BAER GERMANY

# PRECISION THREADING TECHNOLOGY

2020

## Precision and Quality

Good quality is the best marketing, because satisfied customers underline our success.
Our most important principle which inspires us is the commitment for products of the highest standards to meet the requirements of our customers to their utmost satisfaction - a mission we try to fulfill for our corporate philosophy every day.

Our quality check starts with the receipt of goods and continues until the outgoing of the products. At BAER Company customer satisfaction does not come by chance. Ongoing quality testings also influence all new product developments. New ideas and the most modern production facilities improve our products and make them even more precise.

## Development and Improvement

Essential for the sustainability of our work is to invest continuously the long-term in new innovative products. Highest efforts in research and development focus on the needs of our customers. Our tools represent practical and reliable solutions which support an efficient and easy application.

Our cooperations with other industries, companies and research institutes make a strong networking possible. New inspirations are created in innovations, are produced, tested and adapted for practice. This way we are always up to the latest standards of knowledge related to thread technologies. All members of our company contribute to our innovations with their individual know-how.

## Tradition and Experience

For more than 35 years we have been engaged in what we can do best:  threading technology. With this far-reaching treasure trove of experience we have established ourselves as an expert by whom our customers can profit. We are proud to be a family company.
Our identification with the company is even stronger and more distinctive. Each customer, each modernization is at the same time an affair of the heart.

Tradition combined with innovation and progress - make us a flexible and competent partner when it is about threading tools.
Our claim: to contribute to a successful future and to develop tools which meet all kinds of requirements of our customers.

## Distributors

For ensure further deliveries to the customer as soon as possible at home and abroad, we are expanding our distributer network.

BAER-distributors benefit from:
- The largest full range of products - for best price performance ratio
- Quality and reliability - for the highest demands
- Decades of experience in threading technology
- Reliable partnership - flexible and easy
- Sale supporting materials
- Exclusive products
- Exclusive sale territories
- Qualified product and sales trainings
- Attractive terms and conditions
- Innovative products

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# Content


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**BSW** British standard BS 84 whitworth coarse thread

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**BSF** British standard BS 84 whitworth fine thread

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**TR** Trapezoidal thread DIN 103

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**NPT** National standard taper 1:16 pipe thread ANSI B 1.20.1 & **NPTF** National standard sealing pipe thread ANSI B 1.20.3

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**NPS** National standard straight pipe thread

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**RC (BSPT)** Whitworth tapered pipe thread DIN 2999 & **RP(BSPP)** British standard whitworth pipe thread ISO 7-1

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**BA** British Association thread BS 93

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**FG** Bicycle thread DIN 79012 & **BSC** British bicycle thread RS 811

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# UNiTap - Universal High-End Threading Tap

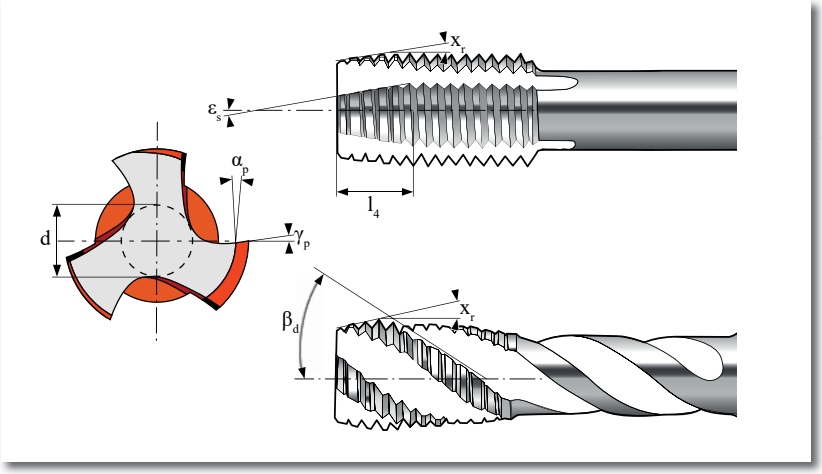
A real revolution in the production of internal threads

## UNiTap - Unique cutting geometry

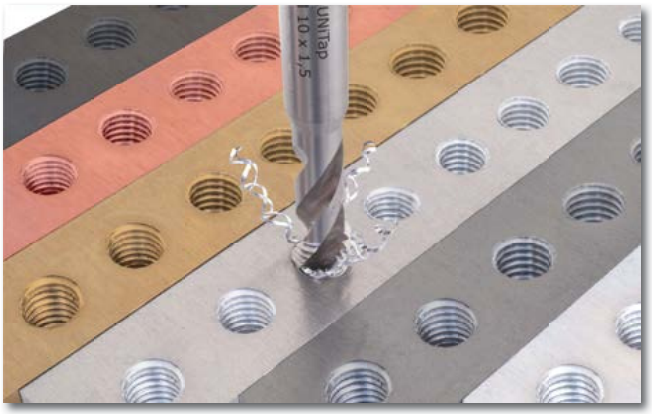
The unique geometry of UNiTap Taps is the result of years of research, which enables the user to machine all materials and makes the tap universally suitable for almost all applications.

During threading an internal thread, the major forces occurat the lead-in chamfer, which is strikingly relieved by structural changes in the UNiTap. The consequence is a reduced torque and a longer life time of the tap. In addition, the areas directly after the lead-in chamfer have been changed to lead the chip optimally and avoid possible jammings. An over-feeding of the thread is also not possible with this profile change.

The design sets new standards in ease of use, durability, and versatility




- for nearly all materials
- for nearly all applications
- excellent cut results
- high tool life time
- unique patented cutting geometry
- ideal tap for all workshops and industrial productions with changing requirements
- huge cost savings - only one threading tool for all applications




## A professional for all applications and materials

- Steels and Steel alloys up to 1200 N/mm²
- Stainless Steels; Inoxable Steels up to 1000 N/mm²;- VA-Steels; INOX; V2A; V4A
- Pure Aluminium; Aluminium Cast and Wrought Alloys
- Grey Cast Iron; Ductile/Nodular/Spheroidal Graphite Cast Iron; Malleable Cast Iron up to 1000 N/mm²
- Pure Titanium and Titanium alloys up to 900 N/mm²
- Pure Nickel and Nickel alloys up 900 N/mm²
- Pure Copper; Copper alloys; Brass; Bronze (all chip lengths)

## Cost savings and flexibility

Due to its universal application possibilities, one UNiTap can do the work of several conventional taps. As a result you can save about 90% of expenses.
Comparison of expenses:

| Machine Taps M6 for |
|---|
| normal steels |
| stainless steels |
| aluminium and alloys |
| cast and grey cast iron |
| titanium and alloys |
| brass and copper |

same result with → UNiTAP BAER HSSE UNiTap Machine Tap for through holes M 6 x 1,0

## Coatings

On request, taps are also available with a TIN or TiAlN coating.

The TIN surface treatment (titanium-nitride gold-yellow) increases the surface hardness (approx. 2300 HV) and the sliding properties. As a result, it provides a better cutting performance and an increased tool life time.

The TiAlN surface treatment increases the surface hardness (approx. 3300 HV), the sliding properties (friction coefficient: 0,25) and with the temperature resistance up to 800°C. As a result, it provides a better cutting performance and an increased tool life time.

UNiTAP

## Examples of application materials and cutting speeds

| Soft Iron, Constructional Steel, Free Cutting Steel, Cementation Steel | | cutting speed $v_c$ in m/min for machine taps for through holes | cutting speed $v_c$ in m/min for machine taps for blind holes |
|---|---|---|---|
| 1.1014 | RFe80 | 25 - 50 | 25 - 50 |
| 1.0570 | St52-3 | 25 - 50 | 25 - 50 |
| 1.0718 | 9SMnPb28 | 25 - 50 | 25 - 50 |
| 1.6523 | 20NiCrMo2 | 6 - 30 | 6 - 30 |

| Carbon Steel, Spring Steel, Alloy Steel, Heat-treatable Steel | | cutting speed $v_c$ in m/min for machine taps for through holes | cutting speed $v_c$ in m/min for machine taps for blind holes |
|---|---|---|---|
| 1.0503 | C45 | 20 - 30 | 20 - 30 |
| 1.1269 | Ck85 | 20 - 30 | 20 - 30 |
| 1.7218 | 25CrMo4 | 6 - 30 | 6 - 30 |
| 1.2344 | X40CrMoV5-1 | 6 - 30 | 6 - 30 |

| Stainless Steel, Inoxable Steel (ferritic, austenitic, martensitic) | | cutting speed $v_c$ in m/min for machine taps for through holes | cutting speed $v_c$ in m/min for machine taps for blind holes |
|---|---|---|---|
| 1.4104 | X14CrMoS17 | 12 - 35 | 12 - 35 |
| 1.4301 | X5CrNi18-10 (V2A) | 12 - 15 | 12 - 15 |
| 1.4571 | X6CrNiMoTi17-12-2 (V4A) | 12 - 15 | 12 - 15 |
| 1.4125 | X105CrMo17 | 12 - 15 | 12 - 15 |

| Pure Nickel and Nickel alloys | | cutting speed $v_c$ in m/min for machine taps for through holes | cutting speed $v_c$ in m/min for machine taps for blind holes |
|---|---|---|---|
| 1.3926 | RNi12 | 3 - 10 | 3 - 10 |
| 2.4668 | NiCr19Fe19NbMo (Inconel 718) | 3 - 10 | 3 - 10 |
| 2.4630 | Ni-Cr20Ti (Nimonic 75) | 1 - 5 | 1 - 5 |
| 2.4665 | NiCr22Fe18Mo (Hastelloy X) | 1 - 5 | 1 - 5 |

| Grey Cast Iron | | cutting speed $v_c$ in m/min for machine taps for through holes | cutting speed $v_c$ in m/min for machine taps for blind holes |
|---|---|---|---|
| 0.6010 | GG10 | 35 - 50 | 35 - 50 |
| 0.6020 | GG20 | 35 - 50 | 35 - 50 |
| 0.6030 | GG30 | 35 - 50 | 35 - 50 |
| 0.6040 | GG40 | 35 - 50 | 35 - 50 |

| Ductile/Nodular/ Spheroidal Graphite Cast Iron, Malleable Cast Iron | | cutting speed $v_c$ in m/min for machine taps for through holes | cutting speed $v_c$ in m/min for machine taps for blind holes |
|---|---|---|---|
| 0.7040 | GGG40 | 12 - 45 | 12 - 45 |
| 0.7060 | GGG60 | 12 - 45 | 12 - 45 |
| 0.7070 | GGG70 | 12 - 45 | 12 - 45 |
| 0.8035 | GTW35-04 | 10 - 25 | 10 - 25 |

| Pure Titanium and Titanium alloys | | cutting speed $v_c$ in m/min for machine taps for through holes | cutting speed $v_c$ in m/min for machine taps for blind holes |
|---|---|---|---|
| 3.7024 | Ti99.5 | 3 - 15 | 3 - 15 |
| 3.7034 | Ti99.7 | 3 - 15 | 3 - 15 |
| 3.7165 | TiAl6V4 | 1 - 5 | 1 - 5 |
| 3.7174 | TiAl6V4Sn2 | 1 - 5 | 1 - 5 |

| Pure Copper and Copper alloys, Brass, Bronze (all chip lengths) | | cutting speed $v_c$ in m/min for machine taps for through holes | cutting speed $v_c$ in m/min for machine taps for blind holes |
|---|---|---|---|
| 2.0065 | E-Cu 58 | 50 - 60 | 50 - 60 |
| 2.1247 | CuBe2 | 30 - 65 | 30 - 65 |
| 2.0360 | CuZn40 | 30 - 65 | 30 - 65 |
| 2.1020 | CuSn6 | 12 - 20 | 12 - 20 |

| Pure Aluminium, Aluminium Cast and Wrought Alloys (all chip lengths) | | cutting speed $v_c$ in m/min for machine taps for through holes | cutting speed $v_c$ in m/min for machine taps for blind holes |
|---|---|---|---|
| 3.0205 | Al99 | 50 - 65 | 50 - 65 |
| 3.1645 | AlCuMgPb | 50 - 65 | 50 - 65 |
| 3.2373 | G-AlSi9Mg | 40 - 65 | 40 - 65 |
| 3.2583 | G-AlSi12(Cu) | 40 - 65 | 40 - 65 |

cutting speed $v_c$ [m/min] = (diameter * π * number of rotations) / 1000

number of rotations n [1/min] = (cutting speed in m/min * 1000) / (diameter * π )

feed programming [mm/min] = number of rotations * pitch

Please keep in mind that the cutting speeds as stated above serve only as guidelines. The right cutting speed depends on lubrication and application.

Cutting paste, cutting oil or emulsion is recommended.

# Custom-made products

## Special tools on request

Our customers benefit from our flexibility and our technical know-how when it comes to design and manufacture special threading tools.

special thread profiles
special sizes
intermediate sizes
special geometries
special Taps
special Dies
special material
express-productions

## Examples of our custom-made products

# Custom-made products

## Send us your inquiry

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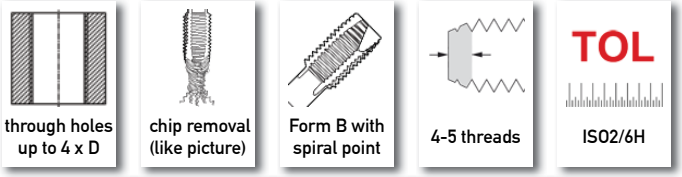
**www.threading-tools.com**

# Thread Cutting Kits UNiTAP

## M metric coarse thread ISO DIN 13

**BAER UNiTap Set M 3 - M 12**
**HSSE UNiTap Machine Taps for through holes**
**incl. HSSE/Co extreme drill bits for core holes**

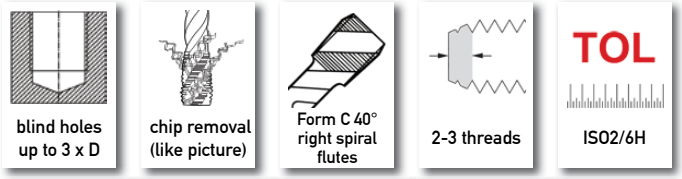


Item No.: UNISD312

| Set Content | |
|---|---|
| **BAER UNiTap HSSE Machine Taps for through holes** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8<br>M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5<br>M 12 x 1,75 |
| **BAER HSSE/Co extreme drill bits for core holes** | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \|<br>6,8 mm \| 8,5 mm \| 10,2 mm |

Item No.: UNISS312

**BAER UNiTap Set M 3 - M 12**
**HSSE UNiTap Machine Taps for blind holes**
**incl. HSSE/Co Extreme drill bits for core holes**

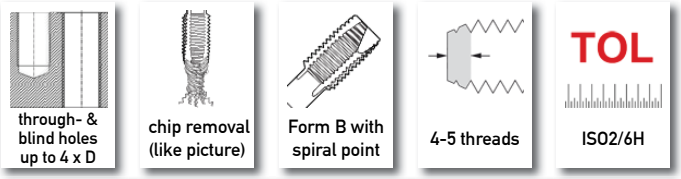



| Set Content | |
|---|---|
| **BAER UNiTap HSSE Machine Taps for blind holes** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8<br>M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5<br>M 12 x 1,75 |
| **BAER HSSE/Co extreme drill bits for core holes** | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \|<br>6,8 mm \| 8,5 mm \| 10,2 mm |

# Thread Cutting Kits with Taps

**M** metric coarse thread
ISO DIN 13

**BAER Short Machine Taps Set M 3 - M 12**
**HSSG Short Machine Taps**
**incl. HSS drill bits for core holes and tap wrench**

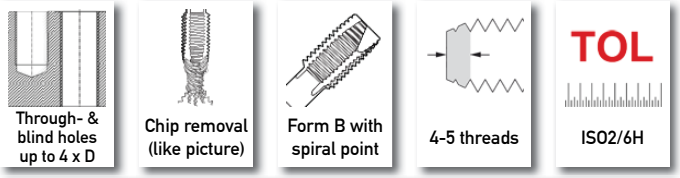



| Set Content | |
|---|---|
| **BAER HSSG Short Machine Taps** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8<br>M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5<br>M 12 x 1,75 |
| **BAER HSSG Drill bits for core holes** | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \|<br>6,8 mm \| 8,5 mm \| 10,2 mm |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-12 \| 1/16-1/2 \| G 1/8 |

Item No.: B1928

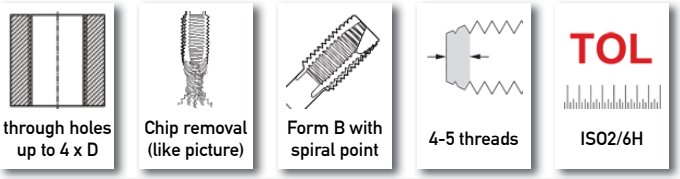
Item No.: B1929

**BAER Short Machine Taps Set M 3 - M 12**
**HSSG Short Machine Taps (3 pcs. each dimension)**
**incl. HSS drill bits for core holes**




| Set Content | |
|---|---|
| **BAER HSSG Short Machine Taps 3 pieces each dimension** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8<br>M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5<br>M 12 x 1,75 |
| **BAER HSSG Drill bits for core holes** | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \|<br>6,8 mm \| 8,5 mm \| 10,2 mm |

**BAER Machine Taps Set M 3 - M 12**
**HSSE Machine Taps for through hole**
**incl. HSS Drill bits for core holes**




| Set Content | |
|---|---|
| **BAER HSSE Machine Taps through hole** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8<br>M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5<br>M 12 x 1,75 |
| **BAER HSSG Drill bits for core holes** | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \|<br>6,8 mm \| 8,5 mm \| 10,2 mm |

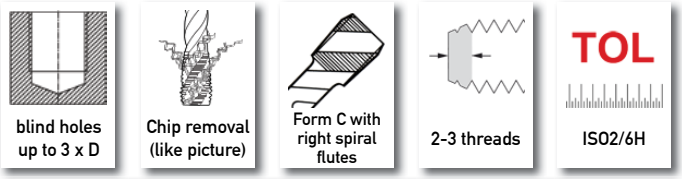
Item No.: B1933E

# Thread Cutting Kits with Taps

## M

**Metric coarse thread**
**ISO DIN 13**

### BAER Machine Taps Set M 3 - M 12
### HSSE Machine Taps for blind holes
### incl. HSS Drill bits for core holes

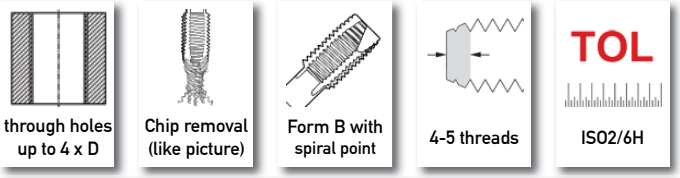



| Set Content | |
|---|---|
| **BAER HSSE Machine Taps for blind holes** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8<br>M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5<br>M 12 x 1,75 |
| **BAER HSSG Drill bits for core holes** | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \|<br>6,8 mm \| 8,5 mm \| 10,2 mm |

Item No.: B1935E

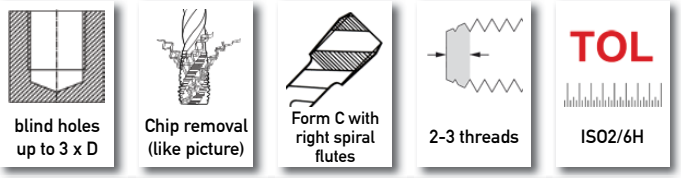
Item No.: B1932

### BAER Machine Taps Set M 3 - M 12
### HSSE-TIN Machine Taps for through hole
### incl. HSS-TIN Drill bits for core holes




| Set Content | |
|---|---|
| **BAER HSSE-TIN Machine Taps through hole** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8<br>M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5<br>M 12 x 1,75 |
| **BAER HSSG-TIN Drill bits for core holes** | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \|<br>6,8 mm \| 8,5 mm \| 10,2 mm |

### BAER Machine Taps Set M 3 - M 12
### HSSE-TIN Machine Taps for blind holes
### incl. HSS-TIN Drill bits for core holes




| Set Content | |
|---|---|
| **BAER HSSE-TIN Machine Taps for blind holes** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8<br>M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5<br>M 12 x 1,75 |
| **BAER HSSG-TIN Drill bits for core holes** | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \|<br>6,8 mm \| 8,5 mm \| 10,2 mm |

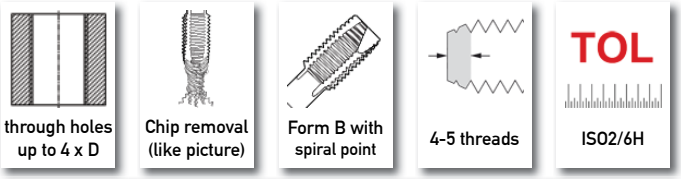
Item No.: B1934

# Thread Cutting Kits with Taps

## M

**Metric coarse thread**
**ISO DIN 13**

**BAER Machine Taps Set M 3 - M 12 for stainless steel**
**HSSE Machine Taps for through hole**
**incl. HSSE/Co Extreme drill bits for core holes**

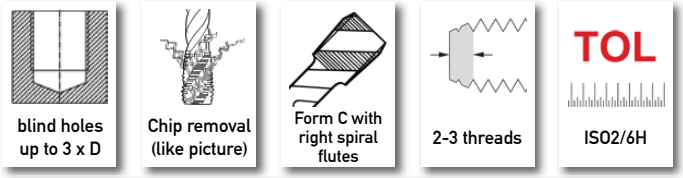



| Set Content | |
|---|---|
| **BAER HSSE Stainless steel Machine Taps through hole** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8<br>M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5<br>M 12 x 1,75 |
| **BAER HSSE/Co Extreme drill bits for core holes** | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \|<br>6,8 mm \| 8,5 mm \| 10,2 mm |

Item No.: B1931

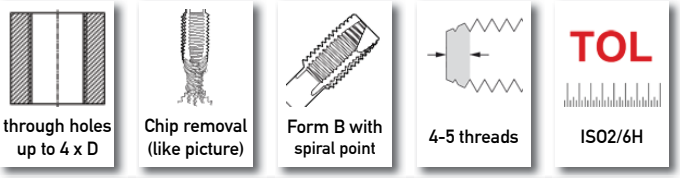
Item No.: B1930

**BAER Machine Taps Set M 3 - M 12 for stainless steel**
**HSSE Machine Taps for blind holes**
**incl. HSSE/Co Extreme drill bits for core holes**




| Set Content | |
|---|---|
| **BAER HSSE Stainless steel Machine Taps for blind holes** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8<br>M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5<br>M 12 x 1,75 |
| **BAER HSSE/Co Extreme drill bits for core holes** | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \|<br>6,8 mm \| 8,5 mm \| 10,2 mm |

**BAER Machine Taps Set M 3 - M 12 Left Hand**
**HSSE Machine Taps for through hole**
**incl. HSS Drill bits for core holes**




| Set Content | |
|---|---|
| **BAER HSSE Left Machine Taps through hole** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8<br>M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5<br>M 12 x 1,75 |
| **BAER HSSG Drill bits for core holes** | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \|<br>6,8 mm \| 8,5 mm \| 10,2 mm |

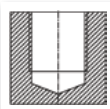
Item No.: B1936E

# Thread Cutting Kits with Taps

## M

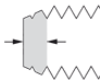
**Metric coarse thread**
**ISO DIN 13**

### BAER Machine Taps Set M 3 - M 12 Left Hand
### HSSE Machine Taps for blind holes
### incl. HSS Drill bits for core holes


blind holes up to 3 x D

Chip removal (like picture)

Form C with left spiral flutes


2-3 threads

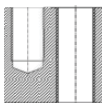
TOL
ISO2/6H

| Set Content | |
|---|---|
| **BAER HSSE Left Machine Taps for blind holes** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8<br>M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5<br>M 12 x 1,75 |
| **BAER HSSG Drill bits for core holes** | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \|<br>6,8 mm \| 8,5 mm \| 10,2 mm |

Item No.: B1937E

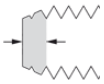
Item No.: B1938

### BAER Bit Short Machine Taps Set M 3 - M 10
### HSSG-Bit Taps
### incl. Bit-Adapter


through- & blind holes up to 2 x D

Chip removal (like picture)

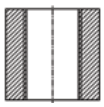
Form D straight flutes


3-4 threads

TOL
ISO2/6H

| Set Content | |
|---|---|
| **BAER HSSG-Bit Short Machine Taps** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8<br>M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 |
| **1/4“ Hexagonal-Bit-Adapter** | |

### BAER Combined Bit Taps Set M 3 - M 10
### HSSG-Combined Bit Taps
### incl. Bit-Adapter


through hole up to 1 x D

Chip removal (like picture)

TOL
ISO2/6H

| Set Content | |
|---|---|
| **BAER HSSG-Combined Bit-Taps** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8<br>M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 |
| **1/4“ Hexagonal-Bit-Adapter** | |

Item No.: B1939

# Thread Cutting Kits with Taps and Dies

**M** Metric coarse thread
ISO DIN 13

## BAER Taps and Dies Sets M 3 - M 12
(example picture)

### BAER UNITap Set M 3 - M 12
### HSSE UNITap Machine Taps through hole & blind hole
### HSSE Round Dies

| | | |
|---|---|---|
| BAER UNITap HSSE Machine Taps for through hole (up to 4 x D) | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | No.: BB12U |
| BAER UNITap HSSE Machine Taps for blind holes (up to 3 x D) | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | |
| BAER HSSE Round Dies with spiral entry | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | |

### BAER Set M 3 - M 12
### HSSE Machine Taps & Drill bits for core holes
### HSS Round Dies

| | | |
|---|---|---|
| BAER HSSE Machine Taps Form C for through hole & blind hole (up to 2 x D) | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | No.: BB2E |
| BAER HSSG Drill bits for core holes | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \| 6,8 mm \| 8,5 mm \| 10,2 mm | |
| BAER HSS Round Dies | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | |

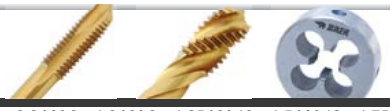
### BAER Set M 3 - M 12
### HSSE Machine Taps through hole & blind hole
### HSS Round Dies

| | | |
|---|---|---|
| BAER HSSE Machine Taps Form B with spiral point for through hole (up to 4 x D) | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | No.: BB1E |
| BAER HSSE Machine Taps Form C with right spiral flutes for blind holes (up to 3 x D) | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | |
| BAER HSS Round Dies | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | |

### BAER Left Hand Set M 3 - M 12
### HSSE Left Hand Machine Taps & Drill bits for core holes
### HSS Left Hand Round Dies

| | | |
|---|---|---|
| BAER HSSE Machine Taps Left Form C for through hole & blind hole (up to 2 x D) | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | No.: BB7E |
| BAER HSSG Drill bits for core holes | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \| 6,8 mm \| 8,5 mm \| 10,2 mm | |
| BAER HSS Round Dies Left | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | |

### BAER TIN Set M 3 - M 12
### HSSE-TIN Machine Taps through hole & blind hole
### HSS Round Dies



| | | |
|---|---|---|
| BAER HSSE-TIN Machine Taps Form B with spiral point for through hole (up to 4 x D) | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | No.: BB4 |
| BAER HSSE-TIN Machine Taps Form C with right spiral flutes for blind holes (up to 3 x D) | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | |
| BAER HSS Round Dies | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | |

### BAER Stainless steel Set M 3 - M 12
### HSSE-Stainless steel Machine Taps through hole & blind hole
### HSSE-Stainless steel Round Dies

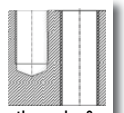
| | | |
|---|---|---|
| BAER HSSE Stainless steel Machine Taps for through hole (up to 4 x D) | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | No.: BB9 |
| BAER HSSE Stainless steel Machine Taps for blind holes (up to 3 x D) | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | |
| BAER HSSE Stainless steel Round Dies | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 | |

# Thread Cutting Kits with Taps, Dies and Tools

## M

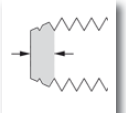
**Metric coarse thread**
**ISO DIN 13**

## BAER Hand-Tap Sets, Round Dies and Tools Sets


through- & blind holes up to 2 x D

Chip removal (like picture)

Form C straight flutes


2-3 threads

ISO2/6H

| M 3 - 12 Standard | M 3 - 12 Left | M 3 - 12 stainless steels* |
|---|---|---|
| Item No.: 10360009046 | Item No.: 10360009046LH | Item No.: 10360009046VA |

* contains HSSE Taps and Dies

| Set Content M 3 - M 12 | |
|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0<br>M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 |
| **BAER HSS Round Dies acc. to DIN** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0<br>M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 |
| **BAER HSSG Drill bits for core holes** | 2,5 mm \| 3,3 mm \| 4,2 mm \| 5,0 mm \|<br>6,8 mm \| 8,5 mm \| 10,2 mm |
| **BAER adjustable Tap Wrenches** | M 1-10 \| 1/16-3/8 \| G 1/8<br>M 4-12 \| 5/32-1/2 \| G 1/8 |
| **BAER Die Stocks** | 20 x 5 \| 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 |
| **BAER Tap Holder Ratchet** | M 3-10 \| M 5-12 |
| **Thread pitch gauge** | for metric threads |
| **Screw extractor** | |

| M 3 - 20 Standard | M 3 - 20 Left | M 3 - 20 stainless steels* |
|---|---|---|
| Item No.: 10360009146 | Item No.: 10360009146LH | Item No.: 10360009146VA |

* contains HSSE Taps and Dies

| Set Content M 3 - M 20 | |
|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0<br>M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75<br>M 14 x 2,0 \| M 16 x 2,0 \| M 18 x 2,5<br>M 20 x 2,5 |
| **BAER HSS Round Dies acc. to DIN** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0<br>M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75<br>M 14 x 2,0 \| M 16 x 2,0 \| M 18 x 2,5<br>M 20 x 2,5 |
| **BAER adjustable Tap Wrenches** | M 1-10 \| 1/16-3/8 \| G 1/8<br>M 5-20 \| 7/32-3/4 \| G 1/8-G 1/2 |
| **BAER Die Stocks** | 20 x 5 \| 20 x 7 \| 25 x 9 \| 30 x 11<br>38 x 14 \| 45 x 18 |
| **BAER Tap Holder Ratchet** | M 3-10 \| M 5-12 |
| **Thread pitch gauge** | for metric threads |
| **Screw extractor** | |

# Thread Cutting Kits with Taps, Dies and Tools

**M** Metric coarse thread
ISO DIN 13

## BAER Hand-Tap Sets, Round Dies and Tools Sets

(example picture)

### BAER Set M 3 - M 12 (incl. intermediate sizes)
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 7 x 1,0 \| M 8 x 1,25 \| M 9 x 1,25 \| M 10 x 1,5 \| M 11 x 1,5 \| M 12 x 1,75 | Item No.: 264800301 |
| **BAER HSS Round Dies** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 7 x 1,0 \| M 8 x 1,25 \| M 9 x 1,25 \| M 10 x 1,5 \| M 11 x 1,5 \| M 12 x 1,75 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 4-12 \| 5/32-1/2 \| G 1/8 | |
| **BAER Die Stocks - zinc die cast** | 20 x 5 \| 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 | |
| **Screw extractor** | | |

### BAER Set M 5 - M 12 (incl. intermediate sizes)
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | M 5 x 0,8 \| M 6 x 1,0 \| M 7 x 1,0 \| M 8 x 1,25 \| M 9 x 1,25 \| M 10 x 1,5 \| M 11 x 1,5 \| M 12 x 1,75 | Item No.: 264800401 |
| **BAER HSS Round Dies** | M 5 x 0,8 \| M 6 x 1,0 \| M 7 x 1,0 \| M 8 x 1,25 \| M 9 x 1,25 \| M 10 x 1,5 \| M 11 x 1,5 \| M 12 x 1,75 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 4-12 \| 5/32-1/2 \| G 1/8 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 | |
| **Screw extractor** | | |

### BAER Set M 5 - M 20 (incl. intermediate sizes)
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | M 5 x 0,8 \| M 6 x 1,0 \| M 7 x 1,0 \| M 8 x 1,25 \| M 9 x 1,25 \| M 10 x 1,5 \|M 11 x 1,5 \| M 12 x 1,75 \| M 14 x 2,0 \| M 16 x 2,0 M 18 x 2,5 \| M 20 x 2,5 | Item No.: 264800501 |
| **BAER HSS Round Dies** | M 5 x 0,8 \| M 6 x 1,0 \| M 7 x 1,0 \| M 8 x 1,25 \| M 9 x 1,25 \| M 10 x 1,5 \|M 11 x 1,5 \| M 12 x 1,75 \| M 14 x 2,0 \| M 16 x 2,0 M 18 x 2,5 \| M 20 x 2,5 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 5-20 \| 7/32-3/4 \| G 1/8-G 1/2 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 \| 45 x 18 | |
| **Screw extractor** | | |

### BAER Set M 3 - M 24
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 \| M 14 x 2,0 \| M 16 x 2,0 \| M 18 x 2,5 M 20 x 2,5 \| M 22 x 2,5 \| M 24 x 3,0 | Item No.: 264800601 |
| **BAER HSS Round Dies** | M 3 x 0,5 \| M 4 x 0,7 \| M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 \| M 14 x 2,0 \| M 16 x 2,0 \| M 18 x 2,5 M 20 x 2,5 \| M 22 x 2,5 \| M 24 x 3,0 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 11-27 \| 7/16-1" \| G 1/4-G 3/4 | |
| **BAER Die Stocks - zinc die cast** | 20 x 5 \| 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 \| 45 x 18 \| 55 x 22 | |
| **Screw extractor** | | |

### BAER Set M 5 - M 30
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 \| M 14 x 2,0 \| M 16 x 2,0 M 18 x 2,5 \| M 20 x 2,5 \| M 22 x 2,5 M 24 x 3,0 \| M 27 x 3,0 \| M 30 x 3,5 | Item No.: 264800701 |
| **BAER HSS Round Dies** | M 5 x 0,8 \| M 6 x 1,0 \| M 8 x 1,25 \| M 10 x 1,5 \| M 12 x 1,75 \| M 14 x 2,0 \| M 16 x 2,0 M 18 x 2,5 \| M 20 x 2,5 \| M 22 x 2,5 M 24 x 3,0 \| M 27 x 3,0 \| M 30 x 3,5 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 5-20 \| 7/32-3/4" \| G 1/8-G 1/2 & M 13-32 \| 1/2-1.1/4" \| G 1/4-1" | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 \| 45 x 18 \| 55 x 22 \| 65 x 25 | |
| **Screw extractor** | | |

# Short Machine Taps

## M Metric coarse thread ISO DIN 13

Efficient internal thread cutting.
The short structural type makes that tap usable by machine and hand.

**Application**:
non abrasive material up to 900 N/mm²
unalloyed and low alloyed steel

### Short Machine Taps
Form D for through holes and blind holes

through holes & blind holes up to 2 x D | Chip removal (like picture) | Form D straight flutes

material: HSSG | ISO2/6H | to 800 N/mm² 22,2 HRC

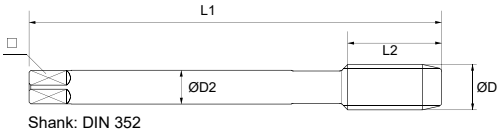
3-4 threads | outside cooling and lubrication

### Short Machine Taps
Form B for through holes

through holes up to 4 x D | Chip removal (like picture) | Form B with spiral point

material: HSSG | ISO2/6H | to 900 N/mm² 27,1 HRC

4-5 threads | outside cooling and lubrication




Shank: DIN 352

| M | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **M 2 x 0,4** | 2,0 | 2,8 | 36 | 8 | 2,1 | 1,60 | 110101001 | 110201001 |
| **M 2,5 x 0,45** | 2,5 | 2,8 | 40 | 9 | 2,1 | 2,05 | 110101002 | 110201002 |
| **M 3 x 0,5** | 3,0 | 3,5 | 40 | 11 | 2,7 | 2,50 | 110101003 | 110201003 |
| **M 3,5 x 0,6** | 3,5 | 4,0 | 45 | 13 | 3,0 | 2,90 | 110101004 | 110201004 |
| **M 4 x 0,7** | 4,0 | 4,5 | 45 | 13 | 3,4 | 3,30 | 110101005 | 110201005 |
| **M 5 x 0,8** | 5,0 | 6,0 | 50 | 16 | 4,9 | 4,20 | 110101006 | 110201006 |
| **M 6 x 1,0** | 6,0 | 6,0 | 50 | 19 | 4,9 | 5,00 | 110101007 | 110201007 |
| **M 8 x 1,25** | 8,0 | 6,0 | 56 | 22 | 4,9 | 6,80 | 110101008 | 110201008 |
| **M 10 x 1,5** | 10,0 | 7,0 | 70 | 24 | 5,5 | 8,50 | 110101009 | 110201009 |
| **M 12 x 1,75** | 12,0 | 9,0 | 75 | 29 | 7,0 | 10,20 | 110101010 | 110201010 |
| **M 14 x 2,0** | 14,0 | 11,0 | 80 | 30 | 9,0 | 12,00 | 110101011 | 110201011 |
| **M 16 x 2,0** | 16,0 | 12,0 | 80 | 32 | 9,0 | 14,00 | 110101012 | 110201012 |
| **M 18 x 2,5** | 18,0 | 14,0 | 95 | 40 | 11,0 | 15,50 | 110101013 | 110201013 |
| **M 20 x 2,5** | 20,0 | 16,0 | 95 | 40 | 12,0 | 17,50 | 110101014 | 110201014 |
| **M 22 x 2,5** | 22,0 | 18,0 | 100 | 40 | 14,5 | 19,50 | 110101015 | 110201015 |
| **M 24 x 3,0** | 24,0 | 18,0 | 110 | 50 | 14,5 | 21,00 | 110101016 | 110201016 |
| **M 27 x 3,0** | 27,0 | 20,0 | 110 | 50 | 16,0 | 24,00 | 110101017 | 110201017 |
| **M 30 x 3,5** | 30,0 | 22,0 | 125 | 56 | 18,0 | 26,50 | 110101018 | 110201018 |

# Hand Tap Sets

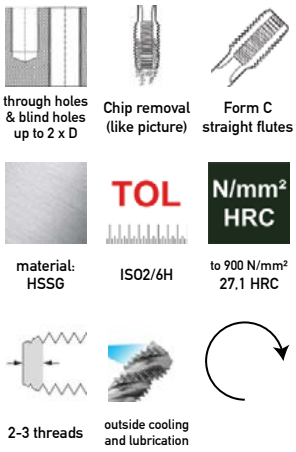
## M

**Metric coarse thread**
**ISO DIN 13**

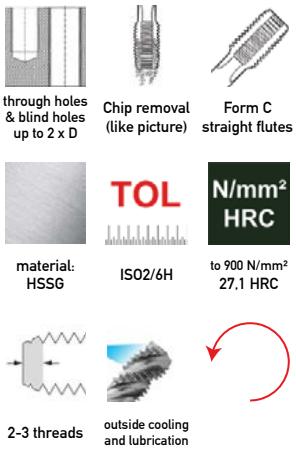
Efficient internal thread cutting.
The short structural type makes that tap usable by hand.

A Hand-Tap-Set includes 3 taps:
Taper Tap
Intermediate Tap
Finish Tap

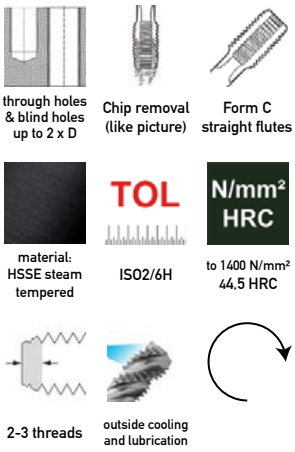
### Hand Tap Sets
for general use

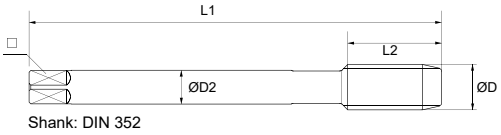



### Hand Tap Sets
for general use — Left Hand




### Hand Tap Sets
for stainless steels



| M | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **M 1 x 0,25** | 1,0 | 2,5 | 32 | 6 | 2,1 | 0,75 | 110301001 | | |
| **M 1,1 x 0,25** | 1,1 | 2,5 | 32 | 6 | 2,1 | 0,85 | 110301002 | | |
| **M 1,2 x 0,25** | 1,2 | 2,5 | 32 | 6 | 2,1 | 0,95 | 110301003 | | |
| **M 1,4 x 0,3** | 1,4 | 2,5 | 32 | 7 | 2,1 | 1,10 | 110301004 | | |
| **M 1,6 x 0,35** | 1,6 | 2,5 | 32 | 8 | 2,1 | 1,25 | 110301005 | | |
| **M 1,7 x 0,35** | 1,7 | 2,5 | 32 | 8 | 2,1 | 1,30 | 110301006 | | |
| **M 1,8 x 0,35** | 1,8 | 2,5 | 32 | 8 | 2,1 | 1,45 | 110301007 | | |
| **M 2 x 0,4** | 2,0 | 2,8 | 36 | 8 | 2,1 | 1,60 | 110301008 | | |
| **M 2,2 x 0,45** | 2,2 | 2,8 | 36 | 9 | 2,1 | 1,75 | 110301009 | | |
| **M 2,3 x 0,4** | 2,3 | 2,8 | 36 | 9 | 2,1 | 1,90 | 110301010 | | |
| **M 2,5 x 0,45** | 2,5 | 2,8 | 40 | 9 | 2,1 | 2,05 | 110301011 | | |
| **M 2,6 x 0,45** | 2,6 | 2,8 | 40 | 9 | 2,1 | 2,10 | 110301012 | | |
| **M 3 x 0,5** | 3,0 | 3,5 | 40 | 11 | 2,7 | 2,50 | 110301013 | 110302001 | 110305001 |
| **M 3 x 0,6** * | 3,0 | 3,5 | 40 | 11 | 2,7 | 2,40 | 110301014 | | |
| **M 3,5 x 0,6** | 3,5 | 4,0 | 45 | 13 | 3,0 | 2,90 | 110301015 | | |
| **M 3,5 x 0,75** * | 3,5 | 4,0 | 45 | 13 | 3,0 | 2,75 | 110301016 | | |
| **M 4 x 0,7** | 4,0 | 4,5 | 45 | 13 | 3,4 | 3,30 | 110301017 | 110302002 | 110305002 |
| **M 4 x 0,75** | 4,0 | 4,5 | 45 | 13 | 3,4 | 3,25 | 110301018 | | |
| **M 4,5 x 0,75** | 4,5 | 6,0 | 50 | 16 | 4,9 | 3,70 | 110301019 | | |
| **M 5 x 0,8** | 5,0 | 6,0 | 50 | 16 | 4,9 | 4,20 | 110301020 | 110302003 | 110305003 |
| **M 5 x 0,9** * | 5,0 | 6,0 | 50 | 16 | 4,9 | 4,10 | 110301021 | | |
| **M 5,5 x 0,9** | 5,5 | 6,0 | 50 | 18 | 4,9 | 4,60 | 110301022 | | |
| **M 6 x 1,0** | 6,0 | 6,0 | 50 | 19 | 4,9 | 5,00 | 110301023 | 110302004 | 110305004 |
| **M 7 x 1,0** | 7,0 | 6,0 | 50 | 19 | 4,9 | 6,00 | 110301024 | | |
| **M 8 x 1,25** | 8,0 | 6,0 | 56 | 22 | 4,9 | 6,80 | 110301025 | 110302005 | 110305005 |
| **M 9 x 1,25** | 9,0 | 7,0 | 63 | 22 | 5,5 | 7,80 | 110301026 | | |
| **M 10 x 1,5** | 10,0 | 7,0 | 70 | 24 | 5,5 | 8,50 | 110301027 | 110302006 | 110305006 |
| **M 11 x 1,5** | 11,0 | 8,0 | 70 | 24 | 6,2 | 9,50 | 110301028 | | |
| **M 12 x 1,75** | 12,0 | 9,0 | 75 | 29 | 7,0 | 10,20 | 110301029 | 110302007 | 110305007 |
| **M 14 x 2,0** | 14,0 | 11,0 | 80 | 30 | 9,0 | 12,00 | 110301030 | 110302008 | |

* special pitch

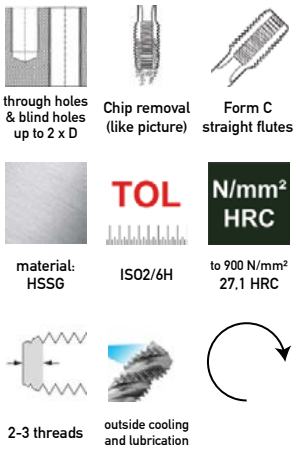
# Hand Tap Sets

## M Metric coarse thread ISO DIN 13

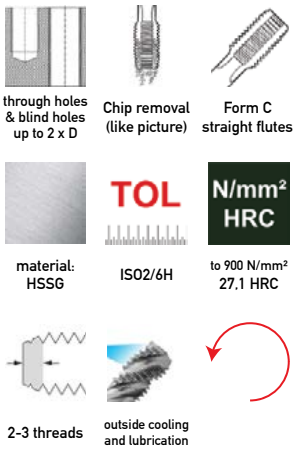
Efficient internal thread cutting.
The short structural type makes that tap usable by hand.

A Hand-Tap-Set includes 3 taps:
Taper Tap
Intermediate Tap
Finish Tap

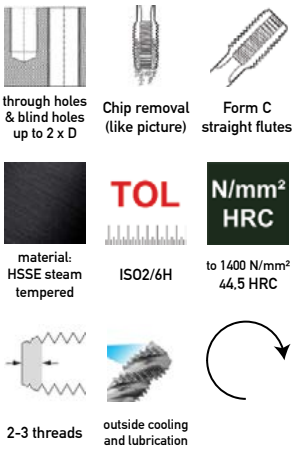
### Hand Tap Sets
for general use

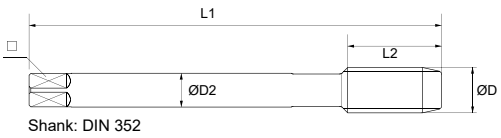



### Hand Tap Sets
for general use Left Hand




### Hand Tap Sets
for stainless steels



Shank: DIN 352

| M | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **M 15 x 2,0** | 15,0 | 12,0 | 80 | 32 | 9,0 | 13,00 | 110301031 | | |
| **M 16 x 2,0** | 16,0 | 12,0 | 80 | 32 | 9,0 | 14,00 | 110301032 | 110302009 | |
| **M 18 x 2,5** | 18,0 | 14,0 | 95 | 40 | 11,0 | 15,50 | 110301033 | 110302010 | |
| **M 20 x 2,5** | 20,0 | 16,0 | 95 | 40 | 12,0 | 17,50 | 110301034 | 110302011 | |
| **M 22 x 2,5** | 22,0 | 18,0 | 100 | 40 | 14,5 | 19,50 | 110301035 | 110302012 | |
| **M 24 x 3,0** | 24,0 | 18,0 | 110 | 50 | 14,5 | 21,00 | 110301036 | 110302013 | |
| **M 27 x 3,0** | 27,0 | 20,0 | 110 | 50 | 16,0 | 24,00 | 110301037 | 110302014 | |
| **M 30 x 3,5** | 30,0 | 22,0 | 125 | 56 | 18,0 | 26,50 | 110301038 | 110302015 | |
| **M 33 x 3,5** | 33,0 | 25,0 | 125 | 56 | 20,0 | 29,50 | 110301039 | 110302016 | |
| **M 36 x 4,0** | 36,0 | 28,0 | 150 | 63 | 22,0 | 32,00 | 110301040 | 110302017 | |
| **M 39 x 4,0** | 39,0 | 32,0 | 150 | 63 | 24,0 | 35,00 | 110301041 | 110302018 | |
| **M 42 x 4,5** | 42,0 | 32,0 | 150 | 63 | 24,0 | 37,50 | 110301042 | 110302019 | |
| **M 45 x 4,5** | 45,0 | 36,0 | 160 | 70 | 29,0 | 40,50 | 110301043 | 110302020 | |
| **M 48 x 5,0** | 48,0 | 36,0 | 180 | 75 | 29,0 | 43,00 | 110301044 | 110302021 | |
| **M 52 x 5,0** | 52,0 | 40,0 | 180 | 75 | 32,0 | 47,00 | 110301045 | 110302022 | |
| **M 56 x 5,5** | 56,0 | 45,0 | 200 | 85 | 35,0 | 50,50 | 110301046 | | |
| **M 60 x 5,5** | 60,0 | 45,0 | 200 | 85 | 35,0 | 54,50 | 110301047 | | |
| **M 64 x 6,0** | 64,0 | 50,0 | 220 | 90 | 39,0 | 58,00 | 110301048 | | |
| **M 68 x 6,0** | 68,0 | 50,0 | 220 | 90 | 39,0 | 62,00 | 110301049 | | |
| **M 72 x 6,0** | 72,0 | 50,0 | 240 | 80 | 39,0 | 66,00 | 110301050 | | |
| **M 76 x 6,0** | 76,0 | 50,0 | 240 | 80 | 39,0 | 70,00 | 110301051 | | |
| **M 80 x 6,0** | 80,0 | 50,0 | 260 | 85 | 39,0 | 74,00 | 110301052 | | |
| **M 84 x 6,0** | 84,0 | 50,0 | 260 | 85 | 39,0 | 78,00 | 110301053 | | |
| **M 88 x 6,0** | 88,0 | 50,0 | 260 | 85 | 39,0 | 82,00 | 110301054 | | |
| **M 90 x 6,0** | 90,0 | 50,0 | 260 | 85 | 39,0 | 84,00 | 110301055 | | |
| **M 92 x 6,0** | 92,0 | 56,0 | 280 | 90 | 44,0 | 86,00 | 110301056 | | |
| **M 96 x 6,0** | 96,0 | 56,0 | 280 | 90 | 44,0 | 90,00 | 110301057 | | |
| **M 100 x 6,0** | 100,0 | 56,0 | 280 | 90 | 44,0 | 94,00 | 110301058 | | |

# Hand Tap Sets

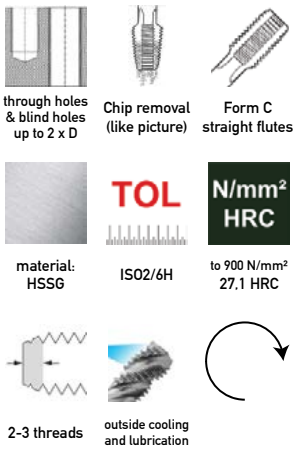
## M

**Metric coarse thread**
**ISO DIN 13**

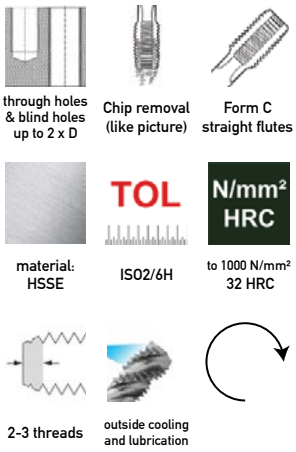
Efficient internal thread cutting.
The short structural type makes that tap usable by hand.

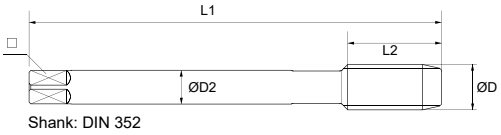
A Hand-Tap-Set includes 3 taps:
Taper Tap
Intermediate Tap
Finish Tap

### Hand Tap Sets
with conical profile




### Hand Tap Sets HSSE
for higher demands



Shank: DIN 352

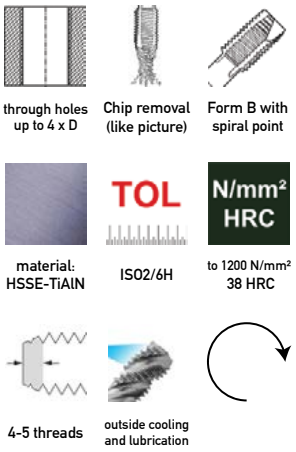
| M | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **M 2 x 0,4** | 2,0 | 2,8 | 36 | 8 | 2,1 | 1,60 | 110313001 | |
| **M 2,5 x 0,45** | 2,5 | 2,8 | 40 | 9 | 2,1 | 2,05 | 110313002 | |
| **M 3 x 0,5** | 3,0 | 3,5 | 40 | 11 | 2,7 | 2,50 | 110313003 | 110304001 |
| **M 4 x 0,7** | 4,0 | 4,5 | 45 | 13 | 3,4 | 3,30 | 110313004 | 110304002 |
| **M 5 x 0,8** | 5,0 | 6,0 | 50 | 16 | 4,9 | 4,20 | 110313005 | 110304003 |
| **M 6 x 1,0** | 6,0 | 6,0 | 50 | 19 | 4,9 | 5,00 | 110313006 | 110304004 |
| **M 8 x 1,25** | 8,0 | 6,0 | 56 | 22 | 4,9 | 6,80 | 110313007 | 110304005 |
| **M 9 x 1,25** | 9,0 | 7,0 | 63 | 22 | 5,5 | 7,80 | 110313008 | |
| **M 10 x 1,5** | 10,0 | 7,0 | 70 | 24 | 5,5 | 8,50 | 110313009 | 110304006 |
| **M 11 x 1,5** | 11,0 | 8,0 | 70 | 24 | 6,2 | 9,50 | 110313010 | |
| **M 12 x 1,75** | 12,0 | 9,0 | 75 | 29 | 7,0 | 10,20 | 110313011 | 110304007 |
| **M 13 x 1,75** | 12,0 | 9,0 | 75 | 29 | 7,0 | 11,20 | 110313012 | |
| **M 14 x 2,0** | 14,0 | 11,0 | 80 | 30 | 9,0 | 12,00 | 110313013 | 110304008 |
| **M 16 x 2,0** | 16,0 | 12,0 | 80 | 32 | 9,0 | 14,00 | 110313014 | 110304009 |
| **M 18 x 2,5** | 18,0 | 14,0 | 95 | 40 | 11,0 | 15,50 | 110313015 | 110304010 |
| **M 19 x 2,5** | 18,0 | 14,0 | 95 | 40 | 11,0 | 16,50 | 110313016 | |
| **M 20 x 2,5** | 20,0 | 16,0 | 95 | 40 | 12,0 | 17,50 | 110313017 | 110304011 |
| **M 22 x 2,5** | 22,0 | 18,0 | 100 | 40 | 14,5 | 19,50 | 110313018 | 110304012 |
| **M 24 x 3,0** | 24,0 | 18,0 | 110 | 50 | 14,5 | 21,00 | 110313019 | 110304013 |
| **M 27 x 3,0** | 27,0 | 20,0 | 110 | 50 | 16,0 | 24,00 | 110313020 | 110304014 |
| **M 30 x 3,5** | 30,0 | 22,0 | 125 | 56 | 18,0 | 26,50 | 110313021 | 110304015 |
| **M 33 x 3,5** | 33,0 | 25,0 | 125 | 56 | 20,0 | 29,50 | 110313022 | |
| **M 36 x 4,0** | 36,0 | 28,0 | 150 | 63 | 22,0 | 32,00 | 110313023 | |
| **M 39 x 4,0** | 39,0 | 32,0 | 150 | 63 | 24,0 | 35,00 | 110313024 | |
| **M 42 x 4,5** | 42,0 | 32,0 | 150 | 63 | 24,0 | 37,50 | 110313025 | |

# Machine Taps - Form B for through holes

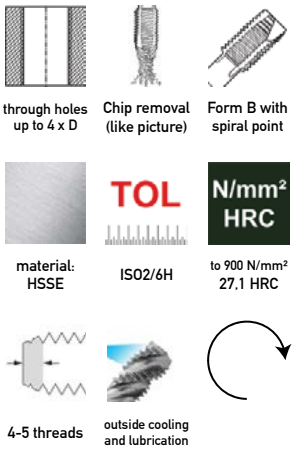
## M Metric coarse thread ISO DIN 13

Tap for machine use in through hole.
The spiral point pushes the chips ahead.

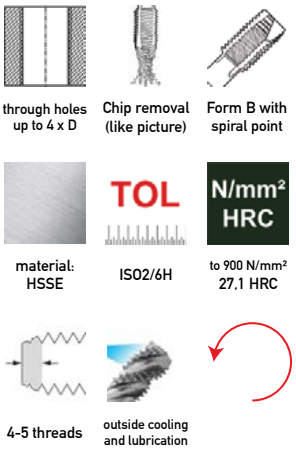
### Machine Tap UNiTAP for universal use

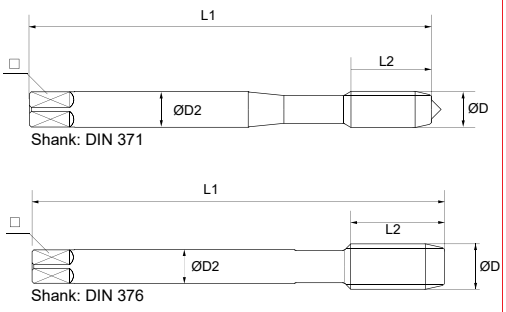



### Machine Tap for general use




### Machine Tap for general use Left-hand thread



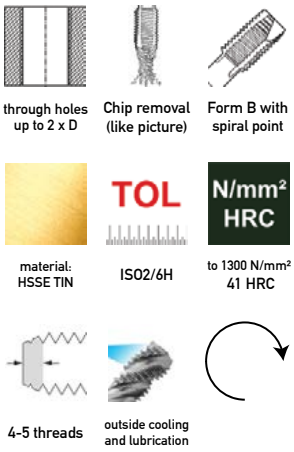
| M | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **DIN 371** | | | | | | | | | |
| **M 2 x 0,4** | 2,0 | 2,8 | 45 | 8 | 2,1 | 1,60 | 110403001 | 110401001 | |
| **M 2,2 x 0,45** | 2,2 | 2,8 | 45 | 8 | 2,1 | 1,75 | 110403002 | | |
| **M 2,5 x 0,45** | 2,5 | 2,8 | 50 | 9 | 2,1 | 2,05 | 110403003 | 110401002 | |
| **M 3 x 0,5** | 3,0 | 3,5 | 56 | 11 | 2,7 | 2,50 | 110403004 | 110401003 | 110402001 |
| **M 3,5 x 0,6** | 3,5 | 4,0 | 56 | 13 | 3,0 | 2,90 | 110403005 | 110401004 | |
| **M 4 x 0,7** | 4,0 | 4,5 | 63 | 13 | 3,4 | 3,30 | 110403006 | 110401005 | 110402002 |
| **M 5 x 0,8** | 5,0 | 6,0 | 70 | 16 | 4,9 | 4,20 | 110403007 | 110401006 | 110402003 |
| **M 6 x 1,0** | 6,0 | 6,0 | 80 | 19 | 4,9 | 5,00 | 110403008 | 110401007 | 110402004 |
| **M 7 x 1,0** | 7,0 | 7,0 | 80 | 19 | 5,5 | 6,00 | | 110401008 | 110402005 |
| **M 8 x 1,25** | 8,0 | 8,0 | 90 | 22 | 6,2 | 6,80 | 110403009 | 110401009 | 110402006 |
| **M 10 x 1,5** | 10,0 | 10,0 | 100 | 24 | 8,0 | 8,50 | 110403010 | 110401010 | 110402007 |
| **DIN 376** | | | | | | | | | |
| **M 3 x 0,5** | 3,0 | 2,2 | 56 | 11 | - | 2,50 | | 110401011 | 110402008 |
| **M 4 x 0,7** | 4,0 | 2,8 | 63 | 13 | 2,1 | 3,30 | | 110401012 | 110402009 |
| **M 5 x 0,8** | 5,0 | 3,5 | 70 | 16 | 2,7 | 4,20 | | 110401013 | 110402010 |
| **M 6 x 1,0** | 6,0 | 4,5 | 80 | 19 | 3,4 | 5,00 | | 110401014 | 110402011 |
| **M 8 x 1,25** | 8,0 | 6,0 | 90 | 22 | 4,9 | 6,80 | | 110401015 | 110402012 |
| **M 10 x 1,5** | 10,0 | 7,0 | 100 | 24 | 5,5 | 8,50 | | 110401016 | 110402013 |
| **M 12 x 1,75** | 12,0 | 9,0 | 110 | 29 | 7,0 | 10,20 | 110403011 | 110401017 | 110402014 |
| **M 14 x 2,0** | 14,0 | 11,0 | 110 | 30 | 9,0 | 12,00 | 110403012 | 110401018 | 110402015 |
| **M 16 x 2,0** | 16,0 | 12,0 | 110 | 32 | 9,0 | 14,00 | 110403013 | 110401019 | 110402016 |
| **M 18 x 2,5** | 18,0 | 14,0 | 125 | 34 | 11,0 | 15,50 | 110403014 | 110401020 | 110402017 |
| **M 20 x 2,5** | 20,0 | 16,0 | 140 | 34 | 12,0 | 17,50 | 110403015 | 110401021 | 110402018 |
| **M 22 x 2,5** | 22,0 | 18,0 | 140 | 34 | 14,5 | 19,50 | 110403016 | 110401022 | 110402019 |
| **M 24 x 3,0** | 24,0 | 18,0 | 160 | 38 | 14,5 | 21,00 | 110403017 | 110401023 | 110402020 |
| **M 27 x 3,0** | 27,0 | 20,0 | 160 | 38 | 16,0 | 24,00 | 110403018 | 110401024 | 110402021 |
| **M 30 x 3,5** | 30,0 | 22,0 | 180 | 45 | 18,0 | 26,50 | 110403019 | 110401025 | 110402022 |
| **M 33 x 3,5** | 33,0 | 25,0 | 180 | 50 | 20,0 | 29,50 | | 110401026 | 110402023 |
| **M 36 x 4,0** | 36,0 | 28,0 | 200 | 56 | 22,0 | 32,00 | | 110401027 | 110402024 |
| **M 39 x 4,0** | 39,0 | 32,0 | 200 | 60 | 24,0 | 35,00 | | 110401028 | 110402025 |
| **M 42 x 4,5** | 42,0 | 32,0 | 200 | 60 | 24,0 | 37,50 | | 110401029 | 110402026 |
| **M 45 x 4,5** | 45,0 | 36,0 | 220 | 65 | 29,0 | 40,50 | | 110401030 | 110402027 |
| **M 48 x 5,0** | 48,0 | 36,0 | 250 | 70 | 29,0 | 43,00 | | 110401031 | 110402028 |
| **M 52 x 5,0** | 52,0 | 40,0 | 250 | 70 | 32,0 | 47,00 | | 110401032 | 110402029 |

# Machos de Máquina - Forma B - Agujeros Pasantes

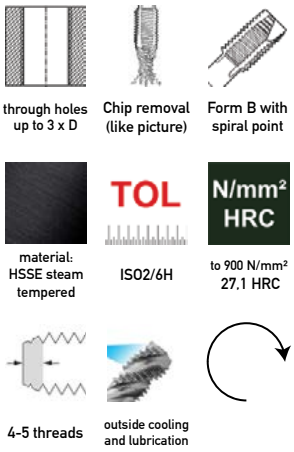
## M

**Métrica ISO - DIN13**

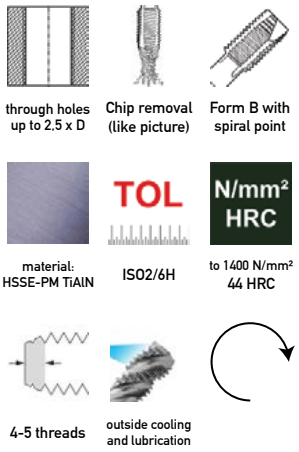
### Macho Máquina
Para aceros especiales y alta resistencia

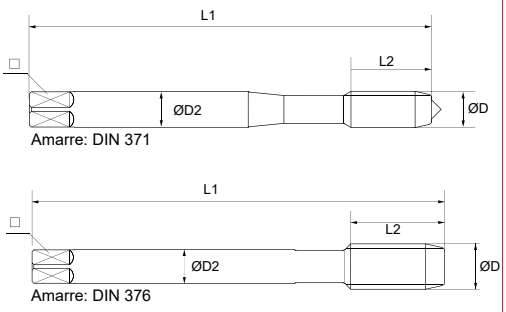


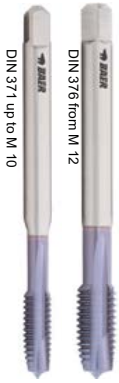

### Macho Máquina
ECO Para Inoxidables y alta vida de la herramienta




### Macho Máquina
Para aceros inoxidables de alta aleación y materiales de alta resistencia






| M | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| M 2 x 0,4 | 2,0 | 2,8 | 45 | 8 | 2,1 | 1,60 | 110404001 | 110405001 | 110406001 |
| M 2,5 x 0,45 | 2,5 | 2,8 | 50 | 9 | 2,1 | 2,05 | 110404002 | 110405002 | 110406002 |
| M 3 x 0,5 | 3,0 | 3,5 | 56 | 11 | 2,7 | 2,50 | 110404003 | 110405003 | 110406003 |
| M 3,5 x 0,6 | 3,5 | 4,0 | 56 | 13 | 3,0 | 2,90 | 110404004 | | |
| M 4 x 0,7 | 4,0 | 4,5 | 63 | 13 | 3,4 | 3,30 | 110404005 | 110405004 | 110406004 |
| M 5 x 0,8 | 5,0 | 6,0 | 70 | 16 | 4,9 | 4,20 | 110404006 | 110405005 | 110406005 |
| M 6 x 1,0 | 6,0 | 6,0 | 80 | 19 | 4,9 | 5,00 | 110404007 | 110405006 | 110406006 |
| M 7 x 1,0 | 7,0 | 7,0 | 80 | 19 | 5,5 | 6,00 | 110404008 | | |
| M 8 x 1,25 | 8,0 | 8,0 | 90 | 22 | 6,2 | 6,80 | 110404009 | 110405007 | 110406007 |
| M 9 x 1,25 | 9,0 | 9,0 | 90 | 18 | 6,2 | 7,80 | 110404010 | | |
| M 10 x 1,5 | 10,0 | 10,0 | 100 | 24 | 8,0 | 8,50 | 110404011 | 110405008 | 110406008 |
| M 12 x 1,75 | 12,0 | 9,0 | 110 | 29 | 7,0 | 10,20 | 110404012 | 110405009 | 110406009 |
| M 14 x 2,0 | 14,0 | 11,0 | 110 | 30 | 9,0 | 12,00 | 110404013 | 110405010 | 110406010 |
| M 16 x 2,0 | 16,0 | 12,0 | 110 | 32 | 9,0 | 14,00 | 110404014 | 110405011 | 110406011 |
| M 18 x 2,5 | 18,0 | 14,0 | 125 | 34 | 11,0 | 15,50 | 110404015 | 110405012 | 110406012 |
| M 20 x 2,5 | 20,0 | 16,0 | 140 | 34 | 12,0 | 17,50 | 110404016 | 110405013 | 110406013 |
| M 22 x 2,5 | 22,0 | 18,0 | 140 | 34 | 14,5 | 19,50 | 110404017 | 110405014 | 110406014 |
| M 24 x 3,0 | 24,0 | 18,0 | 160 | 38 | 14,5 | 21,00 | 110404018 | 110405015 | 110406015 |
| M 27 x 3,0 | 27,0 | 20,0 | 160 | 38 | 16,0 | 24,00 | 110404019 | | |
| M 30 x 3,5 | 30,0 | 22,0 | 180 | 45 | 18,0 | 26,50 | 110404020 | | |

# Machine Taps - Form B for through holes

## M

**Metric coarse thread**
**ISO DIN 13**

### Machine Tap
for aluminum

through holes up to 2,5 x D | Chip removal (like picture) | Form B with spiral point

material: HSSE-TiAlN | ISO2/6H | bis 700 N/mm²

4-5 threads | outside cooling and lubrication

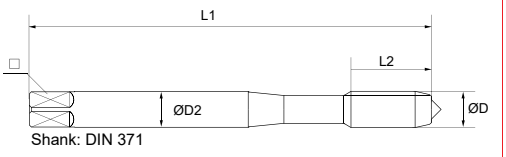
### Machine Tap
for special alloys
(Inconel, Hastelloy etc.)

through holes up to 2,5 x D | Chip removal (like picture) | Form B with spiral point

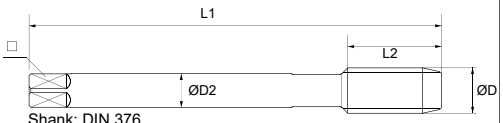
material: HSSE-PM TiAlN | ISO2/6H | to 1200 N/mm² 38 HRC

4-5 threads | outside cooling and lubrication

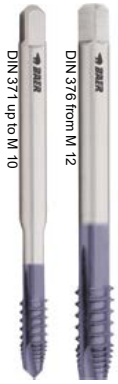
Tap for machine use in through hole.
The spiral point pushes the chips ahead.




Shank: DIN 371




Shank: DIN 376



| M | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **M 2 x 0,4** | 2,0 | 2,8 | 45 | 8 | 2,1 | 1,60 | | 110412001 |
| **M 2,5 x 0,45** | 2,5 | 2,8 | 50 | 9 | 2,1 | 2,05 | | 110412002 |
| **M 3 x 0,5** | 3,0 | 3,5 | 56 | 11 | 2,7 | 2,50 | 110407001 | 110412003 |
| **M 4 x 0,7** | 4,0 | 4,5 | 63 | 13 | 3,4 | 3,30 | 110407002 | 110412004 |
| **M 5 x 0,8** | 5,0 | 6,0 | 70 | 16 | 4,9 | 4,20 | 110407003 | 110412005 |
| **M 6 x 1,0** | 6,0 | 6,0 | 80 | 19 | 4,9 | 5,00 | 110407004 | 110412006 |
| **M 8 x 1,25** | 8,0 | 8,0 | 90 | 22 | 6,2 | 6,80 | 110407005 | 110412007 |
| **M 10 x 1,5** | 10,0 | 10,0 | 100 | 24 | 8,0 | 8,50 | 110407006 | 110412008 |
| **M 12 x 1,75** | 12,0 | 9,0 | 110 | 29 | 7,0 | 10,20 | 110407007 | 110412009 |
| **M 14 x 2,0** | 14,0 | 11,0 | 110 | 30 | 9,0 | 12,00 | 110407008 | 110412010 |
| **M 16 x 2,0** | 16,0 | 12,0 | 110 | 32 | 9,0 | 14,00 | 110407009 | 110412011 |
| **M 18 x 2,5** | 18,0 | 14,0 | 125 | 34 | 11,0 | 15,50 | | 110412012 |
| **M 20 x 2,5** | 20,0 | 16,0 | 140 | 34 | 12,0 | 17,50 | | 110412013 |
| **M 24 x 3,0** | 24,0 | 18,0 | 160 | 38 | 14,5 | 21,00 | | 110412014 |
| **M 27 x 3,0** | 27,0 | 20,0 | 160 | 38 | 16,0 | 24,00 | | 110412015 |
| **M 30 x 3,5** | 30,0 | 22,0 | 180 | 45 | 18,0 | 26,50 | | 110412016 |

# Machine Taps - Form B for through holes

**M** **Metric coarse thread**
**ISO DIN 13**

Tap for machine use in through hole.
The spiral point pushes the chips ahead.

## Machine Tap
for general use
overlengthed (long shank)

through holes up to 4 x D | Chip removal (like picture) | Form B with spiral point

material: HSSE | ISO2/6H | to 900 N/mm² 27,1 HRC

4-5 threads | outside cooling and lubrication

## Machine Tap
for general use
oversized (diameter)

through holes up to 2,5 x D | Chip removal (like picture) | Form B with spiral point

material: HSSE | 6G 7G 6H +0,1 mm | to 900 N/mm² 27,1 HRC

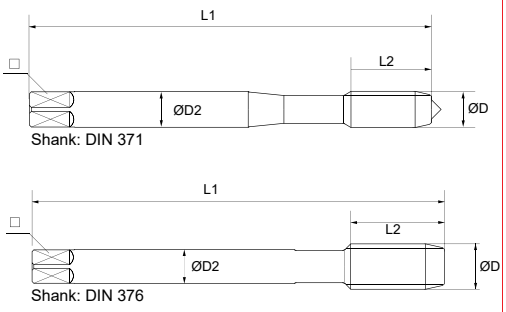
4-5 threads | outside cooling and lubrication

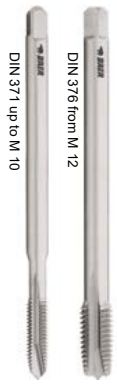
## Machine Tap
for general use
undersized (diameter)

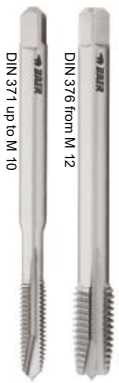
through holes up to 2,5 x D | Chip removal (like picture) | Form B with spiral point

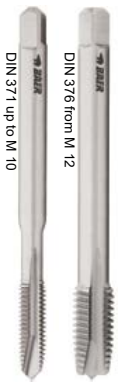
material: HSSE | 4H | to 900 N/mm² 27,1 HRC

4-5 threads | outside cooling and lubrication




| M | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Total length L1 = 100 mm | Tol. 6G: threads with large clearance | Tol. 4H: threads with small clearance |
| **M 2 x 0,4** | 2,0 | 2,8 | 45 | 8 | 2,1 | 1,60 | | | 110420001 |
| **M 2,5 x 0,45** | 2,5 | 2,8 | 50 | 9 | 2,1 | 2,05 | | 110417001 | 110420002 |
| **M 3 x 0,5** | 3,0 | 3,5 | 56 | 11 | 2,7 | 2,50 | 110414001 | 110417002 | 110420003 |
| **M 4 x 0,7** | 4,0 | 4,5 | 63 | 13 | 3,4 | 3,30 | 110414002 | 110417003 | 110420004 |
| **M 5 x 0,8** | 5,0 | 6,0 | 70 | 16 | 4,9 | 4,20 | 110414003 | 110417004 | 110420005 |
| **M 6 x 1,0** | 6,0 | 6,0 | 80 | 19 | 4,9 | 5,00 | 110414004 | 110417005 | 110420006 |
| **M 8 x 1,25** | 8,0 | 8,0 | 90 | 22 | 6,2 | 6,80 | 110414005 | 110417006 | 110420007 |
| **M 10 x 1,5** | 10,0 | 10,0 | 100 | 24 | 8,0 | 8,50 | 110414006 | 110417007 | 110420008 |
| **M 12 x 1,75** | 12,0 | 9,0 | 110 | 29 | 7,0 | 10,20 | 110414007 | 110417008 | 110420009 |
| **M 14 x 2,0** | 14,0 | 11,0 | 110 | 30 | 9,0 | 12,00 | | 110417009 | 110420010 |
| **M 16 x 2,0** | 16,0 | 12,0 | 110 | 32 | 9,0 | 14,00 | | 110417010 | 110420011 |
| **M 18 x 2,5** | 18,0 | 14,0 | 125 | 34 | 11,0 | 15,50 | | 110417011 | |
| **M 20 x 2,5** | 20,0 | 16,0 | 140 | 34 | 12,0 | 17,50 | | 110417012 | |
| | | | | | | | Total length L1 = 120 mm | Tol. 7G: for disorted threads (heat treatment) | |
| **M 3 x 0,5** | 3,0 | 3,5 | 56 | 11 | 2,7 | 2,50 | | 110418001 | |
| **M 4 x 0,7** | 4,0 | 4,5 | 63 | 13 | 3,4 | 3,30 | 110415001 | 110418002 | |
| **M 5 x 0,8** | 5,0 | 6,0 | 70 | 16 | 4,9 | 4,20 | 110415002 | 110418003 | |
| **M 6 x 1,0** | 6,0 | 6,0 | 80 | 19 | 4,9 | 5,00 | 110415003 | 110418004 | |
| **M 8 x 1,25** | 8,0 | 8,0 | 90 | 22 | 6,2 | 6,80 | 110415004 | 110418005 | |
| **M 10 x 1,5** | 10,0 | 10,0 | 100 | 24 | 8,0 | 8,50 | 110415005 | 110418006 | |
| **M 12 x 1,75** | 12,0 | 9,0 | 110 | 29 | 7,0 | 10,20 | 110415006 | 110418007 | |
| | | | | | | | Total length L1 = 150 mm | Tol. 6H +0,1 mm: for electroplating allowance | |
| **M 3 x 0,5** | 3,0 | 3,5 | 56 | 11 | 2,7 | 2,50 | | 110419001 | |
| **M 4 x 0,7** | 4,0 | 4,5 | 63 | 13 | 3,4 | 3,30 | 110416001 | 110419002 | |
| **M 5 x 0,8** | 5,0 | 6,0 | 70 | 16 | 4,9 | 4,20 | 110416002 | 110419003 | |
| **M 6 x 1,0** | 6,0 | 6,0 | 80 | 19 | 4,9 | 5,00 | 110416003 | 110419004 | |
| **M 8 x 1,25** | 8,0 | 8,0 | 90 | 22 | 6,2 | 6,80 | 110416004 | 110419005 | |
| **M 10 x 1,5** | 10,0 | 10,0 | 100 | 24 | 8,0 | 8,50 | 110416005 | 110419006 | |
| **M 12 x 1,75** | 12,0 | 9,0 | 110 | 29 | 7,0 | 10,20 | 110416006 | 110419007 | |

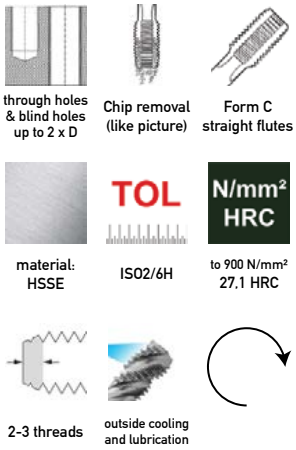
# Machine Taps - Form C (straight flutes) for through holes and blind holes

## M

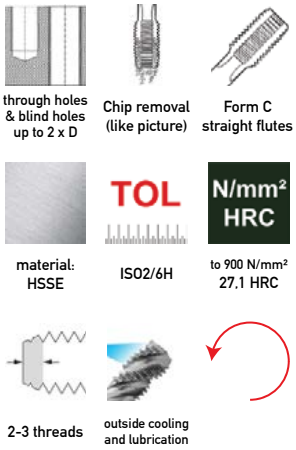
**Metric coarse thread**
**ISO DIN 13**

Tap for machine use in through hole and blind hole. The short lead-in chamfer makes that tap universal in application. The flutes can hold the most part of the chips.

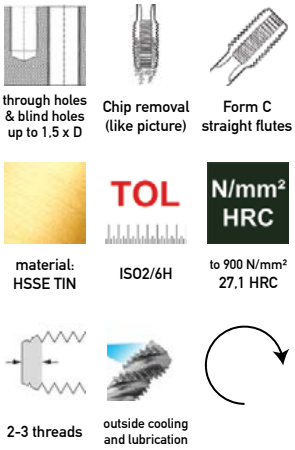
### Machine Tap
for general use

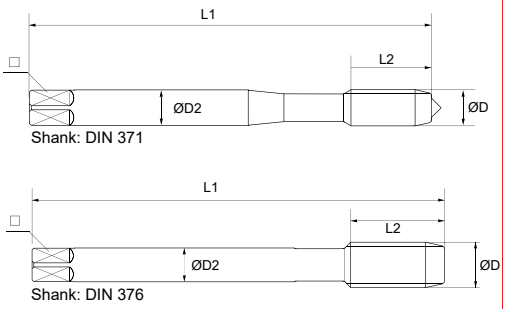


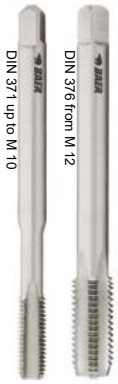

### Machine Tap
for general use
Left-hand thread

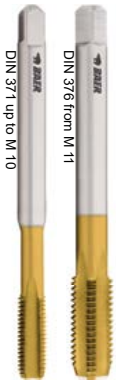



### Machine Tap
with longer tool life time





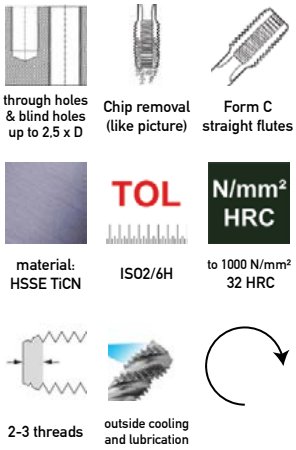

| M | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **DIN 371** | | | | | | | | | |
| **M 2 x 0,4** | 2,0 | 2,8 | 45 | 8 | 2,1 | 1,60 | 110501001 | | 110504001 |
| **M 2,2 x 0,45** | 2,2 | 2,8 | 45 | 8 | 2,1 | 1,75 | | | 110504002 |
| **M 2,3 x 0,4** | 2,3 | 2,8 | 45 | 9 | 2,1 | 1,90 | 110501002 | | 110504003 |
| **M 2,5 x 0,45** | 2,5 | 2,8 | 50 | 9 | 2,1 | 2,05 | 110501003 | | 110504004 |
| **M 2,6 x 0,45** | 2,6 | 2,8 | 50 | 9 | 2,1 | 2,10 | 110501004 | | 110504005 |
| **M 3 x 0,5** | 3,0 | 3,5 | 56 | 11 | 2,7 | 2,50 | 110501005 | 110502001 | 110504006 |
| **M 3,5 x 0,6** | 3,5 | 4,0 | 56 | 13 | 3,0 | 2,90 | 110501006 | | 110504007 |
| **M 4 x 0,7** | 4,0 | 4,5 | 63 | 13 | 3,4 | 3,30 | 110501007 | 110502002 | 110504008 |
| **M 5 x 0,8** | 5,0 | 6,0 | 70 | 16 | 4,9 | 4,20 | 110501008 | 110502003 | 110504009 |
| **M 6 x 1,0** | 6,0 | 6,0 | 80 | 19 | 4,9 | 5,00 | 110501009 | 110502004 | 110504010 |
| **M 7 x 1,0** | 7,0 | 7,0 | 80 | 19 | 5,5 | 6,00 | 110501010 | | 110504011 |
| **M 8 x 1,25** | 8,0 | 8,0 | 90 | 22 | 6,2 | 6,80 | 110501011 | 110502005 | 110504012 |
| **M 9 x 1,25** | 9,0 | 9,0 | 90 | 18 | 6,2 | 7,80 | | | 110504013 |
| **M 10 x 1,5** | 10,0 | 10,0 | 100 | 24 | 8,0 | 8,50 | 110501012 | 110502006 | 110504014 |
| **DIN 376** | | | | | | | | | |
| **M 3 x 0,5** | 3,0 | 2,2 | 56 | 11 | - | 2,50 | 110501013 | | |
| **M 4 x 0,7** | 4,0 | 2,8 | 63 | 13 | 2,1 | 3,30 | 110501014 | | |
| **M 5 x 0,8** | 5,0 | 3,5 | 70 | 16 | 2,7 | 4,20 | 110501015 | | |
| **M 6 x 1,0** | 6,0 | 4,5 | 80 | 19 | 3,4 | 5,00 | 110501016 | | |
| **M 8 x 1,25** | 8,0 | 6,0 | 90 | 22 | 4,9 | 6,80 | 110501017 | | |
| **M 10 x 1,5** | 10,0 | 7,0 | 100 | 24 | 5,5 | 8,50 | 110501018 | | |
| **M 11 x 1,5** | 11,0 | 8,0 | 100 | 22 | 6,2 | 9,50 | | | 110504015 |
| **M 12 x 1,75** | 12,0 | 9,0 | 110 | 29 | 7,0 | 10,20 | 110501019 | 110502007 | 110504016 |
| **M 14 x 2,0** | 14,0 | 11,0 | 110 | 30 | 9,0 | 12,00 | 110501020 | 110502008 | 110504017 |
| **M 16 x 2,0** | 16,0 | 12,0 | 110 | 32 | 9,0 | 14,00 | 110501021 | 110502009 | 110504018 |
| **M 18 x 2,5** | 18,0 | 14,0 | 125 | 34 | 11,0 | 15,50 | 110501022 | 110502010 | 110504019 |
| **M 20 x 2,5** | 20,0 | 16,0 | 140 | 34 | 12,0 | 17,50 | 110501023 | 110502011 | 110504020 |
| **M 22 x 2,5** | 22,0 | 18,0 | 140 | 34 | 14,5 | 19,50 | 110501024 | 110502012 | 110504021 |
| **M 24 x 3,0** | 24,0 | 18,0 | 160 | 38 | 14,5 | 21,00 | 110501025 | 110502013 | 110504022 |
| **M 27 x 3,0** | 27,0 | 20,0 | 160 | 38 | 16,0 | 24,00 | 110501026 | | 110504023 |
| **M 30 x 3,5** | 30,0 | 22,0 | 180 | 45 | 18,0 | 26,50 | 110501027 | | 110504024 |
| **M 33 x 3,5** | 33,0 | 25,0 | 180 | 50 | 20,0 | 29,50 | 110501028 | | 110504025 |
| **M 36 x 4,0** | 36,0 | 28,0 | 200 | 56 | 22,0 | 32,00 | 110501029 | | 110504026 |
| **M 39 x 4,0** | 39,0 | 32,0 | 200 | 60 | 24,0 | 35,00 | 110501030 | | |
| **M 42 x 4,5** | 42,0 | 32,0 | 200 | 60 | 24,0 | 37,50 | 110501031 | | |
| **M 45 x 4,5** | 45,0 | 36,0 | 220 | 65 | 29,0 | 40,50 | 110501032 | | |
| **M 48 x 5,0** | 48,0 | 36,0 | 250 | 70 | 29,0 | 43,00 | 110501033 | | |
| **M 52 x 5,0** | 52,0 | 40,0 | 250 | 70 | 32,0 | 47,00 | 110501034 | | |

# Machine Taps - Form C (straight flutes) for through holes and blind holes

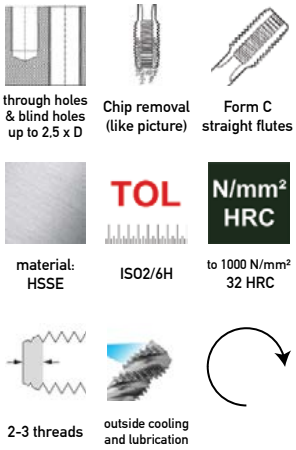
**M** **Metric coarse thread**
**ISO DIN 13**

Tap for machine use in through hole and blind hole. The short lead-in chamfer makes that tap universal in application. The flutes can hold the most part of the chips.

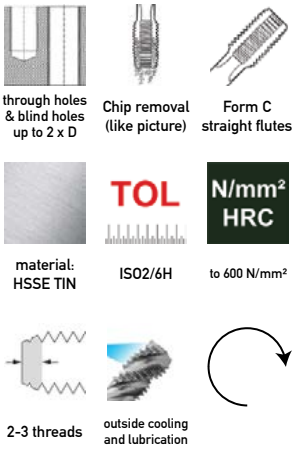
### Machine Tap
for cast materials

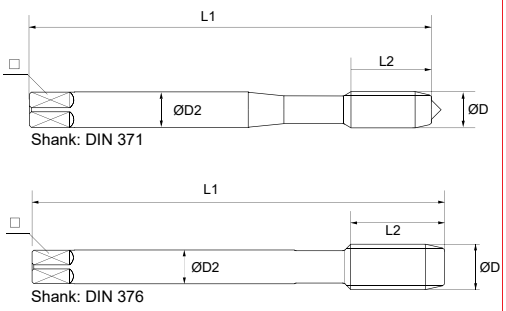


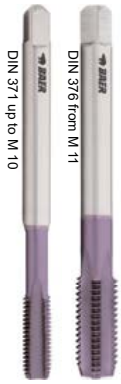

### Machine Tap
for titanium and titanium alloys

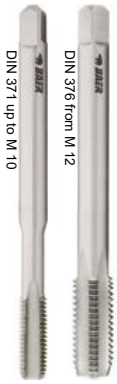



### Machine Tap
for brass (short-chipping)



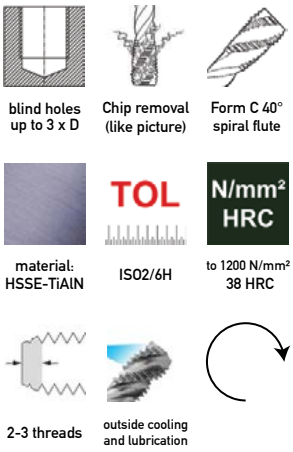
| M | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **M 2 x 0,4** | 2,0 | 2,8 | 45 | 8 | 2,1 | 1,60 | | 110511001 | |
| **M 2,5 x 0,45** | 2,5 | 2,8 | 50 | 9 | 2,1 | 2,05 | | 110511002 | |
| **M 3 x 0,5** | 3,0 | 3,5 | 56 | 11 | 2,7 | 2,50 | 110510001 | 110511003 | 110509001 |
| **M 3,5 x 0,6** | 3,5 | 4,0 | 56 | 13 | 3,0 | 2,90 | 110510002 | | |
| **M 4 x 0,7** | 4,0 | 4,5 | 63 | 13 | 3,4 | 3,30 | 110510003 | 110511004 | 110509002 |
| **M 5 x 0,8** | 5,0 | 6,0 | 70 | 16 | 4,9 | 4,20 | 110510004 | 110511005 | 110509003 |
| **M 6 x 1,0** | 6,0 | 6,0 | 80 | 19 | 4,9 | 5,00 | 110510005 | 110511006 | 110509004 |
| **M 7 x 1,0** | 7,0 | 7,0 | 80 | 19 | 5,5 | 6,00 | 110510006 | | |
| **M 8 x 1,25** | 8,0 | 8,0 | 90 | 22 | 6,2 | 6,80 | 110510007 | 110511007 | 110509005 |
| **M 9 x 1,25** | 9,0 | 9,0 | 90 | 18 | 6,2 | 7,80 | 110510008 | | |
| **M 10 x 1,5** | 10,0 | 10,0 | 100 | 24 | 8,0 | 8,50 | 110510009 | 110511008 | 110509006 |
| **M 11 x 1,5** | 11,0 | 8,0 | 100 | 22 | 6,2 | 9,50 | 110510010 | | |
| **M 12 x 1,75** | 12,0 | 9,0 | 110 | 29 | 7,0 | 10,20 | 110510011 | 110511009 | 110509007 |
| **M 14 x 2,0** | 14,0 | 11,0 | 110 | 30 | 9,0 | 12,00 | 110510012 | 110511010 | 110509008 |
| **M 16 x 2,0** | 16,0 | 12,0 | 110 | 32 | 9,0 | 14,00 | 110510013 | 110511011 | 110509009 |
| **M 18 x 2,5** | 18,0 | 14,0 | 125 | 34 | 11,0 | 15,50 | 110510014 | 110511012 | |
| **M 20 x 2,5** | 20,0 | 16,0 | 140 | 34 | 12,0 | 17,50 | 110510015 | 110511013 | |
| **M 22 x 2,5** | 22,0 | 18,0 | 140 | 34 | 14,5 | 19,50 | 110510016 | | |
| **M 24 x 3,0** | 24,0 | 18,0 | 160 | 38 | 14,5 | 21,00 | 110510017 | | |
| **M 27 x 3,0** | 27,0 | 20,0 | 160 | 38 | 16,0 | 24,00 | 110510018 | | |
| **M 30 x 3,5** | 30,0 | 22,0 | 180 | 45 | 18,0 | 26,50 | 110510019 | | |
| **M 33 x 3,5** | 33,0 | 25,0 | 180 | 50 | 20,0 | 29,50 | 110510020 | | |

# Machine Taps - Form C (with spiral flutes) for blind holes

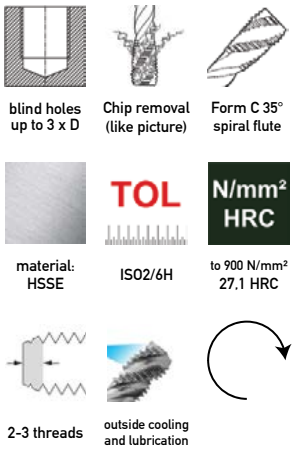
**M** **Metric coarse thread**
**ISO DIN 13**

Tap for machine use in blind holes.
The fast spiral flutes provide good chip removal from the blind hole.

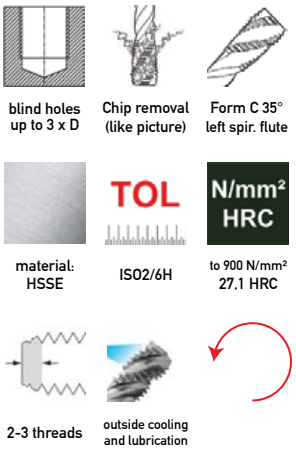
### Machine Tap
UNITAP for universal use

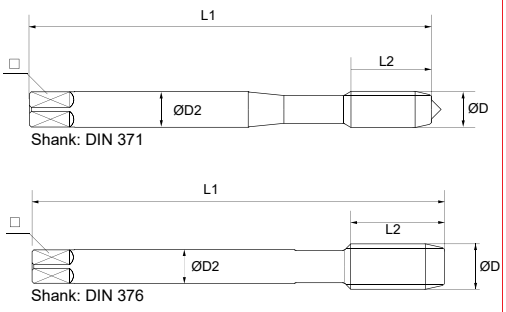


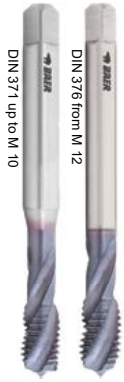

### Machine Tap
for general use




### Machine Tap
for general use
Left-hand thread



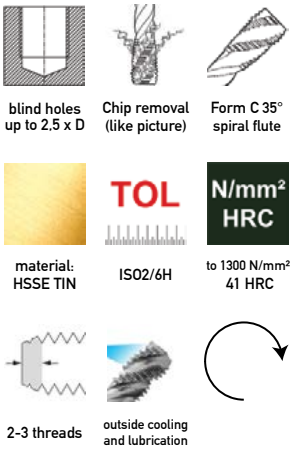
| M | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **DIN 371** | | | | | | | | | |
| **M 2 x 0,4** | 2,0 | 2,8 | 45 | 6 | 2,1 | 1,60 | 110603001 | 110601001 | |
| **M 2,2 x 0,45** | 2,2 | 2,8 | 45 | 6 | 2,1 | 1,75 | 110603002 | | |
| **M 2,5 x 0,45** | 2,5 | 2,8 | 50 | 6 | 2,1 | 2,05 | 110603003 | 110601002 | |
| **M 3 x 0,5** | 3,0 | 3,5 | 56 | 6 | 2,7 | 2,50 | 110603004 | 110601003 | 110602001 |
| **M 3,5 x 0,6** | 3,5 | 4,0 | 56 | 13 | 3,0 | 2,90 | 110603005 | 110601004 | |
| **M 4 x 0,7** | 4,0 | 4,5 | 63 | 7 | 3,4 | 3,30 | 110603006 | 110601005 | 110602002 |
| **M 5 x 0,8** | 5,0 | 6,0 | 70 | 8 | 4,9 | 4,20 | 110603007 | 110601006 | 110602003 |
| **M 6 x 1,0** | 6,0 | 6,0 | 80 | 10 | 4,9 | 5,00 | 110603008 | 110601007 | 110602004 |
| **M 7 x 1,0** | 7,0 | 7,0 | 80 | 19 | 5,5 | 6,00 | | 110601008 | |
| **M 8 x 1,25** | 8,0 | 8,0 | 90 | 14 | 6,2 | 6,80 | 110603009 | 110601009 | 110602005 |
| **M 10 x 1,5** | 10,0 | 10,0 | 100 | 16 | 8,0 | 8,50 | 110603010 | 110601010 | 110602006 |
| **DIN 376** | | | | | | | | | |
| **M 3 x 0,5** | 3,0 | 2,2 | 56 | 6 | - | 2,50 | | 110601011 | 110602007 |
| **M 4 x 0,7** | 4,0 | 2,8 | 63 | 7 | 2,1 | 3,30 | | 110601012 | 110602008 |
| **M 5 x 0,8** | 5,0 | 3,5 | 70 | 8 | 2,7 | 4,20 | | 110601013 | 110602009 |
| **M 6 x 1,0** | 6,0 | 4,5 | 80 | 10 | 3,4 | 5,00 | | 110601014 | 110602010 |
| **M 8 x 1,25** | 8,0 | 6,0 | 90 | 14 | 4,9 | 6,80 | | 110601015 | 110602011 |
| **M 10 x 1,5** | 10,0 | 7,0 | 100 | 16 | 5,5 | 8,50 | | 110601016 | 110602012 |
| **M 12 x 1,75** | 12,0 | 9,0 | 110 | 18 | 7,0 | 10,20 | 110603011 | 110601017 | 110602013 |
| **M 14 x 2,0** | 14,0 | 11,0 | 110 | 20 | 9,0 | 12,00 | 110603012 | 110601018 | 110602014 |
| **M 16 x 2,0** | 16,0 | 12,0 | 110 | 22 | 9,0 | 14,00 | 110603013 | 110601019 | 110602015 |
| **M 18 x 2,5** | 18,0 | 14,0 | 125 | 25 | 11,0 | 15,50 | 110603014 | 110601020 | 110602016 |
| **M 20 x 2,5** | 20,0 | 16,0 | 140 | 25 | 12,0 | 17,50 | 110603015 | 110601021 | 110602017 |
| **M 22 x 2,5** | 22,0 | 18,0 | 140 | 27 | 14,5 | 19,50 | 110603016 | 110601022 | 110602018 |
| **M 24 x 3,0** | 24,0 | 18,0 | 160 | 30 | 14,5 | 21,00 | 110603017 | 110601023 | 110602019 |
| **M 27 x 3,0** | 27,0 | 20,0 | 160 | 30 | 16,0 | 24,00 | 110603018 | 110601024 | 110602020 |
| **M 30 x 3,5** | 30,0 | 22,0 | 180 | 35 | 18,0 | 26,50 | 110603019 | 110601025 | 110602021 |
| **M 33 x 3,5** | 33,0 | 25,0 | 180 | 35 | 20,0 | 29,50 | | 110601026 | 110602022 |
| **M 36 x 4,0** | 36,0 | 28,0 | 200 | 40 | 22,0 | 32,00 | | 110601027 | 110602023 |
| **M 39 x 4,0** | 39,0 | 32,0 | 200 | 40 | 24,0 | 35,00 | | 110601028 | 110602024 |
| **M 42 x 4,5** | 42,0 | 32,0 | 200 | 45 | 24,0 | 37,50 | | 110601029 | 110602025 |
| **M 45 x 4,5** | 45,0 | 36,0 | 220 | 45 | 29,0 | 40,50 | | 110601030 | 110602026 |
| **M 48 x 5,0** | 48,0 | 36,0 | 250 | 50 | 29,0 | 43,00 | | 110601031 | 110602027 |
| **M 52 x 5,0** | 52,0 | 40,0 | 250 | 50 | 32,0 | 47,00 | | 110601032 | 110602028 |

# Machine Taps - Form C (with spiral flutes) for blind holes

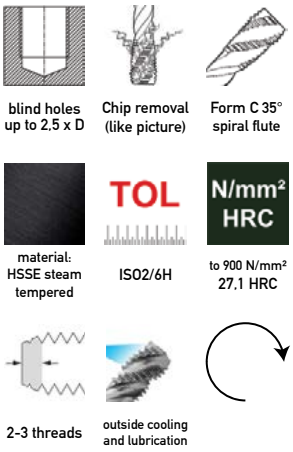
**M** **Metric coarse thread**
**ISO DIN 13**

Tap for machine use in blind holes.
The fast spiral flutes provide good chip removal from the blind hole.

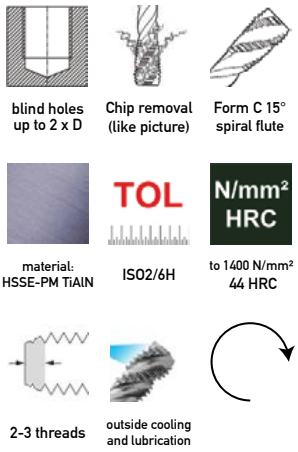
### Machine Tap
for high-alloyed steels
and longer tool life time

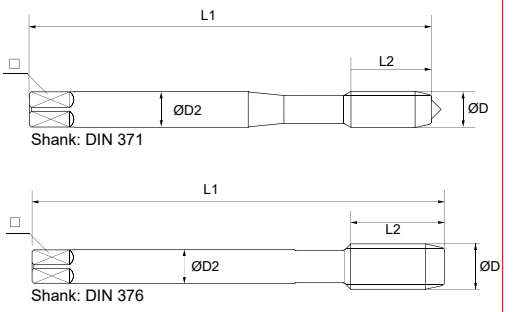


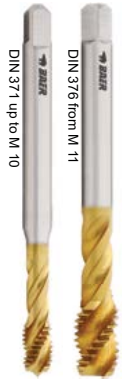

### Machine Tap
ECO for stainless steels
with high tool life time

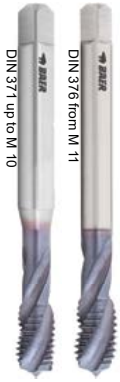



### Machine Tap
for high alloyed stainless steels
and high-tensile materials





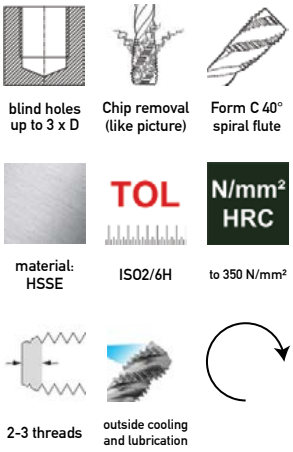

| M | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **M 2 x 0,4** | 2,0 | 2,8 | 45 | 6 | 2,1 | 1,60 | 110604001 | | 110606001 |
| **M 2,5 x 0,45** | 2,5 | 2,8 | 50 | 6 | 2,1 | 2,05 | 110604002 | | 110606002 |
| **M 3 x 0,5** | 3,0 | 3,5 | 56 | 6 | 2,7 | 2,50 | 110604003 | 110605001 | 110606003 |
| **M 3,5 x 0,6** | 3,5 | 4,0 | 56 | 13 | 3,0 | 2,90 | 110604004 | | |
| **M 4 x 0,7** | 4,0 | 4,5 | 63 | 7 | 3,4 | 3,30 | 110604005 | 110605002 | 110606004 |
| **M 5 x 0,8** | 5,0 | 6,0 | 70 | 8 | 4,9 | 4,20 | 110604006 | 110605003 | 110606005 |
| **M 6 x 1,0** | 6,0 | 6,0 | 80 | 10 | 4,9 | 5,00 | 110604007 | 110605004 | 110606006 |
| **M 7 x 1,0** | 7,0 | 7,0 | 80 | 19 | 5,5 | 6,00 | 110604008 | | |
| **M 8 x 1,25** | 8,0 | 8,0 | 90 | 14 | 6,2 | 6,80 | 110604009 | 110605005 | 110606007 |
| **M 9 x 1,25** | 9,0 | 9,0 | 90 | 15 | 7,0 | 7,80 | 110604010 | | |
| **M 10 x 1,5** | 10,0 | 10,0 | 100 | 16 | 8,0 | 8,50 | 110604011 | 110605006 | 110606008 |
| **M 11 x 1,5** | 11,0 | 8,0 | 100 | 18 | 6,2 | 9,50 | 110604012 | | |
| **M 12 x 1,75** | 12,0 | 9,0 | 110 | 18 | 7,0 | 10,20 | 110604013 | 110605007 | 110606009 |
| **M 14 x 2,0** | 14,0 | 11,0 | 110 | 20 | 9,0 | 12,00 | 110604014 | 110605008 | 110606010 |
| **M 16 x 2,0** | 16,0 | 12,0 | 110 | 22 | 9,0 | 14,00 | 110604015 | 110605009 | 110606011 |
| **M 18 x 2,5** | 18,0 | 14,0 | 125 | 25 | 11,0 | 15,50 | 110604016 | 110605010 | 110606012 |
| **M 20 x 2,5** | 20,0 | 16,0 | 140 | 25 | 12,0 | 17,50 | 110604017 | 110605011 | 110606013 |
| **M 22 x 2,5** | 22,0 | 18,0 | 140 | 27 | 14,5 | 19,50 | 110604018 | 110605012 | 110606014 |
| **M 24 x 3,0** | 24,0 | 18,0 | 160 | 30 | 14,5 | 21,00 | 110604019 | 110605013 | 110606015 |
| **M 27 x 3,0** | 27,0 | 20,0 | 160 | 30 | 16,0 | 24,00 | 110604020 | | |
| **M 30 x 3,5** | 30,0 | 22,0 | 180 | 35 | 18,0 | 26,50 | 110604021 | | |

# Machine Taps - Form C (with spiral flutes) for blind holes

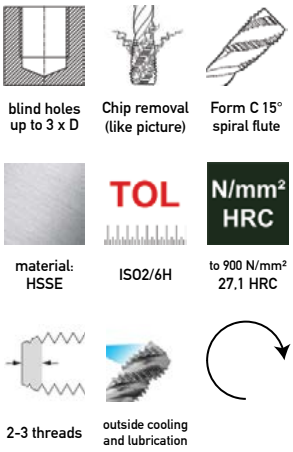
**M** **Metric coarse thread**
**ISO DIN 13**

Tap for machine use in blind holes.
The fast spiral flutes provide good chip removal from the blind hole.

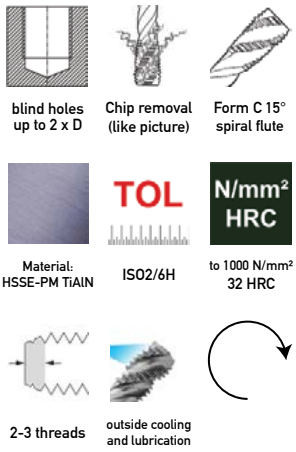
### Machine Tap
for aluminum (long-chipping)

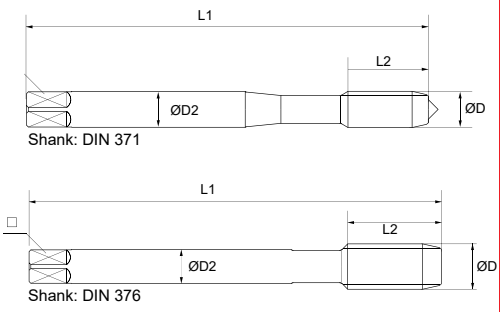


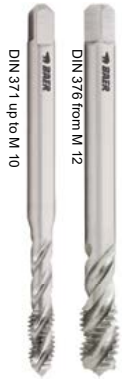

### Machine Tap
for long-chipping materials

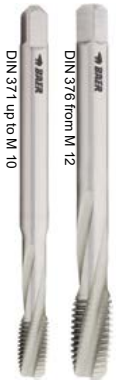


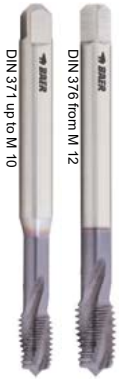

### Machine Tap
for special alloys
(Inconel, Hastelloy etc.)



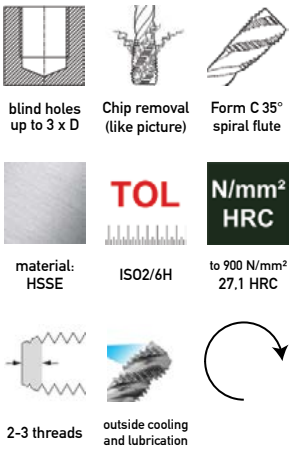

| M | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **DIN 371** | | | | | | | | | |
| **M 3 x 0,5** | 3,0 | 3,5 | 56 | 6 | 2,7 | 2,50 | 110607001 | 110608001 | 110612001 |
| **M 3,5 x 0,6** | 3,5 | 4,0 | 56 | 13 | 3,0 | 2,90 | | 110608002 | |
| **M 4 x 0,7** | 4,0 | 4,5 | 63 | 7 | 3,4 | 3,30 | 110607002 | 110608003 | 110612002 |
| **M 5 x 0,8** | 5,0 | 6,0 | 70 | 8 | 4,9 | 4,20 | 110607003 | 110608004 | 110612003 |
| **M 6 x 1,0** | 6,0 | 6,0 | 80 | 10 | 4,9 | 5,00 | 110607004 | 110608005 | 110612004 |
| **M 7 x 1,0** | 7,0 | 7,0 | 80 | 19 | 5,5 | 6,00 | | 110608006 | |
| **M 8 x 1,25** | 8,0 | 8,0 | 90 | 14 | 6,2 | 6,80 | 110607005 | 110608007 | 110612005 |
| **M 10 x 1,5** | 10,0 | 10,0 | 100 | 16 | 8,0 | 8,50 | 110607006 | 110608008 | 110612006 |
| **DIN 376** | | | | | | | | | |
| **M 3 x 0,5** | 3,0 | 2,2 | 56 | 11 | - | 2,50 | | 110608009 | |
| **M 4 x 0,7** | 4,0 | 2,8 | 63 | 13 | 2,1 | 3,30 | | 110608010 | |
| **M 5 x 0,8** | 5,0 | 3,5 | 70 | 16 | 2,7 | 4,20 | | 110608011 | |
| **M 6 x 1,0** | 6,0 | 4,5 | 80 | 19 | 3,4 | 5,00 | | 110608012 | |
| **M 8 x 1,25** | 8,0 | 6,0 | 90 | 22 | 4,9 | 6,80 | | 110608013 | |
| **M 10 x 1,5** | 10,0 | 7,0 | 100 | 24 | 5,5 | 8,50 | | 110608014 | |
| **M 12 x 1,75** | 12,0 | 9,0 | 110 | 18 | 7,0 | 10,20 | 110607007 | 110608015 | 110612007 |
| **M 14 x 2,0** | 14,0 | 11,0 | 110 | 20 | 9,0 | 12,00 | 110607008 | 110608016 | 110612008 |
| **M 16 x 2,0** | 16,0 | 12,0 | 110 | 22 | 9,0 | 14,00 | 110607009 | 110608017 | 110612009 |
| **M 18 x 2,5** | 18,0 | 14,0 | 125 | 25 | 11,0 | 15,50 | | 110608018 | 110612010 |
| **M 20 x 2,5** | 20,0 | 16,0 | 140 | 25 | 12,0 | 17,50 | | 110608019 | 110612011 |
| **M 22 x 2,5** | 22,0 | 18,0 | 140 | 27 | 14,5 | 19,50 | | 110608020 | |
| **M 24 x 3,0** | 24,0 | 18,0 | 160 | 30 | 14,5 | 21,00 | | 110608021 | |

# Machine Taps - Form C (with spiral flutes) for blind holes

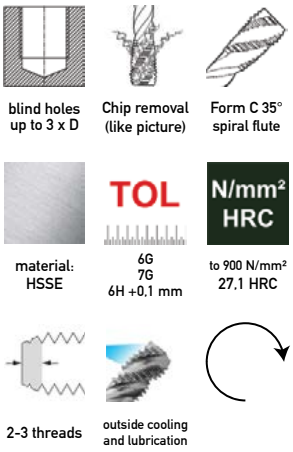
**M** **Metric coarse thread**
**ISO DIN 13**

Tap for machine use in blind holes.
The fast spiral flutes provide good chip removal from the blind hole.

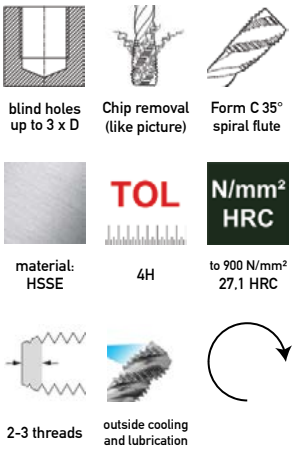
### Machine Tap
for general use
overlengthed (long shank)

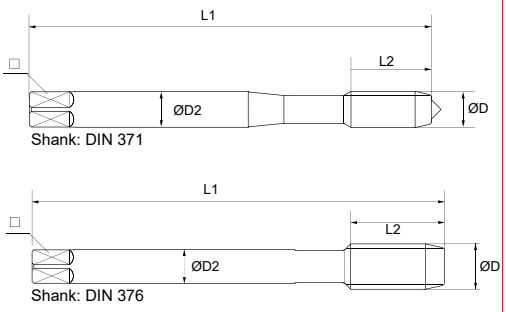


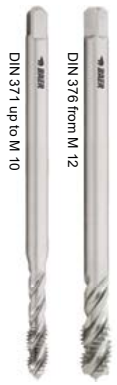

### Machine Tap
for general use
oversized (diameter)

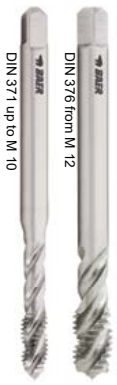


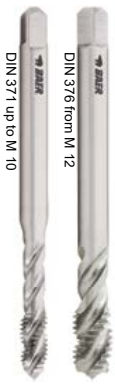

### Machine Tap
for general use
undersized (diameter)



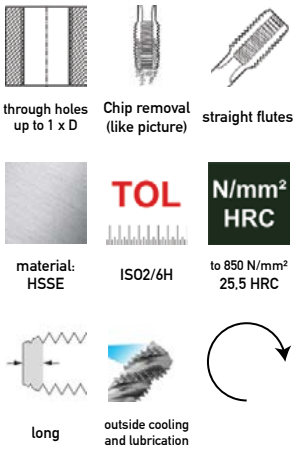

| M | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Total length L1 = 100 mm | Tol. 6G: threads with large clearance | Tol. 4H: threads with small clearance |
| **M 2 x 0,4** | 2,0 | 2,8 | 45 | 6 | 2,1 | 1,60 | | | 110620001 |
| **M 2,5 x 0,45** | 2,5 | 2,8 | 50 | 6 | 2,1 | 2,05 | | | 110620002 |
| **M 3 x 0,5** | 3,0 | 3,5 | 56 | 6 | 2,7 | 2,50 | 110614001 | 110617001 | 110620003 |
| **M 4 x 0,7** | 4,0 | 4,5 | 63 | 7 | 3,4 | 3,30 | 110614002 | 110617002 | 110620004 |
| **M 5 x 0,8** | 5,0 | 6,0 | 70 | 8 | 4,9 | 4,20 | 110614003 | 110617003 | 110620005 |
| **M 6 x 1,0** | 6,0 | 6,0 | 80 | 10 | 4,9 | 5,00 | 110614004 | 110617004 | 110620006 |
| **M 8 x 1,25** | 8,0 | 8,0 | 90 | 14 | 6,2 | 6,80 | 110614005 | 110617005 | 110620007 |
| **M 10 x 1,5** | 10,0 | 10,0 | 100 | 16 | 8,0 | 8,50 | 110614006 | 110617006 | 110620008 |
| **M 12 x 1,75** | 12,0 | 9,0 | 110 | 18 | 7,0 | 10,20 | 110614007 | 110617007 | 110620009 |
| **M 14 x 2,0** | 14,0 | 11,0 | 110 | 20 | 9,0 | 12,00 | | 110617008 | |
| **M 16 x 2,0** | 16,0 | 12,0 | 110 | 22 | 9,0 | 14,00 | | 110617009 | |
| **M 18 x 2,5** | 18,0 | 14,0 | 125 | 25 | 11,0 | 15,50 | | 110617010 | |
| **M 20 x 2,5** | 20,0 | 16,0 | 140 | 25 | 12,0 | 17,50 | | 110617011 | |
| | | | | | | | Total length L1 = 120 mm | Tol. 7G: for disorted threads (heat treatment) | |
| **M 3 x 0,5** | 3,0 | 3,5 | 56 | 6 | 2,7 | 2,50 | | 110618001 | |
| **M 4 x 0,7** | 4,0 | 4,5 | 63 | 7 | 3,4 | 3,30 | 110615001 | 110618002 | |
| **M 5 x 0,8** | 5,0 | 6,0 | 70 | 8 | 4,9 | 4,20 | 110615002 | 110618003 | |
| **M 6 x 1,0** | 6,0 | 6,0 | 80 | 10 | 4,9 | 5,00 | 110615003 | 110618004 | |
| **M 8 x 1,25** | 8,0 | 8,0 | 90 | 14 | 6,2 | 6,80 | 110615004 | 110618005 | |
| **M 10 x 1,5** | 10,0 | 10,0 | 100 | 16 | 8,0 | 8,50 | 110615005 | 110618006 | |
| **M 12 x 1,75** | 12,0 | 9,0 | 110 | 18 | 7,0 | 10,20 | 110615006 | 110618007 | |
| | | | | | | | Total length L1 = 150 mm | Tol. 6H +0,1 mm: for electroplating allowance | |
| **M 3 x 0,5** | 3,0 | 3,5 | 56 | 6 | 2,7 | 2,50 | | 110619001 | |
| **M 4 x 0,7** | 4,0 | 4,5 | 63 | 7 | 3,4 | 3,30 | 110616001 | 110619002 | |
| **M 5 x 0,8** | 5,0 | 6,0 | 70 | 8 | 4,9 | 4,20 | 110616002 | 110619003 | |
| **M 6 x 1,0** | 6,0 | 6,0 | 80 | 10 | 4,9 | 5,00 | 110616003 | 110619004 | |
| **M 8 x 1,25** | 8,0 | 8,0 | 90 | 14 | 6,2 | 6,80 | 110616004 | 110619005 | |
| **M 10 x 1,5** | 10,0 | 10,0 | 100 | 16 | 8,0 | 8,50 | 110616005 | 110619006 | |
| **M 12 x 1,75** | 12,0 | 9,0 | 110 | 18 | 7,0 | 10,20 | 110616006 | 110619007 | |

# Machine Nut Taps and Combined Machine Taps

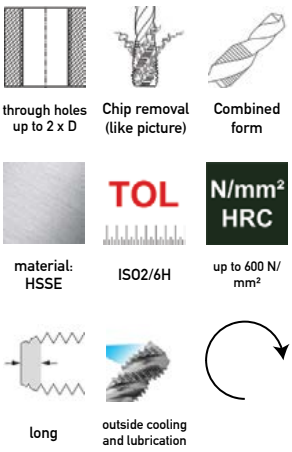
## M

**Metric coarse thread**
**ISO DIN 13**

### Machine Nut Tap
for general use

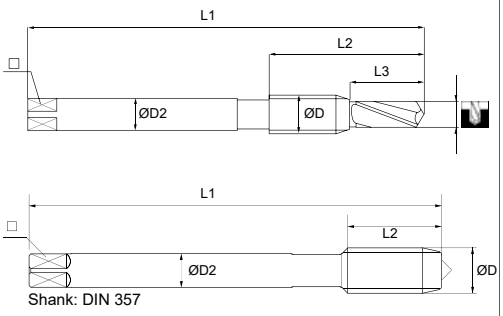



### Combined Machine Tap
for general use




**Machine Nut Tap**
Machine Tap for threading nuts up to 1,0 D. The flutes can hold the most part of the chips.

**Combined Machine Tap**
Machine Tap, which allows core hole drilling and thread tapping in one fluent process without changing tools.



| M | D1 | D2 | L1 | L2 | □ | | No. | D2 | L1 | L2 | L3 | □ | No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **M 3 x 0,5** | 3,0 | 2,2 | 70 | 22 | - | 2,50 | 110901001 | 3,0 | 56 | 22 | 11 | 2,4 | 111001001 |
| **M 4 x 0,7** | 4,0 | 2,8 | 90 | 25 | 2,1 | 3,30 | 110901002 | 4,0 | 63 | 28 | 14 | 3,0 | 111001002 |
| **M 5 x 0,8** | 5,0 | 3,5 | 100 | 28 | 2,7 | 4,20 | 110901003 | 5,0 | 71 | 36 | 18 | 3,8 | 111001003 |
| **M 6 x 1,0** | 6,0 | 4,5 | 110 | 32 | 3,4 | 5,00 | 110901004 | 6,0 | 80 | 44 | 22 | 4,9 | 111001004 |
| **M 8 x 1,25** | 8,0 | 6,0 | 125 | 40 | 4,9 | 6,80 | 110901005 | 8,0 | 95 | 50 | 25 | 6,2 | 111001005 |
| **M 10 x 1,5** | 10,0 | 7,0 | 140 | 45 | 5,5 | 8,50 | 110901006 | 10,0 | 106 | 62 | 31 | 8,0 | 111001006 |
| **M 12 x 1,75** | 12,0 | 9,0 | 180 | 50 | 7,0 | 10,20 | 110901007 | 12,0 | 115 | 70 | 35 | 9,0 | 111001007 |
| **M 14 x 2,0** | 14,0 | 11,0 | 200 | 56 | 9,0 | 12,00 | 110901008 | | | | | | |
| **M 16 x 2,0** | 16,0 | 12,0 | 200 | 63 | 9,0 | 14,00 | 110901009 | | | | | | |
| **M 18 x 2,5** | 18,0 | 14,0 | 220 | 63 | 11,0 | 15,50 | 110901010 | | | | | | |
| **M 20 x 2,5** | 20,0 | 16,0 | 250 | 70 | 12,0 | 17,50 | 110901011 | | | | | | |
| **M 22 x 2,5** | 22,0 | 18,0 | 280 | 80 | 14,5 | 19,50 | 110901012 | | | | | | |
| **M 24 x 3,0** | 24,0 | 18,0 | 280 | 80 | 14,5 | 21,00 | 110901013 | | | | | | |

# UNiForm Machine Forming Taps

## M

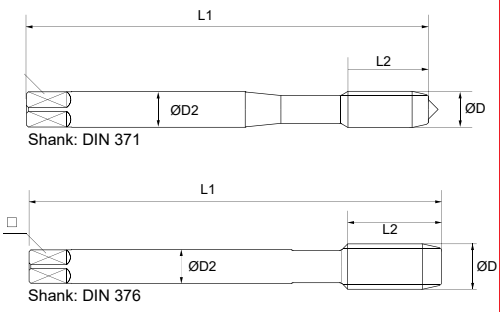
**Metric coarse thread**
**ISO DIN 13**

Machine Forming Taps have following advantages:
- No chips
- Up to 20 times longer lifetime (compared to taps)
- Same forming tap for through and blind hole
- Wide range of materials can be processed
- Intersection of the thread is impossible
- Very high trueness
- Increased strength of the thread
- Higher surface quality
- Much higher cutting speed

### Machine Forming Taps
for universal use

### Machine Forming Taps
for higher demands

### Machine Forming Taps
for universal use
oversized (diameter)

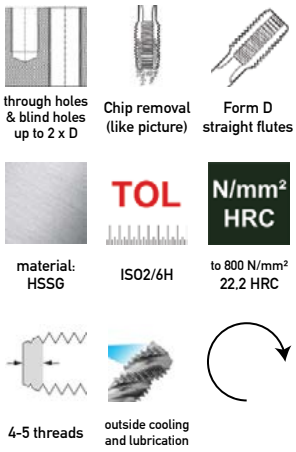


| M | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Tol. 6HX: standard tolerance | Tol. 6HX: standard tolerance | Tol. 6GX: threads with large clearance |
| **M 2 x 0,4** | 2,0 | 2,8 | 45 | 8 | 2,1 | 1,85 | 111101001 | 111104001 | 111117001 |
| **M 2,2 x 0,45** | 2,2 | 2,8 | 45 | 8 | 2,1 | 2,03 | 111101002 | | |
| **M 2,3 x 0,4** | 2,3 | 2,8 | 45 | 8 | 2,1 | 2,15 | 111101003 | | |
| **M 2,5 x 0,45** | 2,5 | 2,8 | 50 | 9 | 2,1 | 2,33 | 111101004 | 111104002 | 111117002 |
| **M 2,6 x 0,45** | 2,6 | 2,8 | 50 | 9 | 2,1 | 2,43 | 111101005 | | |
| **M 3 x 0,5** | 3,0 | 3,5 | 56 | 11 | 2,7 | 2,80 | 111101006 | 111104003 | 111117003 |
| **M 3,5 x 0,6** | 3,5 | 4,0 | 56 | 13 | 3,0 | 3,25 | 111101007 | 111104004 | 111117004 |
| **M 4 x 0,7** | 4,0 | 4,5 | 63 | 13 | 3,4 | 3,70 | 111101008 | 111104005 | 111117005 |
| **M 4,5 x 0,75** | 4,5 | 6,0 | 70 | 14 | 4,9 | 4,20 | 111101009 | | |
| **M 5 x 0,8** | 5,0 | 6,0 | 70 | 16 | 4,9 | 4,65 | 111101010 | 111104006 | 111117006 |
| **M 6 x 1,0** | 6,0 | 6,0 | 80 | 19 | 4,9 | 5,10 | 111101011 | 111104007 | 111117007 |
| **M 8 x 1,25** | 8,0 | 8,0 | 90 | 22 | 6,2 | 7,45 | 111101012 | 111104008 | 111117008 |
| **M 10 x 1,5** | 10,0 | 10,0 | 100 | 24 | 8,0 | 9,35 | 111101013 | 111104009 | 111117009 |
| **M 12 x 1,75** | 12,0 | 9,0 | 110 | 29 | 7,0 | 11,25 | 111101014 | 111104010 | 111117010 |
| **M 14 x 2,0** | 14,0 | 11,0 | 110 | 30 | 9,0 | 13,10 | 111101015 | 111104011 | 111117011 |
| **M 16 x 2,0** | 16,0 | 12,0 | 110 | 32 | 9,0 | 15,10 | 111101016 | 111104012 | 111117012 |
| **M 18 x 2,5** | 18,0 | 14,0 | 125 | 34 | 11,0 | 16,85 | 111101017 | 111104013 | |
| **M 20 x 2,5** | 20,0 | 16,0 | 140 | 34 | 12,0 | 18,85 | 111101018 | 111104014 | |

# 1/4“ Bit-Short Machine Taps

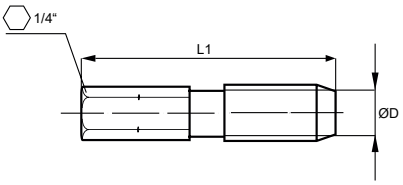
**M** **Metric coarse thread**
**ISO DIN 13**

**Bit-Taps**
Form D for through holes
and blind holes




Efficient internal thread cutting with battery-powered screwdriver (min. 7,5 Volt).

**Application**:
non abrasive material up to 900 N/mm²
unalloyed and low alloyed steel

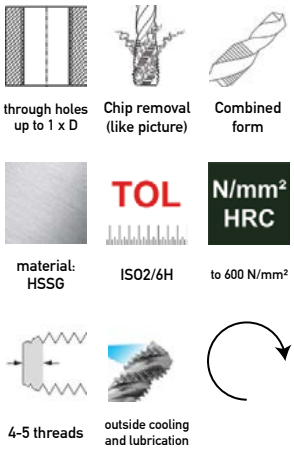


| M | D1 | L1 | L2 | ⬡ | | No. |
|---|---|---|---|---|---|---|
| **M 3 x 0,5** | 3,0 | 33 | 11 | 1/4" | 2,50 | 111201001 |
| **M 3,5 x 0,6** | 3,5 | 34 | 10 | 1/4" | 2,90 | 111201002 |
| **M 4 x 0,7** | 4,0 | 35 | 12 | 1/4" | 3,30 | 111201003 |
| **M 4,5 x 0,75** | 4,5 | 35 | 12 | 1/4" | 3,70 | 111201004 |
| **M 5 x 0,8** | 5,0 | 36 | 15 | 1/4" | 4,20 | 111201005 |
| **M 5,5 x 0,9** | 5,5 | 35 | 15 | 1/4" | 4,60 | 111201006 |
| **M 6 x 1,0** | 6,0 | 39 | 18 | 1/4" | 5,00 | 111201007 |
| **M 7 x 1,0** | 7,0 | 38 | 16 | 1/4" | 6,00 | 111201008 |
| **M 8 x 1,25** | 8,0 | 40 | 19 | 1/4" | 6,80 | 111201009 |
| **M 9 x 1,25** | 9,0 | 41 | 18 | 1/4" | 7,80 | 111201010 |
| **M 10 x 1,5** | 10,0 | 41 | 21 | 1/4" | 8,50 | 111201011 |

# 1/4“ Combined-Bit-Taps

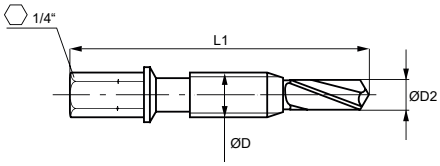
**M** **Metric coarse thread**
**ISO DIN 13**

**Kombi-Bit-Taps**
for through holes




Efficient internal thread cutting with battery-powered screwdriver (min. 7,5 Volt). Core hole drilling and thread tapping in one fluent process.

**Application**:
non abrasive material up to 600 N/mm²
unalloyed and low alloyed steel

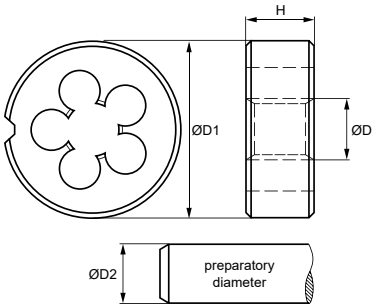


| M | D1 | D2 | L1 | ⬡ | No. |
|---|---|---|---|---|---|
| **M 3 x 0,5** | 3,0 | 2,5 | 36 | 1/4" | 111301001 |
| **M 4 x 0,7** | 4,0 | 3,3 | 39 | 1/4" | 111301002 |
| **M 5 x 0,8** | 5,0 | 4,2 | 41 | 1/4" | 111301003 |
| **M 6 x 1,0** | 6,0 | 5,0 | 44 | 1/4" | 111301004 |
| **M 8 x 1,25** | 8,0 | 6,8 | 50 | 1/4" | 111301005 |
| **M 10 x 1,5** | 10,0 | 8,5 | 59 | 1/4" | 111301006 |

# Round Dies

## M Metric coarse thread ISO DIN 13

| Round Dies for general use | Round Dies for general use Left Hand | Round Dies for higher demands | Round Dies for stainless steels | Round Dies for brass |
|---|---|---|---|---|
| TOL | TOL | TOL | TOL | TOL |
| material: HSS | material: HSS | material: HSSE | material: HSSE | material: HSS |
| ISO-6g | ISO-6g | ISO-6g | ISO-6g | ISO-6g |
| Chamfer: 1,5 threads | Chamfer: 1,5 threads | Chamfer: 1,5 threads | Chamfer: 2 threads | Chamfer: 1,25 threads |
| right hand thread | left hand thread | right hand thread | right hand thread | right hand thread |
| | | with spiral entry | lapped with spiral entry | lapped with spiral entry |

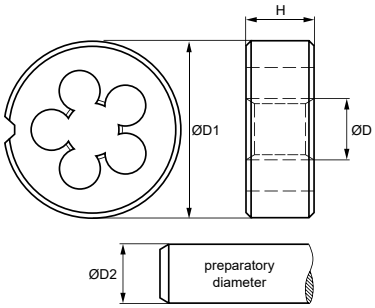


| M | D | D1 | H | D2 | No. | No. | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **M 1 x 0,25** | 1,0 | 16 | 5 | 0,96 | 111401001 | | | | |
| **M 1,1 x 0,25** | 1,1 | 16 | 5 | 1,05 | 111401002 | | | | |
| **M 1,2 x 0,25** | 1,2 | 16 | 5 | 1,15 | 111401003 | | | | |
| **M 1,4 x 0,3** | 1,4 | 16 | 5 | 1,36 | 111401004 | | | 111405001 | |
| **M 1,6 x 0,35** | 1,6 | 16 | 5 | 1,55 | 111401005 | | | 111405002 | |
| **M 1,7 x 0,35** | 1,7 | 16 | 5 | 1,64 | 111401006 | | | 111405003 | |
| **M 1,8 x 0,35** | 1,8 | 16 | 5 | 1,75 | 111401007 | | | | |
| **M 2 x 0,4** | 2,0 | 16 | 5 | 1,95 | 111401008 | 111402001 | | 111405004 | 111409001 |
| **M 2,2 x 0,45** | 2,2 | 16 | 5 | 2,15 | 111401009 | | | | |
| **M 2,3 x 0,4** | 2,3 | 16 | 5 | 2,23 | 111401010 | | | 111405005 | |
| **M 2,5 x 0,45** | 2,5 | 16 | 5 | 2,42 | 111401011 | | | 111405006 | 111409002 |
| **M 2,6 x 0,45** | 2,6 | 16 | 5 | 2,53 | 111401012 | | | 111405007 | 111409003 |
| **M 3 x 0,5** | 3,0 | 20 | 5 | 2,92 | 111401013 | 111402002 | 111404001 | 111405008 | 111409004 |
| **M 3,5 x 0,6** | 3,5 | 20 | 5 | 3,41 | 111401014 | | | 111405009 | 111409005 |
| **M 4 x 0,7** | 4,0 | 20 | 5 | 3,90 | 111401015 | 111402003 | 111404002 | 111405010 | 111409006 |
| **M 4,5 x 0,75** | 4,5 | 20 | 7 | 4,40 | 111401016 | | | | |
| **M 5 x 0,8** | 5,0 | 20 | 7 | 4,90 | 111401017 | 111402004 | 111404003 | 111405011 | 111409007 |
| **M 5 x 0,9** | 5,0 | 20 | 7 | 4,89 | 111401018 | | | | |
| **M 5,5 x 0,9** | 5,5 | 20 | 7 | 5,44 | 111401019 | | | | |
| **M 6 x 1,0** | 6,0 | 20 | 7 | 5,88 | 111401020 | 111402005 | 111404004 | 111405012 | 111409008 |
| **M 7 x 1,0** | 7,0 | 25 | 9 | 6,88 | 111401021 | | | 111405013 | 111409009 |
| **M 8 x 1,25** | 8,0 | 25 | 9 | 7,86 | 111401022 | 111402006 | 111404005 | 111405014 | 111409010 |
| **M 9 x 1,25** | 9,0 | 25 | 9 | 8,86 | 111401023 | | | | |
| **M 10 x 1,5** | 10,0 | 30 | 11 | 9,85 | 111401024 | 111402007 | 111404006 | 111405015 | 111409011 |
| **M 11 x 1,5** | 11,0 | 30 | 11 | 10,85 | 111401025 | | | | |
| **M 12 x 1,75** | 12,0 | 38 | 14 | 11,83 | 111401026 | 111402008 | 111404007 | 111405016 | 111409012 |
| **M 14 x 2,0** | 14,0 | 38 | 14 | 13,82 | 111401027 | 111402009 | 111404008 | 111405017 | 111409013 |
| **M 15 x 2,0** | 15,0 | 38 | 14 | 14,91 | 111401028 | | | | |
| **M 16 x 2,0** | 16,0 | 45 | 18 | 15,82 | 111401029 | 111402010 | 111404009 | 111405018 | |
| **M 18 x 2,5** | 18,0 | 45 | 18 | 17,79 | 111401030 | 111402011 | 111404010 | 111405019 | |
| **M 19 x 2,5** | 19,0 | 45 | 18 | 18,89 | 111401031 | | | | |
| **M 20 x 2,5** | 20,0 | 45 | 18 | 19,79 | 111401032 | 111402012 | 111404011 | 111405020 | |
| **M 22 x 2,5** | 22,0 | 55 | 22 | 21,79 | 111402033 | 111402013 | 111404012 | 111405021 | |

# Round Dies

## M Metric coarse thread ISO DIN 13

| Round Dies for general use | Round Dies for general use Left Hand | Round Dies for higher demands | Round Dies for stainless steels | Round Dies for brass |
|---|---|---|---|---|
| material: HSS | material: HSS | material: HSSE | material: HSSE | material: HSS |
| ISO-6g | ISO-6g | ISO-6g | ISO-6g | ISO-6g |
| Chamfer: 1,5 threads | Chamfer: 1,5 threads | Chamfer: 1,5 threads | Chamfer: 2 threads | Chamfer: 1,25 threads |
| right hand thread | left hand thread | right hand thread | right hand thread | right hand thread |
| | | with spiral entry | lapped with spiral entry | lapped with spiral entry |

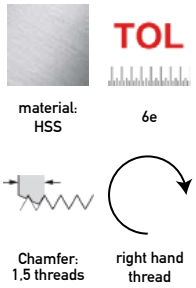


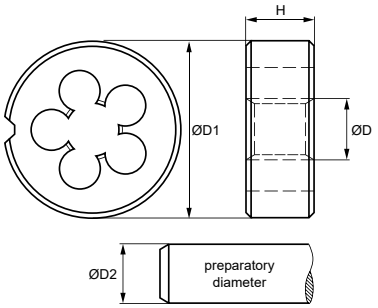
| M | D | D1 | H | D2 | No. | No. | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **M 24 x 3,0** | 24,0 | 55 | 22 | 23,76 | 111401034 | 111402014 | 111404013 | 111405022 | |
| **M 27 x 3,0** | 27,0 | 65 | 25 | 26,76 | 111401035 | 111402015 | 111404014 | 111405023 | |
| **M 30 x 3,5** | 30,0 | 65 | 25 | 29,73 | 111401036 | 111402016 | 111404015 | 111405024 | |
| **M 33 x 3,5** | 33,0 | 65 | 25 | 32,73 | 111401037 | 111402017 | | | |
| **M 36 x 4,0** | 36,0 | 65 | 25 | 35,70 | 111401038 | 111402018 | | | |
| **M 39 x 4,0** | 39,0 | 75 | 30 | 38,70 | 111401039 | 111402019 | | | |
| **M 42 x 4,5** | 42,0 | 75 | 30 | 41,68 | 111401040 | 111402020 | | | |
| **M 45 x 4,5** | 45,0 | 90 | 36 | 44,68 | 111401041 | 111402021 | | | |
| **M 48 x 5,0** | 48,0 | 90 | 36 | 47,66 | 111401042 | 111402022 | | | |
| **M 52 x 5,0** | 52,0 | 90 | 36 | 51,66 | 111401043 | 111402023 | | | |
| **M 56 x 5,5** | 56,0 | 105 | 36 | 55,65 | 111401044 | | | | |
| **M 60 x 5,5** | 60,0 | 105 | 36 | 59,65 | 111401045 | | | | |
| **M 64 x 6,0** | 64,0 | 120 | 36 | 63,62 | 111401046 | | | | |
| **M 68 x 6,0** | 68,0 | 120 | 36 | 67,62 | 111401047 | | | | |
| **M 72 x 6,0** | 72,0 | 120 | 36 | | 111401048 | | | | |
| **M 76 x 6,0** | 76,0 | 120 | 36 | | 111401049 | | | | |
| **M 80 x 6,0** | 80,0 | 120 | 36 | | 111401050 | | | | |
| **M 84 x 6,0** | 84,0 | 130 | 36 | | 111401051 | | | | |
| **M 88 x 6,0** | 88,0 | 140 | 36 | | 111401052 | | | | |
| **M 90 x 6,0** | 90,0 | 140 | 36 | | 111401053 | | | | |
| **M 92 x 6,0** | 92,0 | 140 | 36 | | 111401054 | | | | |
| **M 96 x 6,0** | 96,0 | 140 | 36 | | 111401055 | | | | |
| **M 100 x 6,0** | 100,0 | 150 | 36 | | 111401056 | | | | |

# Round Dies

## M Metric coarse thread ISO DIN 13

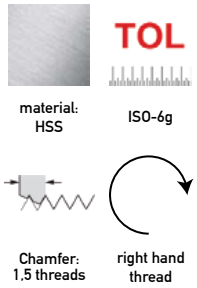
**Round Dies**
for general use
undersized

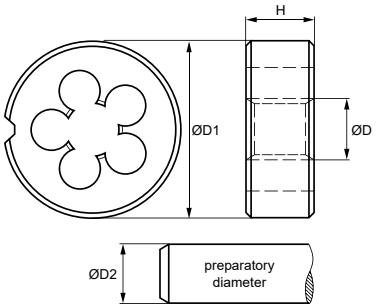


| M | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **M 3 x 0,5** | 3,0 | 20 | 5 | 2,89 | 111421001 |
| **M 4 x 0,7** | 4,0 | 20 | 5 | 3,87 | 111421002 |
| **M 5 x 0,8** | 5,0 | 20 | 7 | 4,86 | 111421003 |
| **M 6 x 1,0** | 6,0 | 20 | 7 | 5,85 | 111421004 |
| **M 8 x 1,25** | 8,0 | 25 | 9 | 7,83 | 111421005 |
| **M 10 x 1,5** | 10,0 | 30 | 11 | 9,81 | 111421006 |
| **M 12 x 1,75** | 12,0 | 38 | 14 | 11,81 | 111421007 |
| **M 14 x 2,0** | 14,0 | 38 | 14 | 13,87 | 111421008 |
| **M 16 x 2,0** | 16,0 | 45 | 18 | 15,87 | 111421009 |
| **M 18 x 2,5** | 18,0 | 45 | 18 | 17,75 | 111421010 |
| **M 20 x 2,5** | 20,0 | 45 | 18 | 19,75 | 111421011 |

**Round Dies**
for general use
dimensions: 25 x 9



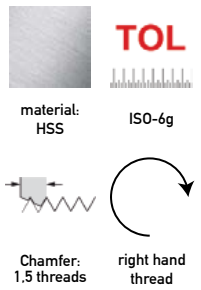



| M | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **M 3 x 0,5** | 3,0 | 25 | 9 | 2,92 | 111422001 |
| **M 4 x 0,7** | 4,0 | 25 | 9 | 3,90 | 111422002 |
| **M 5 x 0,8** | 5,0 | 25 | 9 | 4,90 | 111422003 |
| **M 6 x 1,0** | 6,0 | 25 | 9 | 5,88 | 111422004 |
| **M 8 x 1,25** | 8,0 | 25 | 9 | 7,86 | 111422005 |
| **M 10 x 1,5** | 10,0 | 25 | 9 | 9,85 | 111422006 |
| **M 12 x 1,75** | 12,0 | 25 | 9 | 11,83 | 111422007 |

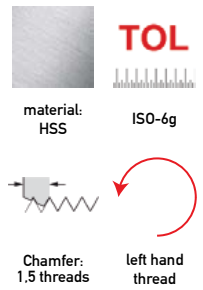
# Hexagon Die Nuts

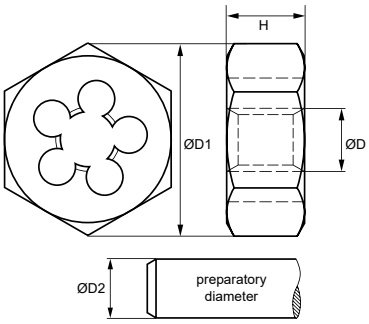
**M** **Metric coarse thread**
**ISO DIN 13**

**Hexagon Die Nuts**
for general use




**Hexagon Die Nuts**
for general use
Left Hand



| M | D | D1 | H | D2 | No. | No. |
|---|---|---|---|---|---|---|
| **M 3 x 0,5** | 3,0 | 19 | 5 | 2,92 | 111501001 | 111502001 |
| **M 3,5 x 0,6** | 3,5 | 19 | 5 | 3,41 | 111501002 | |
| **M 4 x 0,7** | 4,0 | 19 | 5 | 3,90 | 111501003 | 111502002 |
| **M 5 x 0,8** | 4,5 | 19 | 7 | 4,40 | 111501004 | 111502003 |
| **M 6 x 1,0** | 6,0 | 19 | 7 | 5,88 | 111501005 | 111502004 |
| **M 7 x 1,0** | 7,0 | 22 | 9 | 6,88 | 111501006 | |
| **M 8 x 1,25** | 8,0 | 22 | 9 | 7,86 | 111501007 | 111502005 |
| **M 9 x 1,25** | 9,0 | 22 | 9 | 8,86 | 111501008 | |
| **M 10 x 1,5** | 10,0 | 27 | 11 | 9,85 | 111501009 | 111502006 |
| **M 11 x 1,5** | 11,0 | 27 | 11 | 10,85 | 111501010 | |
| **M 12 x 1,75** | 12,0 | 36 | 14 | 11,83 | 111501011 | 111502007 |
| **M 14 x 2,0** | 14,0 | 36 | 14 | 13,82 | 111501012 | 111502008 |
| **M 16 x 2,0** | 16,0 | 41 | 18 | 15,82 | 111501013 | 111502009 |
| **M 18 x 2,5** | 18,0 | 41 | 18 | 17,79 | 111501014 | 111502010 |
| **M 20 x 2,5** | 20,0 | 41 | 18 | 19,79 | 111501015 | 111502011 |
| **M 22 x 2,5** | 22,0 | 50 | 22 | 21,79 | 111501016 | 111502012 |
| **M 24 x 3,0** | 24,0 | 50 | 22 | 23,76 | 111501017 | 111502013 |
| **M 27 x 3,0** | 27,0 | 60 | 25 | 26,76 | 111501018 | 111502014 |
| **M 30 x 3,5** | 30,0 | 60 | 25 | 29,73 | 111501019 | 111502015 |
| **M 33 x 3,5** | 33,0 | 60 | 25 | 32,73 | 111501020 | 111502016 |
| **M 36 x 4,0** | 36,0 | 60 | 25 | 35,70 | 111501021 | 111502017 |
| **M 39 x 4,0** | 39,0 | 70 | 30 | 38,70 | 111501022 | 111502018 |
| **M 42 x 4,5** | 42,0 | 70 | 30 | 41,68 | 111501023 | 111502019 |
| **M 45 x 4,5** | 45,0 | 85 | 36 | 44,68 | 111501024 | 111502020 |
| **M 48 x 5,0** | 48,0 | 85 | 36 | 47,66 | 111501025 | 111502021 |
| **M 52 x 5,0** | 52,0 | 85 | 36 | 51,66 | 111501026 | 111502022 |
| **M 56 x 5,5** | 56,0 | 100 | 36 | 55,65 | 111501027 | |
| **M 60 x 5,5** | 60,0 | 100 | 36 | 59,65 | 111501028 | |
| **M 64 x 6,0** | 64,0 | 100 | 36 | 63,62 | 111501029 | |
| **M 68 x 6,0** | 68,0 | 115 | 36 | 67,62 | 111501030 | |

# Thread Cutting Kits with Taps, Dies and Tools

## MF Metric fine thread ISO DIN 13

## BAER Hand-Tap Sets, Round Dies and Tools Sets

(example picture)

### BAER Set MF 3 - MF 12
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (2 parts)** | MF 3 x 0,35 \| MF 4 x 0,5 \| MF 5 x 0,5 \| 6 x 0,75 \| MF 8 x 0,75 \| MF 8 x 1,0 \| MF 10 x 1,0 \| MF 12 x 1,5 | Item No.: 264801002 |
| **BAER HSS Round Dies** | MF 3 x 0,35 \| MF 4 x 0,5 \| MF 5 x 0,5 \| 6 x 0,75 \| MF 8 x 0,75 \| MF 8 x 1,0 \| MF 10 x 1,0 \| MF 12 x 1,5 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 4-12 \| 5/32-1/2 \| G 1/8 | |
| **BAER Die Stocks - zinc die cast** | 20 x 5 \| 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 10 | |
| **Screw extractor** | | |

### BAER Set MF 6 - MF 20
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (2 parts)** | MF 6 x 0,75 \| MF 8 x 0,75 \| MF 8 x 1,0 \| MF 10 x 1,0 \| MF 12 x 1,0 \| MF 12 x 1,5 \| MF 14 x 1,25 \| MF 14 x 1,5 \| MF 16 x 1,5 MF 18 x 1,5 \| MF 20 x 1,5 | Item No.: 264801102 |
| **BAER HSS Round Dies** | MF 6 x 0,75 \| MF 8 x 0,75 \| MF 8 x 1,0 \| MF 10 x 1,0 \| MF 12 x 1,0 \| MF 12 x 1,5 \| MF 14 x 1,25 \| MF 14 x 1,5 \| MF 16 x 1,5 MF 18 x 1,5 \| MF 20 x 1,5 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 5-20 \| 7/32-3/4 \| G 1/8-G 1/2 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 10 \| 45 x 14 | |
| **Screw extractor** | | |

### BAER Set MF 6 - MF 24
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (2 parts)** | MF 6 x 0,75 \| MF 8 x 0,75 \| MF 8 x 1,0 \| MF 10 x 1,0 \| MF 12 x 1,0 \| MF 12 x 1,5 \| MF 14 x 1,25 \| MF 14 x 1,5 \| MF 16 x 1,5 MF 18 x 1,5 \| MF 20 x 1,5 \| MF 22 x 1,5 \| MF 24 x 1,5 | Item No.: 264801202 |
| **BAER HSS Round Dies** | MF 6 x 0,75 \| MF 8 x 0,75 \| MF 8 x 1,0 \| MF 10 x 1,0 \| MF 12 x 1,0 \| MF 12 x 1,5 \| MF 14 x 1,25 \| MF 14 x 1,5 \| MF 16 x 1,5 MF 18 x 1,5 \| MF 20 x 1,5 \| MF 22 x 1,5 \| MF 24 x 1,5 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 11-27 \| 7/16-1" \| G 1/4-G 3/4 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 10 \| 45 x 14 \| 55 x 16 | |
| **Screw extractor** | | |

# Thread Cutting Kits with Taps and Dies

# MF

**Metric fine thread**
**ISO DIN 13**

## BAER Short Machine Taps und Round Dies Sets MF 5 - MF 12

**(example picture)**

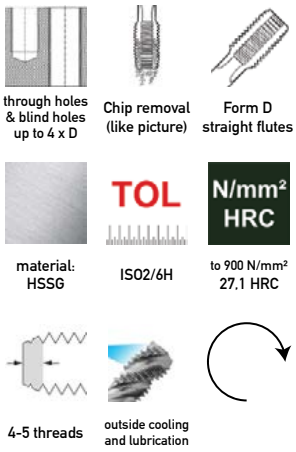
**BAER Set MF 5 - MF 12**
**HSSG Short Machine Taps & Drill bits for core holes**
**HSS Round Dies**

| | | |
|---|---|---|
| **BAER HSSG Short Machine Tap Form D for through hole & blind hole (up to 4 x D)** | M 5 x 0,5 \| M 6 x 0,75 \| M 8 x 1,0 \| M 10 x 1,0 \| M 12 x 1,5 | Item No.: BES1 |
| **BAER HSSG Drill bits for core holes** | 4,3 mm \| 5,2 mm \| 7,0 mm \| 9,0 mm \| 10,5 mm | |
| **BAER HSS Round Dies** | M 5 x 0,5 \| M 6 x 0,75 \| M 8 x 1,0 \| M 10 x 1,0 \| M 12 x 1,5 | |

# Short Machine Taps

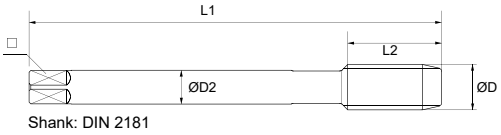
## MF Metric fine thread ISO DIN 13

**Short Machine Taps**
Form D for through holes and blind holes




Efficient internal thread cutting.
The short structural type makes that tap usable by machine and hand.

**Application**:
non abrasive material up to 900 N/mm²
unalloyed and low alloyed steel



| MF | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| **MF 6 x 0,75** | 6,0 | 6,0 | 50 | 14 | 4,9 | 5,20 | 120101001 |
| **MF 8 x 0,75** | 8,0 | 6,0 | 50 | 19 | 4,9 | 6,20 | 120101002 |
| **MF 8 x 1,0** | 8,0 | 6,0 | 56 | 22 | 4,9 | 7,00 | 120101003 |
| **MF 9 x 0,75** | 9,0 | 7,0 | 56 | 19 | 5,5 | 8,20 | 120101004 |
| **MF 9 x 1,0** | 9,0 | 7,0 | 63 | 20 | 5,5 | 8,00 | 120101005 |
| **MF 10 x 0,75** | 10,0 | 7,0 | 63 | 20 | 5,5 | 9,20 | 120101006 |
| **MF 10 x 1,0** | 10,0 | 7,0 | 63 | 20 | 5,5 | 9,00 | 120101007 |
| **MF 10 x 1,25** | 10,0 | 7,0 | 70 | 24 | 5,5 | 8,80 | 120101008 |
| **MF 12 x 1,0** | 12,0 | 9,0 | 70 | 22 | 7,0 | 11,00 | 120101009 |
| **MF 12 x 1,25** | 12,0 | 9,0 | 70 | 22 | 7,0 | 10,80 | 120101010 |
| **MF 12 x 1,5** | 12,0 | 9,0 | 70 | 22 | 7,0 | 10,50 | 120101011 |
| **MF 13 x 1,0** | 13,0 | 11,0 | 70 | 22 | 9,0 | 12,00 | 120101012 |
| **MF 13 x 1,5** | 13,0 | 11,0 | 70 | 22 | 9,0 | 11,50 | 120101013 |
| **MF 14 x 1,0** | 14,0 | 11,0 | 70 | 22 | 9,0 | 13,00 | 120101014 |
| **MF 14 x 1,25** | 14,0 | 11,0 | 70 | 22 | 9,0 | 12,80 | 120101015 |
| **MF 14 x 1,5** | 14,0 | 11,0 | 70 | 22 | 9,0 | 12,50 | 120101016 |
| **MF 15 x 1,5** | 15,0 | 12,0 | 70 | 22 | 9,0 | 13,50 | 120101017 |
| **MF 16 x 1,5** | 16,0 | 12,0 | 70 | 22 | 9,0 | 14,50 | 120101018 |
| **MF 18 x 1,0** | 18,0 | 14,0 | 80 | 22 | 11,0 | 17,00 | 120101019 |
| **MF 18 x 1,5** | 18,0 | 14,0 | 80 | 22 | 11,0 | 16,50 | 120101020 |
| **MF 20 x 1,5** | 20,0 | 16,0 | 80 | 22 | 12,0 | 18,50 | 120101021 |
| **MF 20 x 2,0** | 20,0 | 16,0 | 80 | 22 | 12,0 | 18,00 | 120101022 |
| **MF 22 x 1,5** | 22,0 | 18,0 | 80 | 22 | 14,5 | 20,50 | 120101023 |
| **MF 22 x 2,0** | 22,0 | 18,0 | 80 | 22 | 14,5 | 20,00 | 120101024 |
| **MF 24 x 1,5** | 24,0 | 18,0 | 90 | 22 | 14,5 | 22,50 | 120101025 |
| **MF 24 x 2,0** | 24,0 | 18,0 | 90 | 22 | 14,5 | 22,00 | 120101026 |
| **MF 25 x 1,5** | 25,0 | 18,0 | 90 | 22 | 14,5 | 23,50 | 120101027 |
| **MF 26 x 1,5** | 26,0 | 18,0 | 90 | 22 | 14,5 | 24,50 | 120101028 |
| **MF 27 x 1,5** | 27,0 | 20,0 | 90 | 22 | 16,0 | 25,50 | 120101029 |
| **MF 28 x 1,5** | 28,0 | 20,0 | 90 | 22 | 16,0 | 26,50 | 120101030 |
| **MF 30 x 1,5** | 30,0 | 22,0 | 90 | 22 | 18,0 | 28,50 | 120101031 |
| **MF 30 x 2,0** | 30,0 | 22,0 | 90 | 22 | 18,0 | 28,00 | 120101032 |
| **MF 32 x 1,5** | 32,0 | 22,0 | 90 | 22 | 18,0 | 30,50 | 120101033 |

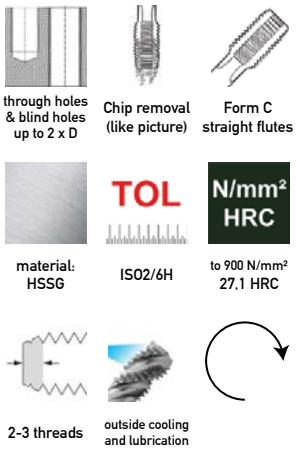
# MF

**Metric fine thread**
**ISO DIN 13**

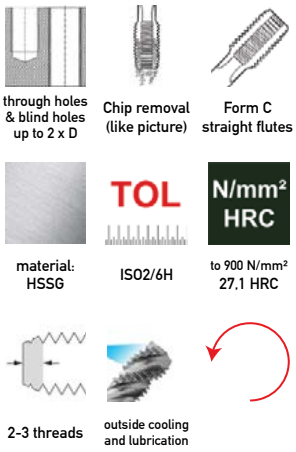
Efficient internal thread cutting.
The short structural type makes that tap usable by hand.

A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

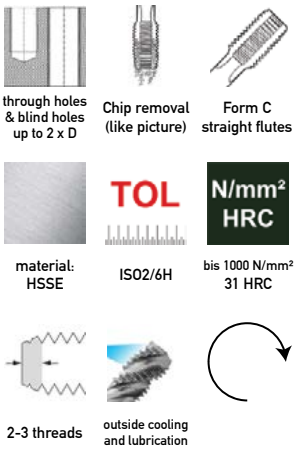
## Hand Tap Sets
for general use

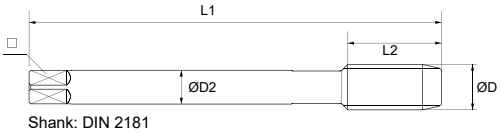



## Hand Tap Sets
for general use — Left Hand




## Hand Tap Sets — HSSE
for higher demands



Shank: DIN 2181

| MF | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **MF 2,5 x 0,35** | 2,5 | 2,8 | 40 | 9 | 2,1 | 2,15 | 120301001 | | |
| **MF 2,6 x 0,35** | 2,6 | 2,8 | 40 | 9 | 2,1 | 2,25 | 120301002 | | |
| **MF 3 x 0,35** | 3,0 | 3,5 | 40 | 9 | 2,7 | 2,65 | 120301003 | | |
| **MF 3,5 x 0,35** | 3,5 | 4,0 | 45 | 10 | 3,0 | 3,15 | 120301004 | | |
| **MF 4 x 0,35** | 4,0 | 4,5 | 45 | 10 | 3,4 | 3,65 | 120301005 | | |
| **MF 4 x 0,5** | 4,0 | 4,5 | 45 | 10 | 3,4 | 3,50 | 120301006 | | |
| **MF 4,5 x 0,5** | 4,5 | 6,0 | 50 | 12 | 4,9 | 4,00 | 120301007 | | |
| **MF 5 x 0,5** | 5,0 | 6,0 | 50 | 12 | 4,9 | 4,50 | 120301008 | | |
| **MF 5 x 0,75** | 5,0 | 6,0 | 50 | 12 | 4,9 | 4,25 | 120301009 | | |
| **MF 5,5 x 0,5** | 5,5 | 6,0 | 50 | 12 | 4,9 | 5,00 | 120301010 | | |
| **MF 6 x 0,5** | 6,0 | 6,0 | 50 | 14 | 4,9 | 5,50 | 120301011 | | |
| **MF 6 x 0,75** | 6,0 | 6,0 | 50 | 14 | 4,9 | 5,20 | 120301012 | 120302001 | 120304001 |
| **MF 7 x 0,5** | 7,0 | 6,0 | 50 | 14 | 4,9 | 6,50 | 120301013 | | |
| **MF 7 x 0,75** | 7,0 | 6,0 | 50 | 14 | 4,9 | 6,20 | 120301014 | | |
| **MF 8 x 0,5** | 8,0 | 6,0 | 50 | 19 | 4,9 | 7,50 | 120301015 | | |
| **MF 8 x 0,75** | 8,0 | 6,0 | 50 | 19 | 4,9 | 7,20 | 120301016 | 120302002 | 120304002 |
| **MF 8 x 1** | 8,0 | 6,0 | 56 | 22 | 4,9 | 7,00 | 120301017 | 120302003 | 120304003 |
| **MF 9 x 0,5** | 9,0 | 7,0 | 56 | 19 | 5,5 | 8,50 | 120301018 | | |
| **MF 9 x 0,75** | 9,0 | 7,0 | 56 | 19 | 5,5 | 8,25 | 120301019 | | |
| **MF 9 x 1** | 9,0 | 7,0 | 63 | 20 | 5,5 | 8,00 | 120301020 | | |
| **MF 10 x 0,5** | 10,0 | 7,0 | 63 | 20 | 5,5 | 9,50 | 120301021 | | |
| **MF 10 x 0,75** | 10,0 | 7,0 | 63 | 20 | 5,5 | 9,20 | 120301022 | | |
| **MF 10 x 1,0** | 10,0 | 7,0 | 63 | 20 | 5,5 | 9,00 | 120301023 | 120302004 | 120304004 |
| **MF 10 x 1,25** | 10,0 | 7,0 | 70 | 24 | 5,5 | 8,80 | 120301024 | 120302005 | 120304005 |
| **MF 11 x 0,75** | 11,0 | 8,0 | 63 | 20 | 6,2 | 10,20 | 120301025 | | |
| **MF 11 x 1,0** | 11,0 | 8,0 | 63 | 20 | 6,2 | 10,00 | 120301026 | | |
| **MF 11 x 1,25** | 11,0 | 8,0 | 63 | 22 | 6,2 | 10,80 | 120301027 | | |
| **MF 12 x 0,5** | 12,0 | 9,0 | 70 | 22 | 7,0 | 11,50 | 120301028 | | |
| **MF 12 x 0,75** | 12,0 | 9,0 | 70 | 22 | 7,0 | 10,20 | 120301029 | | |
| **MF 12 x 1,0** | 12,0 | 9,0 | 70 | 22 | 7,0 | 11,00 | 120301030 | 120302006 | 120304006 |
| **MF 12 x 1,25** | 12,0 | 9,0 | 70 | 22 | 7,0 | 10,80 | 120301031 | 120302007 | 120304007 |
| **MF 12 x 1,5** | 12,0 | 9,0 | 70 | 22 | 7,0 | 10,50 | 120301032 | 120302008 | 120304008 |
| **MF 13 x 0,5** | 13,0 | 11,0 | 70 | 22 | 9,0 | 12,50 | 120301033 | | |

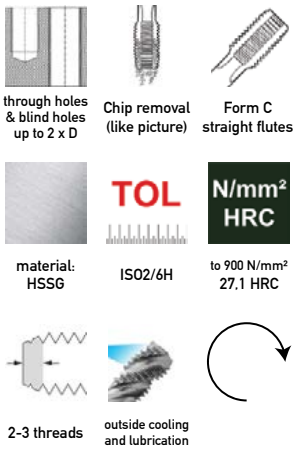
# Hand Tap Sets

## MF Metric fine thread ISO DIN 13

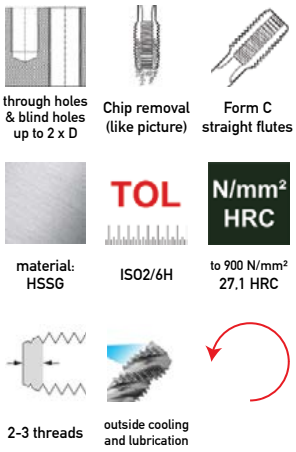
Efficient internal thread cutting.
The short structural type makes that tap usable by hand.

A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

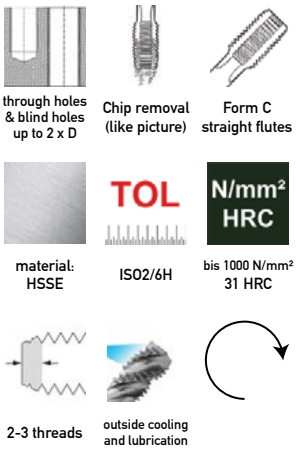
### Hand Tap Sets
for general use

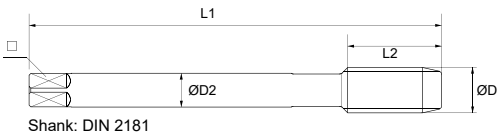



### Hand Tap Sets
for general use Left Hand




### Hand Tap Sets HSSE
for higher demands



Shank: DIN 2181

| MF | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **MF 13 x 0,75** | 13,0 | 11,0 | 70 | 22 | 9,0 | 12,20 | 120301034 | | |
| **MF 13 x 1,0** | 13,0 | 11,0 | 70 | 22 | 9,0 | 12,00 | 120301035 | | |
| **MF 13 x 1,5** | 13,0 | 11,0 | 70 | 22 | 9,0 | 11,50 | 120301036 | | |
| **MF 14 x 0,5** | 14,0 | 11,0 | 70 | 22 | 9,0 | 13,50 | 120301037 | | |
| **MF 14 x 0,75** | 14,0 | 11,0 | 70 | 22 | 9,0 | 13,20 | 120301038 | | |
| **MF 14 x 1,0** | 14,0 | 11,0 | 70 | 22 | 9,0 | 13,00 | 120301039 | | |
| **MF 14 x 1,25** | 14,0 | 11,0 | 70 | 22 | 9,0 | 12,80 | 120301040 | 120302009 | 120304009 |
| **MF 14 x 1,5** | 14,0 | 11,0 | 70 | 22 | 9,0 | 12,50 | 120301041 | 120302010 | 120304010 |
| **MF 15 x 0,75** | 15,0 | 12,0 | 70 | 22 | 9,0 | 14,20 | 120301042 | | |
| **MF 15 x 1,0** | 15,0 | 12,0 | 70 | 22 | 9,0 | 14,00 | 120301043 | | |
| **MF 15 x 1,5** | 15,0 | 12,0 | 70 | 22 | 9,0 | 13,50 | 120301044 | | |
| **MF 16 x 0,5** | 16,0 | 12,0 | 70 | 22 | 9,0 | 15,50 | 120301045 | | |
| **MF 16 x 0,75** | 16,0 | 12,0 | 70 | 22 | 9,0 | 15,20 | 120301046 | | |
| **MF 16 x 1,0** | 16,0 | 12,0 | 70 | 22 | 9,0 | 15,00 | 120301047 | 120302011 | 120304011 |
| **MF 16 x 1,25** | 16,0 | 12,0 | 70 | 22 | 9,0 | 14,80 | 120301048 | | |
| **MF 16 x 1,5** | 16,0 | 12,0 | 70 | 22 | 9,0 | 14,50 | 120301049 | 120302012 | 120304012 |
| **MF 17 x 1** | 17,0 | 12,0 | 70 | 22 | 9,0 | 16,00 | 120301050 | | |
| **MF 17 x 1,5** | 17,0 | 12,0 | 70 | 22 | 9,0 | 15,50 | 120301051 | | |
| **MF 18 x 0,5** | 18,0 | 14,0 | 80 | 22 | 11,0 | 17,50 | 120301052 | | |
| **MF 18 x 0,75** | 18,0 | 14,0 | 80 | 22 | 11,0 | 17,20 | 120301053 | | |
| **MF 18 x 1,0** | 18,0 | 14,0 | 80 | 22 | 11,0 | 17,00 | 120301054 | | |
| **MF 18 x 1,25** | 18,0 | 14,0 | 80 | 22 | 11,0 | 16,80 | 120301055 | | |
| **MF 18 x 1,5** | 18,0 | 14,0 | 80 | 22 | 11,0 | 16,50 | 120301056 | 120302013 | 120304013 |
| **MF 18 x 2,0** | 18,0 | 14,0 | 80 | 22 | 11,0 | 16,00 | 120301057 | | |
| **MF 19 x 1** | 19,0 | 16,0 | 80 | 22 | 12,0 | 18,00 | 120301058 | | |
| **MF 19 x 1,5** | 19,0 | 14,0 | 80 | 22 | 11,0 | 17,50 | 120301059 | | |
| **MF 20 x 0,5** | 20,0 | 16,0 | 80 | 22 | 12,0 | 19,50 | 120301060 | | |
| **MF 20 x 0,75** | 20,0 | 16,0 | 80 | 22 | 12,0 | 19,20 | 120301061 | | |
| **MF 20 x 1,0** | 20,0 | 16,0 | 80 | 22 | 12,0 | 19,00 | 120301062 | | |
| **MF 20 x 1,25** | 20,0 | 16,0 | 80 | 22 | 12,0 | 18,80 | 120301063 | | |
| **MF 20 x 1,5** | 20,0 | 16,0 | 80 | 22 | 12,0 | 18,50 | 120301064 | 120302014 | 120304014 |
| **MF 20 x 2,0** | 20,0 | 16,0 | 80 | 22 | 12,0 | 18,00 | 120301065 | | 120304015 |
| **MF 21 x 1** | 21,0 | 16,0 | 80 | 22 | 12,0 | 20,00 | 120301066 | | |

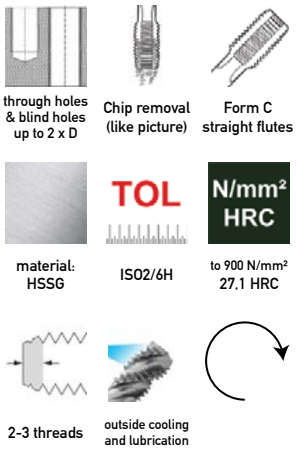
# MF

**Metric fine thread**
**ISO DIN 13**

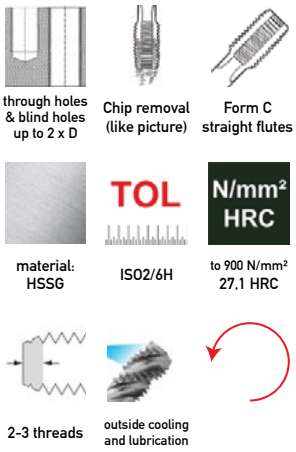
Efficient internal thread cutting.
The short structural type makes that tap usable by hand.

A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

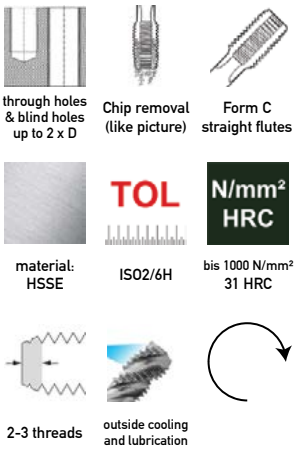
## Hand Tap Sets
for general use

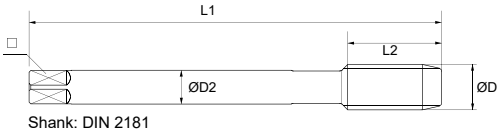



## Hand Tap Sets
for general use — Left Hand




## Hand Tap Sets — HSSE
for higher demands



Shank: DIN 2181

| MF | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **MF 21 x 1,5** | 21,0 | 16,0 | 80 | 22 | 12,0 | 19,50 | 120301067 | | |
| **MF 22 x 0,5** | 22,0 | 18,0 | 80 | 22 | 14,5 | 21,50 | 120301068 | | |
| **MF 22 x 0,75** | 22,0 | 18,0 | 80 | 22 | 14,5 | 21,20 | 120301069 | | |
| **MF 22 x 1,0** | 22,0 | 18,0 | 80 | 22 | 14,5 | 21,00 | 120301070 | | |
| **MF 22 x 1,25** | 22,0 | 18,0 | 80 | 22 | 14,5 | 20,80 | 120301071 | | |
| **MF 22 x 1,5** | 22,0 | 18,0 | 80 | 22 | 14,5 | 20,50 | 120301072 | 120302015 | 120304016 |
| **MF 22 x 2,0** | 22,0 | 18,0 | 80 | 22 | 14,5 | 20,00 | 120301073 | | 120304017 |
| **MF 23 x 1** | 23,0 | 18,0 | 80 | 22 | 14,5 | 22,00 | 120301074 | | |
| **MF 23 x 1,5** | 23,0 | 18,0 | 80 | 22 | 14,5 | 21,50 | 120301075 | | |
| **MF 24 x 0,5** | 24,0 | 18,0 | 90 | 22 | 14,5 | 23,50 | 120301076 | | |
| **MF 24 x 0,75** | 24,0 | 18,0 | 90 | 22 | 14,5 | 23,20 | 120301077 | | |
| **MF 24 x 1,0** | 24,0 | 18,0 | 90 | 22 | 14,5 | 23,00 | 120301078 | | |
| **MF 24 x 1,25** | 24,0 | 18,0 | 90 | 22 | 14,5 | 23,80 | 120301079 | | |
| **MF 24 x 1,5** | 24,0 | 18,0 | 90 | 22 | 14,5 | 22,50 | 120301080 | 120302016 | 120304018 |
| **MF 24 x 2,0** | 24,0 | 18,0 | 90 | 22 | 14,5 | 22,00 | 120301081 | 120302017 | |
| **MF 25 x 1,0** | 25,0 | 18,0 | 90 | 22 | 14,5 | 24,00 | 120301082 | | |
| **MF 25 x 1,5** | 25,0 | 18,0 | 90 | 22 | 14,5 | 23,50 | 120301083 | | |
| **MF 26 x 1,0** | 26,0 | 18,0 | 90 | 22 | 14,5 | 25,00 | 120301084 | | |
| **MF 26 x 1,5** | 26,0 | 18,0 | 90 | 22 | 14,5 | 24,50 | 120301085 | | |
| **MF 26 x 2,0** | 26,0 | 18,0 | 90 | 22 | 14,5 | 24,00 | 120301086 | | |
| **MF 27 x 1** | 27,0 | 20,0 | 90 | 22 | 16,0 | 26,00 | 120301087 | | |
| **MF 27 x 1,5** | 27,0 | 20,0 | 90 | 22 | 16,0 | 25,50 | 120301088 | | |
| **MF 27 x 2,0** | 27,0 | 20,0 | 90 | 22 | 16,0 | 25,00 | 120301089 | | |
| **MF 28 x 1,0** | 28,0 | 20,0 | 90 | 22 | 16,0 | 27,00 | 120301090 | | |
| **MF 28 x 1,5** | 28,0 | 20,0 | 90 | 22 | 16,0 | 26,50 | 120301091 | | |
| **MF 28 x 2,0** | 28,0 | 20,0 | 90 | 22 | 16,0 | 26,00 | 120301092 | | |
| **MF 29 x 1,5** | 29,0 | 22,0 | 90 | 22 | 18,0 | 27,50 | 120301093 | | |
| **MF 30 x 1,0** | 30,0 | 22,0 | 90 | 22 | 18,0 | 29,00 | 120301094 | | |
| **MF 30 x 1,5** | 30,0 | 22,0 | 90 | 22 | 18,0 | 28,50 | 120301095 | 120302018 | |
| **MF 30 x 2,0** | 30,0 | 22,0 | 90 | 22 | 18,0 | 28,00 | 120301096 | 120302019 | |
| **MF 30 x 2,5** | 30,0 | 22,0 | 125 | 56 | 18,0 | 27,50 | 120301097 | | |
| **MF 30 x 3,0** | 30,0 | 22,0 | 125 | 56 | 18,0 | 27,00 | 120301098 | | |
| **MF 32 x 1** | 32,0 | 22,0 | 90 | 22 | 18,0 | 31,00 | 120301099 | | |

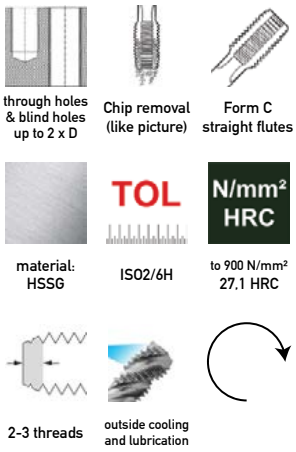
# Hand Tap Sets

## MF Metric fine thread ISO DIN 13

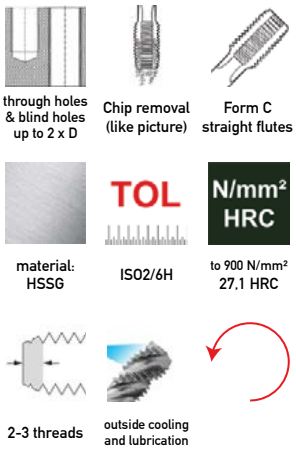
Efficient internal thread cutting.
The short structural type makes that tap usable by hand.

A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

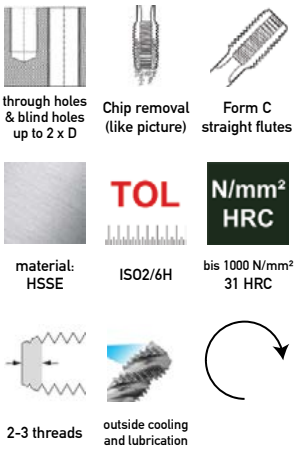
### Hand Tap Sets
for general use

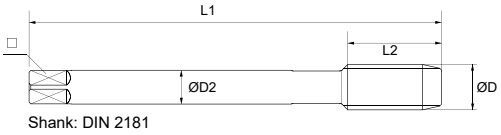



### Hand Tap Sets
for general use — Left Hand




### Hand Tap Sets — HSSE
for higher demands



Shank: DIN 2181

| MF | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **MF 32 x 1,5** | 32,0 | 22,0 | 90 | 22 | 18,0 | 30,50 | 120301100 | | |
| **MF 32 x 2,0** | 32,0 | 22,0 | 90 | 22 | 18,0 | 30,00 | 120301101 | | |
| **MF 32 x 3,0** | 32,0 | 22,0 | 125 | 56 | 18,0 | 29,00 | 120301102 | | |
| **MF 33 x 1,5** | 33,0 | 25,0 | 100 | 25 | 20,0 | 31,50 | 120301103 | | |
| **MF 33 x 2,0** | 33,0 | 25,0 | 100 | 25 | 20,0 | 31,00 | 120301104 | | |
| **MF 33 x 3,0** | 33,0 | 25,0 | 125 | 56 | 20,0 | 30,00 | 120301105 | | |
| **MF 34 x 1** | 34,0 | 28,0 | 100 | 25 | 22,0 | 33,00 | 120301106 | | |
| **MF 34 x 1,5** | 34,0 | 28,0 | 100 | 25 | 22,0 | 32,50 | 120301107 | | |
| **MF 34 x 2,0** | 34,0 | 28,0 | 125 | 40 | 22,0 | 32,00 | 120301108 | | |
| **MF 35 x 1** | 35,0 | 28,0 | 100 | 25 | 22,0 | 34,00 | 120301109 | | |
| **MF 35 x 1,5** | 35,0 | 28,0 | 100 | 25 | 22,0 | 33,50 | 120301110 | | |
| **MF 35 x 2** | 35,0 | 28,0 | 125 | 40 | 22,0 | 33,00 | 120301111 | | |
| **MF 36 x 1** | 36,0 | 28,0 | 100 | 25 | 22,0 | 35,00 | 120301112 | | |
| **MF 36 x 1,5** | 36,0 | 28,0 | 100 | 25 | 22,0 | 34,50 | 120301113 | | |
| **MF 36 x 2,0** | 36,0 | 28,0 | 125 | 40 | 22,0 | 34,00 | 120301114 | | |
| **MF 36 x 3,0** | 36,0 | 28,0 | 125 | 40 | 22,0 | 33,00 | 120301115 | | |
| **MF 37 x 1,5** | 37,0 | 28,0 | 100 | 25 | 22,0 | 35,50 | 120301116 | | |
| **MF 38 x 1** | 38,0 | 28,0 | 100 | 25 | 22,0 | 37,00 | 120301117 | | |
| **MF 38 x 1,5** | 38,0 | 28,0 | 100 | 25 | 22,0 | 36,50 | 120301118 | | |
| **MF 38 x 2** | 38,0 | 28,0 | 125 | 40 | 22,0 | 36,00 | 120301119 | | |
| **MF 38 x 3** | 38,0 | 28,0 | 125 | 40 | 22,0 | 35,00 | 120301120 | | |
| **MF 39 x 1,5** | 39,0 | 32,0 | 110 | 25 | 24,0 | 37,50 | 120301121 | | |
| **MF 39 x 2,0** | 39,0 | 32,0 | 125 | 40 | 24,0 | 37,00 | 120301122 | | |
| **MF 39 x 3,0** | 39,0 | 32,0 | 125 | 40 | 24,0 | 36,00 | 120301123 | | |
| **MF 40 x 1** | 40,0 | 32,0 | 110 | 25 | 24,0 | 39,00 | 120301124 | | |
| **MF 40 x 1,5** | 40,0 | 32,0 | 110 | 25 | 24,0 | 38,50 | 120301125 | | |
| **MF 40 x 2,0** | 40,0 | 32,0 | 125 | 40 | 24,0 | 38,00 | 120301126 | | |
| **MF 40 x 3,0** | 40,0 | 32,0 | 125 | 40 | 24,0 | 37,00 | 120301127 | | |
| **MF 42 x 1** | 42,0 | 32,0 | 110 | 25 | 24,0 | 41,00 | 120301128 | | |
| **MF 42 x 1,5** | 42,0 | 32,0 | 110 | 25 | 24,0 | 40,50 | 120301129 | | |
| **MF 42 x 2,0** | 42,0 | 32,0 | 125 | 40 | 24,0 | 40,00 | 120301130 | | |
| **MF 42 x 3,0** | 42,0 | 32,0 | 125 | 40 | 24,0 | 39,00 | 120301131 | | |
| **MF 44 x 1,5** | 44,0 | 36,0 | 110 | 25 | 29,0 | 42,50 | 120301132 | | |

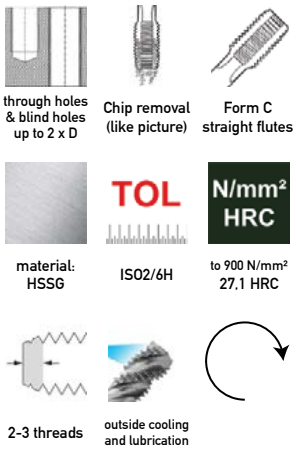
# MF

**Metric fine thread**
**ISO DIN 13**

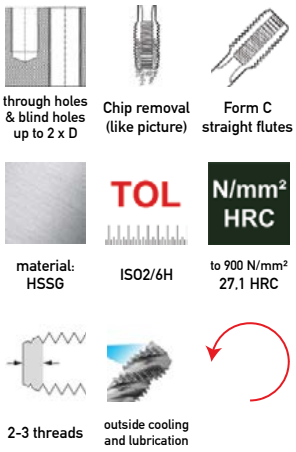
Efficient internal thread cutting.
The short structural type makes that tap usable by hand.

A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

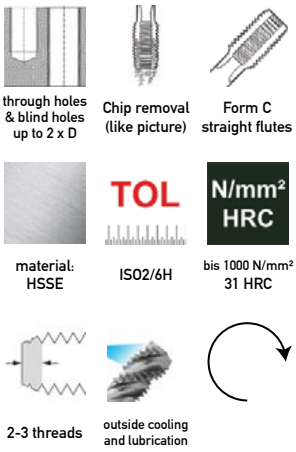
## Hand Tap Sets
for general use

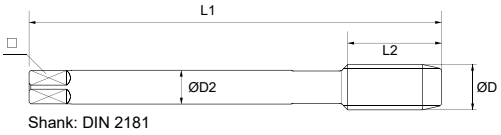



## Hand Tap Sets
for general use — Left Hand




## Hand Tap Sets — HSSE
for higher demands



Shank: DIN 2181

| MF | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **MF 44 x 2** | 44,0 | 36,0 | 125 | 40 | 29,0 | 42,00 | 120301133 | | |
| **MF 45 x 1** | 45,0 | 36,0 | 110 | 25 | 29,0 | 44,00 | 120301134 | | |
| **MF 45 x 1,5** | 45,0 | 36,0 | 110 | 25 | 29,0 | 43,50 | 120301135 | | |
| **MF 45 x 2,0** | 45,0 | 36,0 | 125 | 40 | 29,0 | 43,00 | 120301136 | | |
| **MF 45 x 3,0** | 45,0 | 36,0 | 125 | 40 | 29,0 | 42,00 | 120301137 | | |
| **MF 46 x 1,5** | 46,0 | 36,0 | 140 | 40 | 29,0 | 45,50 | 120301138 | | |
| **MF 48 x 1** | 48,0 | 36,0 | 140 | 40 | 29,0 | 47,00 | 120301139 | | |
| **MF 48 x 1,5** | 48,0 | 36,0 | 140 | 40 | 29,0 | 46,50 | 120301140 | | |
| **MF 48 x 2,0** | 48,0 | 36,0 | 140 | 40 | 29,0 | 46,00 | 120301141 | | |
| **MF 48 x 3,0** | 48,0 | 36,0 | 140 | 40 | 29,0 | 45,00 | 120301142 | | |
| **MF 50 x 1,5** | 50,0 | 36,0 | 140 | 40 | 29,0 | 48,50 | 120301143 | | |
| **MF 50 x 2,0** | 50,0 | 36,0 | 140 | 40 | 29,0 | 48,00 | 120301144 | | |
| **MF 50 x 3,0** | 50,0 | 36,0 | 140 | 40 | 29,0 | 47,00 | 120301145 | | |
| **MF 52 x 1,5** | 52,0 | 40,0 | 140 | 40 | 32,0 | 50,50 | 120301146 | | |
| **MF 52 x 2,0** | 52,0 | 40,0 | 140 | 40 | 32,0 | 50,00 | 120301147 | | |
| **MF 52 x 3,0** | 52,0 | 40,0 | 140 | 40 | 32,0 | 49,00 | 120301148 | | |
| **MF 54 x 1** | 54,0 | 40,0 | 140 | 32 | 32,0 | 53,00 | 120301149 | | |
| **MF 54 x 1,5** | 54,0 | 40,0 | 140 | 32 | 32,0 | 52,50 | 120301150 | | |
| **MF 54 x 2,0** | 54,0 | 40,0 | 140 | 36 | 32,0 | 52,00 | 120301151 | | |
| **MF 54 x 3,0** | 54,0 | 40,0 | 140 | 40 | 32,0 | 51,00 | 120301152 | | |
| **MF 54 x 4,0** | 54,0 | 40,0 | 180 | 50 | 32,0 | 50,00 | 120301153 | | |
| **MF 55 x 1,5** | 55,0 | 40,0 | 140 | 32 | 32,0 | 53,50 | 120301154 | | |
| **MF 55 x 2,0** | 55,0 | 40,0 | 140 | 36 | 32,0 | 53,00 | 120301155 | | |
| **MF 55 x 3,0** | 55,0 | 40,0 | 140 | 40 | 32,0 | 52,00 | 120301156 | | |
| **MF 55 x 4,0** | 55,0 | 40,0 | 180 | 50 | 32,0 | 51,00 | 120301157 | | |
| **MF 56 x 1** | 56,0 | 40,0 | 140 | 32 | 32,0 | 55,00 | 120301158 | | |
| **MF 56 x 1,5** | 56,0 | 40,0 | 140 | 32 | 32,0 | 54,50 | 120301159 | | |
| **MF 56 x 2,0** | 56,0 | 40,0 | 140 | 36 | 32,0 | 54,00 | 120301160 | | |
| **MF 56 x 3,0** | 56,0 | 40,0 | 140 | 40 | 32,0 | 53,00 | 120301161 | | |
| **MF 56 x 4,0** | 56,0 | 40,0 | 180 | 50 | 32,0 | 52,00 | 120301162 | | |
| **MF 58 x 1** | 58,0 | 45,0 | 160 | 32 | 35,0 | 57,00 | 120301163 | | |
| **MF 58 x 1,5** | 58,0 | 45,0 | 160 | 32 | 35,0 | 56,50 | 120301164 | | |
| **MF 58 x 2,0** | 58,0 | 45,0 | 160 | 36 | 35,0 | 56,00 | 120301165 | | |

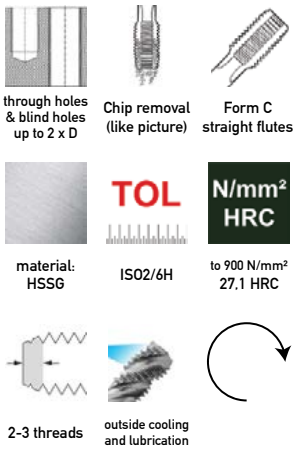
# Hand Tap Sets

## MF Metric fine thread ISO DIN 13

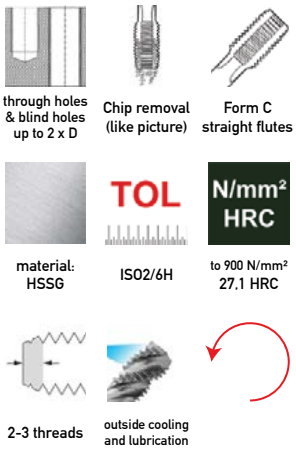
Efficient internal thread cutting.
The short structural type makes that tap usable by hand.

A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

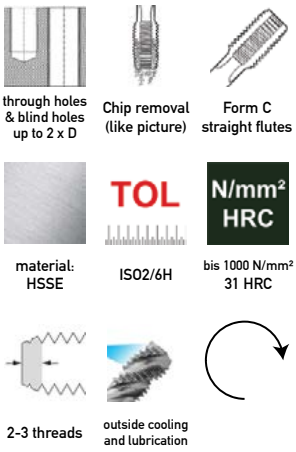
### Hand Tap Sets
for general use

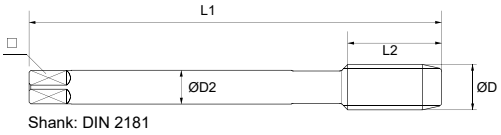



### Hand Tap Sets
for general use — Left Hand




### Hand Tap Sets — HSSE
for higher demands



Shank: DIN 2181

| MF | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **MF 58 x 3,0** | 58,0 | 45,0 | 160 | 40 | 35,0 | 55,00 | 120301166 | | |
| **MF 58 x 4,0** | 58,0 | 45,0 | 200 | 55 | 35,0 | 54,00 | 120301167 | | |
| **MF 60 x 1,5** | 60,0 | 45,0 | 160 | 34 | 35,0 | 58,50 | 120301168 | | |
| **MF 60 x 2,0** | 60,0 | 45,0 | 160 | 36 | 35,0 | 58,00 | 120301169 | | |
| **MF 60 x 3,0** | 60,0 | 45,0 | 160 | 40 | 35,0 | 57,00 | 120301170 | | |
| **MF 60 x 4,0** | 60,0 | 45,0 | 200 | 55 | 35,0 | 56,00 | 120301171 | | |
| **MF 62 x 1,5** | 62,0 | 50,0 | 160 | 34 | 39,0 | 60,50 | 120301172 | | |
| **MF 62 x 2,0** | 62,0 | 50,0 | 160 | 36 | 39,0 | 60,00 | 120301173 | | |
| **MF 62 x 3,0** | 62,0 | 50,0 | 180 | 45 | 39,0 | 59,00 | 120301174 | | |
| **MF 62 x 4,0** | 62,0 | 50,0 | 220 | 55 | 39,0 | 58,00 | 120301175 | | |
| **MF 63 x 1,5** | 63,0 | 50,0 | 160 | 32 | 39,0 | 61,50 | 120301176 | | |
| **MF 64 x 1,5** | 64,0 | 50,0 | 160 | 34 | 39,0 | 62,50 | 120301177 | | |
| **MF 64 x 2,0** | 64,0 | 50,0 | 160 | 36 | 39,0 | 62,00 | 120301178 | | |
| **MF 64 x 3,0** | 64,0 | 50,0 | 180 | 45 | 39,0 | 61,00 | 120301179 | | |
| **MF 64 x 4,0** | 64,0 | 50,0 | 220 | 60 | 39,0 | 60,00 | 120301180 | | |
| **MF 65 x 1,5** | 65,0 | 50,0 | 160 | 34 | 39,0 | 63,50 | 120301181 | | |
| **MF 65 x 2,0** | 65,0 | 50,0 | 160 | 36 | 39,0 | 63,00 | 120301182 | | |
| **MF 65 x 3,0** | 65,0 | 50,0 | 180 | 45 | 39,0 | 62,00 | 120301183 | | |
| **MF 65 x 4,0** | 65,0 | 50,0 | 220 | 60 | 39,0 | 61,00 | 120301184 | | |
| **MF 68 x 1,5** | 68,0 | 50,0 | 160 | 36 | 39,0 | 66,50 | 120301185 | | |
| **MF 68 x 2,0** | 68,0 | 50,0 | 160 | 40 | 39,0 | 66,00 | 120301186 | | |
| **MF 68 x 3,0** | 68,0 | 50,0 | 180 | 50 | 39,0 | 65,00 | 120301187 | | |
| **MF 68 x 4,0** | 68,0 | 50,0 | 220 | 60 | 39,0 | 64,00 | 120301188 | | |
| **MF 70 x 1,5** | 70,0 | 50,0 | 160 | 36 | 39,0 | 68,50 | 120301189 | | |
| **MF 70 x 2,0** | 70,0 | 50,0 | 160 | 40 | 39,0 | 68,00 | 120301190 | | |
| **MF 70 x 3,0** | 70,0 | 50,0 | 200 | 50 | 39,0 | 67,00 | 120301191 | | |
| **MF 70 x 4,0** | 70,0 | 50,0 | 240 | 60 | 39,0 | 66,00 | 120301192 | | |
| **MF 72 x 1,5** | 72,0 | 50,0 | 160 | 36 | 39,0 | 70,50 | 120301193 | | |
| **MF 72 x 2,0** | 72,0 | 50,0 | 160 | 40 | 39,0 | 70,00 | 120301194 | | |
| **MF 72 x 3,0** | 72,0 | 50,0 | 200 | 50 | 39,0 | 69,00 | 120301195 | | |
| **MF 72 x 4,0** | 72,0 | 50,0 | 240 | 60 | 39,0 | 68,00 | 120301196 | | |
| **MF 74 x 1,5** | 74,0 | 50,0 | 160 | 36 | 39,0 | 72,50 | 120301197 | | |
| **MF 74 x 2,0** | 74,0 | 50,0 | 160 | 40 | 39,0 | 72,00 | 120301198 | | |

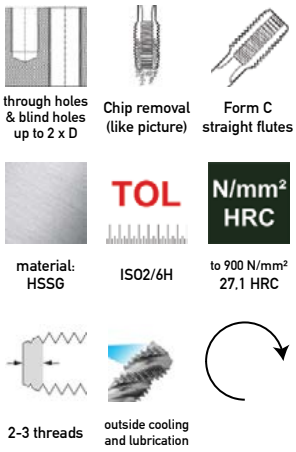
# MF

**Metric fine thread**
**ISO DIN 13**

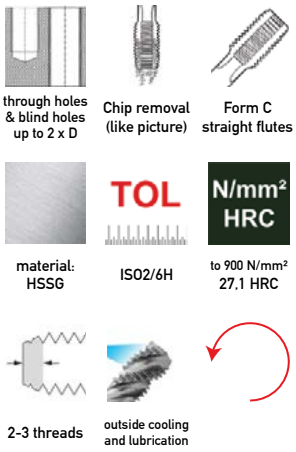
Efficient internal thread cutting.
The short structural type makes that tap usable by hand.

A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

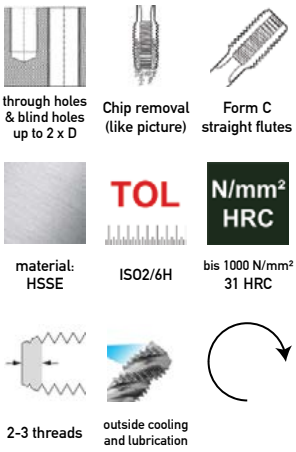
## Hand Tap Sets
for general use

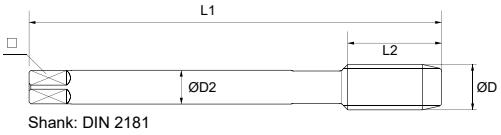



## Hand Tap Sets
for general use — Left Hand




## Hand Tap Sets — HSSE
for higher demands



Shank: DIN 2181

| MF | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **MF 74 x 3,0** | 74,0 | 50,0 | 200 | 50 | 39,0 | 71,00 | 120301199 | | |
| **MF 74 x 4,0** | 74,0 | 50,0 | 240 | 60 | 39,0 | 70,00 | 120301200 | | |
| **MF 75 x 1,5** | 75,0 | 50,0 | 160 | 36 | 39,0 | 73,50 | 120301201 | | |
| **MF 75 x 2,0** | 75,0 | 50,0 | 160 | 40 | 39,0 | 73,00 | 120301202 | | |
| **MF 75 x 3,0** | 75,0 | 50,0 | 200 | 50 | 39,0 | 72,00 | 120301203 | | |
| **MF 75 x 4,0** | 75,0 | 50,0 | 240 | 60 | 39,0 | 71,00 | 120301204 | | |
| **MF 76 x 1,5** | 76,0 | 50,0 | 160 | 36 | 39,0 | 74,50 | 120301205 | | |
| **MF 76 x 2,0** | 76,0 | 50,0 | 160 | 40 | 39,0 | 74,00 | 120301206 | | |
| **MF 76 x 3,0** | 76,0 | 50,0 | 220 | 50 | 39,0 | 73,00 | 120301207 | | |
| **MF 76 x 4,0** | 76,0 | 50,0 | 260 | 60 | 39,0 | 72,00 | 120301208 | | |
| **MF 78 x 1,5** | 78,0 | 50,0 | 160 | 36 | 39,0 | 76,50 | 120301209 | | |
| **MF 78 x 2,0** | 78,0 | 50,0 | 160 | 40 | 39,0 | 76,00 | 120301210 | | |
| **MF 78 x 3,0** | 78,0 | 50,0 | 220 | 55 | 39,0 | 75,00 | 120301211 | | |
| **MF 78 x 4,0** | 78,0 | 50,0 | 260 | 65 | 39,0 | 74,00 | 120301212 | | |
| **MF 80 x 1,5** | 80,0 | 50,0 | 160 | 36 | 39,0 | 78,50 | 120301213 | | |
| **MF 80 x 2,0** | 80,0 | 50,0 | 160 | 40 | 39,0 | 78,00 | 120301214 | | |
| **MF 80 x 3,0** | 80,0 | 50,0 | 220 | 55 | 39,0 | 77,00 | 120301215 | | |
| **MF 80 x 4,0** | 80,0 | 50,0 | 260 | 65 | 39,0 | 76,00 | 120301216 | | |
| **MF 82 x 1,5** | 82,0 | 50,0 | 160 | 36 | 39,0 | 80,50 | 120301217 | | |
| **MF 82 x 2,0** | 82,0 | 50,0 | 160 | 40 | 39,0 | 80,00 | 120301218 | | |
| **MF 82 x 3,0** | 82,0 | 50,0 | 220 | 55 | 39,0 | 79,00 | 120301219 | | |
| **MF 82 x 4,0** | 82,0 | 50,0 | 260 | 65 | 39,0 | 78,00 | 120301220 | | |
| **MF 84 x 1,5** | 84,0 | 50,0 | 160 | 36 | 39,0 | 82,50 | 120301221 | | |
| **MF 84 x 2,0** | 84,0 | 50,0 | 160 | 40 | 39,0 | 82,00 | 120301222 | | |
| **MF 84 x 3,0** | 84,0 | 50,0 | 220 | 55 | 39,0 | 81,00 | 120301223 | | |
| **MF 84 x 4,0** | 84,0 | 50,0 | 260 | 65 | 39,0 | 80,00 | 120301224 | | |
| **MF 85 x 1,5** | 85,0 | 50,0 | 160 | 36 | 39,0 | 83,50 | 120301225 | | |
| **MF 85 x 2,0** | 85,0 | 50,0 | 160 | 40 | 39,0 | 83,00 | 120301226 | | |
| **MF 85 x 3,0** | 85,0 | 50,0 | 220 | 55 | 39,0 | 82,00 | 120301227 | | |
| **MF 85 x 4,0** | 85,0 | 50,0 | 260 | 65 | 39,0 | 81,00 | 120301228 | | |
| **MF 86 x 1,5** | 86,0 | 50,0 | 160 | 36 | 39,0 | 84,50 | 120301229 | | |
| **MF 86 x 2,0** | 86,0 | 50,0 | 160 | 40 | 39,0 | 84,00 | 120301230 | | |
| **MF 86 x 3,0** | 86,0 | 50,0 | 220 | 55 | 39,0 | 83,00 | 120301231 | | |

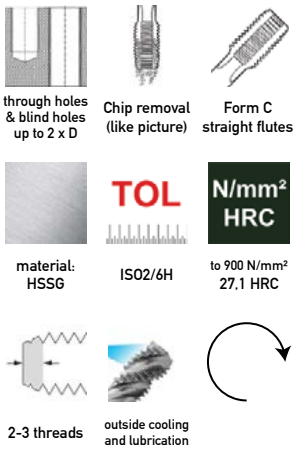
# Hand Tap Sets

## MF Metric fine thread ISO DIN 13

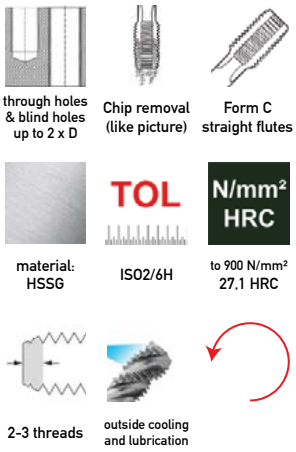
Efficient internal thread cutting.
The short structural type makes that tap usable by hand.

A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

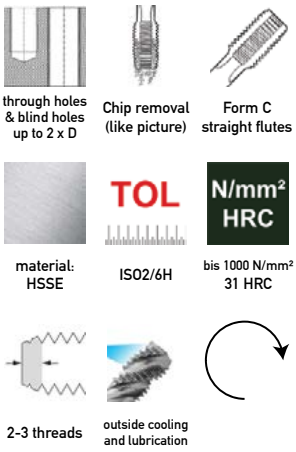
### Hand Tap Sets
for general use

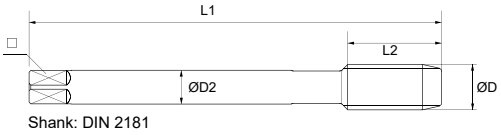



### Hand Tap Sets
for general use — Left Hand




### Hand Tap Sets — HSSE
for higher demands



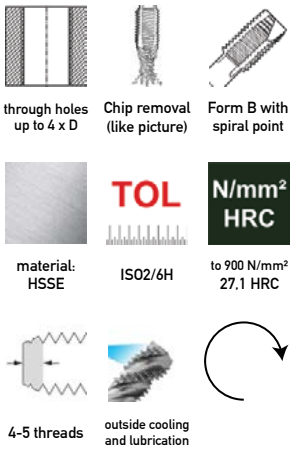
Shank: DIN 2181

| MF | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **MF 86 x 4,0** | 86,0 | 50,0 | 260 | 65 | 39,0 | 82,00 | 120301232 | | |
| **MF 88 x 1,5** | 88,0 | 50,0 | 160 | 38 | 39,0 | 86,50 | 120301233 | | |
| **MF 88 x 2,0** | 88,0 | 50,0 | 160 | 40 | 39,0 | 86,00 | 120301234 | | |
| **MF 88 x 3,0** | 88,0 | 50,0 | 220 | 55 | 39,0 | 85,00 | 120301235 | | |
| **MF 88 x 4,0** | 88,0 | 50,0 | 260 | 65 | 39,0 | 84,00 | 120301236 | | |
| **MF 90 x 1,5** | 90,0 | 50,0 | 160 | 38 | 39,0 | 88,50 | 120301237 | | |
| **MF 90 x 2,0** | 90,0 | 50,0 | 160 | 40 | 39,0 | 88,00 | 120301238 | | |
| **MF 90 x 3,0** | 90,0 | 50,0 | 220 | 55 | 39,0 | 87,00 | 120301239 | | |
| **MF 90 x 4,0** | 90,0 | 50,0 | 260 | 65 | 39,0 | 86,00 | 120301240 | | |
| **MF 92 x 1,5** | 92,0 | 56,0 | 180 | 40 | 44,0 | 90,50 | 120301241 | | |
| **MF 92 x 2,0** | 92,0 | 56,0 | 180 | 45 | 44,0 | 90,00 | 120301242 | | |
| **MF 92 x 3,0** | 92,0 | 56,0 | 240 | 60 | 44,0 | 89,00 | 120301243 | | |
| **MF 92 x 4,0** | 92,0 | 56,0 | 280 | 70 | 44,0 | 88,00 | 120301244 | | |
| **MF 95 x 1,5** | 95,0 | 56,0 | 180 | 40 | 44,0 | 93,50 | 120301245 | | |
| **MF 95 x 2,0** | 95,0 | 56,0 | 180 | 45 | 44,0 | 93,00 | 120301246 | | |
| **MF 95 x 3,0** | 95,0 | 56,0 | 240 | 60 | 44,0 | 92,00 | 120301247 | | |
| **MF 95 x 4,0** | 95,0 | 56,0 | 280 | 70 | 44,0 | 91,00 | 120301248 | | |
| **MF 96 x 1,5** | 96,0 | 56,0 | 180 | 40 | 44,0 | 94,50 | 120301249 | | |
| **MF 96 x 2,0** | 96,0 | 56,0 | 180 | 45 | 44,0 | 94,00 | 120301250 | | |
| **MF 96 x 3,0** | 96,0 | 56,0 | 240 | 60 | 44,0 | 93,00 | 120301251 | | |
| **MF 96 x 4,0** | 96,0 | 56,0 | 280 | 70 | 44,0 | 92,00 | 120301252 | | |
| **MF 98 x 1,5** | 98,0 | 56,0 | 180 | 40 | 44,0 | 96,50 | 120301253 | | |
| **MF 98 x 2,0** | 98,0 | 56,0 | 180 | 45 | 44,0 | 96,00 | 120301254 | | |
| **MF 98 x 3,0** | 98,0 | 56,0 | 240 | 60 | 44,0 | 95,00 | 120301255 | | |
| **MF 98 x 4,0** | 98,0 | 56,0 | 280 | 70 | 44,0 | 94,00 | 120301256 | | |
| **MF 100 x 1,5** | 100,0 | 56,0 | 180 | 45 | 44,0 | 98,50 | 120301257 | | |
| **MF 100 x 2,0** | 100,0 | 56,0 | 180 | 50 | 44,0 | 98,00 | 120301258 | | |
| **MF 100 x 3,0** | 100,0 | 56,0 | 240 | 65 | 44,0 | 97,00 | 120301259 | | |
| **MF 100 x 4,0** | 100,0 | 56,0 | 280 | 75 | 44,0 | 96,00 | 120301260 | | |
| **MF 105 x 1,5** | 105,0 | 56,0 | 180 | 45 | 44,0 | 103,50 | 120301261 | | |
| **MF 105 x 2,0** | 105,0 | 56,0 | 180 | 50 | 44,0 | 103,00 | 120301262 | | |
| **MF 105 x 3,0** | 105,0 | 56,0 | 240 | 65 | 44,0 | 102,00 | 120301263 | | |
| **MF 105 x 4,0** | 105,0 | 56,0 | 280 | 75 | 44,0 | 101,00 | 120301264 | | |

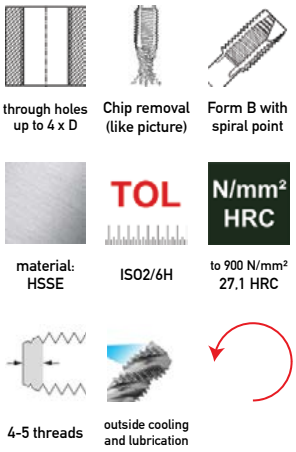
# Machine Taps - Form B for through holes

## MF Metric fine thread ISO DIN 13

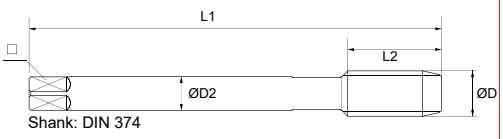
**Machine Tap**
for general use




**Machine Tap**
for general use
Left-hand thread




Tap for machine use in through hole.
The spiral point pushes the chips ahead.

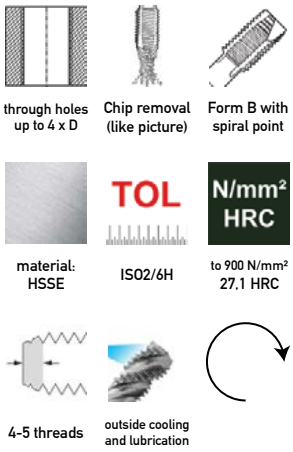


| MF | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **MF 3 x 0,35** | 3,0 | 2,2 | 56 | 9 | - | 2,65 | 120401001 | 120402001 |
| **MF 4 x 0,35** | 4,0 | 2,8 | 63 | 10 | 2,1 | 3,65 | 120401002 | 120402002 |
| **MF 4 x 0,5** | 4,0 | 2,8 | 63 | 10 | 2,1 | 3,50 | 120401003 | 120402003 |
| **MF 5 x 0,5** | 5,0 | 3,5 | 70 | 12 | 2,7 | 4,50 | 120401004 | 120402004 |
| **MF 5 x 0,75** | 5,0 | 3,5 | 70 | 12 | 2,7 | 4,25 | 120401005 | 120402005 |
| **MF 6 x 0,5** | 6,0 | 4,5 | 80 | 14 | 3,4 | 5,50 | 120401006 | 120402006 |
| **MF 6 x 0,75** | 6,0 | 4,5 | 80 | 14 | 3,4 | 5,20 | 120401007 | 120402007 |
| **MF 7 x 0,75** | 7,0 | 5,5 | 80 | 14 | 4,3 | 6,20 | 120401008 | 120402008 |
| **MF 8 x 0,5** | 8,0 | 6,0 | 80 | 19 | 4,9 | 7,50 | 120401009 | 120402009 |
| **MF 8 x 0,75** | 8,0 | 6,0 | 80 | 19 | 4,9 | 7,20 | 120401010 | 120402010 |
| **MF 8 x 1,0** | 8,0 | 6,0 | 90 | 22 | 4,9 | 7,00 | 120401011 | 120402011 |
| **MF 9 x 0,75** | 9,0 | 7,0 | 80 | 19 | 5,5 | 8,25 | 120401012 | 120402012 |
| **MF 9 x 1,0** | 9,0 | 7,0 | 90 | 22 | 5,5 | 8,00 | 120401013 | 120402013 |
| **MF 10 x 0,75** | 10,0 | 7,0 | 90 | 20 | 5,5 | 9,20 | 120401014 | 120402014 |
| **MF 10 x 1,0** | 10,0 | 7,0 | 90 | 20 | 5,5 | 9,00 | 120401015 | 120402015 |
| **MF 10 x 1,25** | 10,0 | 7,0 | 100 | 24 | 5,5 | 8,80 | 120401016 | 120402016 |
| **MF 11 x 1,0** | 11,0 | 8,0 | 90 | 20 | 6,2 | 10,00 | 120401017 | 120402017 |
| **MF 11 x 1,25** | 11,0 | 8,0 | 90 | 22 | 6,2 | 10,80 | 120401018 | 120402018 |
| **MF 12 x 0,75** | 12,0 | 9,0 | 100 | 22 | 7,0 | 10,20 | 120401019 | 120402019 |
| **MF 12 x 1,0** | 12,0 | 9,0 | 100 | 22 | 7,0 | 11,00 | 120401020 | 120402020 |
| **MF 12 x 1,25** | 12,0 | 9,0 | 100 | 22 | 7,0 | 10,80 | 120401021 | 120402021 |
| **MF 12 x 1,5** | 12,0 | 9,0 | 100 | 22 | 7,0 | 10,50 | 120401022 | 120402022 |
| **MF 13 x 1,0** | 13,0 | 11,0 | 100 | 22 | 9,0 | 12,00 | 120401023 | 120402023 |
| **MF 13 x 1,5** | 13,0 | 11,0 | 100 | 22 | 9,0 | 11,50 | 120401024 | 120402024 |
| **MF 14 x 0,75** | 14,0 | 11,0 | 100 | 22 | 9,0 | 13,20 | 120401025 | 120402025 |
| **MF 14 x 1,0** | 14,0 | 11,0 | 100 | 22 | 9,0 | 13,00 | 120401026 | 120402026 |
| **MF 14 x 1,25** | 14,0 | 11,0 | 100 | 22 | 9,0 | 12,80 | 120401027 | 120402027 |
| **MF 14 x 1,5** | 14,0 | 11,0 | 100 | 22 | 9,0 | 12,50 | 120401028 | 120402028 |
| **MF 15 x 1,0** | 15,0 | 12,0 | 100 | 22 | 9,0 | 14,00 | 120401029 | 120402029 |
| **MF 15 x 1,5** | 15,0 | 12,0 | 100 | 22 | 9,0 | 13,50 | 120401030 | 120402030 |
| **MF 16 x 1,0** | 16,0 | 12,0 | 100 | 22 | 9,0 | 15,00 | 120401031 | 120402031 |
| **MF 16 x 1,25** | 16,0 | 12,0 | 100 | 22 | 9,0 | 14,80 | 120401032 | 120402032 |
| **MF 16 x 1,5** | 16,0 | 12,0 | 100 | 22 | 9,0 | 14,50 | 120401033 | 120402033 |
| **MF 18 x 1,0** | 18,0 | 14,0 | 110 | 25 | 11,0 | 17,00 | 120401034 | 120402034 |
| **MF 18 x 1,25** | 18,0 | 14,0 | 110 | 25 | 11,0 | 16,80 | 120401035 | 120402035 |

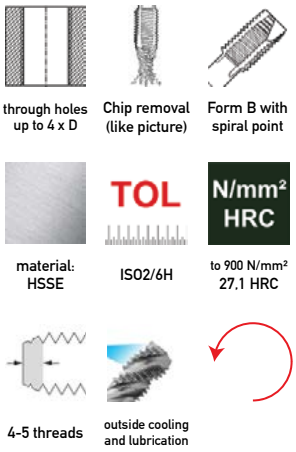
# Machine Taps - Form B for through holes

## MF Metric fine thread ISO DIN 13

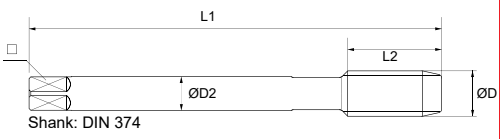
**Machine Tap**
for general use




**Machine Tap**
for general use
Left-hand thread




Tap for machine use in through hole.
The spiral point pushes the chips ahead.

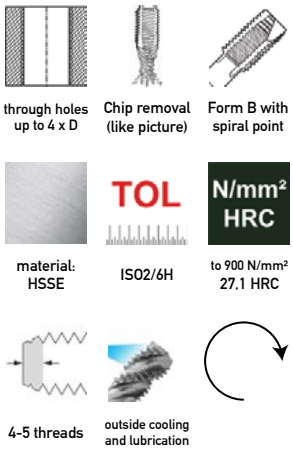


| MF | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **MF 18 x 1,5** | 18,0 | 14,0 | 110 | 25 | 11,0 | 16,50 | 120401036 | 120402036 |
| **MF 18 x 2,0** | 18,0 | 14,0 | 125 | 34 | 11,0 | 16,00 | 120401037 | 120402037 |
| **MF 20 x 1,0** | 20,0 | 16,0 | 125 | 25 | 12,0 | 19,00 | 120401038 | 120402038 |
| **MF 20 x 1,25** | 20,0 | 16,0 | 125 | 25 | 12,0 | 18,80 | 120401039 | 120402039 |
| **MF 20 x 1,5** | 20,0 | 16,0 | 125 | 25 | 12,0 | 18,50 | 120401040 | 120402040 |
| **MF 20 x 2,0** | 20,0 | 16,0 | 140 | 34 | 12,0 | 18,00 | 120401041 | 120402041 |
| **MF 21 x 1,5** | 21,0 | 16,0 | 125 | 25 | 12,0 | 19,50 | 120401042 | 120402042 |
| **MF 22 x 1,0** | 22,0 | 18,0 | 125 | 25 | 14,5 | 21,00 | 120401043 | 120402043 |
| **MF 22 x 1,25** | 22,0 | 18,0 | 125 | 25 | 14,5 | 20,80 | 120401044 | 120402044 |
| **MF 22 x 1,5** | 22,0 | 18,0 | 125 | 25 | 14,5 | 20,50 | 120401045 | 120402045 |
| **MF 22 x 2,0** | 22,0 | 18,0 | 140 | 34 | 14,5 | 20,00 | 120401046 | 120402046 |
| **MF 23 x 1,5** | 23,0 | 18,0 | 125 | 25 | 14,5 | 21,50 | 120401047 | 120402047 |
| **MF 24 x 1,0** | 24,0 | 18,0 | 140 | 28 | 14,5 | 23,00 | 120401048 | 120402048 |
| **MF 24 x 1,25** | 24,0 | 18,0 | 140 | 28 | 14,5 | 23,80 | 120401049 | 120402049 |
| **MF 24 x 1,5** | 24,0 | 18,0 | 140 | 28 | 14,5 | 22,50 | 120401050 | 120402050 |
| **MF 24 x 2,0** | 24,0 | 18,0 | 140 | 28 | 14,5 | 22,00 | 120401051 | 120402051 |
| **MF 25 x 1,0** | 25,0 | 18,0 | 140 | 28 | 14,5 | 24,00 | 120401052 | 120402052 |
| **MF 25 x 1,5** | 25,0 | 18,0 | 140 | 28 | 14,5 | 23,50 | 120401053 | 120402053 |
| **MF 26 x 1,0** | 26,0 | 18,0 | 140 | 28 | 14,5 | 25,00 | 120401054 | 120402054 |
| **MF 26 x 1,5** | 26,0 | 18,0 | 140 | 28 | 14,5 | 24,50 | 120401055 | 120402055 |
| **MF 26 x 2,0** | 26,0 | 18,0 | 140 | 28 | 14,5 | 24,00 | 120401056 | 120402056 |
| **MF 27 x 1,0** | 27,0 | 20,0 | 140 | 28 | 16,0 | 26,00 | 120401057 | 120402057 |
| **MF 27 x 1,5** | 27,0 | 20,0 | 140 | 28 | 16,0 | 25,50 | 120401058 | 120402058 |
| **MF 27 x 2,0** | 27,0 | 20,0 | 140 | 28 | 16,0 | 25,00 | 120401059 | 120402059 |
| **MF 28 x 1,0** | 28,0 | 20,0 | 140 | 28 | 16,0 | 27,00 | 120401060 | 120402060 |
| **MF 28 x 1,5** | 28,0 | 20,0 | 140 | 28 | 16,0 | 26,50 | 120401061 | 120402061 |
| **MF 28 x 2,0** | 28,0 | 20,0 | 140 | 28 | 16,0 | 26,00 | 120401062 | 120402062 |
| **MF 29 x 1,5** | 29,0 | 22,0 | 150 | 28 | 18,0 | 27,50 | 120401063 | 120402063 |
| **MF 30 x 1,0** | 30,0 | 22,0 | 150 | 28 | 18,0 | 29,00 | 120401064 | 120402064 |
| **MF 30 x 1,5** | 30,0 | 22,0 | 150 | 28 | 18,0 | 28,50 | 120401065 | 120402065 |
| **MF 30 x 2,0** | 30,0 | 22,0 | 150 | 28 | 18,0 | 28,00 | 120401066 | 120402066 |
| **MF 30 x 2,5** | 30,0 | 22,0 | 180 | 45 | 18,0 | 27,50 | 120401067 | 120402067 |
| **MF 30 x 3,0** | 30,0 | 22,0 | 180 | 45 | 18,0 | 27,00 | 120401068 | 120402068 |
| **MF 32 x 1,5** | 32,0 | 22,0 | 150 | 28 | 18,0 | 30,50 | 120401069 | 120402069 |
| **MF 32 x 2,0** | 32,0 | 22,0 | 150 | 28 | 18,0 | 30,00 | 120401070 | 120402070 |

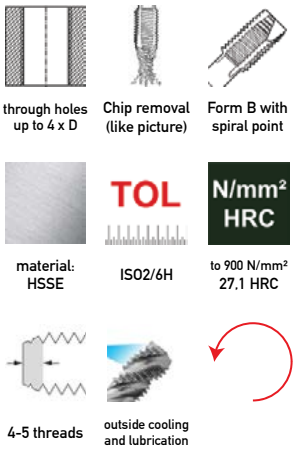
# Machine Taps - Form B for through holes

## MF Metric fine thread ISO DIN 13

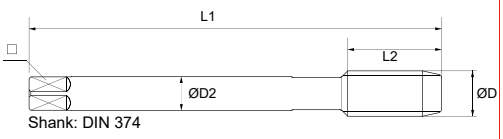
**Machine Tap**
for general use




**Machine Tap**
for general use
Left-hand thread




Tap for machine use in through hole.
The spiral point pushes the chips ahead.



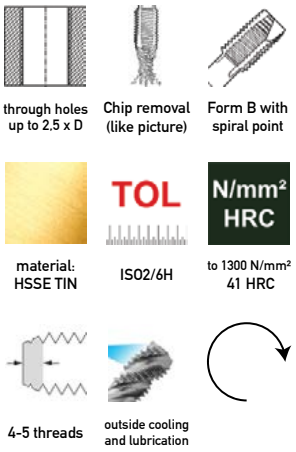
| MF | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **MF 32 x 3,0** | 32,0 | 22,0 | 180 | 50 | 18,0 | 29,00 | 120401071 | 120402071 |
| **MF 33 x 1,5** | 33,0 | 25,0 | 160 | 30 | 20,0 | 31,50 | 120401072 | 120402072 |
| **MF 33 x 2,0** | 33,0 | 25,0 | 160 | 30 | 20,0 | 31,00 | 120401073 | 120402073 |
| **MF 33 x 3,0** | 33,0 | 25,0 | 180 | 50 | 20,0 | 30,00 | 120401074 | 120402074 |
| **MF 34 x 1,5** | 34,0 | 28,0 | 170 | 30 | 22,0 | 32,50 | 120401075 | 120402075 |
| **MF 34 x 2,0** | 34,0 | 28,0 | 170 | 30 | 22,0 | 32,00 | 120401076 | 120402076 |
| **MF 35 x 1,5** | 35,0 | 28,0 | 170 | 30 | 22,0 | 33,50 | 120401077 | 120402077 |
| **MF 36 x 1,5** | 36,0 | 28,0 | 170 | 30 | 22,0 | 34,50 | 120401078 | 120402078 |
| **MF 36 x 2,0** | 36,0 | 28,0 | 170 | 30 | 22,0 | 34,00 | 120401079 | 120402079 |
| **MF 36 x 3,0** | 36,0 | 28,0 | 200 | 56 | 22,0 | 33,00 | 120401080 | 120402080 |
| **MF 38 x 1,5** | 38,0 | 28,0 | 170 | 30 | 22,0 | 36,50 | 120401081 | 120402081 |
| **MF 39 x 1,5** | 39,0 | 32,0 | 170 | 30 | 24,0 | 37,50 | 120401082 | 120402082 |
| **MF 39 x 2,0** | 39,0 | 32,0 | 170 | 30 | 24,0 | 37,00 | 120401083 | 120402083 |
| **MF 39 x 3,0** | 39,0 | 32,0 | 200 | 60 | 24,0 | 36,00 | 120401084 | 120402084 |
| **MF 40 x 1,5** | 40,0 | 32,0 | 170 | 30 | 24,0 | 38,50 | 120401085 | 120402085 |
| **MF 40 x 2,0** | 40,0 | 32,0 | 170 | 30 | 24,0 | 38,00 | 120401086 | 120402086 |
| **MF 40 x 3,0** | 40,0 | 32,0 | 200 | 60 | 24,0 | 37,00 | 120401087 | 120402087 |
| **MF 42 x 1,5** | 42,0 | 32,0 | 170 | 30 | 24,0 | 40,50 | 120401088 | 120402088 |
| **MF 42 x 2,0** | 42,0 | 32,0 | 170 | 30 | 24,0 | 40,00 | 120401089 | 120402089 |
| **MF 42 x 3,0** | 42,0 | 32,0 | 200 | 60 | 24,0 | 39,00 | 120401090 | 120402090 |
| **MF 45 x 1,5** | 45,0 | 36,0 | 180 | 32 | 29,0 | 43,50 | 120401091 | 120402091 |
| **MF 45 x 2,0** | 45,0 | 36,0 | 180 | 32 | 29,0 | 43,00 | 120401092 | 120402092 |
| **MF 45 x 3,0** | 45,0 | 36,0 | 200 | 50 | 29,0 | 42,00 | 120401093 | 120402093 |
| **MF 48 x 1,5** | 48,0 | 36,0 | 190 | 32 | 29,0 | 46,50 | 120401094 | 120402094 |
| **MF 48 x 2,0** | 48,0 | 36,0 | 190 | 32 | 29,0 | 46,00 | 120401095 | 120402095 |
| **MF 48 x 3,0** | 48,0 | 36,0 | 225 | 50 | 29,0 | 45,00 | 120401096 | 120402096 |
| **MF 50 x 1,5** | 50,0 | 36,0 | 190 | 32 | 29,0 | 48,50 | 120401097 | 120402097 |
| **MF 50 x 2,0** | 50,0 | 36,0 | 190 | 32 | 29,0 | 48,00 | 120401098 | 120402098 |
| **MF 50 x 3,0** | 50,0 | 36,0 | 225 | 50 | 29,0 | 47,00 | 120401099 | 120402099 |
| **MF 52 x 1,5** | 52,0 | 40,0 | 190 | 32 | 32,0 | 50,50 | 120401100 | 120402100 |
| **MF 52 x 2,0** | 52,0 | 40,0 | 190 | 32 | 32,0 | 50,00 | 120401101 | 120402101 |
| **MF 52 x 3,0** | 52,0 | 40,0 | 225 | 50 | 32,0 | 49,00 | 120401102 | 120402102 |
| **MF 63 x 1,5** | 63,0 | 50,0 | 275 | 50 | 39,0 | 61,50 | 120401103 | |

# Machine Taps - Form B for through holes

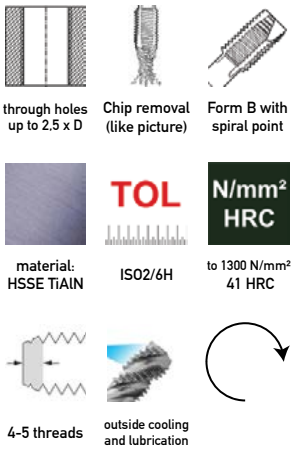
## MF Metric fine thread ISO DIN 13

Tap for machine use in through hole.
The spiral point pushes the chips ahead.

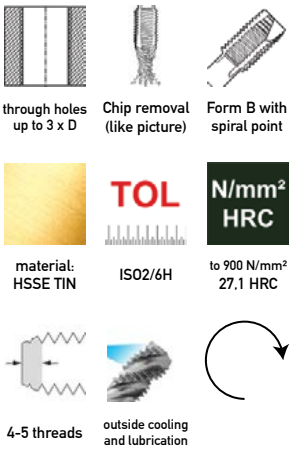
### Machine Tap for high-alloyed steels

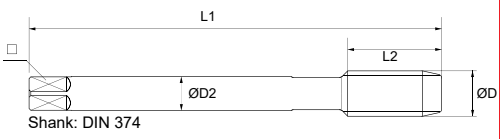



### Machine Tap for stainless steels




### Machine Tap for aluminum



| MF | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **MF 6 x 0,75** | 6,0 | 4,5 | 80 | 14 | 3,4 | 5,20 | 120404001 | 120405001 | 120407001 |
| **MF 8 x 1,0** | 8,0 | 6,0 | 90 | 22 | 4,9 | 7,00 | 120404002 | 120405002 | 120407002 |
| **MF 10 x 1,0** | 10,0 | 7,0 | 90 | 20 | 5,5 | 9,00 | 120404003 | 120405003 | 120407003 |
| **MF 10 x 1,25** | 10,0 | 7,0 | 100 | 24 | 5,5 | 8,80 | 120404004 | 120405004 | 120407004 |
| **MF 12 x 1,0** | 12,0 | 9,0 | 100 | 22 | 7,0 | 11,00 | 120404005 | 120405005 | 120407005 |
| **MF 12 x 1,25** | 12,0 | 9,0 | 100 | 22 | 7,0 | 10,80 | 120404006 | 120405006 | 120407006 |
| **MF 12 x 1,5** | 12,0 | 9,0 | 100 | 22 | 7,0 | 10,50 | 120404007 | 120405007 | 120407007 |
| **MF 14 x 1,25** | 14,0 | 11,0 | 100 | 22 | 9,0 | 12,80 | 120404008 | 120405008 | 120407008 |
| **MF 14 x 1,5** | 14,0 | 11,0 | 100 | 22 | 9,0 | 12,50 | 120404009 | 120405009 | 120407009 |
| **MF 16 x 1,5** | 16,0 | 12,0 | 100 | 22 | 9,0 | 14,50 | 120404010 | 120405010 | 120407010 |
| **MF 18 x 1,5** | 18,0 | 14,0 | 110 | 25 | 11,0 | 16,50 | 120404011 | 120405011 | 120407011 |
| **MF 20 x 1,5** | 20,0 | 16,0 | 125 | 25 | 12,0 | 18,50 | 120404012 | 120405012 | 120407012 |

# Machine Taps - Form B for through holes

## MF Metric fine thread ISO DIN 13

Tap for machine use in through hole.
The spiral point pushes the chips ahead.

### Machine Tap
for special alloys
(Inconel, Hastelloy etc.)

through holes up to 2,5 x D | Chip removal (like picture) | Form B with spiral point

material: HSSE-PM TiAlN | TOL ISO2/6H | N/mm² HRC to 1200 N/mm² 38 HRC

4-5 threads | outside cooling and lubrication

### Machine Tap
with longer tool life time

through holes up to 2,5 x D | Chip removal (like picture) | Form B with spiral point

material: HSSE TIN | TOL ISO2/6H | N/mm² HRC to 900 N/mm² 27,1 HRC

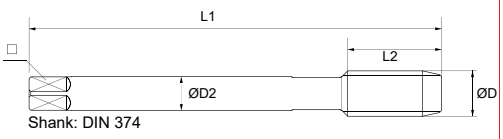
4-5 threads | outside cooling and lubrication

### Machine Tap
for general use
oversized (diameter)

through holes up to 3 x D | Chip removal (like picture) | Form B with spiral point

material: HSSE | TOL ISO3/6G | N/mm² HRC to 900 N/mm² 27,1 HRC

4-5 threads | outside cooling and lubrication




| MF | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Tol. 6G: threads with large clearance |
| **MF 6 x 0,75** | 6,0 | 4,5 | 80 | 14 | 3,4 | 5,20 | | 120425001 | 120417001 |
| **MF 8 x 1,0** | 8,0 | 6,0 | 90 | 22 | 4,9 | 7,00 | 120412001 | 120425002 | 120417002 |
| **MF 10 x 1,0** | 10,0 | 7,0 | 90 | 20 | 5,5 | 9,00 | 120412002 | 120425003 | 120417003 |
| **MF 10 x 1,25** | 10,0 | 7,0 | 100 | 24 | 5,5 | 8,80 | 120412003 | 120425004 | 120417004 |
| **MF 12 x 1,0** | 12,0 | 9,0 | 100 | 22 | 7,0 | 11,00 | 120412004 | 120425005 | |
| **MF 12 x 1,25** | 12,0 | 9,0 | 100 | 22 | 7,0 | 10,80 | 120412005 | 120425006 | |
| **MF 12 x 1,5** | 12,0 | 9,0 | 100 | 22 | 7,0 | 10,50 | 120412006 | 120425007 | 120417005 |
| **MF 14 x 1,25** | 14,0 | 11,0 | 100 | 22 | 9,0 | 12,80 | | 120425008 | |
| **MF 14 x 1,5** | 14,0 | 11,0 | 100 | 22 | 9,0 | 12,50 | 120412007 | 120425009 | 120417006 |
| **MF 16 x 1,5** | 16,0 | 12,0 | 100 | 22 | 9,0 | 14,50 | 120412008 | 120425010 | |
| **MF 18 x 1,5** | 18,0 | 14,0 | 110 | 25 | 11,0 | 16,50 | 120412009 | 120425011 | |
| **MF 20 x 1,5** | 20,0 | 16,0 | 125 | 25 | 12,0 | 18,50 | 120412010 | 120425012 | |

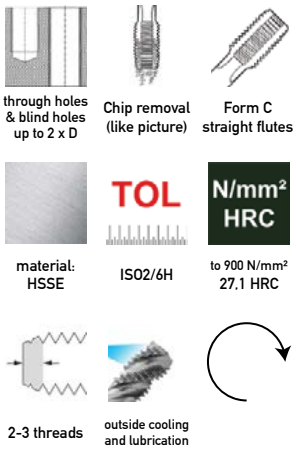
# Machine Taps - Form C (straight flutes) for through holes and blind holes

## MF

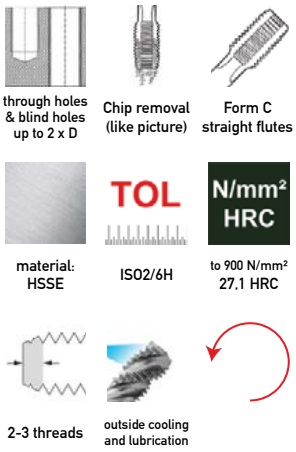
**Metric fine thread**
**ISO DIN 13**

Tap for machine use in through hole and blind hole. The short lead-in chamfer makes that tap universal in application. The flutes can hold the most part of the chips.

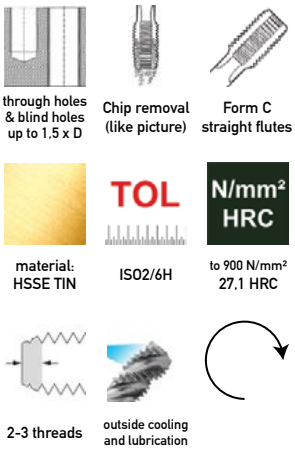
### Machine Tap
for general use

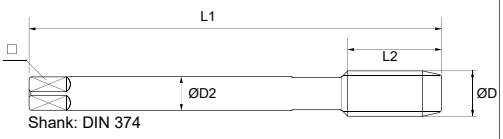



### Machine Tap
for general use
Left-hand thread




### Machine Tap
with longer tool life time



| MF | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **MF 4 x 0,35** | 4,0 | 2,8 | 63 | 10 | 2,1 | 3,65 | 120501001 | | |
| **MF 5 x 0,5** | 5,0 | 3,5 | 70 | 12 | 2,7 | 4,50 | 120501002 | | |
| **MF 6 x 0,5** | 6,0 | 4,5 | 80 | 14 | 3,4 | 5,50 | | | 120504001 |
| **MF 6 x 0,75** | 6,0 | 4,5 | 80 | 14 | 3,4 | 5,20 | 120501003 | 120502001 | 120504002 |
| **MF 7 x 0,75** | 7,0 | 5,5 | 80 | 14 | 4,3 | 6,20 | | | 120504003 |
| **MF 8 x 0,75** | 8,0 | 6,0 | 80 | 19 | 4,9 | 7,20 | 120501004 | | |
| **MF 8 x 1,0** | 8,0 | 6,0 | 90 | 22 | 4,9 | 7,00 | 120501005 | 120502002 | 120504004 |
| **MF 10 x 0,5** | 10,0 | 7,0 | 90 | 20 | 5,5 | 9,50 | | | 120504005 |
| **MF 10 x 1,0** | 10,0 | 7,0 | 90 | 20 | 5,5 | 9,00 | 120501006 | 120502003 | 120504006 |
| **MF 10 x 1,25** | 10,0 | 7,0 | 100 | 24 | 5,5 | 8,80 | 120501007 | 120502004 | 120504007 |
| **MF 12 x 0,75** | 12,0 | 9,0 | 100 | 22 | 7,0 | 10,20 | | | 120504008 |
| **MF 12 x 1,0** | 12,0 | 9,0 | 100 | 22 | 7,0 | 11,00 | 120501008 | | 120504009 |
| **MF 12 x 1,25** | 12,0 | 9,0 | 100 | 22 | 7,0 | 10,80 | 120501009 | 120502005 | 120504010 |
| **MF 12 x 1,5** | 12,0 | 9,0 | 100 | 22 | 7,0 | 10,50 | 120501010 | 120502006 | 120504011 |
| **MF 14 x 1,0** | 14,0 | 11,0 | 100 | 22 | 9,0 | 13,00 | 120501011 | | 120504012 |
| **MF 14 x 1,25** | 14,0 | 11,0 | 100 | 22 | 9,0 | 12,80 | 120501012 | | 120504013 |
| **MF 14 x 1,5** | 14,0 | 11,0 | 100 | 22 | 9,0 | 12,50 | 120501013 | 120502007 | 120504014 |
| **MF 16 x 1,0** | 16,0 | 12,0 | 100 | 22 | 9,0 | 15,00 | 120501014 | | 120504015 |
| **MF 16 x 1,25** | 16,0 | 12,0 | 100 | 22 | 9,0 | 14,80 | | | 120504016 |
| **MF 16 x 1,5** | 16,0 | 12,0 | 100 | 22 | 9,0 | 14,50 | 120501015 | 120502008 | 120504017 |
| **MF 18 x 1,0** | 18,0 | 14,0 | 110 | 25 | 11,0 | 17,00 | 120501016 | | |
| **MF 18 x 1,5** | 18,0 | 14,0 | 110 | 25 | 11,0 | 16,50 | 120501017 | 120502009 | 120504018 |
| **MF 18 x 2,0** | 18,0 | 14,0 | 125 | 34 | 11,0 | 16,00 | 120501018 | | |
| **MF 20 x 1,0** | 20,0 | 16,0 | 125 | 25 | 12,0 | 19,00 | 120501019 | | |
| **MF 20 x 1,25** | 20,0 | 16,0 | 125 | 25 | 12,0 | 18,80 | 120501020 | | |
| **MF 20 x 1,5** | 20,0 | 16,0 | 125 | 25 | 12,0 | 18,50 | 120501021 | 120502010 | 120504019 |
| **MF 20 x 2,0** | 20,0 | 16,0 | 140 | 34 | 12,0 | 18,00 | 120501022 | | |
| **MF 22 x 1,0** | 22,0 | 18,0 | 125 | 25 | 14,5 | 21,00 | 120501023 | | |
| **MF 22 x 1,5** | 22,0 | 18,0 | 125 | 25 | 14,5 | 20,50 | 120501024 | | 120504020 |
| **MF 22 x 2,0** | 22,0 | 18,0 | 140 | 34 | 14,5 | 20,00 | 120501025 | | |

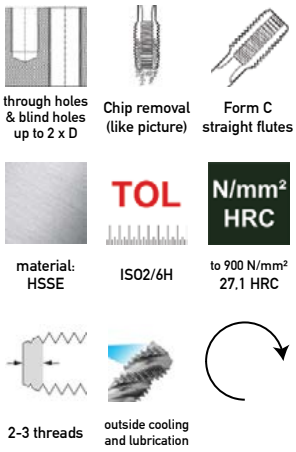
# Machine Taps - Form C (straight flutes) for through holes and blind holes

## MF

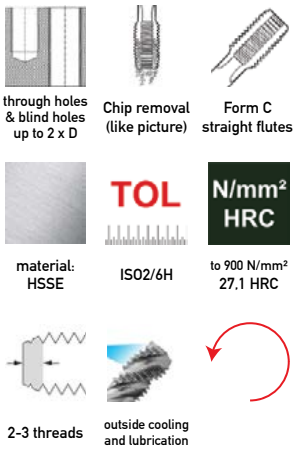
**Metric fine thread**
**ISO DIN 13**

Tap for machine use in through hole and blind hole. The short lead-in chamfer makes that tap universal in application. The flutes can hold the most part of the chips.

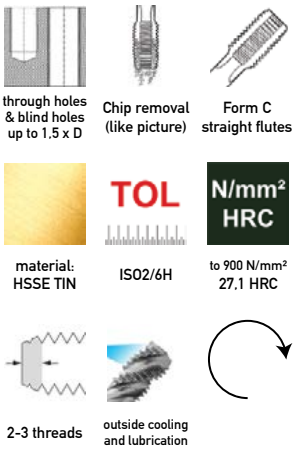
### Machine Tap
for general use

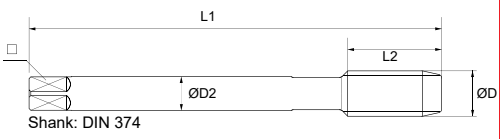



### Machine Tap
for general use
Left-hand thread




### Machine Tap
with longer tool life time



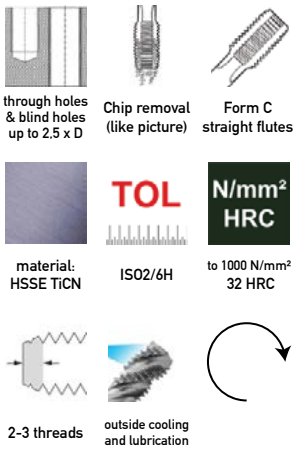
| MF | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **MF 24 x 1,0** | 24,0 | 18,0 | 140 | 28 | 14,5 | 23,00 | 120501026 | | |
| **MF 24 x 1,5** | 24,0 | 18,0 | 140 | 28 | 14,5 | 22,50 | 120501027 | | |
| **MF 24 x 2,0** | 24,0 | 18,0 | 140 | 28 | 14,5 | 22,00 | 120501028 | | |
| **MF 25 x 1,0** | 25,0 | 18,0 | 140 | 28 | 14,5 | 24,00 | 120501029 | | |
| **MF 26 x 1,5** | 26,0 | 18,0 | 140 | 28 | 14,5 | 24,50 | 120501030 | | |
| **MF 27 x 1,5** | 27,0 | 20,0 | 140 | 28 | 16,0 | 25,50 | 120501031 | | |
| **MF 27 x 2,0** | 27,0 | 20,0 | 140 | 28 | 16,0 | 25,00 | 120501032 | | |
| **MF 28 x 1,5** | 28,0 | 20,0 | 140 | 28 | 16,0 | 26,50 | 120501033 | | |
| **MF 30 x 1,5** | 30,0 | 22,0 | 150 | 28 | 18,0 | 28,50 | 120501034 | | |
| **MF 30 x 2,0** | 30,0 | 22,0 | 150 | 28 | 18,0 | 28,00 | 120501035 | | |
| **MF 32 x 1,5** | 32,0 | 22,0 | 150 | 28 | 18,0 | 30,50 | 120501036 | | |
| **MF 32 x 2,0** | 32,0 | 22,0 | 150 | 28 | 18,0 | 30,00 | 120501037 | | |
| **MF 33 x 2,0** | 33,0 | 25,0 | 160 | 30 | 20,0 | 31,00 | 120501038 | | |
| **MF 35 x 1,5** | 35,0 | 28,0 | 170 | 30 | 22,0 | 33,50 | 120501039 | | |
| **MF 36 x 1,5** | 36,0 | 28,0 | 170 | 30 | 22,0 | 34,50 | 120501040 | | |
| **MF 36 x 2,0** | 36,0 | 28,0 | 170 | 30 | 22,0 | 34,00 | 120501041 | | |
| **MF 38 x 1,5** | 38,0 | 28,0 | 170 | 30 | 22,0 | 36,50 | 120501042 | | |
| **MF 40 x 1,5** | 40,0 | 32,0 | 170 | 30 | 24,0 | 38,50 | 120501043 | | |
| **MF 42 x 1,5** | 42,0 | 32,0 | 170 | 30 | 24,0 | 40,50 | 120501044 | | |
| **MF 45 x 1,5** | 45,0 | 36,0 | 180 | 32 | 29,0 | 43,50 | 120501045 | | |
| **MF 48 x 1,5** | 48,0 | 36,0 | 190 | 32 | 29,0 | 46,50 | 120501046 | | |
| **MF 50 x 1,5** | 50,0 | 36,0 | 190 | 32 | 29,0 | 48,50 | 120501047 | | |
| **MF 52 x 1,5** | 52,0 | 40,0 | 190 | 32 | 32,0 | 50,50 | 120501048 | | |

# Machine Taps - Form C (straight flutes) for through holes and blind holes

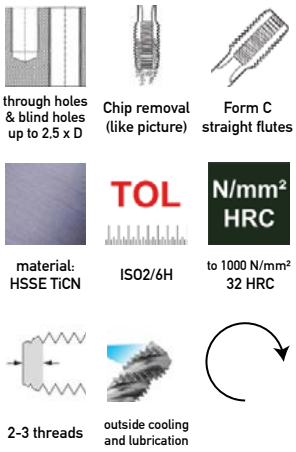
## MF Metric fine thread ISO DIN 13

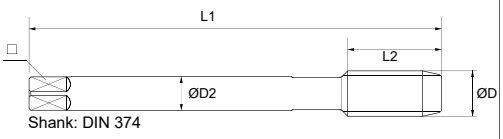
Tap for machine use in through hole and blind hole. The short lead-in chamfer makes that tap universal in application. The flutes can hold the most part of the chips.

**Machine Tap**
for cast materials




**Machine Tap**
for brass (short-chipping)



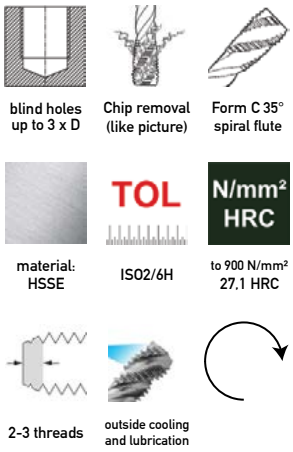



| MF | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **MF 4 x 0,5** | 4,0 | 2,8 | 63 | 10 | 2,1 | 3,50 | 120510001 | 120509001 |
| **MF 5 x 0,5** | 5,0 | 3,5 | 70 | 12 | 2,7 | 4,50 | 120510002 | 120509002 |
| **MF 6 x 0,75** | 6,0 | 4,5 | 80 | 14 | 3,4 | 5,20 | 120510003 | 120509003 |
| **MF 8 x 1,0** | 8,0 | 6,0 | 90 | 22 | 4,9 | 7,00 | 120510004 | 120509004 |
| **MF 10 x 1,0** | 10,0 | 7,0 | 90 | 20 | 5,5 | 9,00 | 120510005 | 120509005 |
| **MF 10 x 1,25** | 10,0 | 7,0 | 100 | 24 | 5,5 | 8,80 | 120510006 | 120509006 |
| **MF 12 x 1,25** | 12,0 | 9,0 | 100 | 22 | 7,0 | 10,80 | 120510007 | 120509007 |
| **MF 12 x 1,5** | 12,0 | 9,0 | 100 | 22 | 7,0 | 10,50 | 120510008 | 120509008 |
| **MF 14 x 1,25** | 14,0 | 11,0 | 100 | 22 | 9,0 | 12,80 | 120510009 | 120509009 |
| **MF 14 x 1,5** | 14,0 | 11,0 | 100 | 22 | 9,0 | 12,50 | 120510010 | 120509010 |
| **MF 16 x 1,5** | 16,0 | 12,0 | 100 | 22 | 9,0 | 14,50 | 120510011 | 120509011 |
| **MF 18 x 1,5** | 18,0 | 14,0 | 110 | 25 | 11,0 | 16,50 | 120510012 | 120509012 |
| **MF 20 x 1,5** | 20,0 | 16,0 | 125 | 25 | 12,0 | 18,50 | 120510013 | 120509013 |

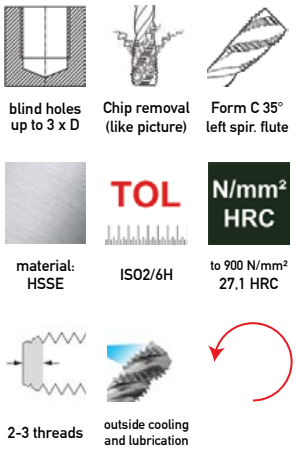
# Machine Taps - Form C (with spiral flutes) for blind holes

## MF Metric fine thread ISO DIN 13

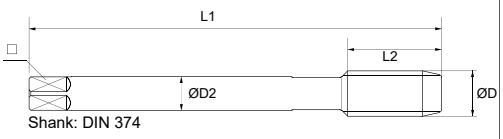
**Machine Tap**
for general use




**Machine Tap**
for general use
Left-hand thread




Tap for machine use in blind holes.
The fast spiral flutes provide good chip removal from the blind hole.

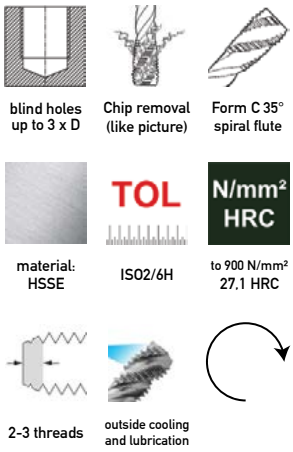


| MF | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **MF 3 x 0,35** | 3,0 | 2,2 | 56 | 5 | - | 2,65 | 120601001 | 120602001 |
| **MF 4 x 0,35** | 4,0 | 2,8 | 63 | 5 | 2,1 | 3,65 | 120601002 | 120602002 |
| **MF 4 x 0,5** | 4,0 | 2,8 | 63 | 5 | 2,1 | 3,50 | 120601003 | 120602003 |
| **MF 5 x 0,5** | 5,0 | 3,5 | 70 | 5 | 2,7 | 4,50 | 120601004 | 120602004 |
| **MF 5 x 0.75** | 5,0 | 3,5 | 70 | 8 | 2,7 | 4,25 | 120601005 | 120602005 |
| **MF 6 x 0,5** | 6,0 | 4,5 | 80 | 5 | 3,4 | 5,50 | 120601006 | 120602006 |
| **MF 6 x 0,75** | 6,0 | 4,5 | 80 | 8 | 3,4 | 5,20 | 120601007 | 120602007 |
| **MF 7 x 0,75** | 7,0 | 5,5 | 80 | 8 | 4,3 | 6,20 | 120601008 | 120602008 |
| **MF 8 x 0,5** | 8,0 | 6,0 | 80 | 8 | 4,9 | 7,50 | 120601009 | 120602009 |
| **MF 8 x 0,75** | 8,0 | 6,0 | 80 | 8 | 4,9 | 7,20 | 120601010 | 120602010 |
| **MF 8 x 1,0** | 8,0 | 6,0 | 90 | 10 | 4,9 | 7,00 | 120601011 | 120602011 |
| **MF 9 x 0,75** | 9,0 | 7,0 | 80 | 10 | 5,5 | 8,25 | 120601012 | 120602012 |
| **MF 9 x 1,0** | 9,0 | 7,0 | 90 | 10 | 5,5 | 8,00 | 120601013 | 120602013 |
| **MF 10 x 0,75** | 10,0 | 7,0 | 90 | 10 | 5,5 | 9,20 | 120601014 | 120602014 |
| **MF 10 x 1,0** | 10,0 | 7,0 | 90 | 10 | 5,5 | 9,00 | 120601015 | 120602015 |
| **MF 10 x 1,25** | 10,0 | 7,0 | 100 | 16 | 5,5 | 8,80 | 120601016 | 120602016 |
| **MF 11 x 1,0** | 11,0 | 8,0 | 90 | 11 | 6,2 | 10,00 | 120601017 | 120602017 |
| **MF 11 x 1,25** | 11,0 | 8,0 | 90 | 14 | 6,2 | 10,80 | 120601018 | 120602018 |
| **MF 12 x 0,75** | 12,0 | 9,0 | 100 | 10 | 7,0 | 10,20 | 120601019 | 120602019 |
| **MF 12 x 1,0** | 12,0 | 9,0 | 100 | 11 | 7,0 | 11,00 | 120601020 | 120602020 |
| **MF 12 x 1,25** | 12,0 | 9,0 | 100 | 15 | 7,0 | 10,80 | 120601021 | 120602021 |
| **MF 12 x 1,5** | 12,0 | 9,0 | 100 | 15 | 7,0 | 10,50 | 120601022 | 120602022 |
| **MF 13 x 1,0** | 13,0 | 11,0 | 100 | 11 | 9,0 | 12,00 | 120601023 | 120602023 |
| **MF 13 x 1,5** | 13,0 | 11,0 | 100 | 15 | 9,0 | 11,50 | 120601024 | 120602024 |
| **MF 14 x 0,75** | 14,0 | 11,0 | 100 | 10 | 9,0 | 13,20 | 120601025 | 120602025 |
| **MF 14 x 1,0** | 14,0 | 11,0 | 100 | 11 | 9,0 | 13,00 | 120601026 | 120602026 |
| **MF 14 x 1,25** | 14,0 | 11,0 | 100 | 15 | 9,0 | 12,80 | 120601027 | 120602027 |
| **MF 14 x 1,5** | 14,0 | 11,0 | 100 | 15 | 9,0 | 12,50 | 120601028 | 120602028 |
| **MF 15 x 1,0** | 15,0 | 12,0 | 100 | 12 | 9,0 | 14,00 | 120601029 | 120602029 |
| **MF 15 x 1,5** | 15,0 | 12,0 | 100 | 15 | 9,0 | 13,50 | 120601030 | 120602030 |
| **MF 16 x 1,0** | 16,0 | 12,0 | 100 | 12 | 9,0 | 15,00 | 120601031 | 120602031 |
| **MF 16 x 1,25** | 16,0 | 12,0 | 100 | 15 | 9,0 | 14,80 | 120601032 | 120602032 |
| **MF 16 x 1,5** | 16,0 | 12,0 | 100 | 15 | 9,0 | 14,50 | 120601033 | 120602033 |
| **MF 18 x 1,0** | 18,0 | 14,0 | 110 | 13 | 11,0 | 17,00 | 120601034 | 120602034 |
| **MF 18 x 1,25** | 18,0 | 14,0 | 110 | 15 | 11,0 | 16,80 | 120601035 | 120602035 |

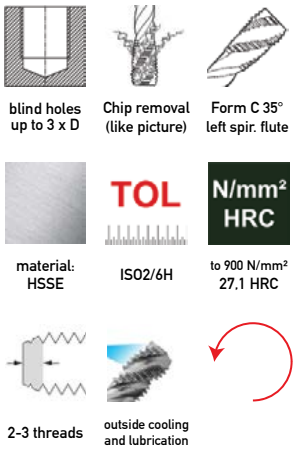
# Machine Taps - Form C (with spiral flutes) for blind holes

## MF Metric fine thread ISO DIN 13

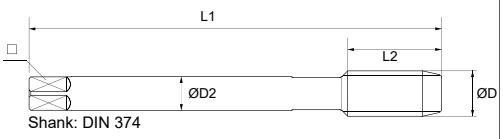
**Machine Tap**
for general use




**Machine Tap**
for general use
Left-hand thread




Tap for machine use in blind holes.
The fast spiral flutes provide good chip removal from the blind hole.

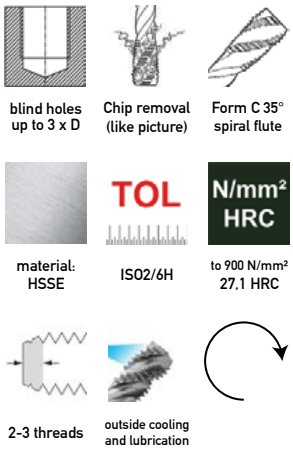


| MF | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **MF 18 x 1,5** | 18,0 | 14,0 | 110 | 17 | 11,0 | 16,50 | 120601036 | 120602036 |
| **MF 18 x 2,0** | 18,0 | 14,0 | 125 | 20 | 11,0 | 16,00 | 120601037 | 120602037 |
| **MF 20 x 1,0** | 20,0 | 16,0 | 125 | 14 | 12,0 | 19,00 | 120601038 | 120602038 |
| **MF 20 x 1,25** | 20,0 | 16,0 | 125 | 17 | 12,0 | 18,80 | 120601039 | 120602039 |
| **MF 20 x 1,5** | 20,0 | 16,0 | 125 | 17 | 12,0 | 18,50 | 120601040 | 120602040 |
| **MF 20 x 2,0** | 20,0 | 16,0 | 140 | 20 | 12,0 | 18,00 | 120601041 | 120602041 |
| **MF 21 x 1,5** | 21,0 | 16,0 | 125 | 17 | 12,0 | 19,50 | 120601042 | 120602042 |
| **MF 22 x 1,0** | 22,0 | 18,0 | 125 | 14 | 14,5 | 21,00 | 120601043 | 120602043 |
| **MF 22 x 1,25** | 22,0 | 18,0 | 125 | 17 | 14,5 | 20,80 | 120601044 | 120602044 |
| **MF 22 x 1,5** | 22,0 | 18,0 | 125 | 17 | 14,5 | 20,50 | 120601045 | 120602045 |
| **MF 22 x 2,0** | 22,0 | 18,0 | 140 | 20 | 14,5 | 20,00 | 120601046 | 120602046 |
| **MF 23 x 1,5** | 23,0 | 18,0 | 125 | 17 | 14,5 | 21,50 | 120601047 | 120602047 |
| **MF 24 x 1,0** | 24,0 | 18,0 | 140 | 15 | 14,5 | 23,00 | 120601048 | 120602048 |
| **MF 24 x 1,25** | 24,0 | 18,0 | 140 | 17 | 14,5 | 23,80 | 120601049 | 120602049 |
| **MF 24 x 1,5** | 24,0 | 18,0 | 140 | 20 | 14,5 | 22,50 | 120601050 | 120602050 |
| **MF 24 x 2,0** | 24,0 | 18,0 | 140 | 20 | 14,5 | 22,00 | 120601051 | 120602051 |
| **MF 25 x 1,0** | 25,0 | 18,0 | 140 | 15 | 14,5 | 24,00 | 120601052 | 120602052 |
| **MF 25 x 1,5** | 25,0 | 18,0 | 140 | 20 | 14,5 | 23,50 | 120601053 | 120602053 |
| **MF 26 x 1,0** | 26,0 | 18,0 | 140 | 15 | 14,5 | 25,00 | 120601054 | 120602054 |
| **MF 26 x 1,5** | 26,0 | 18,0 | 140 | 20 | 14,5 | 24,50 | 120601055 | 120602055 |
| **MF 26 x 2,0** | 26,0 | 18,0 | 140 | 20 | 14,5 | 24,00 | 120601056 | 120602056 |
| **MF 27 x 1,0** | 27,0 | 20,0 | 140 | 15 | 16,0 | 26,00 | 120601057 | 120602057 |
| **MF 27 x 1,5** | 27,0 | 20,0 | 140 | 20 | 16,0 | 25,50 | 120601058 | 120602058 |
| **MF 27 x 2,0** | 27,0 | 20,0 | 140 | 20 | 16,0 | 25,00 | 120601059 | 120602059 |
| **MF 28 x 1,0** | 28,0 | 20,0 | 140 | 15 | 16,0 | 27,00 | 120601060 | 120602060 |
| **MF 28 x 1,5** | 28,0 | 20,0 | 140 | 20 | 16,0 | 26,50 | 120601061 | 120602061 |
| **MF 28 x 2,0** | 28,0 | 20,0 | 140 | 20 | 16,0 | 26,00 | 120601062 | 120602062 |
| **MF 29 x 1,5** | 29,0 | 22,0 | 150 | 22 | 18,0 | 27,50 | 120601063 | 120602063 |
| **MF 30 x 1,0** | 30,0 | 22,0 | 150 | 17 | 18,0 | 29,00 | 120601064 | 120602064 |
| **MF 30 x 1,5** | 30,0 | 22,0 | 150 | 22 | 18,0 | 28,50 | 120601065 | 120602065 |
| **MF 30 x 2,0** | 30,0 | 22,0 | 150 | 22 | 18,0 | 28,00 | 120601066 | 120602066 |
| **MF 30 x 2,5** | 30,0 | 22,0 | 180 | 27 | 18,0 | 27,50 | 120601067 | 120602067 |
| **MF 30 x 3,0** | 30,0 | 22,0 | 180 | 30 | 18,0 | 27,00 | 120601068 | 120602068 |
| **MF 32 x 1,5** | 32,0 | 22,0 | 150 | 22 | 18,0 | 30,50 | 120601069 | 120602069 |
| **MF 32 x 2,0** | 32,0 | 22,0 | 150 | 22 | 18,0 | 30,00 | 120601070 | 120602070 |

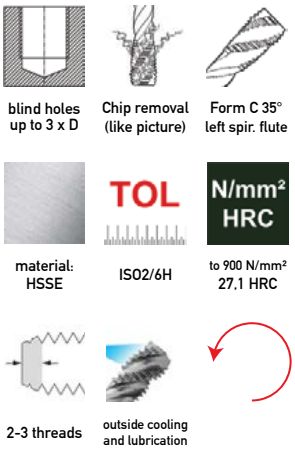
# Machine Taps - Form C (with spiral flutes) for blind holes

## MF Metric fine thread ISO DIN 13

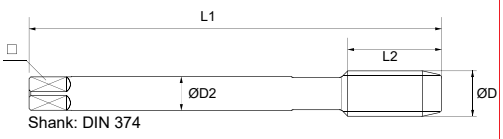
**Machine Tap**
for general use




**Machine Tap**
for general use
Left-hand thread




Tap for machine use in blind holes.
The fast spiral flutes provide good chip removal from the blind hole.



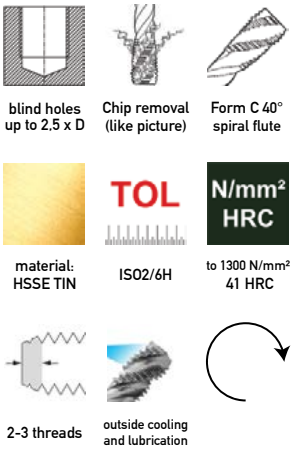
| MF | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **MF 32 x 3,0** | 32,0 | 22,0 | 180 | 30 | 18,0 | 29,00 | 120601071 | 120602071 |
| **MF 33 x 1,5** | 33,0 | 25,0 | 160 | 24 | 20,0 | 31,50 | 120601072 | 120602072 |
| **MF 33 x 2,0** | 33,0 | 25,0 | 160 | 24 | 20,0 | 31,00 | 120601073 | 120602073 |
| **MF 33 x 3,0** | 33,0 | 25,0 | 180 | 30 | 20,0 | 30,00 | 120601074 | 120602074 |
| **MF 34 x 1,5** | 34,0 | 28,0 | 170 | 24 | 22,0 | 32,50 | 120601075 | 120602075 |
| **MF 34 x 2,0** | 34,0 | 28,0 | 170 | 24 | 22,0 | 32,00 | 120601076 | 120602076 |
| **MF 35 x 1,5** | 35,0 | 28,0 | 170 | 24 | 22,0 | 33,50 | 120601077 | 120602077 |
| **MF 36 x 1,5** | 36,0 | 28,0 | 170 | 24 | 22,0 | 34,50 | 120601078 | 120602078 |
| **MF 36 x 2,0** | 36,0 | 28,0 | 170 | 24 | 22,0 | 34,00 | 120601079 | 120602079 |
| **MF 36 x 3,0** | 36,0 | 28,0 | 200 | 30 | 22,0 | 33,00 | 120601080 | 120602080 |
| **MF 38 x 1,5** | 38,0 | 28,0 | 170 | 24 | 22,0 | 36,50 | 120601081 | 120602081 |
| **MF 39 x 1,5** | 39,0 | 32,0 | 170 | 25 | 24,0 | 37,50 | 120601082 | 120602082 |
| **MF 39 x 2,0** | 39,0 | 32,0 | 170 | 25 | 24,0 | 37,00 | 120601083 | 120602083 |
| **MF 39 x 3,0** | 39,0 | 32,0 | 200 | 30 | 24,0 | 36,00 | 120601084 | 120602084 |
| **MF 40 x 1,5** | 40,0 | 32,0 | 170 | 25 | 24,0 | 38,50 | 120601085 | 120602085 |
| **MF 40 x 2,0** | 40,0 | 32,0 | 170 | 25 | 24,0 | 38,00 | 120601086 | 120602086 |
| **MF 40 x 3,0** | 40,0 | 32,0 | 200 | 30 | 24,0 | 37,00 | 120601087 | 120602087 |
| **MF 42 x 1,5** | 42,0 | 32,0 | 170 | 25 | 24,0 | 40,50 | 120601088 | 120602088 |
| **MF 42 x 2,0** | 42,0 | 32,0 | 170 | 25 | 24,0 | 40,00 | 120601089 | 120602089 |
| **MF 42 x 3,0** | 42,0 | 32,0 | 200 | 30 | 24,0 | 39,00 | 120601090 | 120602090 |
| **MF 45 x 1,5** | 45,0 | 36,0 | 180 | 27 | 29,0 | 43,50 | 120601091 | 120602091 |
| **MF 45 x 2,0** | 45,0 | 36,0 | 180 | 27 | 29,0 | 43,00 | 120601092 | 120602092 |
| **MF 45 x 3,0** | 45,0 | 36,0 | 200 | 30 | 29,0 | 42,00 | 120601093 | 120602093 |
| **MF 48 x 1,5** | 48,0 | 36,0 | 190 | 27 | 29,0 | 46,50 | 120601094 | 120602094 |
| **MF 48 x 2,0** | 48,0 | 36,0 | 190 | 27 | 29,0 | 46,00 | 120601095 | 120602095 |
| **MF 48 x 3,0** | 48,0 | 36,0 | 225 | 33 | 29,0 | 45,00 | 120601096 | 120602096 |
| **MF 50 x 1,5** | 50,0 | 36,0 | 190 | 27 | 29,0 | 48,50 | 120601097 | 120602097 |
| **MF 50 x 2,0** | 50,0 | 36,0 | 190 | 27 | 29,0 | 48,00 | 120601098 | 120602098 |
| **MF 50 x 3,0** | 50,0 | 36,0 | 225 | 33 | 29,0 | 47,00 | 120601099 | 120602099 |
| **MF 52 x 1,5** | 52,0 | 40,0 | 190 | 27 | 32,0 | 50,50 | 120601100 | 120602100 |
| **MF 52 x 2,0** | 52,0 | 40,0 | 190 | 27 | 32,0 | 50,00 | 120601101 | 120602101 |
| **MF 52 x 3,0** | 52,0 | 40,0 | 225 | 33 | 32,0 | 49,00 | 120601102 | 120602102 |
| **MF 63 x 1,5** | 63,0 | 50,0 | 275 | 40 | 39,0 | 61,50 | 120601103 | |

# Machine Taps - Form C (with spiral flutes) for blind holes

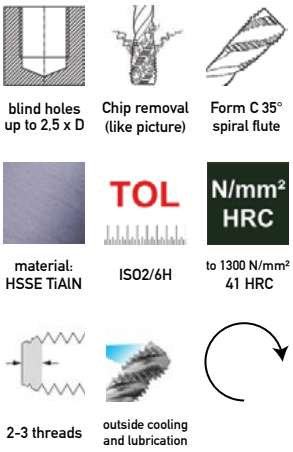
## MF Metric fine thread ISO DIN 13

Tap for machine use in blind holes.
The fast spiral flutes provide good chip removal from the blind hole.

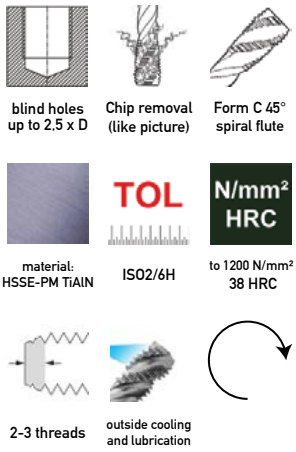
### Machine Tap
und for high-alloyed steels

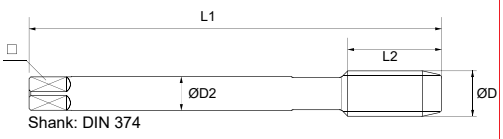



### Machine Tap
PRO for stainless steels with high tool life time




### Machine Tap
for special alloys (Inconel, Hastelloy etc.)



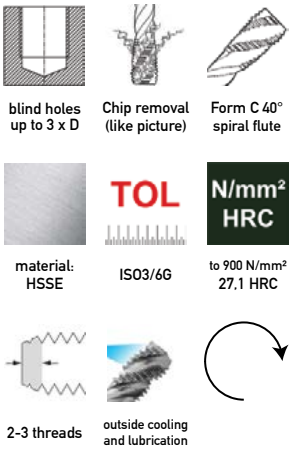
| MF | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **MF 6 x 0,75** | 6,0 | 4,5 | 80 | 8 | 3,4 | 5,20 | 120604001 | 120605001 | |
| **MF 8 x 1,0** | 8,0 | 6,0 | 90 | 10 | 4,9 | 7,00 | 120604002 | 120605002 | 120612001 |
| **MF 10 x 1,0** | 10,0 | 7,0 | 90 | 10 | 5,5 | 9,00 | 120604003 | 120605003 | 120612002 |
| **MF 10 x 1,25** | 10,0 | 7,0 | 100 | 16 | 5,5 | 8,80 | 120604004 | 120605004 | 120612003 |
| **MF 12 x 1,0** | 12,0 | 9,0 | 100 | 11 | 7,0 | 11,00 | 120604005 | 120605005 | 120612004 |
| **MF 12 x 1,25** | 12,0 | 9,0 | 100 | 15 | 7,0 | 10,80 | 120604006 | 120605006 | 120612005 |
| **MF 12 x 1,5** | 12,0 | 9,0 | 100 | 15 | 7,0 | 10,50 | 120604007 | 120605007 | 120612006 |
| **MF 14 x 1,5** | 14,0 | 11,0 | 100 | 15 | 9,0 | 12,50 | 120604008 | 120605008 | 120612007 |
| **MF 16 x 1,5** | 16,0 | 12,0 | 100 | 15 | 9,0 | 14,50 | 120604009 | 120605009 | 120612008 |
| **MF 18 x 1,5** | 18,0 | 14,0 | 110 | 17 | 11,0 | 16,50 | 120604010 | 120605010 | 120612009 |
| **MF 20 x 1,5** | 20,0 | 16,0 | 125 | 17 | 12,0 | 18,50 | 120604011 | 120605011 | 120612010 |
| **MF 22 x 1,5** | 22,0 | 18,0 | 125 | 17 | 14,5 | 20,50 | 120604012 | 120605012 | |

# Machine Taps - Form C (with spiral flutes) for blind holes

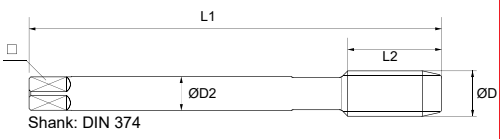
## MF

**Metric fine thread**
**ISO DIN 13**

**Machine Tap**
for general use
oversized (diameter)




Tap for machine use in blind holes.
The fast spiral flutes provide good chip removal from the blind hole.



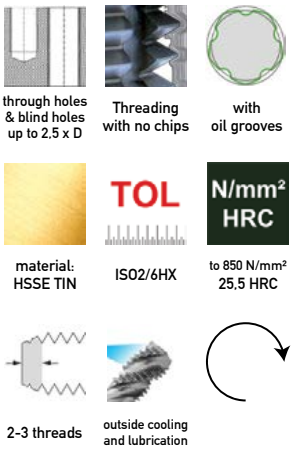
| MF | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| | | | | | | | Tol. 6G: threads with large clearance |
| **MF 6 x 0,75** | 6,0 | 4,5 | 80 | 8 | 3,4 | 5,20 | 120617001 |
| **MF 8 x 1,0** | 8,0 | 6,0 | 90 | 10 | 4,9 | 7,00 | 120617002 |
| **MF 10 x 1,0** | 10,0 | 7,0 | 90 | 10 | 5,5 | 9,00 | 120617003 |
| **MF 10 x 1,25** | 10,0 | 7,0 | 100 | 16 | 5,5 | 8,80 | 120617004 |
| **MF 12 x 1,5** | 12,0 | 9,0 | 100 | 15 | 7,0 | 10,50 | 120617005 |
| **MF 14 x 1,5** | 14,0 | 11,0 | 100 | 15 | 9,0 | 12,50 | 120617006 |

# UNiForm Machine Forming Taps

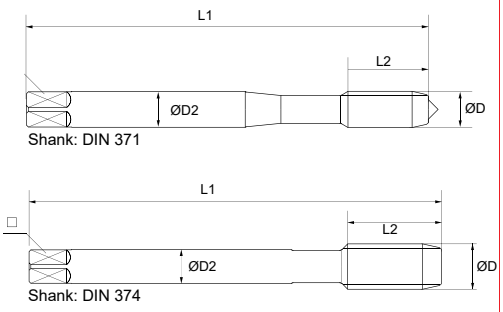
## MF Metric fine thread ISO DIN 13

Machine Forming Taps have following advantages:
- No chips
- Up to 20 times longer lifetime (compared to taps)
- Same forming tap for through and blind hole
- Wide range of materials can be processed
- Intersection of the thread is impossible
- Very high trueness
- Increased strength of the thread
- Higher surface quality
- Much higher cutting speed

### Machine Forming Taps
for universal use




### Machine Forming Taps
for universal use
oversized (diameter)

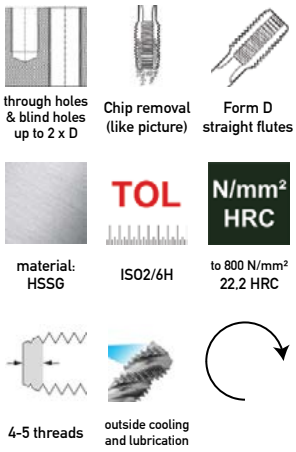


| MF | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Tol. 6HX: standard tolerance | Tol. 6GX: threads with large clearance |
| **MF 3 x 0,35** | 3,0 | 3,5 | 56 | 10 | 2,7 | 2,85 | 121101001 | 121117001 |
| **MF 4 x 0,5** | 4,0 | 4,5 | 63 | 12 | 3,4 | 3,80 | 121101002 | 121117002 |
| **MF 5 x 0,5** | 5,0 | 6,0 | 70 | 14 | 4,9 | 4,80 | 121101003 | 121117003 |
| **MF 6 x 0,75** | 6,0 | 6,0 | 80 | 16 | 4,9 | 5,65 | 121101004 | 121117004 |
| **MF 8 x 1,0** | 8,0 | 8,0 | 90 | 18 | 6,2 | 7,55 | 121101005 | 121117005 |
| **MF 10 x 1,0** | 10,0 | 10,0 | 90 | 18 | 8,0 | 9,55 | 121101006 | 121117006 |
| **MF 10 x 1,25** | 10,0 | 10,0 | 100 | 20 | 8,0 | 9,45 | 121101007 | 121117007 |
| **MF 12 x 1,0** | 12,0 | 9,0 | 100 | 22 | 7,0 | 11,55 | 121101008 | 121117008 |
| **MF 12 x 1,25** | 12,0 | 9,0 | 100 | 22 | 7,0 | 11,45 | 121101009 | 121117009 |
| **MF 12 x 1,5** | 12,0 | 9,0 | 100 | 22 | 7,0 | 11,30 | 121101010 | 121117010 |
| **MF 14 x 1,25** | 14,0 | 11,0 | 100 | 22 | 9,0 | 13,45 | 121101011 | 121117011 |
| **MF 14 x 1,5** | 14,0 | 11,0 | 100 | 22 | 9,0 | 13,30 | 121101012 | 121117012 |
| **MF 16 x 1,5** | 16,0 | 12,0 | 100 | 22 | 9,0 | 15,30 | 121101013 | 121117013 |
| **MF 18 x 1,5** | 18,0 | 14,0 | 110 | 22 | 11,0 | 17,30 | 121101014 | 121117014 |
| **MF 20 x 1,5** | 20,0 | 16,0 | 125 | 25 | 12,0 | 19,30 | 121101015 | 121117015 |

# 1/4“ Bit-Short Machine Taps

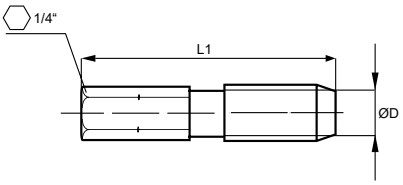
## MF Metric fine thread ISO DIN 13

**Bit-Taps**
Form D for through holes and blind holes




Efficient internal thread cutting with battery-powered screwdriver (min. 7,5 Volt).

**Application**:
non abrasive material up to 900 N/mm²
unalloyed and low alloyed steel

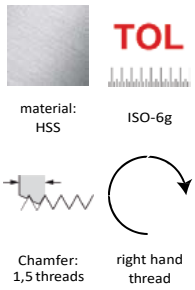


| MF | D1 | L1 | L2 | ⬡ | | No. |
|---|---|---|---|---|---|---|
| **MF 3 x 0,35** | 3,0 | 33,0 | 11 | 1/4" | 2,65 | 121201001 |
| **MF 3,5 x 0,35** | 3,5 | 33,5 | 10 | 1/4" | 3,15 | 121201002 |
| **MF 4 x 0,35** | 4,0 | 35,0 | 12 | 1/4" | 3,65 | 121201003 |
| **MF 4 x 0,5** | 4,0 | 35,0 | 12 | 1/4" | 3,50 | 121201004 |
| **MF 4,5 x 0,5** | 4,5 | 35,0 | 12 | 1/4" | 4,00 | 121201005 |
| **MF 5 x 0,5** | 5,0 | 36,0 | 15 | 1/4" | 4,50 | 121201006 |
| **MF 5 x 0,75** | 5,0 | 36,0 | 15 | 1/4" | 4,25 | 121201007 |
| **MF 5,5 x 0,5** | 5,5 | 35,0 | 15 | 1/4" | 5,00 | 121201008 |
| **MF 6 x 0,5** | 6,0 | 39,0 | 18 | 1/4" | 5,50 | 121201009 |
| **MF 6 x 0,75** | 6,0 | 39,0 | 18 | 1/4" | 5,20 | 121201010 |
| **MF 7 x 0,5** | 7,0 | 37,5 | 16 | 1/4" | 6,50 | 121201011 |
| **MF 7 x 0,75** | 7,0 | 37,5 | 16 | 1/4" | 6,20 | 121201012 |
| **MF 8 x 0,5** | 8,0 | 40,0 | 19 | 1/4" | 7,50 | 121201013 |
| **MF 8 x 0,75** | 8,0 | 40,0 | 19 | 1/4" | 7,20 | 121201014 |
| **MF 8 x 1** | 8,0 | 40,0 | 19 | 1/4" | 7,00 | 121201015 |
| **MF 9 x 0,5** | 9,0 | 40,5 | 18 | 1/4" | 8,50 | 121201016 |
| **MF 9 x 0,75** | 9,0 | 40,5 | 18 | 1/4" | 8,25 | 121201017 |
| **MF 9 x 1** | 9,0 | 40,5 | 18 | 1/4" | 8,00 | 121201018 |
| **MF 10 x 0,5** | 10,0 | 41,0 | 21 | 1/4" | 9,50 | 121201019 |
| **MF 10 x 0,75** | 10,0 | 41,0 | 21 | 1/4" | 9,20 | 121201020 |
| **MF 10 x 1,0** | 10,0 | 41,0 | 21 | 1/4" | 9,00 | 121201021 |
| **MF 10 x 1,25** | 10,0 | 41,0 | 21 | 1/4" | 8,80 | 121201022 |

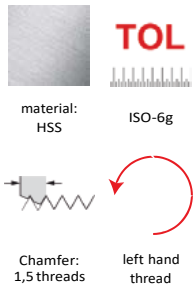
# Round Dies

## MF Metric fine thread ISO DIN 13

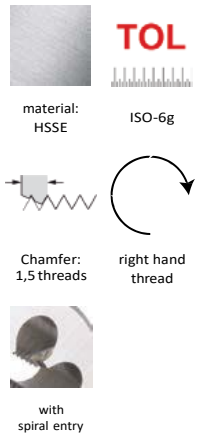
### Round Dies for general use



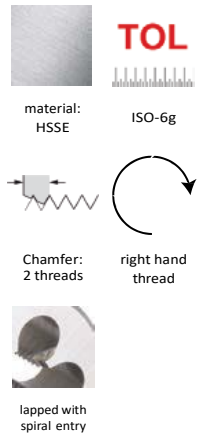

### Round Dies for general use Left Hand



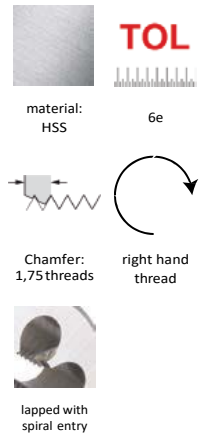

### Round Dies for higher demands

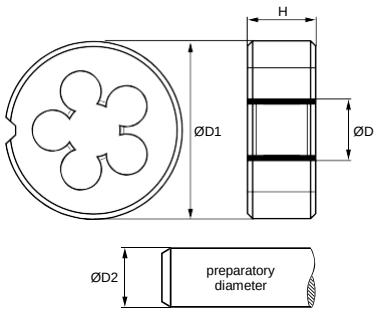



### Round Dies for stainless steels




### Round Dies undersized



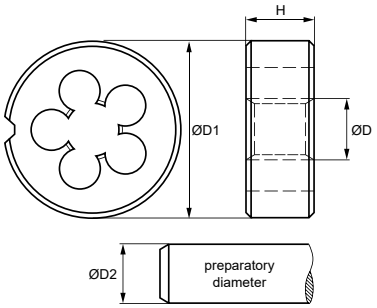



| MF | D | D1 | H | D2 | No. | No. | No. | No. | No. | D2 Tol. 6e |
|---|---|---|---|---|---|---|---|---|---|---|
| MF 2,5 x 0,35 | 2,5 | 16 | 5 | 2,44 | 121401001 | | | | | |
| MF 2,6 x 0,35 | 2,6 | 16 | 5 | 2,54 | 121401002 | | | | | |
| MF 3 x 0,35 | 3,0 | 20 | 5 | 2,94 | 121401003 | | | 121405001 | | |
| MF 3,5 x 0,35 | 3,5 | 20 | 5 | 3,44 | 121401004 | | | 121405002 | | |
| MF 4 x 0,35 | 4,0 | 20 | 5 | 3,94 | 121401005 | | | | | |
| MF 4 x 0,5 | 4,0 | 20 | 5 | 3,93 | 121401006 | | | 121405003 | 121421001 | 3,84 mm |
| MF 4,5 x 0,5 | 4,5 | 20 | 5 | 4,43 | 121401007 | | | | | |
| MF 5 x 0,5 | 5,0 | 20 | 5 | 4,93 | 121401008 | | | 121405004 | 121421002 | 4,83 mm |
| MF 5 x 0,75 | 5,0 | 20 | 7 | 4,91 | 121401010 | | | | | |
| MF 5,5 x 0,5 | 5,5 | 20 | 5 | 5,43 | 121401009 | | | | | |
| MF 6 x 0,5 | 6,0 | 20 | 5 | 5,93 | 121401011 | | | 121405005 | 121421003 | 5,83 mm |
| MF 6 x 0,75 | 6,0 | 20 | 7 | 5,90 | 121401012 | 121402001 | 121404001 | 121405006 | 121421004 | 5,81 mm |
| MF 7 x 0,5 | 7,0 | 25 | 9 | 6,93 | 121401013 | | | | 121421005 | 6,83 mm |
| MF 7 x 0,75 | 7,0 | 25 | 9 | 6,90 | 121401014 | | | 121405007 | | |
| MF 8 x 0,5 | 8,0 | 25 | 9 | 7,93 | 121401015 | | | 121405008 | 121421006 | 7,82 mm |
| MF 8 x 0,75 | 8,0 | 25 | 9 | 7,90 | 121401016 | 121402002 | 121404002 | 121405009 | 121421007 | 7,80 mm |
| MF 8 x 1,0 | 8,0 | 25 | 9 | 7,83 | 121401017 | 121402003 | 121404003 | 121405010 | 121421008 | 7,78 mm |
| MF 9 x 0,5 | 9,0 | 25 | 9 | 8,93 | 121401018 | | | | | |
| MF 9 x 0,75 | 9,0 | 25 | 9 | 8,90 | 121401019 | | | | | |
| MF 9 x 1,0 | 9,0 | 25 | 9 | 8,88 | 121401020 | | | | | |
| MF 10 x 0,5 | 10,0 | 30 | 11 | 9,93 | 121401021 | | | | | |
| MF 10 x 0,75 | 10,0 | 30 | 11 | 9,90 | 121401022 | | | 121405011 | 121421009 | 9,79 mm |
| MF 10 x 1,0 | 10,0 | 30 | 11 | 9,88 | 121401023 | 121402004 | 121404004 | 121405012 | 121421010 | 9,77 mm |
| MF 10 x 1,25 | 10,0 | 30 | 11 | 9,86 | 121401024 | 121402005 | 121404005 | 121405013 | | |
| MF 11 x 1,0 | 11,0 | 30 | 11 | 10,88 | 121401025 | | | | | |
| MF 11 x 1,25 | 11,0 | 30 | 11 | 10,86 | 121401026 | | | | | |
| MF 12 x 0,5 | 12,0 | 38 | 10 | 11,93 | 121401027 | | | | | |
| MF 12 x 0,75 | 12,0 | 38 | 10 | 11,90 | 121401028 | | | | 121421011 | 11,78 mm |
| MF 12 x 1,0 | 12,0 | 38 | 10 | 11,88 | 121401029 | 121402006 | 121404006 | 121405014 | 121421012 | 11,76 mm |
| MF 12 x 1,25 | 12,0 | 38 | 10 | 11,86 | 121401030 | 121402007 | 121404007 | 121405015 | | |
| MF 12 x 1,5 | 12,0 | 38 | 10 | 11,85 | 121401031 | 121402008 | 121404008 | 121405016 | 121421013 | 11,73 mm |
| MF 13 x 0,5 | 13,0 | 38 | 10 | 12,93 | 121401032 | | | | | |
| MF 13 x 1,0 | 13,0 | 38 | 10 | 12,88 | 121401033 | | | | | |

# Round Dies

## MF Metric fine thread ISO DIN 13

| Round Dies for general use | Round Dies for general use Left Hand | Round Dies for higher demands | Round Dies for stainless steels | Round Dies undersized |
|---|---|---|---|---|
| TOL | TOL | TOL | TOL | TOL |
| material: HSS | material: HSS | material: HSSE | material: HSSE | material: HSS |
| ISO-6g | ISO-6g | ISO-6g | ISO-6g | 6e |
| Chamfer: 1,5 threads | Chamfer: 1,5 threads | Chamfer: 1,5 threads | Chamfer: 2 threads | Chamfer: 1,75 threads |
| right hand thread | left hand thread | right hand thread | right hand thread | right hand thread |
| | | with spiral entry | lapped with spiral entry | lapped with spiral entry |

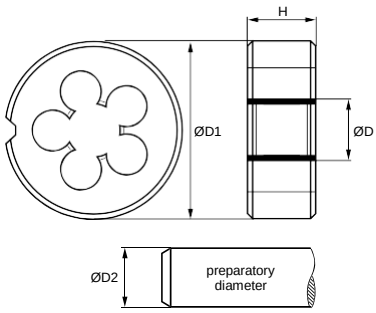


| MF | D | D1 | H | D2 | No. | No. | No. | No. | No. | D2 Tol. 6e |
|---|---|---|---|---|---|---|---|---|---|---|
| MF 13 x 1,5 | 13,0 | 38 | 10 | 12,85 | 121401034 | | | | | |
| MF 14 x 0,5 | 14,0 | 38 | 10 | 13,93 | 121401035 | | | | | |
| MF 14 x 0,75 | 14,0 | 38 | 10 | 13,90 | 121401036 | | | | | |
| MF 14 x 1,0 | 14,0 | 38 | 10 | 13,88 | 121401037 | | | 121405017 | 121421014 | 13,76 mm |
| MF 14 x 1,25 | 14,0 | 38 | 10 | 13,86 | 121401038 | 121402009 | 121404009 | 121405018 | | |
| MF 14 x 1,5 | 14,0 | 38 | 10 | 13,85 | 121401039 | 121402010 | 121404010 | 121405019 | 121421015 | 13,73 mm |
| MF 15 x 0,75 | 15,0 | 38 | 10 | 14,90 | 121401040 | | | | | |
| MF 15 x 1,0 | 15,0 | 38 | 10 | 14,88 | 121401041 | | | | | |
| MF 15 x 1,5 | 15,0 | 38 | 10 | 14,85 | 121401042 | | | | | |
| MF 16 x 0,5 | 16,0 | 45 | 14 | 15,93 | 121401043 | | | | | |
| MF 16 x 0,75 | 16,0 | 45 | 14 | 15,90 | 121401044 | | | | | |
| MF 16 x 1,0 | 16,0 | 45 | 14 | 15,88 | 121401045 | 121402011 | | 121405020 | 121421016 | 15,76 mm |
| MF 16 x 1,25 | 16,0 | 45 | 14 | 15,86 | 121401046 | | | | | |
| MF 16 x 1,5 | 16,0 | 45 | 14 | 15,85 | 121401047 | 121402012 | 121404011 | 121405021 | 121421017 | 15,73 mm |
| MF 17 x 1,0 | 17,0 | 45 | 14 | 16,88 | 121401048 | | | | | |
| MF 17 x 1,5 | 17,0 | 45 | 14 | 16,85 | 121401049 | | | | | |
| MF 18 x 0,5 | 18,0 | 45 | 14 | 17,93 | 121401050 | | | | | |
| MF 18 x 0,75 | 18,0 | 45 | 14 | 17,90 | 121401051 | | | | | |
| MF 18 x 1,0 | 18,0 | 45 | 14 | 17,88 | 121401052 | | | 121405022 | 121421018 | 17,74 mm |
| MF 18 x 1,25 | 18,0 | 45 | 14 | 17,86 | 121401053 | | | | | |
| MF 18 x 1,5 | 18,0 | 45 | 14 | 17,85 | 121401054 | 121402013 | 121404012 | 121405023 | 121421019 | 17,71 mm |
| MF 18 x 2,0 | 18,0 | 45 | 14 | 17,82 | 121401055 | | 121404013 | | | |
| MF 19 x 1,0 | 19,0 | 45 | 14 | 18,88 | 121401056 | | | | | |
| MF 19 x 1,5 | 19,0 | 45 | 14 | 18,85 | 121401057 | | | | | |
| MF 20 x 0,5 | 20,0 | 45 | 14 | 19,93 | 121401058 | | | | | |
| MF 20 x 0,75 | 20,0 | 45 | 14 | 19,90 | 121401059 | | | | | |
| MF 20 x 1,0 | 20,0 | 45 | 14 | 19,88 | 121401060 | | | 121405024 | 121421020 | 19,66 mm |
| MF 20 x 1,25 | 20,0 | 45 | 14 | 19,86 | 121401061 | | | | | |
| MF 20 x 1,5 | 20,0 | 45 | 14 | 19,85 | 121401062 | 121402014 | 121404014 | 121405025 | 121421021 | 19,71 mm |
| MF 20 x 2,0 | 20,0 | 45 | 14 | 19,82 | 121401063 | | 121404015 | | | |
| MF 21 x 1,0 | 21,0 | 45 | 14 | 20,88 | 121401064 | | | | | |
| MF 21 x 1,5 | 21,0 | 45 | 14 | 20,85 | 121401065 | | | | | |
| MF 22 x 0,5 | 22,0 | 55 | 16 | 21,93 | 121401066 | | | | | |

# Round Dies

## MF Metric fine thread ISO DIN 13

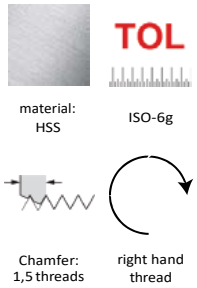
| Round Dies for general use | Round Dies for general use Left Hand | Round Dies for higher demands | Round Dies for stainless steels | Round Dies undersized |
|---|---|---|---|---|
| TOL | TOL | TOL | TOL | TOL |
| material: HSS | material: HSS | material: HSSE | material: HSSE | material: HSS |
| ISO-6g | ISO-6g | ISO-6g | ISO-6g | 6e |
| Chamfer: 1,5 threads | Chamfer: 1,5 threads | Chamfer: 1,5 threads | Chamfer: 2 threads | Chamfer: 1,75 threads |
| right hand thread | left hand thread | right hand thread | right hand thread | right hand thread |
| | | with spiral entry | lapped with spiral entry | lapped with spiral entry |



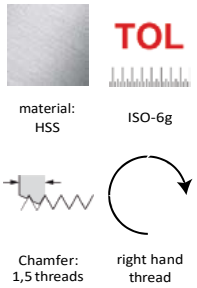
| MF | D | D1 | H | D2 | No. | No. | No. | No. | No. | D2 Tol. 6e |
|---|---|---|---|---|---|---|---|---|---|---|
| MF 22 x 0,75 | 22,0 | 55 | 16 | 21,90 | 121401067 | | | | | |
| MF 22 x 1,0 | 22,0 | 55 | 16 | 21,88 | 121401068 | | | | | |
| MF 22 x 1,25 | 22,0 | 55 | 16 | 21,86 | 121401069 | | | | | |
| MF 22 x 1,5 | 22,0 | 55 | 16 | 21,85 | 121401070 | 121402015 | 121404016 | 121405026 | 121421022 | 21,71 mm |
| MF 22 x 2,0 | 22,0 | 55 | 16 | 21,82 | 121401071 | | | | | |
| MF 23 x 1,0 | 23,0 | 55 | 16 | 22,88 | 121401072 | | | | | |
| MF 23 x 1,5 | 23,0 | 55 | 16 | 22,85 | 121401073 | | | | | |
| MF 24 x 0,5 | 24,0 | 55 | 16 | 23,93 | 121401074 | | | | | |
| MF 24 x 0,75 | 24,0 | 55 | 16 | 23,90 | 121401075 | | | | | |
| MF 24 x 1,0 | 24,0 | 55 | 16 | 23,88 | 121401076 | | | | 121421023 | 21,74 mm |
| MF 24 x 1,25 | 24,0 | 55 | 16 | 23,86 | 121401077 | | | | | |
| MF 24 x 1,5 | 24,0 | 55 | 16 | 23,85 | 121401078 | 121402016 | 121404017 | 121405027 | 121421024 | 23,70 mm |
| MF 24 x 2,0 | 24,0 | 55 | 16 | 22,82 | 121401079 | 121402017 | | 121405028 | | |
| MF 25 x 1,0 | 25,0 | 55 | 16 | 24,88 | 121401080 | | | | | |
| MF 25 x 1,5 | 25,0 | 55 | 16 | 24,85 | 121401081 | | | | | |
| MF 26 x 1,0 | 26,0 | 55 | 16 | 25,88 | 121401082 | | | | | |
| MF 26 x 1,5 | 26,0 | 55 | 16 | 25,85 | 121401083 | | | 121405029 | 121421025 | 25,69 mm |
| MF 26 x 2,0 | 26,0 | 55 | 16 | 25,82 | 121401084 | | | | | |
| MF 27 x 1,0 | 27,0 | 65 | 18 | 26,88 | 121401085 | | | | | |
| MF 27 x 1,5 | 27,0 | 65 | 18 | 26,85 | 121401086 | | | | | |
| MF 27 x 2,0 | 27,0 | 65 | 18 | 26,82 | 121401087 | | | | | |
| MF 28 x 1,0 | 28,0 | 65 | 18 | 27,88 | 121401088 | | | | | |
| MF 28 x 1,5 | 28,0 | 65 | 18 | 27,85 | 121401089 | | | | | |
| MF 28 x 2,0 | 28,0 | 65 | 18 | 27,82 | 121401090 | | | | | |
| MF 29 x 1,5 | 29,0 | 65 | 18 | 28,85 | 121401091 | | | | | |
| MF 30 x 1,0 | 30,0 | 65 | 18 | 29,88 | 121401092 | | | | | |
| MF 30 x 1,5 | 30,0 | 65 | 18 | 29,85 | 121401093 | | | 121405030 | | |
| MF 30 x 2,0 | 30,0 | 65 | 18 | 29,82 | 121401094 | 121402018 | | 121405031 | | |
| MF 30 x 2,5 | 30,0 | 65 | 18 | 29,79 | 121401095 | 121402019 | | | | |
| MF 30 x 3,0 | 30,0 | 65 | 25 | 29,76 | 121401096 | 121402020 | | | | |
| MF 32 x 1,0 | 32,0 | 65 | 18 | 31,88 | 121401098 | 121402021 | | | | |
| MF 32 x 1,5 | 32,0 | 65 | 18 | 31,85 | 121401097 | 121402022 | | | | |
| MF 32 x 2,0 | 32,0 | 65 | 18 | 31,82 | 121401099 | 121402023 | | | | |

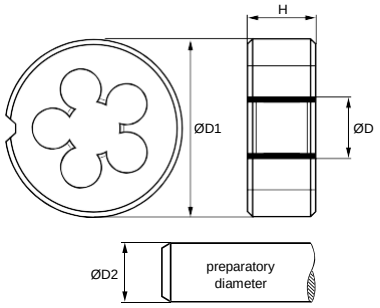
# MF Metric fine thread ISO DIN 13

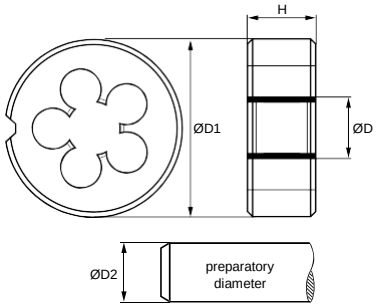
**Round Dies**
for general use




**Round Dies**
for general use





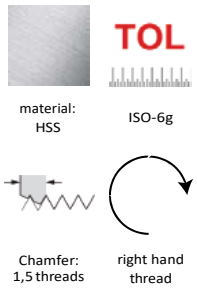
| MF | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **MF 32 x 3,0** | 32,0 | 65 | 25 | 31,77 | 121401100 |
| **MF 33 x 1,5** | 33,0 | 65 | 18 | 32,85 | 121401101 |
| **MF 33 x 2,0** | 33,0 | 65 | 18 | 32,82 | 121401102 |
| **MF 33 x 3,0** | 33,0 | 65 | 25 | 32,76 | 121401103 |
| **MF 34 x 1,0** | 34,0 | 65 | 18 | 33,88 | 121401104 |
| **MF 34 x 1,5** | 34,0 | 65 | 18 | 33,85 | 121401105 |
| **MF 34 x 2,0** | 34,0 | 65 | 18 | 33,82 | 121401106 |
| **MF 35 x 1,0** | 35,0 | 65 | 18 | 34,88 | 121401107 |
| **MF 35 x 1,5** | 35,0 | 65 | 18 | 34,85 | 121401108 |
| **MF 35 x 2,0** | 35,0 | 65 | 18 | 34,82 | 121401109 |
| **MF 36 x 1,0** | 36,0 | 65 | 18 | 35,88 | 121401110 |
| **MF 36 x 1,5** | 36,0 | 65 | 18 | 35,85 | 121401111 |
| **MF 36 x 2,0** | 36,0 | 65 | 18 | 35,82 | 121401112 |
| **MF 36 x 3,0** | 36,0 | 65 | 25 | 35,76 | 121401113 |
| **MF 37 x 1,5** | 37,0 | 65 | 18 | 36,85 | 121401114 |
| **MF 38 x 1,0** | 38,0 | 75 | 20 | 37,88 | 121401115 |
| **MF 38 x 1,5** | 38,0 | 75 | 20 | 37,85 | 121401116 |
| **MF 38 x 2,0** | 38,0 | 75 | 20 | 37,82 | 121401117 |
| **MF 38 x 3,0** | 38,0 | 75 | 30 | 37,77 | 121401118 |
| **MF 39 x 1,5** | 39,0 | 75 | 20 | 38,85 | 121401119 |
| **MF 39 x 2,0** | 39,0 | 75 | 20 | 38,82 | 121401120 |
| **MF 39 x 3,0** | 39,0 | 75 | 30 | 38,76 | 121401121 |
| **MF 40 x 1,0** | 40,0 | 75 | 20 | 39,88 | 121401122 |
| **MF 40 x 1,5** | 40,0 | 75 | 20 | 39,85 | 121401123 |
| **MF 40 x 2,0** | 40,0 | 75 | 20 | 39,82 | 121401124 |
| **MF 40 x 3,0** | 40,0 | 75 | 30 | 39,76 | 121401125 |
| **MF 42 x 1,0** | 42,0 | 75 | 20 | 41,88 | 121401126 |
| **MF 42 x 1,5** | 42,0 | 75 | 20 | 41,85 | 121401127 |
| **MF 42 x 2,0** | 42,0 | 75 | 20 | 41,82 | 121401128 |
| **MF 42 x 3,0** | 42,0 | 75 | 30 | 41,76 | 121401129 |
| **MF 44 x 1,5** | 44,0 | 90 | 22 | 43,85 | 121401130 |
| **MF 44 x 2,0** | 44,0 | 90 | 22 | 43,82 | 121401131 |
| **MF 45 x 1,0** | 45,0 | 90 | 22 | 44,88 | 121401132 |

| MF | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **MF 45 x 1,5** | 45,0 | 90 | 22 | 44,85 | 121401133 |
| **MF 45 x 2,0** | 45,0 | 90 | 22 | 44,82 | 121401134 |
| **MF 45 x 3,0** | 45,0 | 90 | 36 | 44,76 | 121401135 |
| **MF 46 x 1,5** | 46,0 | 90 | 22 | 45,85 | 121401136 |
| **MF 48 x 1,0** | 48,0 | 90 | 22 | 47,88 | 121401137 |
| **MF 48 x 1,5** | 48,0 | 90 | 22 | 47,85 | 121401138 |
| **MF 48 x 2,0** | 48,0 | 90 | 22 | 47,82 | 121401139 |
| **MF 48 x 3,0** | 48,0 | 90 | 36 | 47,46 | 121401140 |
| **MF 50 x 1,5** | 50,0 | 90 | 22 | 49,85 | 121401141 |
| **MF 50 x 2,0** | 50,0 | 90 | 22 | 49,82 | 121401142 |
| **MF 50 x 3,0** | 50,0 | 90 | 36 | 49,76 | 121401143 |
| **MF 52 x 1,5** | 52,0 | 90 | 22 | 51,85 | 121401144 |
| **MF 52 x 2,0** | 52,0 | 90 | 22 | 51,82 | 121401145 |
| **MF 52 x 3,0** | 52,0 | 90 | 36 | 51,76 | 121401146 |
| **MF 54 x 1,5** | 54,0 | 105 | 22 | 53,92 | 121401147 |
| **MF 54 x 2,0** | 54,0 | 105 | 22 | 53,91 | 121401148 |
| **MF 54 x 3,0** | 54,0 | 105 | 36 | 53,88 | 121401149 |
| **MF 54 x 4,0** | 54,0 | 105 | 36 | 53,85 | 121401150 |
| **MF 55 x 1,5** | 55,0 | 105 | 22 | 54,85 | 121401151 |
| **MF 55 x 2,0** | 55,0 | 105 | 22 | 54,82 | 121401152 |
| **MF 55 x 3,0** | 55,0 | 105 | 36 | 54,76 | 121401153 |
| **MF 55 x 4,0** | 55,0 | 105 | 36 | 54,73 | 121401154 |
| **MF 56 x 1,5** | 56,0 | 105 | 22 | 55,85 | 121401155 |
| **MF 56 x 2,0** | 56,0 | 105 | 22 | 55,82 | 121401156 |
| **MF 56 x 3,0** | 56,0 | 105 | 36 | 55,76 | 121401157 |
| **MF 56 x 4,0** | 56,0 | 105 | 36 | 55,73 | 121401158 |
| **MF 58 x 1,5** | 58,0 | 105 | 22 | 57,92 | 121401159 |
| **MF 58 x 2,0** | 58,0 | 105 | 22 | 57,91 | 121401160 |
| **MF 58 x 3,0** | 58,0 | 105 | 36 | 57,88 | 121401161 |
| **MF 58 x 4,0** | 58,0 | 105 | 36 | 57,85 | 121401162 |
| **MF 60 x 1,5** | 60,0 | 105 | 22 | 59,92 | 121401163 |
| **MF 60 x 2,0** | 60,0 | 105 | 22 | 59,91 | 121401164 |
| **MF 60 x 3,0** | 60,0 | 105 | 36 | 59,88 | 121401165 |

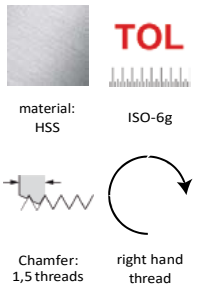
# Round Dies

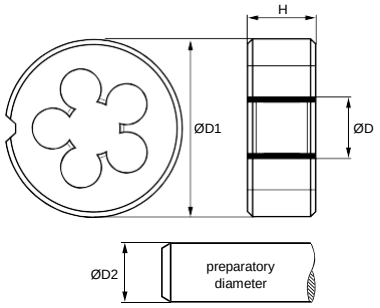
## MF Metric fine thread ISO DIN 13

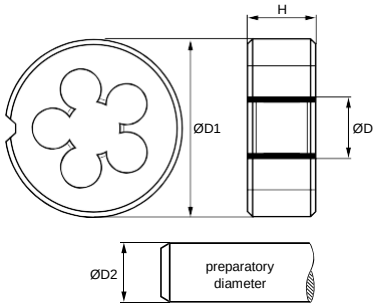
**Round Dies**
for general use




**Round Dies**
for general use



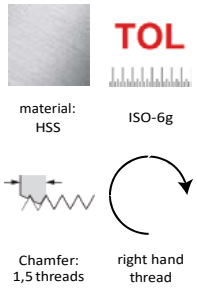


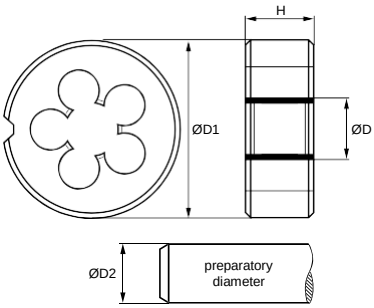
| MF | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **MF 60 x 4,0** | 60,0 | 105 | 36 | 59,85 | 121401166 |
| **MF 62 x 1,5** | 62,0 | 105 | 22 | 61,92 | 121401167 |
| **MF 62 x 2,0** | 62,0 | 105 | 22 | 61,91 | 121401168 |
| **MF 62 x 3,0** | 62,0 | 105 | 36 | 61,88 | 121401169 |
| **MF 62 x 4,0** | 62,0 | 105 | 36 | 61,85 | 121401170 |
| **MF 63 x 1,5** | 63,0 | 105 | 22 | 62,92 | 121401171 |
| **MF 64 x 1,5** | 64,0 | 120 | 22 | 63,92 | 121401172 |
| **MF 64 x 2,0** | 64,0 | 120 | 22 | 63,91 | 121401173 |
| **MF 64 x 3,0** | 64,0 | 120 | 36 | 63,88 | 121401174 |
| **MF 64 x 4,0** | 64,0 | 120 | 36 | 63,85 | 121401175 |
| **MF 65 x 1,5** | 65,0 | 120 | 22 | 64,92 | 121401176 |
| **MF 65 x 2,0** | 65,0 | 120 | 22 | 64,91 | 121401177 |
| **MF 65 x 3,0** | 65,0 | 120 | 36 | 64,88 | 121401178 |
| **MF 65 x 4,0** | 65,0 | 120 | 36 | 64,85 | 121401179 |
| **MF 68 x 1,5** | 68,0 | 120 | 22 | 67,92 | 121401180 |
| **MF 68 x 2,0** | 68,0 | 120 | 22 | 67,91 | 121401181 |
| **MF 68 x 3,0** | 68,0 | 120 | 36 | 67,88 | 121401182 |
| **MF 68 x 4,0** | 68,0 | 120 | 36 | 67,85 | 121401183 |
| **MF 70 x 1,5** | 70,0 | 120 | 22 | 69,92 | 121401184 |
| **MF 70 x 2,0** | 70,0 | 120 | 22 | 69,91 | 121401185 |
| **MF 70 x 3,0** | 70,0 | 120 | 36 | 69,88 | 121401186 |
| **MF 70 x 4,0** | 70,0 | 120 | 36 | 69,85 | 121401187 |
| **MF 72 x 1,5** | 72,0 | 120 | 22 | 71,92 | 121401188 |
| **MF 72 x 2,0** | 72,0 | 120 | 22 | 71,91 | 121401189 |
| **MF 72 x 3,0** | 72,0 | 120 | 36 | 71,88 | 121401190 |
| **MF 72 x 4,0** | 72,0 | 120 | 36 | 71,85 | 121401191 |
| **MF 74 x 1,5** | 74,0 | 120 | 22 | 73,92 | 121401192 |
| **MF 74 x 2,0** | 74,0 | 120 | 22 | 73,91 | 121401193 |
| **MF 74 x 3,0** | 74,0 | 120 | 36 | 73,88 | 121401194 |
| **MF 74 x 4,0** | 74,0 | 120 | 36 | 73,85 | 121401195 |
| **MF 75 x 1,5** | 75,0 | 120 | 22 | 74,92 | 121401196 |
| **MF 75 x 2,0** | 75,0 | 120 | 22 | 74,91 | 121401197 |
| **MF 75 x 3,0** | 75,0 | 120 | 36 | 74,88 | 121401198 |

| MF | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **MF 75 x 4,0** | 75,0 | 120 | 36 | 74,85 | 121401199 |
| **MF 76 x 1,5** | 76,0 | 120 | 22 | 75,92 | 121401200 |
| **MF 76 x 2,0** | 76,0 | 120 | 22 | 75,91 | 121401201 |
| **MF 76 x 3,0** | 76,0 | 120 | 36 | 75,88 | 121401202 |
| **MF 76 x 4,0** | 76,0 | 120 | 36 | 75,85 | 121401203 |
| **MF 78 x 1,5** | 78,0 | 120 | 22 | 77,92 | 121401204 |
| **MF 78 x 2,0** | 78,0 | 120 | 22 | 77,91 | 121401205 |
| **MF 78 x 3,0** | 78,0 | 120 | 36 | 77,88 | 121401206 |
| **MF 78 x 4,0** | 78,0 | 120 | 36 | 77,85 | 121401207 |
| **MF 80 x 1,5** | 80,0 | 120 | 22 | 79,92 | 121401208 |
| **MF 80 x 2,0** | 80,0 | 120 | 22 | 79,91 | 121401209 |
| **MF 80 x 3,0** | 80,0 | 120 | 36 | 79,88 | 121401210 |
| **MF 80 x 4,0** | 80,0 | 120 | 36 | 79,85 | 121401211 |
| **MF 82 x 1,5** | 82,0 | 130 | 25 | 81,92 | 121401212 |
| **MF 82 x 2,0** | 82,0 | 130 | 25 | 81,91 | 121401213 |
| **MF 82 x 3,0** | 82,0 | 130 | 36 | 81,88 | 121401214 |
| **MF 82 x 4,0** | 82,0 | 130 | 36 | 81,85 | 121401215 |
| **MF 84 x 1,5** | 84,0 | 130 | 25 | 83,92 | 121401216 |
| **MF 84 x 2,0** | 84,0 | 130 | 25 | 83,91 | 121401217 |
| **MF 84 x 3,0** | 84,0 | 130 | 36 | 83,88 | 121401218 |
| **MF 84 x 4,0** | 84,0 | 130 | 36 | 83,85 | 121401219 |
| **MF 85 x 1,5** | 85,0 | 130 | 25 | 84,92 | 121401220 |
| **MF 85 x 2,0** | 85,0 | 130 | 25 | 84,91 | 121401221 |
| **MF 85 x 3,0** | 85,0 | 130 | 36 | 84,88 | 121401222 |
| **MF 85 x 4,0** | 85,0 | 130 | 36 | 84,85 | 121401223 |
| **MF 86 x 1,5** | 86,0 | 140 | 22 | 85,92 | 121401224 |
| **MF 86 x 2,0** | 86,0 | 140 | 22 | 85,91 | 121401225 |
| **MF 86 x 3,0** | 86,0 | 140 | 22 | 85,88 | 121401226 |
| **MF 86 x 4,0** | 86,0 | 140 | 22 | 85,85 | 121401227 |
| **MF 88 x 1,5** | 88,0 | 140 | 22 | 87,92 | 121401228 |
| **MF 88 x 2,0** | 88,0 | 140 | 22 | 87,91 | 121401229 |
| **MF 88 x 3,0** | 88,0 | 140 | 22 | 87,88 | 121401230 |
| **MF 88 x 4,0** | 88,0 | 140 | 22 | 87,85 | 121401231 |

# MF Metric fine thread ISO DIN 13

**Round Dies**
for general use



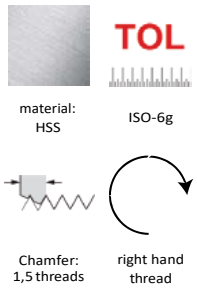



| MF | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **MF 90 x 1,5** | 90,0 | 140 | 22 | 89,92 | 121401232 |
| **MF 90 x 2,0** | 90,0 | 140 | 22 | 89,91 | 121401233 |
| **MF 90 x 3,0** | 90,0 | 140 | 22 | 89,88 | 121401234 |
| **MF 90 x 4,0** | 90,0 | 140 | 22 | 89,85 | 121401235 |
| **MF 92 x 1,5** | 92,0 | 140 | 22 | 91,92 | 121401236 |
| **MF 92 x 2,0** | 92,0 | 140 | 22 | 91,91 | 121401237 |
| **MF 92 x 3,0** | 92,0 | 140 | 22 | 91,88 | 121401238 |
| **MF 92 x 4,0** | 92,0 | 140 | 22 | 91,85 | 121401239 |
| **MF 95 x 1,5** | 95,0 | 140 | 22 | 94,92 | 121401240 |
| **MF 95 x 2,0** | 95,0 | 140 | 22 | 94,91 | 121401241 |
| **MF 95 x 3,0** | 95,0 | 140 | 22 | 94,88 | 121401242 |
| **MF 95 x 4,0** | 95,0 | 140 | 22 | 94,85 | 121401243 |
| **MF 96 x 1,5** | 96,0 | 140 | 22 | 95,92 | 121401244 |
| **MF 96 x 2,0** | 96,0 | 140 | 22 | 95,91 | 121401245 |
| **MF 96 x 3,0** | 96,0 | 140 | 22 | 95,88 | 121401246 |
| **MF 96 x 4,0** | 96,0 | 140 | 22 | 95,85 | 121401247 |
| **MF 98 x 1,5** | 98,0 | 150 | 25 | 94,92 | 121401248 |
| **MF 98 x 2,0** | 98,0 | 150 | 25 | 97,91 | 121401249 |
| **MF 98 x 3,0** | 98,0 | 150 | 25 | 97,88 | 121401250 |
| **MF 98 x 4,0** | 98,0 | 150 | 25 | 97,85 | 121401251 |
| **MF 100 x 1,5** | 100,0 | 150 | 25 | 99,92 | 121401252 |
| **MF 100 x 2,0** | 100,0 | 150 | 25 | 99,91 | 121401253 |
| **MF 100 x 3,0** | 100,0 | 150 | 25 | 99,88 | 121401254 |
| **MF 100 x 4,0** | 100,0 | 150 | 25 | 99,85 | 121401255 |
| **MF 105 x 1,5** | 105,0 | 150 | 25 | 104,92 | 121401256 |
| **MF 105 x 2,0** | 105,0 | 150 | 25 | 104,91 | 121401257 |
| **MF 105 x 3,0** | 105,0 | 150 | 25 | 104,88 | 121401258 |
| **MF 105 x 4,0** | 105,0 | 150 | 25 | 104,85 | 121401259 |
| **MF 110 x 1,5** | 110,0 | 160 | 25 | 109,92 | 121401260 |
| **MF 110 x 2,0** | 110,0 | 160 | 25 | 109,91 | 121401261 |
| **MF 110 x 3,0** | 110,0 | 160 | 25 | 109,88 | 121401262 |
| **MF 110 x 4,0** | 110,0 | 160 | 25 | 109,85 | 121401263 |

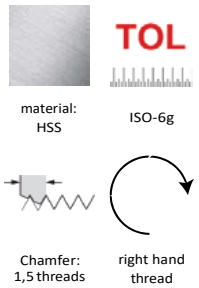
# Hexagon Die Nuts

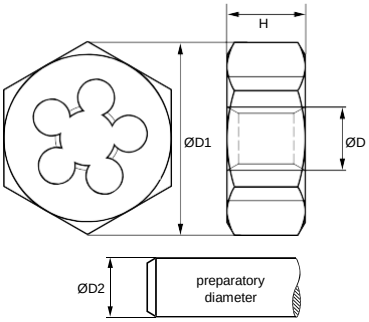
## MF Metric fine thread ISO DIN 13

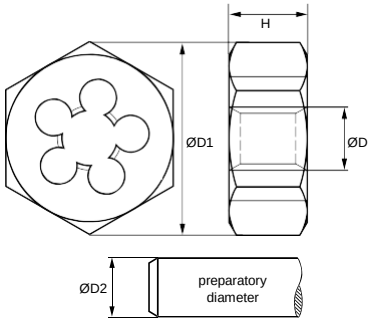
**Hexagon Die Nuts**
for general use




**Hexagon Die Nuts**
for general use





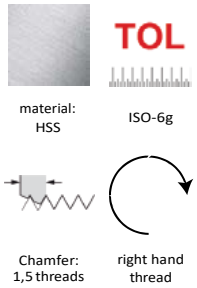
| MF | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **MF 3 x 0,35** | 3,0 | 19 | 5 | 2,94 | 121501001 |
| **MF 4 x 0,35** | 3,5 | 19 | 5 | 3,44 | 121501002 |
| **MF 4 x 0,5** | 4,0 | 19 | 5 | 3,93 | 121501003 |
| **MF 5 x 0,5** | 5,0 | 19 | 5 | 4,93 | 121501004 |
| **MF 5 x 0,75** | 5,0 | 19 | 7 | 4,91 | 121501005 |
| **MF 6 x 0,5** | 6,0 | 19 | 5 | 5,93 | 121501006 |
| **MF 6 x 0,75** | 6,0 | 19 | 7 | 5,90 | 121501007 |
| **MF 7 x 0,75** | 7,0 | 22 | 9 | 6,90 | 121501008 |
| **MF 8 x 0,5** | 8,0 | 22 | 9 | 7,93 | 121501009 |
| **MF 8 x 0,75** | 8,0 | 22 | 9 | 7,90 | 121501010 |
| **MF 8 x 1,0** | 8,0 | 22 | 9 | 7,83 | 121501011 |
| **MF 9 x 0,75** | 9,0 | 22 | 9 | 8,90 | 121501012 |
| **MF 9 x 1,0** | 9,0 | 22 | 9 | 8,88 | 121501013 |
| **MF 10 x 0,75** | 10,0 | 27 | 11 | 9,90 | 121501014 |
| **MF 10 x 1,0** | 10,0 | 27 | 11 | 9,88 | 121501015 |
| **MF 10 x 1,25** | 10,0 | 27 | 11 | 9,86 | 121501016 |
| **MF 11 x 1,0** | 11,0 | 27 | 11 | 10,88 | 121501017 |
| **MF 11 x 1,25** | 11,0 | 27 | 11 | 10,86 | 121501018 |
| **MF 12 x 0,75** | 12,0 | 36 | 10 | 11,90 | 121501019 |
| **MF 12 x 1,0** | 12,0 | 36 | 10 | 11,88 | 121501020 |
| **MF 12 x 1,25** | 12,0 | 36 | 10 | 11,86 | 121501021 |
| **MF 12 x 1,5** | 12,0 | 36 | 10 | 11,85 | 121501022 |
| **MF 13 x 1,0** | 13,0 | 36 | 10 | 12,88 | 121501023 |
| **MF 13 x 1,5** | 13,0 | 36 | 10 | 12,85 | 121501024 |
| **MF 14 x 0,75** | 14,0 | 36 | 10 | 13,90 | 121501025 |
| **MF 14 x 1,0** | 14,0 | 36 | 10 | 13,88 | 121501026 |
| **MF 14 x 1,25** | 14,0 | 36 | 10 | 13,86 | 121501027 |
| **MF 14 x 1,5** | 14,0 | 36 | 10 | 13,85 | 121501028 |
| **MF 15 x 1,0** | 15,0 | 36 | 10 | 14,88 | 121501029 |
| **MF 15 x 1,5** | 15,0 | 36 | 10 | 14,85 | 121501030 |
| **MF 16 x 1,0** | 16,0 | 41 | 14 | 15,88 | 121501031 |
| **MF 16 x 1,25** | 16,0 | 41 | 14 | 15,86 | 121501032 |
| **MF 16 x 1,5** | 16,0 | 41 | 14 | 15,85 | 121501033 |
| **MF 18 x 1,0** | 18,0 | 41 | 14 | 17,88 | 121501034 |

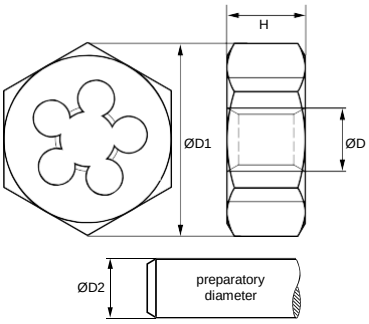
| MF | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **MF 18 x 1,25** | 18,0 | 41 | 14 | 17,86 | 121501035 |
| **MF 18 x 1,5** | 18,0 | 41 | 14 | 17,85 | 121501036 |
| **MF 18 x 2,0** | 18,0 | 41 | 14 | 17,82 | 121501037 |
| **MF 20 x 1,0** | 20,0 | 41 | 14 | 19,88 | 121501038 |
| **MF 20 x 1,25** | 20,0 | 41 | 14 | 19,86 | 121501039 |
| **MF 20 x 1,5** | 20,0 | 41 | 14 | 19,85 | 121501040 |
| **MF 20 x 2,0** | 20,0 | 41 | 14 | 19,82 | 121501041 |
| **MF 21 x 1,5** | 21,0 | 41 | 14 | 20,85 | 121501042 |
| **MF 22 x 1,0** | 22,0 | 50 | 16 | 21,88 | 121501043 |
| **MF 22 x 1,25** | 22,0 | 50 | 16 | 21,86 | 121501044 |
| **MF 22 x 1,5** | 22,0 | 50 | 16 | 21,85 | 121501045 |
| **MF 22 x 2,0** | 22,0 | 50 | 16 | 21,82 | 121501046 |
| **MF 23 x 1,5** | 23,0 | 50 | 16 | 22,85 | 121501047 |
| **MF 24 x 1,0** | 24,0 | 50 | 16 | 23,88 | 121501048 |
| **MF 24 x 1,25** | 24,0 | 50 | 16 | 23,86 | 121501049 |
| **MF 24 x 1,5** | 24,0 | 50 | 16 | 23,85 | 121501050 |
| **MF 24 x 2,0** | 24,0 | 50 | 16 | 22,82 | 121501051 |
| **MF 25 x 1,0** | 25,0 | 50 | 16 | 24,88 | 121501052 |
| **MF 25 x 1,5** | 25,0 | 50 | 16 | 24,85 | 121501053 |
| **MF 26 x 1,0** | 26,0 | 50 | 16 | 25,88 | 121501054 |
| **MF 26 x 1,5** | 26,0 | 50 | 16 | 25,85 | 121501055 |
| **MF 26 x 2,0** | 26,0 | 50 | 16 | 25,82 | 121501056 |
| **MF 27 x 1,0** | 27,0 | 60 | 18 | 26,88 | 121501057 |
| **MF 27 x 1,5** | 27,0 | 60 | 18 | 26,85 | 121501058 |
| **MF 27 x 2,0** | 27,0 | 60 | 18 | 26,82 | 121501059 |
| **MF 28 x 1,0** | 28,0 | 60 | 18 | 27,88 | 121501060 |
| **MF 28 x 1,5** | 28,0 | 60 | 18 | 27,85 | 121501061 |
| **MF 28 x 2,0** | 28,0 | 60 | 18 | 27,82 | 121501062 |
| **MF 29 x 1,5** | 29,0 | 60 | 18 | 28,85 | 121501063 |
| **MF 30 x 1,0** | 30,0 | 60 | 18 | 29,88 | 121501064 |
| **MF 30 x 1,5** | 30,0 | 60 | 18 | 29,85 | 121501065 |
| **MF 30 x 2,0** | 30,0 | 60 | 18 | 29,82 | 121501066 |
| **MF 30 x 3,0** | 30,0 | 60 | 25 | 29,76 | 121501067 |
| **MF 32 x 1,5** | 32,0 | 60 | 18 | 31,85 | 121501068 |

# Hexagon Die Nuts

## MF Metric fine thread ISO DIN 13

**Hexagon Die Nuts**
for general use



| MF | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **MF 32 x 2,0** | 32,0 | 60 | 18 | 31,82 | 121501069 |
| **MF 32 x 3,0** | 32,0 | 60 | 25 | 31,77 | 121501070 |
| **MF 33 x 1,5** | 33,0 | 60 | 18 | 32,85 | 121501071 |
| **MF 33 x 2,0** | 33,0 | 60 | 18 | 32,82 | 121501072 |
| **MF 33 x 3,0** | 33,0 | 60 | 25 | 32,76 | 121501073 |
| **MF 34 x 1,5** | 34,0 | 60 | 18 | 33,85 | 121501074 |
| **MF 34 x 2,0** | 34,0 | 60 | 18 | 33,82 | 121501075 |
| **MF 35 x 1,5** | 35,0 | 60 | 18 | 34,85 | 121501076 |
| **MF 36 x 1,5** | 36,0 | 60 | 18 | 35,85 | 121501077 |
| **MF 36 x 2,0** | 36,0 | 60 | 18 | 35,82 | 121501078 |
| **MF 36 x 3,0** | 36,0 | 60 | 25 | 35,76 | 121501079 |
| **MF 38 x 1,5** | 38,0 | 70 | 20 | 37,85 | 121501080 |
| **MF 39 x 1,5** | 39,0 | 70 | 20 | 38,85 | 121501081 |
| **MF 39 x 2,0** | 39,0 | 70 | 20 | 38,82 | 121501082 |
| **MF 39 x 3,0** | 39,0 | 70 | 30 | 38,76 | 121501083 |
| **MF 40 x 1,5** | 40,0 | 70 | 20 | 39,85 | 121501084 |
| **MF 40 x 2,0** | 40,0 | 70 | 20 | 39,82 | 121501085 |
| **MF 40 x 3,0** | 40,0 | 70 | 30 | 39,76 | 121501086 |
| **MF 42 x 1,5** | 42,0 | 70 | 20 | 41,85 | 121501087 |
| **MF 42 x 2,0** | 42,0 | 70 | 20 | 41,82 | 121501088 |
| **MF 42 x 3,0** | 42,0 | 70 | 30 | 41,76 | 121501089 |
| **MF 45 x 1,5** | 45,0 | 85 | 22 | 44,85 | 121501090 |
| **MF 45 x 2,0** | 45,0 | 85 | 22 | 44,82 | 121501091 |
| **MF 45 x 3,0** | 45,0 | 85 | 36 | 44,76 | 121501092 |
| **MF 48 x 1,5** | 48,0 | 85 | 22 | 47,85 | 121501093 |
| **MF 48 x 2,0** | 48,0 | 85 | 22 | 47,82 | 121501094 |
| **MF 48 x 3,0** | 48,0 | 85 | 36 | 47,46 | 121501095 |
| **MF 50 x 1,5** | 50,0 | 85 | 22 | 49,85 | 121501096 |
| **MF 50 x 2,0** | 50,0 | 85 | 22 | 49,82 | 121501097 |
| **MF 50 x 3,0** | 50,0 | 85 | 36 | 49,76 | 121501098 |
| **MF 52 x 1,5** | 52,0 | 85 | 22 | 51,85 | 121501099 |
| **MF 52 x 2,0** | 52,0 | 85 | 22 | 51,82 | 121501100 |
| **MF 52 x 3,0** | 52,0 | 85 | 36 | 51,76 | 121501101 |

# Thread Cutting Kits with Taps, Dies and Tools

# G-Rohr (BSP)

**British standard whitworth pipe thread**
**DIN ISO 228**

## BAER Hand-Tap Sets, Round Dies and Tools Sets

**(example picture)**

### BAER Set G(BSP) 1/8“ - 1“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (2 parts)** | G 1/8 x 28 \| G 1/4 x 19 \| G 3/8 x 19 \| G 1/2 x 14 \| G 3/4 x 14 \| G 1“ x 11 | Item No.: 264802014 |
| **BAER HSS Round Dies** | G 1/8 x 28 \| G 1/4 x 19 \| G 3/8 x 19 \| G 1/2 x 14 \| G 3/4 x 14 \| G 1“ x 11 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 5-20 \| 7/32-3/4“ \| G 1/8-1/2 & M 13-32 \| 1/2-1.1/4“ \| G 1/4-1“ | |
| **BAER Die Stocks - zinc die cast** | 30 x 11 \| 38 x 10 \| 45 x 14 \| 55 x 16 \| 68 x 18 | |
| **Screw extractor** | | |

### BAER Set G(BSP) 1/8“ - 1“ (incl. intermediate sizes)
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (2 parts)** | G 1/8 x 28 \| G 1/4 x 19 \| G 3/8 x 19 \| G 1/2 x 14 \| G 5/8 x 14 \| G 3/4 x 14 \| G 7/8 x 14 \| G 1“ x 11 | Item No.: 264802114 |
| **BAER HSS Round Dies** | G 1/8 x 28 \| G 1/4 x 19 \| G 3/8 x 19 \| G 1/2 x 14 \| G 5/8 x 14 \| G 3/4 x 14 \| G 7/8 x 14 \| G 1“ x 11 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 5-20 \| 7/32-3/4“ \| G 1/8-1/2 & M 13-32 \| 1/2-1.1/4“ \| G 1/4-1“ | |
| **BAER Die Stocks - zinc die cast** | 30 x 11 \| 38 x 10 \| 45 x 14 \| 55 x 16 \| 68 x 18 | |
| **Screw extractor** | | |

### BAER Set G(BSP) 1/4“ - 1.1/2“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (2 parts)** | G 1/4 x 19 \| G 3/8 x 19 \| G 1/2 x 14 \| G 3/4 x 14 \| G 1“ x 11 \| G 1.1/4“ x 11 \| G 1.1/2“ x 11 | Item No.: 264802214 |
| **BAER HSS Round Dies** | G 1/4 x 19 \| G 3/8 x 19 \| G 1/2 x 14 \| G 3/4 x 14 \| G 1“ x 11 \| G 1.1/4“ x 11 \| G 1.1/2“ x 11 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 4-12 \| 5/32-1/2 \| G 1/8 & M 11-27 \| 7/16-1“ \| G 1/4-3/4 & M 27-52 \| 1.1/8“-2“ \| G 3/4-1.3/4“ | |
| **BAER Die Stocks - zinc die cast** | 38 x 10 \| 45 x 14 \| 55 x 16 \| 68 x 18 \| 75 x 20 \| 90 x 22 | |
| **Screw extractor** | | |

# Thread Cutting Kits with Taps and Dies

# G-Rohr (BSP)

**British standard whitworth pipe thread**
**DIN ISO 228**

## BAER Taps and Dies Sets
**(example picture)**

**BAER Set G(BSP) 1/8“ - 3/4“**
**Short Machine Taps through hole & blind hole**
**HSSG Hexagonal-Die-Nuts**

| | | |
|---|---|---|
| **BAER HSSG Short Machine TapsForm D for through holes and blind holes (up to 4 x D)** | G 1/8 x 28 \| G 1/4 x 19 \| G 3/8 x 19 \| G 1/2 x 14 \| G 3/4 x 14 | Item No.: BSR1 |
| **BAER HSSG Hexagonal-Die-Nuts** | G 1/8 x 28 \| G 1/4 x 19 \| G 3/8 x 19 \| G 1/2 x 14 \| G 3/4 x 14 | |

**BAER Set G(BSP) 1/8“ - 1/2“**
**Short Machine Taps through hole & blind hole**
**HSSG Hexagonal-Die-Nuts**

| | | |
|---|---|---|
| **BAER HSSG Short Machine TapsForm D for through holes and blind holes (up to 4 x D)** | G 1/8 x 28 \| G 1/4 x 19 \| G 3/8 x 19 \| G 1/2 x 14 | Item No.: BSR2 |
| **BAER HSSG Hexagonal-Die-Nuts** | G 1/8 x 28 \| G 1/4 x 19 \| G 3/8 x 19 \| G 1/2 x 14 | |

Attention: the box two empty spaces/ recesses for BSP3/4 Tap and Round Die in case of adding them later

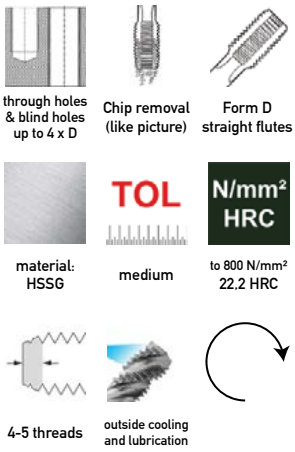
**BAER Set G(BSP) 1/8“ - 3/4“**
**Short Machine Taps through hole & blind hole**
**HSSG Round Dies**

| | | |
|---|---|---|
| **BAER HSSG Short Machine TapsForm D for through holes and blind holes (up to 4 x D)** | G 1/8 x 28 \| G 1/4 x 19 \| G 3/8 x 19 \| G 1/2 x 14 \| G 3/4 x 14 | Item No.: BSR1 |
| **BAER HSSG Round Dies** | G 1/8 x 28 \| G 1/4 x 19 \| G 3/8 x 19 \| G 1/2 x 14 \| G 3/4 x 14 | |

# G-Rohr (BSP)

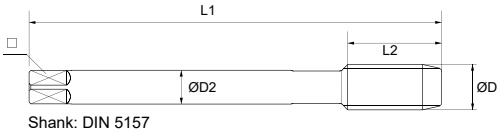
**British standard whitworth pipe thread**
**DIN ISO 228**

**Short Machine Taps**
Form D for through holes
and blind holes




Efficient internal thread cutting.
The short structural type makes that tap usable by machine and hand.

**Application:**
non abrasive material up to 900 N/mm²
unalloyed and low alloyed steel



| G(BSP) | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| **BSP 1/8 x 28** | 9,73 | 7,0 | 63 | 20 | 5,5 | 8,80 | 130101001 |
| **BSP 1/4 x 19** | 13,16 | 11,0 | 70 | 22 | 9,0 | 11,80 | 130101002 |
| **BSP 3/8 x 19** | 16,66 | 12,0 | 70 | 22 | 9,0 | 15,25 | 130101003 |
| **BSP 1/2 x 14** | 20,95 | 16,0 | 80 | 22 | 12,0 | 19,00 | 130101004 |
| **BSP 3/4 x 14** | 26,44 | 20,0 | 90 | 22 | 16,0 | 24,50 | 130101005 |
| **BSP 1" x 11** | 33,25 | 25,0 | 100 | 25 | 20,0 | 30,75 | 130101006 |
| **BSP 1.1/4 x 11** | 41,91 | 32,0 | 125 | 40 | 24,0 | 39,50 | 130101007 |
| **BSP 1.1/2 x 11** | 47,80 | 36,0 | 140 | 40 | 29,0 | 45,25 | 130101008 |
| **BSP 1.3/4 x 11** | 53,74 | 40,0 | 140 | 40 | 32,0 | 51,20 | 130101009 |
| **BSP 2" x 11** | 59,61 | 45,0 | 160 | 40 | 35,0 | 57,00 | 130101010 |
| **BSP 2.1/4 x 11** | 65,71 | 50,0 | 160 | 40 | 39,0 | 63,10 | 130101011 |
| **BSP 2.1/2 x 11** | 75,18 | 50,0 | 160 | 40 | 39,0 | 72,60 | 130101012 |
| **BSP 2.3/4 x 11** | 81,53 | 50,0 | 160 | 40 | 39,0 | 79,00 | 130101013 |
| **BSP 3" x 11** | 87,88 | 50,0 | 160 | 40 | 39,0 | 85,50 | 130101014 |
| **BSP 3.1/2 x 11** | 100,3 | 56,0 | 180 | 45 | 44,0 | 98,00 | 130101015 |
| **BSP 4" x 11** | 113,0 | 56,0 | 180 | 45 | 44,0 | 110,50 | 130101016 |

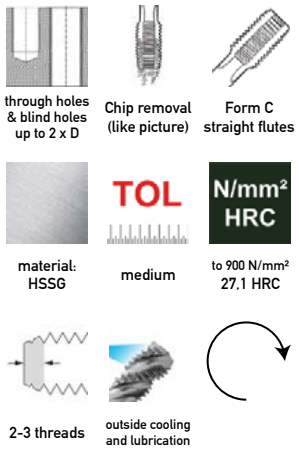
# G-Rohr (BSP)

**British standard whitworth pipe thread**
**DIN ISO 228**

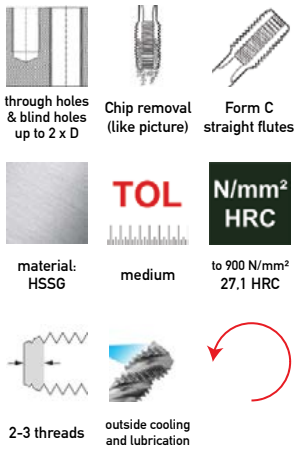
Efficient internal thread cutting.
The short structural type makes that tap usable by hand.

A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

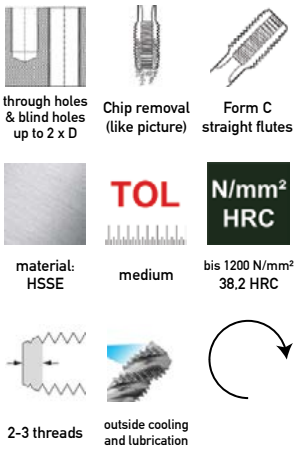
## Hand Tap Sets
for general use

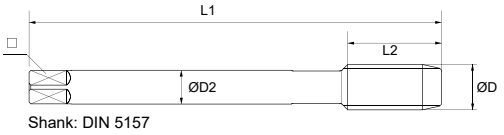



## Hand Tap Sets
for general use — Left Hand




## Hand Tap Sets
for high tensile materials



Shank: DIN 5157

| G(BSP) | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **BSP 1/8 x 28** | 9,73 | 7,0 | 63 | 20 | 5,5 | 8,80 | 130301001 | 130302001 | 130304001 |
| **BSP 1/4 x 19** | 13,16 | 11,0 | 70 | 22 | 9,0 | 11,80 | 130301002 | 130302002 | 130304002 |
| **BSP 3/8 x 19** | 16,66 | 12,0 | 70 | 22 | 9,0 | 15,25 | 130301003 | 130302003 | 130304003 |
| **BSP 1/2 x 14** | 20,95 | 16,0 | 80 | 22 | 12,0 | 19,00 | 130301004 | 130302004 | 130304004 |
| **BSP 5/8 x 14** | 22,91 | 18,0 | 80 | 22 | 14,5 | 21,00 | 130301005 | 130302005 | |
| **BSP 3/4 x 14** | 26,44 | 20,0 | 90 | 22 | 16,0 | 24,50 | 130301006 | 130302006 | 130304005 |
| **BSP 7/8 x 14** | 30,20 | 22,0 | 90 | 22 | 18,0 | 28,25 | 130301007 | | |
| **BSP 1" x 11** | 33,25 | 25,0 | 100 | 25 | 20,0 | 30,75 | 130301008 | 130302007 | 130304006 |
| **BSP 1.1/8 x 11** | 37,90 | 28,0 | 125 | 40 | 22,0 | 35,30 | 130301009 | 130302008 | |
| **BSP 1.1/4 x 11** | 41,91 | 32,0 | 125 | 40 | 24,0 | 39,50 | 130301010 | 130302009 | |
| **BSP 1.3/8 x 11** | 44,32 | 36,0 | 140 | 40 | 29,0 | 41,70 | 130301011 | 130302010 | |
| **BSP 1.1/2 x 11** | 47,80 | 36,0 | 140 | 40 | 29,0 | 45,25 | 130301012 | 130302011 | |
| **BSP 1.5/8 x 11** | 52,00 | 40,0 | 140 | 40 | 32,0 | 49,60 | 130301013 | | |
| **BSP 1.3/4 x 11** | 53,74 | 40,0 | 140 | 40 | 32,0 | 51,20 | 130301014 | 130302012 | |
| **BSP 2" x 11** | 59,61 | 45,0 | 160 | 40 | 35,0 | 57,00 | 130301015 | 130302013 | |
| **BSP 2.1/4 x 11** | 65,71 | 50,0 | 160 | 40 | 39,0 | 63,10 | 130301016 | | |
| **BSP 2.1/2 x 11** | 75,18 | 50,0 | 160 | 40 | 39,0 | 72,60 | 130301017 | | |
| **BSP 2.3/4 x 11** | 81,53 | 50,0 | 160 | 40 | 39,0 | 79,00 | 130301018 | | |
| **BSP 3" x 11** | 87,88 | 50,0 | 160 | 40 | 39,0 | 85,50 | 130301019 | | |
| **BSP 3.1/2 x 11** | 100,3 | 56,0 | 180 | 45 | 44,0 | 98,00 | 130301020 | | |
| **BSP 4" x 11** | 113,0 | 56,0 | 180 | 45 | 44,0 | 110,50 | 130301021 | | |

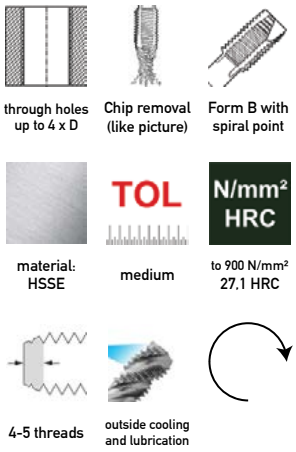
# Machine Taps - Form B for through holes and Form C Left-hand thread

## G-Rohr (BSP)

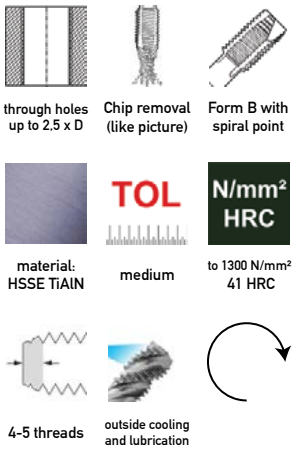
**British standard whitworth pipe thread**
**DIN ISO 228**

Tap for machine use in through hole and for left-hand thread in through and blind holes.
The spiral point pushes the chips ahead.

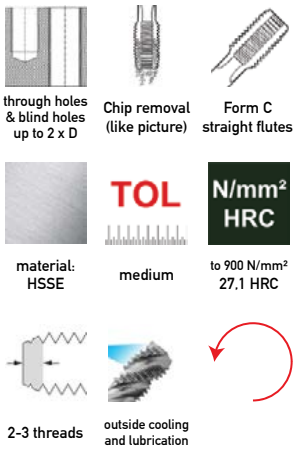
### Machine Tap
for general use

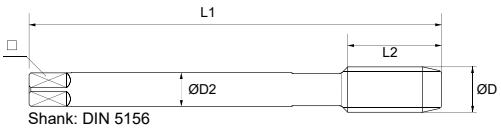



### Machine Tap
for stainless steels




### Machine Tap
for general use
Left-hand thread



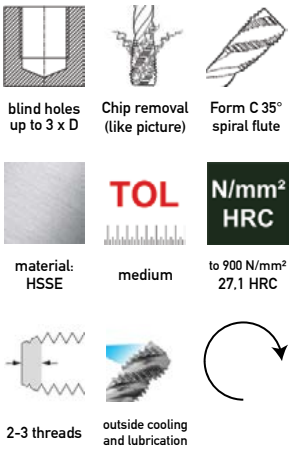
| G (BSP) | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **BSP 1/8 x 28** | 9,73 | 7,0 | 90 | 20 | 5,5 | 8,80 | 130401001 | 130405001 | 130502001 |
| **BSP 1/4 x 19** | 13,16 | 11,0 | 100 | 22 | 9,0 | 11,80 | 130401002 | 130405002 | 130502002 |
| **BSP 3/8 x 19** | 16,66 | 12,0 | 100 | 22 | 9,0 | 15,25 | 130401003 | 130405003 | 130502003 |
| **BSP 1/2 x 14** | 20,95 | 16,0 | 125 | 25 | 12,0 | 19,00 | 130401004 | 130405004 | 130502004 |
| **BSP 5/8 x 14** | 22,91 | 18,0 | 125 | 25 | 14,5 | 21,00 | 130401005 | 130405005 | 130502005 |
| **BSP 3/4 x 14** | 26,44 | 20,0 | 140 | 28 | 16,0 | 24,50 | 130401006 | 130405006 | 130502006 |
| **BSP 7/8 x 14** | 30,20 | 22,0 | 150 | 28 | 18,0 | 28,25 | 130401007 | 130405007 | |
| **BSP 1" x 11** | 33,25 | 25,0 | 160 | 30 | 20,0 | 30,75 | 130401008 | 130405008 | 130502007 |
| **BSP 1.1/8 x 11** | 37,90 | 28,0 | 170 | 30 | 22,0 | 35,30 | 130401009 | 130405009 | |
| **BSP 1.1/4 x 11** | 41,91 | 32,0 | 170 | 30 | 24,0 | 39,50 | 130401010 | 130405010 | |
| **BSP 1.3/8 x 11** | 44,32 | 36,0 | 180 | 32 | 29,0 | 41,70 | 130401011 | 130405011 | |
| **BSP 1.1/2 x 11** | 47,80 | 36,0 | 190 | 32 | 29,0 | 45,25 | 130401012 | 130405012 | |
| **BSP 1.3/4 x 11** | 53,74 | 40,0 | 190 | 32 | 32,0 | 51,20 | 130401013 | 130405013 | |
| **BSP 2" x 11** | 59,61 | 45,0 | 220 | 40 | 35,0 | 57,00 | 130401014 | 130405014 | |

# G-Rohr (BSP)

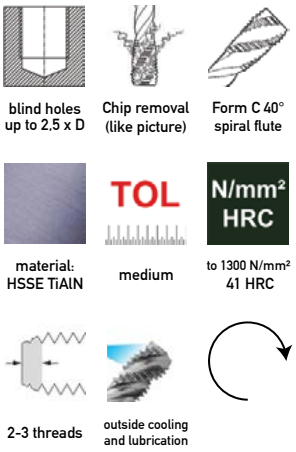
**British standard whitworth pipe thread**
**DIN ISO 228**

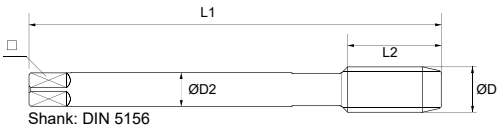
Tap for machine use in blind holes.
The fast spiral flutes provide good chip removal from the blind hole.

**Machine Tap**
for general use




**Machine Tap**
for stainless steels



| G(BSP) | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **BSP 1/8 x 28** | 9,73 | 7,0 | 90 | 20 | 5,5 | 8,80 | 130601001 | 130605001 |
| **BSP 1/4 x 19** | 13,16 | 11,0 | 100 | 22 | 9,0 | 11,80 | 130601002 | 130605002 |
| **BSP 3/8 x 19** | 16,66 | 12,0 | 100 | 22 | 9,0 | 15,25 | 130601003 | 130605003 |
| **BSP 1/2 x 14** | 20,95 | 16,0 | 125 | 25 | 12,0 | 19,00 | 130601004 | 130605004 |
| **BSP 5/8 x 14** | 22,91 | 18,0 | 125 | 25 | 14,5 | 21,00 | 130601005 | 130605005 |
| **BSP 3/4 x 14** | 26,44 | 20,0 | 140 | 28 | 16,0 | 24,50 | 130601006 | 130605006 |
| **BSP 7/8 x 14** | 30,20 | 22,0 | 150 | 28 | 18,0 | 28,25 | 130601007 | 130605007 |
| **BSP 1" x 11** | 33,25 | 25,0 | 160 | 30 | 20,0 | 30,75 | 130601008 | 130605008 |
| **BSP 1.1/8 x 11** | 37,90 | 28,0 | 170 | 30 | 22,0 | 35,30 | 130601009 | 130605009 |
| **BSP 1.1/4 x 11** | 41,91 | 32,0 | 170 | 30 | 24,0 | 39,50 | 130601010 | 130605010 |
| **BSP 1.3/8 x 11** | 44,32 | 36,0 | 180 | 32 | 29,0 | 41,70 | 130601011 | 130605011 |
| **BSP 1.1/2 x 11** | 47,80 | 36,0 | 190 | 32 | 29,0 | 45,25 | 130601012 | 130605012 |
| **BSP 1.3/4 x 11** | 53,74 | 40,0 | 190 | 32 | 32,0 | 51,20 | 130601013 | 130605013 |
| **BSP 2" x 11** | 59,61 | 45,0 | 220 | 40 | 35,0 | 57,00 | 130601014 | 130605014 |

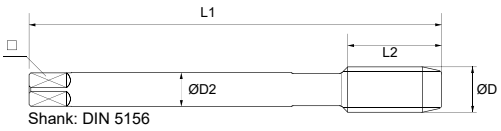
# UNiForm Machine Forming Taps

## G-Rohr (BSP)

**British standard whitworth pipe thread**
**DIN ISO 228**

### Machine Forming Taps
for universal use

Machine Forming Taps have following advantages:
- No chips
- Up to 20 times longer lifetime (compared to taps)
- Same forming tap for through and blind hole
- Wide range of materials can be processed
- Intersection of the thread is impossible
- Very high trueness
- Increased strength of the thread
- Higher surface quality
- Much higher cutting speed

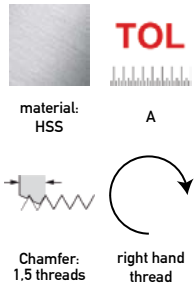


| G(BSP) | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| **BSP 1/8 x 28** | 9,73 | 7,0 | 90 | 18 | 5,5 | 9,25 | 131101001 |
| **BSP 1/4 x 19** | 13,16 | 11,0 | 100 | 22 | 9,0 | 12,50 | 131101002 |
| **BSP 3/8 x 19** | 16,66 | 12,0 | 100 | 22 | 9,0 | 16,00 | 131101003 |
| **BSP 1/2 x 14** | 20,95 | 16,0 | 125 | 25 | 12,0 | 20,00 | 131101004 |
| **BSP 3/4 x 14** | 26,44 | 20,0 | 140 | 28 | 20,0 | 25,50 | 131101005 |

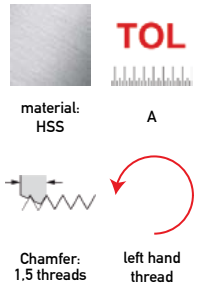
# G-Rohr (BSP)

**British standard whitworth pipe thread**
**DIN ISO 228**

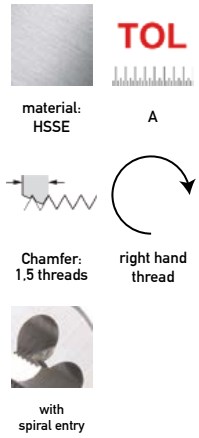
## Round Dies
for general use

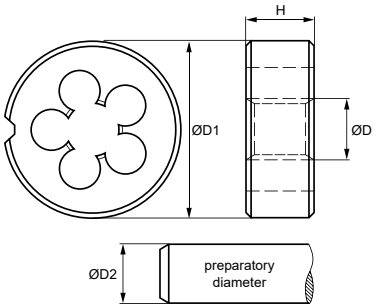



## Round Dies
for general use
Left Hand




## Round Dies
for stainless steels



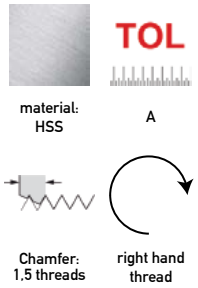
| G(BSP) | D | D1 | H | D2 | No. | No. | No. |
|---|---|---|---|---|---|---|---|
| **BSP 1/8 x 28** | 9,73 | 30 | 11 | 9,62 | 131401001 | 131402001 | 131405001 |
| **BSP 1/4 x 19** | 13,16 | 38 | 10 | 13,03 | 131401002 | 131402002 | 131405002 |
| **BSP 3/8 x 19** | 16,66 | 45 | 14 | 16,54 | 131401003 | 131402003 | 131405003 |
| **BSP 1/2 x 14** | 20,95 | 45 | 14 | 20,81 | 131401004 | 131402004 | 131405004 |
| **BSP 5/8 x 14** | 22,91 | 55 | 16 | 22,77 | 131401005 | 131402005 | |
| **BSP 3/4 x 14** | 26,44 | 55 | 16 | 26,30 | 131401006 | 131402006 | 131405005 |
| **BSP 7/8 x 14** | 30,20 | 65 | 18 | 30,06 | 131401007 | 131402007 | |
| **BSP 1" x 11** | 33,25 | 65 | 18 | 33,07 | 131401008 | 131402008 | 131405006 |
| **BSP 1.1/8 x 11** | 37,90 | 75 | 20 | 37,72 | 131401009 | 131402009 | |
| **BSP 1.1/4 x 11** | 41,91 | 75 | 20 | 41,73 | 131401010 | 131402010 | |
| **BSP 1.3/8 x 11** | 44,32 | 90 | 22 | 44,14 | 131401011 | 131402011 | |
| **BSP 1.1/2 x 11** | 47,80 | 90 | 22 | 47,62 | 131401012 | 131402012 | |
| **BSP 1.5/8 x 11** | 52,00 | 90 | 22 | 51,82 | 131401013 | 131402013 | |
| **BSP 1.3/4 x 11** | 53,74 | 105 | 22 | 53,57 | 131401014 | 131402014 | |
| **BSP 2" x 11** | 59,61 | 90 | 22 | 59,43 | 131401015 | 131402015 | |
| **BSP 2" x 11** | 59,61 | 105 | 22 | 59,43 | 131401016 | | |
| **BSP 2.1/4 x 11** | 65,71 | 120 | 22 | 65,49 | 131401017 | | |
| **BSP 2.1/2 x 11** | 75,18 | 120 | 22 | 74,97 | 131401018 | | |
| **BSP 2.3/4 x 11** | 81,53 | 120 | 22 | 81,32 | 131401019 | | |
| **BSP 3" x 11** | 87,88 | 130 | 25 | 87,67 | 131401020 | | |
| **BSP 3.1/2 x 11** | 100,33 | 150 | 25 | 100,11 | 131401021 | | |
| **BSP 4" x 11** | 113,03 | 160 | 25 | 112,81 | 131401022 | | |

# Hexagon Die Nuts

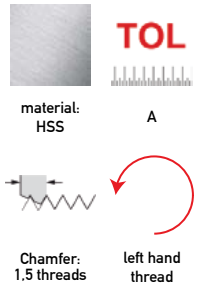
## G-Rohr (BSP)

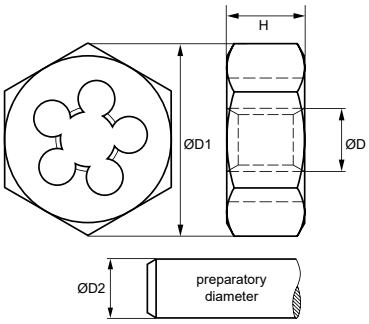
**British standard whitworth pipe thread**
**DIN ISO 228**

**Hexagon Die Nuts**
for general use




**Hexagon Die Nuts**
for general use
Left Hand



| G(BSP) | D | D1 | H | D2 | No. | No. |
|---|---|---|---|---|---|---|
| **BSP 1/8 x 28** | 9,73 | 27 | 11 | 9,62 | 131501001 | 131502001 |
| **BSP 1/4 x 19** | 13,16 | 36 | 10 | 13,03 | 131501002 | 131502002 |
| **BSP 3/8 x 19** | 16,66 | 41 | 14 | 16,54 | 131501003 | 131502003 |
| **BSP 1/2 x 14** | 20,95 | 41 | 14 | 20,81 | 131501004 | 131502004 |
| **BSP 5/8 x 14** | 22,91 | 50 | 16 | 22,77 | 131501005 | 131502005 |
| **BSP 3/4 x 14** | 26,44 | 50 | 16 | 26,30 | 131501006 | 131502006 |
| **BSP 7/8 x 14** | 30,20 | 60 | 18 | 30,06 | 131501007 | |
| **BSP 1" x 11** | 33,25 | 60 | 18 | 33,07 | 131501008 | 131502007 |
| **BSP 1.1/8 x 11** | 37,90 | 70 | 20 | 37,72 | 131501009 | 131502008 |
| **BSP 1.1/4 x 11** | 41,91 | 70 | 20 | 41,73 | 131501010 | 131502009 |
| **BSP 1.3/8 x 11** | 44,32 | 85 | 22 | 44,14 | 131501011 | 131502010 |
| **BSP 1.1/2 x 11** | 47,80 | 85 | 22 | 47,62 | 131501012 | 131502011 |
| **BSP 1.5/8 x 11** | 52,00 | 85 | 22 | 51,82 | 131501013 | |
| **BSP 1.3/4 x 11** | 53,74 | 100 | 22 | 53,57 | 131501014 | 131502012 |
| **BSP 2" x 11** | 59,61 | 100 | 22 | 59,43 | 131501015 | 131502013 |

# Thread Cutting Kits with Taps, Dies and Tools

# UNC

**Unified coarse thread**
**ANSI B1.1**

## BAER Hand-Tap Sets, Round Dies and Tools Sets

**(example picture)**

### BAER Set UNC 1/4“ - 1/2“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | UNC 1/4 x 20 \| UNC 5/16 x 18 \| UNC 3/8 x 16 \| UNC 7/16 x 14 \| UNC 1/2 x 13 | Item No.: 264805003 |
| **BAER HSS Round Dies** | UNC 1/4 x 20 \| UNC 5/16 x 18 \| UNC 3/8 x 16 \| UNC 7/16 x 14 \| UNC 1/2 x 13 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 4-12 \| 5/32-1/2 \| G 1/8 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 | |
| **Screw extractor** | | |

### BAER Set UNC 1/4“ - 3/4“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | UNC 1/4 x 20 \| UNC 5/16 x 18 \| UNC 3/8 x 16 \| UNC 7/16 x 14 \| UNC 1/2 x 13 \| UNC 5/8 x 11 \| UNC 3/4 x 10 | Item No.: 264805103 |
| **BAER HSS Round Dies** | UNC 1/4 x 20 \| UNC 5/16 x 18 \| UNC 3/8 x 16 \| UNC 7/16 x 14 \| UNC 1/2 x 13 \| UNC 5/8 x 11 \| UNC 3/4 x 10 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 5-20 \| 7/32-3/4“ \| G 1/8-1/2 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 \| 45 x 18 | |
| **Screw extractor** | | |

### BAER Set UNC 1/4“ - 1“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | UNC 1/4 x 20 \| UNC 5/16 x 18 \| UNC 3/8 x 16 \| UNC 7/16 x 14 \| UNC 1/2 x 13 \| UNC 5/8 x 11 \|UNC 3/4 x 10<br>UNC 7/8 x 9 \|UNC 1“ x 8 | Item No.: 264805303 |
| **BAER HSS Round Dies** | UNC 1/4 x 20 \| UNC 5/16 x 18 \| UNC 3/8 x 16 \| UNC 7/16 x 14 \| UNC 1/2 x 13 \| UNC 5/8 x 11 \|UNC 3/4 x 10<br>UNC 7/8 x 9 \|UNC 1“ x 8 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 11-27 \| 7/16-1“ \| G 1/4-3/4 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 \| 45 x 18 \| 55 x 22 | |
| **Screw extractor** | | |

### BAER Set UNC 1/4“ - 1.1/2“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | UNC 1/4 x 20 \| UNC 5/16 x 18 \| UNC 3/8 x 16 \| UNC 7/16 x 14 \| UNC 1/2 x 13 \| UNC 5/8 x 11 \| UNC 3/4 x 10 \| UNC 7/8 x 9<br>UNC 1“ x 8 \| UNC 1.1/8“ x 7 \|UNC 1.1/4“ x 7 \| UNC 1.1/2“ x 6 | Item No.: 264805403 |
| **BAER HSS Round Dies** | UNC 1/4 x 20 \| UNC 5/16 x 18 \| UNC 3/8 x 16 \| UNC 7/16 x 14 \| UNC 1/2 x 13 \| UNC 5/8 x 11 \| UNC 3/4 x 10 \| UNC 7/8 x 9<br>UNC 1“ x 8 \| UNC 1.1/8“ x 7 \|UNC 1.1/4“ x 7 \| UNC 1.1/2“ x 6 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 5-20 \| 7/32-3/4“ \| G 1/8-1/2 & M 13-32 \| 1/2 - 1.1/4“ \| G 1/4-1“ | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 \| 45 x 18 \| 55 x 22 \| 65 x 25 | |
| **Screw extractor** | | |

### BAER Set UNC & UNF 1/4“ - 3/4“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts) UNC**<br>**BAER HSSG Hand Tap Sets (2 parts) UNF** | UNC 1/4 \| UNC 5/16 \| UNC 3/8 \| UNC 7/16 \| UNC 1/2 \| UNC 5/8 \| UNC 3/4<br>UNF 1/4 \| UNF 5/16 \| UNF 3/8 \| UNF 7/16 \| UNF 1/2 \| UNF 5/8 \| UNF 3/4 | Item No.: 2648066203 |
| **BAER HSS Round Dies UNC**<br>**BAER HSS Round Dies UNF** | UNC 1/4 \| UNC 5/16 \| UNC 3/8 \| UNC 7/16 \| UNC 1/2 \| UNC 5/8 \| UNC 3/4<br>UNF 1/4 \| UNF 5/16 \| UNF 3/8 \| UNF 7/16 \| UNF 1/2 \| UNF 5/8 \| UNF 3/4 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 5-20 \| 7/32-3/4“ \| G 1/8-1/2 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 \| 45 x 18 | |
| **Screw extractor** | | |

# Thread Cutting Kits with Taps and Dies

# UNC

**Unified coarse thread**
**ANSI B1.1**

## BAER Short Machine Taps und Round Dies Sets UNC 1/4“ - 1/2“

**(example picture)**

**BAER Set UNC 1/4“ - 1/2“**
**HSSG Short Machine Taps & Drill bits for core holes**
**HSS Round Dies**

| | | |
|---|---|---|
| **BAER HSSG Short Machine Tap Form D for through hole & blind hole (up to 4 x D)** | UNC 1/4 x 20 \| UNC 5/16 x 18 \| UNC 3/8 x 16 \| UNC 7/16 x 14 \| UNC 1/2 x 13 | Item No.: BES2 |
| **BAER HSSG Drill bits for core holes** | 5,2 mm \| 6,6 mm \| 8,0 mm \| 9,4 mm \| 10,8 mm | |
| **BAER HSS Round Dies** | UNC 1/4 x 20 \| UNC 5/16 x 18 \| UNC 3/8 x 16 \| UNC 7/16 x 14 \| UNC 1/2 x 13 | |

# Short Machine Taps and Hand Tap Sets

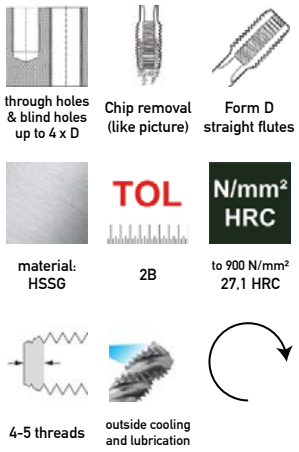
## UNC

**Unified coarse thread**
**ANSI B1.1**

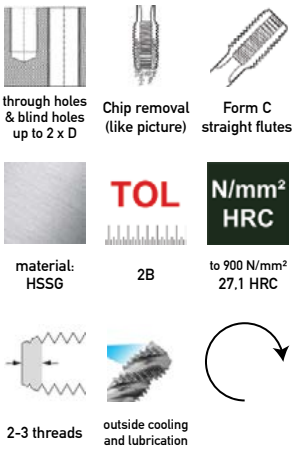
Efficient internal thread cutting.
The short structural type makes that tap usable by hand. The Short-Machine-Tap is also usable by machine.

A Hand-Tap-Set includes 3 taps:
Taper Tap
Intermediate Tap
Finish Tap

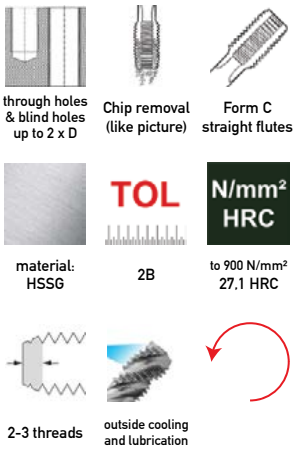
### Short Machine Taps
Form D for through holes and blind holes

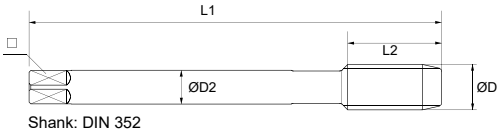



### Hand Tap Sets
for general use




### Hand Tap Sets
for general use — Left Hand



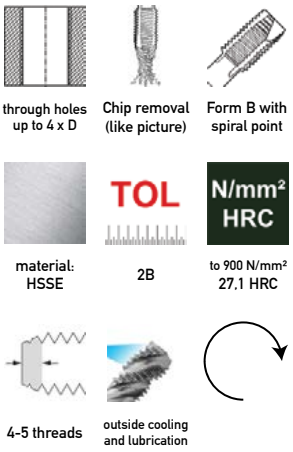
| UNC | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **UNC No 1 x 64** | 1,85 | 2,5 | 32 | 10 | 2,1 | 1,50 | | 140301001 | |
| **UNC No 2 x 56** | 2,18 | 2,8 | 36 | 11 | 2,1 | 1,80 | | 140301002 | |
| **UNC No 3 x 48** | 2,52 | 2,8 | 36 | 11 | 2,1 | 2,10 | | 140301003 | |
| **UNC No 4 x 40** | 2,85 | 3,5 | 40 | 12 | 2,7 | 2,30 | | 140301004 | |
| **UNC No 5 x 40** | 3,18 | 3,5 | 40 | 12 | 2,7 | 2,60 | | 140301005 | |
| **UNC No 6 x 32** | 3,51 | 4,0 | 45 | 14 | 3,0 | 2,85 | | 140301006 | 140302001 |
| **UNC No 8 x 32** | 4,17 | 4,5 | 45 | 14 | 3,4 | 3,50 | | 140301007 | 140302002 |
| **UNC No 10 x 24** | 4,83 | 6,0 | 50 | 16 | 4,9 | 3,90 | | 140301008 | 140302003 |
| **UNC No 12 x 24** | 5,49 | 6,0 | 50 | 18 | 4,9 | 4,50 | | 140301009 | 140302004 |
| **UNC 1/4 x 20** | 6,35 | 6,0 | 50 | 19 | 4,9 | 5,20 | 140101001 | 140301010 | 140302005 |
| **UNC 5/16 x 18** | 7,94 | 6,0 | 56 | 22 | 4,9 | 6,60 | 140101002 | 140301011 | 140302006 |
| **UNC 3/8 x 16** | 9,53 | 7,0 | 70 | 24 | 5,5 | 8,00 | 140101003 | 140301012 | 140302007 |
| **UNC 7/16 x 14** | 11,11 | 8,0 | 70 | 24 | 6,2 | 9,40 | 140101004 | 140301013 | 140302008 |
| **UNC 1/2 x 13** | 12,70 | 9,0 | 75 | 29 | 7,0 | 10,80 | 140101005 | 140301014 | 140302009 |
| **UNC 9/16 x 12** | 14,29 | 11,0 | 80 | 30 | 9,0 | 12,20 | 140101006 | 140301015 | 140302010 |
| **UNC 5/8 x 11** | 15,88 | 12,0 | 80 | 32 | 9,0 | 13,50 | 140101007 | 140301016 | 140302011 |
| **UNC 3/4 x 10** | 19,05 | 14,0 | 95 | 40 | 11,0 | 16,50 | 140101008 | 140301017 | 140302012 |
| **UNC 7/8 x 9** | 22,23 | 18,0 | 100 | 40 | 14,5 | 19,50 | 140101009 | 140301018 | 140302013 |
| **UNC 1" x 8** | 25,40 | 18,0 | 110 | 50 | 14,5 | 22,25 | 140101010 | 140301019 | 140302014 |
| **UNC 1.1/8 x 7** | 28,58 | 22,0 | 132 | 56 | 18,0 | 25,00 | | 140301020 | |
| **UNC 1.1/4 x 7** | 31,75 | 22,0 | 132 | 56 | 18,0 | 28,25 | | 140301021 | |
| **UNC 1.3/8 x 6** | 34,93 | 28,0 | 150 | 63 | 22,0 | 30,75 | | 140301022 | |
| **UNC 1.1/2 x 6** | 38,10 | 32,0 | 150 | 63 | 24,0 | 34,00 | | 140301023 | |
| **UNC 1.5/8 x 5** | 41,28 | 32,0 | 160 | 70 | 24,0 | 37,10 | | 140301024 | |
| **UNC 1.3/4 x 5** | 44,45 | 36,0 | 160 | 70 | 29,0 | 39,50 | | 140301025 | |
| **UNC 1.7/8 x 4,5** | 47,63 | 36,0 | 190 | 80 | 29,0 | 42,00 | | 140301026 | |
| **UNC 2" x 4,5** | 50,80 | 40,0 | 190 | 80 | 32,0 | 45,00 | | 140301027 | |
| **UNC 2.1/4 x 4,5** | 57,15 | 45,0 | 220 | 80 | 35,0 | 51,50 | | 140301028 | |
| **UNC 2.1/2 x 4** | 63,50 | 50,0 | 220 | 80 | 39,0 | 57,25 | | 140301029 | |
| **UNC 2.3/4 x 4** | 69,85 | 50,0 | 240 | 80 | 39,0 | 63,50 | | 140301030 | |
| **UNC 3" x 4** | 73,20 | 50,0 | 260 | 80 | 39,0 | 70,00 | | 140301031 | |

# Machine Taps - Form B for through holes

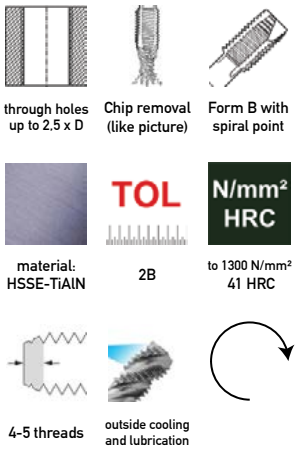
# UNC

**Unified coarse thread**
**ANSI B1.1**

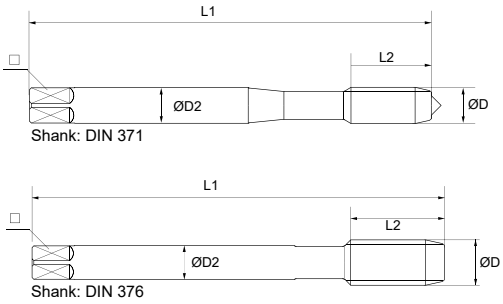
## Machine Tap
for general use

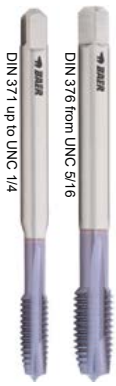



## Machine Tap
for stainless steels




Tap for machine use in through hole.
The spiral point pushes the chips ahead.





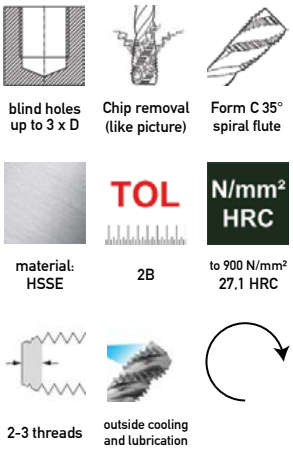

| UNC | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **DIN 371** | | | | | | | | |
| **UNC No 2 x 56** | 2,18 | 2,8 | 45 | 8 | 2,1 | 1,85 | | 140405001 |
| **UNC No 3 x 48** | 2,52 | 2,8 | 50 | 9 | 2,1 | 2,10 | | 140405002 |
| **UNC No 4 x 40** | 2,85 | 3,5 | 50 | 10 | 2,7 | 2,30 | 140401001 | 140405003 |
| **UNC No 5 x 40** | 3,18 | 3,5 | 56 | 11 | 2,7 | 2,60 | 140401002 | 140405004 |
| **UNC No 6 x 32** | 3,51 | 4,0 | 56 | 12 | 3,0 | 2,85 | 140401003 | 140405005 |
| **UNC No 8 x 32** | 4,17 | 4,5 | 63 | 13 | 3,4 | 3,50 | 140401004 | 140405006 |
| **UNC No 10 x 24** | 4,83 | 6,0 | 70 | 15 | 4,9 | 3,90 | 140401005 | 140405007 |
| **UNC No 12 x 24** | 5,49 | 6,0 | 70 | 16 | 4,9 | 4,50 | 140401006 | 140405008 |
| **UNC 1/4 x 20** | 6,35 | 7,0 | 80 | 17 | 5,5 | 5,20 | 140401007 | 140405009 |
| **UNC 5/16 x 18** | 7,94 | 8,0 | 90 | 20 | 6,2 | 6,60 | 140401008 | |
| **UNC 3/8 x 16** | 9,53 | 9,0 | 100 | 22 | 7,0 | 8,00 | 140401009 | |
| **DIN 376** | | | | | | | | |
| **UNC No 4 x 40** | 2,85 | 1,8 | 50 | 10 | - | 2,30 | 140401010 | |
| **UNC No 5 x 40** | 3,18 | 2,2 | 56 | 11 | 1,8 | 2,60 | 140401011 | |
| **UNC No 6 x 32** | 3,51 | 2,5 | 56 | 12 | 2,1 | 2,85 | 140401012 | |
| **UNC No 8 x 32** | 4,17 | 2,8 | 63 | 13 | 2,1 | 3,50 | 140401013 | |
| **UNC No 10 x 24** | 4,83 | 3,5 | 70 | 15 | 2,7 | 3,90 | 140401014 | |
| **UNC No 12 x 24** | 5,49 | 3,5 | 70 | 16 | 2,7 | 4,50 | 140401015 | |
| **UNC 1/4 x 20** | 6,35 | 4,5 | 80 | 17 | 3,4 | 5,20 | 140401016 | |
| **UNC 5/16 x 18** | 7,94 | 6,0 | 90 | 20 | 4,9 | 6,60 | 140401017 | 140405010 |
| **UNC 3/8 x 16** | 9,53 | 7,0 | 100 | 22 | 5,5 | 8,00 | 140401018 | 140405011 |
| **UNC 7/16 x 14** | 11,11 | 8,0 | 100 | 22 | 6,2 | 9,40 | 140401019 | 140405012 |
| **UNC 1/2 x 13** | 12,70 | 9,0 | 110 | 25 | 7,0 | 10,80 | 140401020 | 140405013 |
| **UNC 9/16 x 12** | 14,29 | 11,0 | 110 | 26 | 9,0 | 12,20 | 140401021 | 140405014 |
| **UNC 5/8 x 11** | 15,88 | 12,0 | 110 | 27 | 9,0 | 13,50 | 140401022 | 140405015 |
| **UNC 3/4 x 10** | 19,05 | 14,0 | 125 | 30 | 11,0 | 16,50 | 140401023 | 140405016 |
| **UNC 7/8 x 9** | 22,23 | 18,0 | 140 | 32 | 14,5 | 19,50 | 140401024 | 140405017 |
| **UNC 1" x 8** | 25,40 | 20,0 | 160 | 36 | 16,0 | 22,25 | 140401025 | 140405018 |
| **UNC 1.1/4 x 7** | 31,75 | 22,0 | 180 | 40 | 18,0 | 28,25 | 140401026 | |
| **UNC 1.1/2 x 6** | 38,10 | 32,0 | 200 | 50 | 24,0 | 34,00 | 140401027 | |
| **UNC 1.3/4 x 5** | 44,45 | 36,0 | 220 | 65 | 29,0 | 39,50 | 140401028 | |
| **UNC 2" x 4,5** | 50,80 | 40,0 | 250 | 70 | 32,0 | 45,00 | 140401029 | |

# Machine Taps - Form C (with spiral flutes) for blind holes

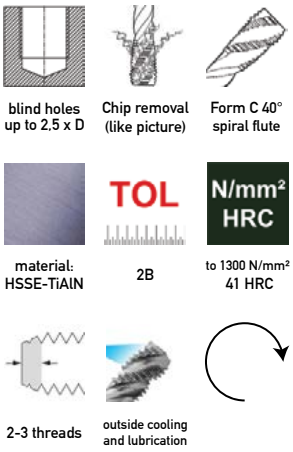
## UNC

**Unified coarse thread**
**ANSI B1.1**

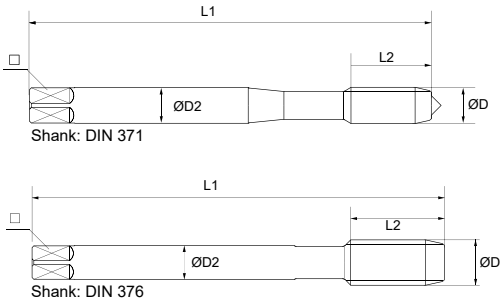
### Machine Tap
for general use

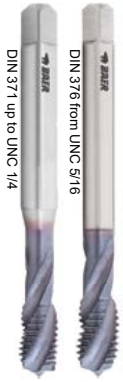



### Machine Tap
for stainless steels




Tap for machine use in blind holes.
The fast spiral flutes provide good chip removal from the blind hole.





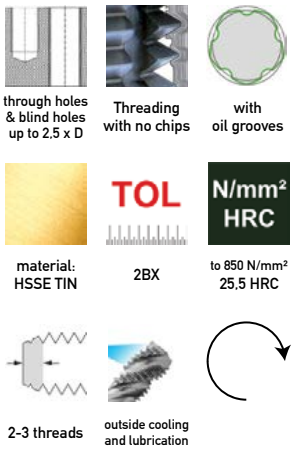

| UNC | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **DIN 371** | | | | | | | | |
| **UNC No 2 x 56** | 2,18 | 2,8 | 45 | 6 | 2,1 | 1,85 | | 140605001 |
| **UNC No 3 x 48** | 2,52 | 2,8 | 50 | 7 | 2,1 | 2,10 | | 140605002 |
| **UNC No 4 x 40** | 2,85 | 3,5 | 50 | 6 | 2,7 | 2,30 | 140601001 | 140605003 |
| **UNC No 5 x 40** | 3,18 | 3,5 | 56 | 7 | 2,7 | 2,60 | 140601002 | 140605004 |
| **UNC No 6 x 32** | 3,51 | 4,0 | 56 | 7 | 3,0 | 2,85 | 140601003 | 140605005 |
| **UNC No 8 x 32** | 4,17 | 4,5 | 63 | 8 | 3,4 | 3,50 | 140601004 | 140605006 |
| **UNC No 10 x 24** | 4,83 | 6,0 | 70 | 10 | 4,9 | 3,90 | 140601005 | 140605007 |
| **UNC No 12 x 24** | 5,49 | 6,0 | 70 | 10 | 4,9 | 4,50 | 140601006 | 140605008 |
| **UNC 1/4 x 20** | 6,35 | 7,0 | 80 | 13 | 5,5 | 5,20 | 140601007 | 140605009 |
| **UNC 5/16 x 18** | 7,94 | 8,0 | 90 | 14 | 6,2 | 6,60 | 140601008 | |
| **UNC 3/8 x 16** | 9,53 | 9,0 | 100 | 16 | 7,0 | 8,00 | 140601009 | |
| **DIN 376** | | | | | | | | |
| **UNC No 4 x 40** | 2,85 | 1,8 | 50 | 10 | - | 2,30 | 140601010 | |
| **UNC No 5 x 40** | 3,18 | 2,2 | 56 | 11 | 1,8 | 2,60 | 140601011 | |
| **UNC No 6 x 32** | 3,51 | 2,5 | 56 | 12 | 2,1 | 2,85 | 140601012 | |
| **UNC No 8 x 32** | 4,17 | 2,8 | 63 | 13 | 2,1 | 3,50 | 140601013 | |
| **UNC No 10 x 24** | 4,83 | 3,5 | 70 | 15 | 2,7 | 3,90 | 140601014 | |
| **UNC No 12 x 24** | 5,49 | 3,5 | 70 | 16 | 2,7 | 4,50 | 140601015 | |
| **UNC 1/4 x 20** | 6,35 | 4,5 | 80 | 17 | 3,4 | 5,20 | 140601016 | |
| **UNC 5/16 x 18** | 7,94 | 6,0 | 90 | 20 | 4,9 | 6,60 | 140601017 | 140605010 |
| **UNC 3/8 x 16** | 9,53 | 7,0 | 100 | 22 | 5,5 | 8,00 | 140601018 | 140605011 |
| **UNC 7/16 x 14** | 11,11 | 8,0 | 100 | 22 | 6,2 | 9,40 | 140601019 | 140605012 |
| **UNC 1/2 x 13** | 12,70 | 9,0 | 110 | 25 | 7,0 | 10,80 | 140601020 | 140605013 |
| **UNC 9/16 x 12** | 14,29 | 11,0 | 110 | 26 | 9,0 | 12,20 | 140601021 | 140605014 |
| **UNC 5/8 x 11** | 15,88 | 12,0 | 110 | 27 | 9,0 | 13,50 | 140601022 | 140605015 |
| **UNC 3/4 x 10** | 19,05 | 14,0 | 125 | 30 | 11,0 | 16,50 | 140601023 | 140605016 |
| **UNC 7/8 x 9** | 22,23 | 18,0 | 140 | 32 | 14,5 | 19,50 | 140601024 | 140605017 |
| **UNC 1" x 8** | 25,40 | 20,0 | 160 | 36 | 16,0 | 22,25 | 140601025 | 140605018 |
| **UNC 1.1/4 x 7** | 31,75 | 22,0 | 180 | 40 | 18,0 | 28,25 | 140601026 | |
| **UNC 1.1/2 x 6** | 38,10 | 32,0 | 200 | 50 | 24,0 | 34,00 | 140601027 | |
| **UNC 1.3/4 x 5** | 44,45 | 36,0 | 220 | 65 | 29,0 | 39,50 | 140601028 | |
| **UNC 2" x 4,5** | 50,80 | 40,0 | 250 | 70 | 32,0 | 45,00 | 140601029 | |

# UNiForm Machine Forming Taps

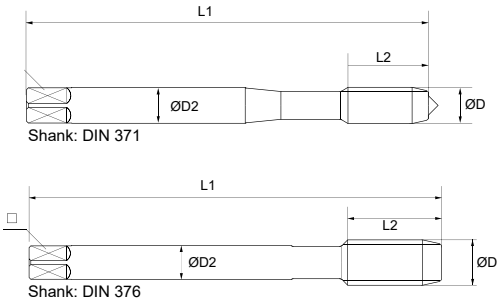
## UNC

**Unified coarse thread**
**ANSI B1.1**

### Machine Forming Taps
for universal use




Machine Forming Taps have following advantages:
- No chips
- Up to 20 times longer lifetime (compared to taps)
- Same forming tap for through and blind hole
- Wide range of materials can be processed
- Intersection of the thread is impossible
- Very high trueness
- Increased strength of the thread
- Higher surface quality
- Much higher cutting speed



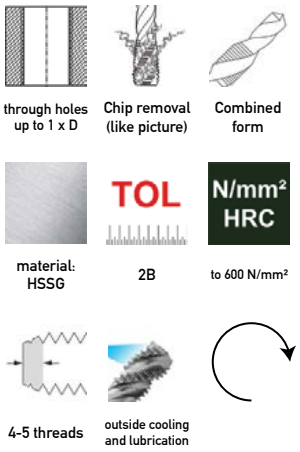
| UNC | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| **UNC No 4 x 40** | 2,85 | 3,5 | 56 | 11 | 2,7 | 2,55 | 141101001 |
| **UNC No 5 x 40** | 3,18 | 3,5 | 56 | 10 | 2,7 | 2,65 | 141101002 |
| **UNC No 6 x 32** | 3,51 | 4,0 | 56 | 12 | 3,0 | 3,15 | 141101003 |
| **UNC No 8 x 32** | 4,17 | 4,5 | 63 | 13 | 3,4 | 3,80 | 141101004 |
| **UNC No 10 x 24** | 4,83 | 6,0 | 70 | 15 | 4,9 | 4,35 | 141101005 |
| **UNC No 12 x 24** | 5,49 | 6,0 | 80 | 16 | 4,9 | 5,00 | 141101006 |
| **UNC 1/4 x 20** | 6,35 | 7,0 | 80 | 17 | 5,5 | 5,75 | 141101007 |
| **UNC 5/16 x 18** | 7,94 | 8,0 | 90 | 20 | 6,2 | 7,30 | 141101008 |
| **UNC 3/8 x 16** | 9,53 | 10,0 | 100 | 22 | 8,0 | 8,80 | 141101009 |
| **UNC 7/16 x 14** | 11,11 | 8,0 | 100 | 22 | 6,2 | 10,25 | 141101010 |
| **UNC 1/2 x 13** | 12,70 | 9,0 | 110 | 25 | 7,0 | 11,80 | 141101011 |
| **UNC 9/16 x 12** | 14,29 | 11,0 | 110 | 26 | 9,0 | 13,30 | 141101012 |
| **UNC 5/8 x 11** | 15,88 | 12,0 | 110 | 27 | 9,0 | 14,80 | 141101013 |
| **UNC 3/4 x 10** | 19,05 | 14,0 | 125 | 30 | 11,0 | 17,85 | 141101014 |

# 1/4“ Combined-Bit-Taps

# UNC

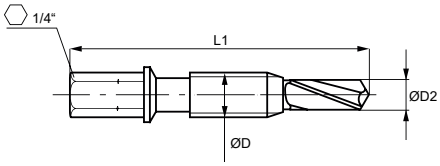
**Unified coarse thread**
**ANSI B1.1**

**Kombi-Bit-Taps**
for through holes




Efficient internal thread cutting with battery-powered screwdriver (min. 7,5 Volt). Core hole drilling and thread tapping in one fluent process.

**Application**:
non abrasive material up to 600 N/mm²
unalloyed and low alloyed steel

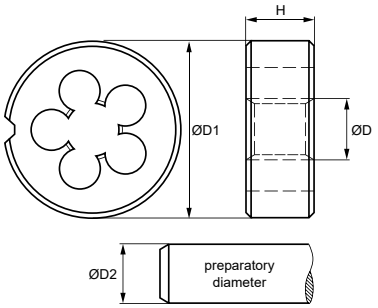


| UNC | D1 | D2 | L1 | ⬡ | No. |
|---|---|---|---|---|---|
| **UNC No 4 x 40** | 2,85 | 2,3 | 36 | 1/4" | 141301001 |
| **UNC No 5 x 40** | 3,18 | 2,6 | 36 | 1/4" | 141301002 |
| **UNC No 6 x 32** | 3,51 | 2,9 | 39 | 1/4" | 141301003 |
| **UNC No 8 x 32** | 4,17 | 3,5 | 39 | 1/4" | 141301004 |
| **UNC No 10 x 24** | 4,83 | 3,9 | 41 | 1/4" | 141301005 |
| **UNC No 12 x 24** | 5,49 | 4,5 | 41 | 1/4" | 141301006 |
| **UNC 1/4 x 20** | 6,35 | 5,2 | 44 | 1/4" | 141301007 |
| **UNC 5/16 x 18** | 7,94 | 6,6 | 50 | 1/4" | 141301008 |
| **UNC 3/8 x 16** | 9,53 | 8,0 | 59 | 1/4" | 141301009 |

# UNC

**Unified coarse thread**
**ANSI B1.1**

| Round Dies for general use | Round Dies for general use Left Hand | Round Dies for stainless steels |
|---|---|---|
| TOL | TOL | TOL |
| material: HSS | material: HSS | material: HSSE |
| 2A | 2A | 2A |
| Chamfer: 1,5 threads | Chamfer: 1,5 threads | Chamfer: 2 threads |
| right hand thread | left hand thread | right hand thread |



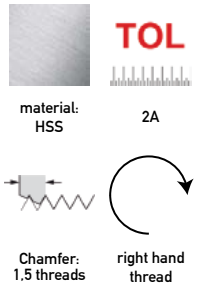
| UNC | D | D1 | H | D2 | No. | No. | No. |
|---|---|---|---|---|---|---|---|
| **UNC No 1 x 64** | 1,85 | 16 | 5 | 1,79 | 141401001 | | |
| **UNC No 2 x 56** | 2,18 | 16 | 5 | 2,12 | 141401002 | | |
| **UNC No 3 x 48** | 2,52 | 16 | 5 | 2,44 | 141401003 | | |
| **UNC No 4 x 40** | 2,85 | 20 | 5 | 2,76 | 141401004 | | 141405001 |
| **UNC No 5 x 40** | 3,18 | 20 | 5 | 3,09 | 141401005 | | |
| **UNC No 6 x 32** | 3,51 | 20 | 7 | 3,41 | 141401006 | 141402001 | 141405002 |
| **UNC No 8 x 32** | 4,17 | 20 | 7 | 4,07 | 141401007 | 141402002 | 141405003 |
| **UNC No 10 x 24** | 4,83 | 20 | 7 | 4,71 | 141401008 | 141402003 | |
| **UNC No 12 x 24** | 5,49 | 20 | 7 | 5,37 | 141401009 | | |
| **UNC 1/4 x 20** | 6,35 | 20 | 7 | 6,22 | 141401010 | 141402004 | 141405004 |
| **UNC 5/16 x 18** | 7,94 | 25 | 9 | 7,80 | 141401011 | 141402005 | 141405005 |
| **UNC 3/8 x 16** | 9,53 | 30 | 11 | 9,37 | 141401012 | 141402006 | 141405006 |
| **UNC 7/16 x 14** | 11,11 | 30 | 11 | 10,95 | 141401013 | 141402007 | |
| **UNC 1/2 x 13** | 12,70 | 38 | 14 | 12,52 | 141401014 | 141402008 | |
| **UNC 9/16 x 12** | 14,29 | 38 | 14 | 14,10 | 141401015 | 141402009 | |
| **UNC 5/8 x 11** | 15,88 | 45 | 18 | 15,68 | 141401016 | 141402010 | |
| **UNC 3/4 x 10** | 19,05 | 45 | 18 | 18,84 | 141401017 | 141402011 | |
| **UNC 7/8 x 9** | 22,23 | 55 | 22 | 22,00 | 141401018 | 141402012 | |
| **UNC 1" x 8** | 25,40 | 55 | 22 | 25,16 | 141401019 | 141402013 | |
| **UNC 1.1/8 x 7** | 28,58 | 65 | 25 | 28,31 | 141401020 | | |
| **UNC 1.1/4 x 7** | 31,75 | 65 | 25 | 31,49 | 141401021 | | |
| **UNC 1.3/8 x 6** | 34,93 | 65 | 25 | 34,63 | 141401022 | | |
| **UNC 1.1/2 x 6** | 38,10 | 65 | 25 | 37,80 | 141401023 | | |
| **UNC 1.1/2 x 6** | 38,10 | 75 | 30 | 37,80 | 141401024 | | |
| **UNC 1.5/8 x 5** | 41,28 | 75 | 30 | 40,95 | 141401025 | | |
| **UNC 1.3/4 x 5** | 44,45 | 90 | 36 | 44,12 | 141401026 | | |
| **UNC 1.7/8 x 4,5** | 47,63 | 90 | 36 | 47,30 | 141401027 | | |
| **UNC 2" x 4,5** | 50,80 | 90 | 36 | 50,45 | 141401028 | | |

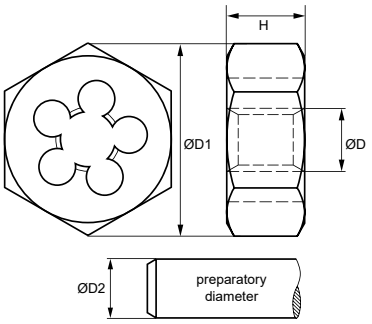
# Hexagon Die Nuts

# UNC

**Unified coarse thread**
**ANSI B1.1**

**Hexagon Die Nuts**
for general use



| UNC | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **UNC 1/4 x 20** | 6,35 | 19 | 7 | 6,22 | 141501001 |
| **UNC 5/16 x 18** | 7,94 | 22 | 9 | 7,80 | 141501002 |
| **UNC 3/8 x 16** | 9,53 | 27 | 11 | 9,37 | 141501003 |
| **UNC 7/16 x 14** | 11,11 | 27 | 11 | 10,95 | 141501004 |
| **UNC 1/2 x 13** | 12,70 | 36 | 14 | 12,52 | 141501005 |
| **UNC 9/16 x 12** | 14,29 | 36 | 14 | 14,10 | 141501006 |
| **UNC 5/8 x 11** | 15,88 | 41 | 18 | 15,68 | 141501007 |
| **UNC 3/4 x 10** | 19,05 | 41 | 18 | 18,84 | 141501008 |
| **UNC 7/8 x 9** | 22,23 | 50 | 22 | 22,00 | 141501009 |
| **UNC 1" x 8** | 25,40 | 50 | 22 | 25,16 | 141501010 |
| **UNC 1.1/8 x 7** | 28,58 | 60 | 25 | 28,31 | 141501011 |
| **UNC 1.1/4 x 7** | 31,75 | 60 | 25 | 31,49 | 141501012 |
| **UNC 1.3/8 x 6** | 34,93 | 60 | 25 | 34,63 | 141501013 |
| **UNC 1.1/2 x 6** | 38,10 | 70 | 30 | 37,80 | 141501014 |

# Thread Cutting Kits with Taps, Dies and Tools

# UNF

**Unified fine thread**
**ANSI B1.1**

## BAER Hand-Tap Sets, Round Dies and Tools Sets

**(example picture)**

### BAER Set UNF 1/4“ - 1/2“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (2 parts)** | UNF 1/4 x 28 \| UNF 5/16 x 24 \| UNF 3/8 x 24 \| UNF 7/16 x 20 \| UNF 1/2 x 20 | Item No.: 264806004 |
| **BAER HSS Round Dies** | UNF 1/4 x 28 \| UNF 5/16 x 24 \| UNF 3/8 x 24 \| UNF 7/16 x 20 \| UNF 1/2 x 20 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 4-12 \| 5/32-1/2 \| G 1/8 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 10 | |
| **Screw extractor** | | |

### BAER Set UNF 1/4“ - 3/4“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (2 parts)** | UNF 1/4 x 28 \| UNF 5/16 x 24 \| UNF 3/8 x 24 \| UNF 7/16 x 20 \| UNF 1/2 x 20 \| UNF 5/8 x 18 \| UNF 3/4 x 16 | Item No.: 264806104 |
| **BAER HSS Round Dies** | UNF 1/4 x 28 \| UNF 5/16 x 24 \| UNF 3/8 x 24 \| UNF 7/16 x 20 \| UNF 1/2 x 20 \| UNF 5/8 x 18 \| UNF 3/4 x 16 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 5-20 \| 7/32-3/4“ \| G 1/8-1/2 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 10 \| 45 x 14 | |
| **Screw extractor** | | |

### BAER Set UNF 1/4“ - 1“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (2 parts)** | UNF 1/4 x 28 \| UNF 5/16 x 24 \| UNF 3/8 x 24 \| UNF 7/16 x 20 \| UNF 1/2 x 20 \| UNF 5/8 x 18 \| UNF 3/4 x 16 \| UNF 7/8 x 14<br>UNF 1“ x 12 | Item No.: 264806304 |
| **BAER HSS Round Dies** | UNF 1/4 x 28 \| UNF 5/16 x 24 \| UNF 3/8 x 24 \| UNF 7/16 x 20 \| UNF 1/2 x 20 \| UNF 5/8 x 18 \| UNF 3/4 x 16 \| UNF 7/8 x 14<br>UNF 1“ x 12 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 11-27 \| 7/16-1“ \| G 1/4-3/4 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 10 \| 45 x 14 \| 55 x 16 | |
| **Screw extractor** | | |

### BAER Set UNC & UNF 1/4“ - 3/4“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts) UNC**<br>**BAER HSSG Hand Tap Sets (2 parts) UNF** | UNC 1/4 \| UNC 5/16 \| UNC 3/8 \| UNC 7/16 \| UNC 1/2 \| UNC 5/8 \| UNC 3/4<br>UNF 1/4 \| UNF 5/16 \| UNF 3/8 \| UNF 7/16 \| UNF 1/2 \| UNF 5/8 \| UNF 3/4 | Item No.: 2648066203 |
| **BAER HSS Round Dies UNC**<br>**BAER HSS Round Dies UNF** | UNC 1/4 \| UNC 5/16 \| UNC 3/8 \| UNC 7/16 \| UNC 1/2 \| UNC 5/8 \| UNC 3/4<br>UNF 1/4 \| UNF 5/16 \| UNF 3/8 \| UNF 7/16 \| UNF 1/2 \| UNF 5/8 \| UNF 3/4 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 5-20 \| 7/32-3/4“ \| G 1/8-1/2 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 \| 45 x 18 | |
| **Screw extractor** | | |

# Thread Cutting Kits with Taps and Dies

# UNF

**Unified fine thread**
**ANSI B1.1**

## BAER Short Machine Taps und Round Dies Sets UNF 1/4“ - 1/2“

**(example picture)**

**BAER Set UNF 1/4“ - 1/2“**
**HSSG Short Machine Taps & Drill bits for core holes**
**HSS Round Dies**

| | | |
|---|---|---|
| **BAER HSSG Short Machine Tap Form D for through hole & blind hole (up to 4 x D)** | UNF 1/4 x 28 \| UNF 5/16 x 24 \| UNF 3/8 x 24 \| UNF 7/16 x 20 \| UNF 1/2 x 20 | Item No.: BES3 |
| **BAER HSSG Drill bits for core holes** | 5,5 mm \| 6,9 mm \| 8,5 mm \| 9,9 mm \| 11,5 mm | |
| **BAER HSS Round Dies** | UNF 1/4 x 28 \| UNF 5/16 x 24 \| UNF 3/8 x 24 \| UNF 7/16 x 20 \| UNF 1/2 x 20 | |

# Short Machine Taps and Hand Tap Sets

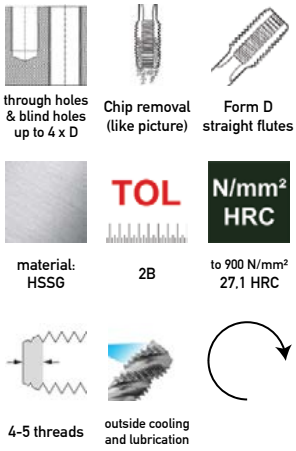
## UNF

**Unified fine thread**
**ANSI B1.1**

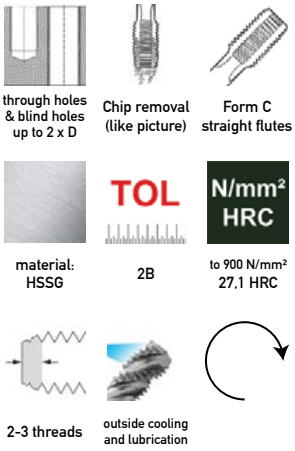
Efficient internal thread cutting.
The short structural type makes that tap usable by hand. The Short-Machine-Tap is also usable by machine.

A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

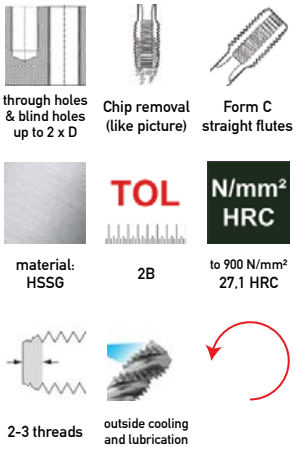
### Short Machine Taps
Form D for through holes and blind holes

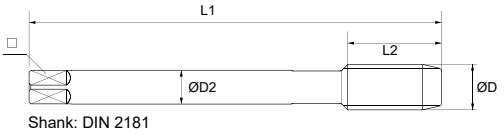



### Hand Tap Sets
for general use




### Hand Tap Sets
for general use — Left Hand



Shank: DIN 2181

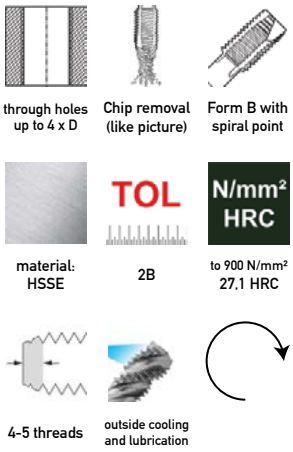
| UNF | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **UNF No 0 x 80** | 1,52 | 2,5 | 28 | 8 | 2,1 | 1,30 | | 150301001 | |
| **UNF No 1 x 72** | 1,85 | 2,8 | 32 | 9 | 2,1 | 1,60 | | 150301002 | |
| **UNF No 2 x 64** | 2,18 | 2,8 | 32 | 10 | 2,1 | 1,90 | | 150301003 | |
| **UNF No 3 x 56** | 2,52 | 2,8 | 32 | 10 | 2,1 | 2,10 | | 150301004 | |
| **UNF No 4 x 48** | 2,85 | 3,5 | 36 | 11 | 2,7 | 2,40 | | 150301005 | |
| **UNF No 5 x 44** | 3,18 | 3,5 | 36 | 11 | 2,7 | 2,70 | | 150301006 | |
| **UNF No 6 x 40** | 3,51 | 4,5 | 40 | 12 | 3,4 | 3,00 | | 150301007 | |
| **UNF No 8 x 36** | 4,17 | 4,5 | 40 | 12 | 3,4 | 3,50 | | 150301008 | |
| **UNF No 10 x 32** | 4,83 | 6,0 | 45 | 14 | 4,9 | 4,10 | | 150301009 | 150302001 |
| **UNF No 12 x 28** | 5,49 | 6,0 | 50 | 14 | 4,9 | 4,70 | | 150301010 | |
| **UNF 1/4 x 28** | 6,35 | 6,0 | 50 | 18 | 4,9 | 5,50 | 150101001 | 150301011 | 150302002 |
| **UNF 5/16 x 24** | 7,94 | 6,0 | 56 | 22 | 4,9 | 6,90 | 150101002 | 150301012 | 150302003 |
| **UNF 3/8 x 24** | 9,53 | 7,0 | 63 | 22 | 5,5 | 8,50 | 150101003 | 150301013 | 150302004 |
| **UNF 7/16 x 20** | 11,11 | 8,0 | 63 | 22 | 6,2 | 9,90 | 150101004 | 150301014 | 150302005 |
| **UNF 1/2 x 20** | 12,70 | 9,0 | 75 | 24 | 7,0 | 11,50 | 150101005 | 150301015 | 150302006 |
| **UNF 9/16 x 18** | 14,29 | 11,0 | 80 | 28 | 9,0 | 12,90 | 150101006 | 150301016 | 150302007 |
| **UNF 5/8 x 18** | 15,88 | 12,0 | 80 | 28 | 9,0 | 14,50 | 150101007 | 150301017 | 150302008 |
| **UNF 3/4 x 16** | 19,05 | 14,0 | 95 | 32 | 11,0 | 17,50 | 150101008 | 150301018 | 150302009 |
| **UNF 7/8 x 14** | 22,23 | 18,0 | 100 | 36 | 14,5 | 20,25 | 150101009 | 150301019 | 150302010 |
| **UNF 1" x 12** | 25,40 | 18,0 | 110 | 40 | 14,5 | 23,25 | 150101010 | 150301020 | 150302011 |
| **UNF 1" x 14** | 25,40 | 18,0 | 110 | 40 | 14,5 | 23,30 | | 150301021 | |
| **UNF 1.1/8 x 12** | 28,58 | 22,0 | 110 | 50 | 18,0 | 26,50 | | 150301022 | |
| **UNF 1.1/4 x 12** | 31,75 | 22,0 | 132 | 56 | 18,0 | 29,50 | | 150301023 | |
| **UNF 1.3/8 x 12** | 34,93 | 28,0 | 132 | 56 | 22,0 | 32,50 | | 150301024 | |
| **UNF 1.1/2 x 12** | 38,10 | 32,0 | 150 | 63 | 24,0 | 36,00 | | 150301025 | |

# Machine Taps - Form B for through holes

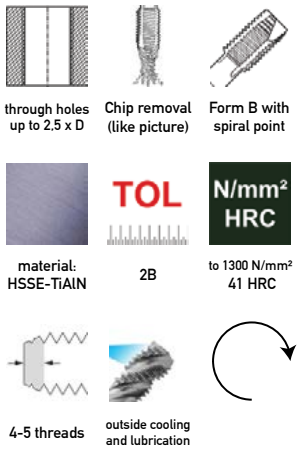
## UNF

**Unified fine thread**
**ANSI B1.1**

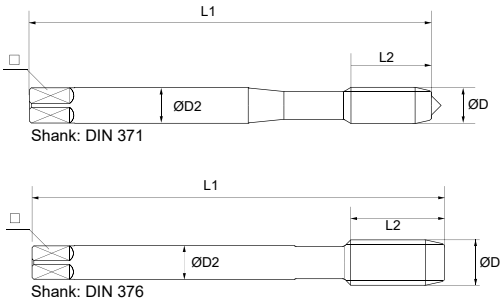
### Machine Tap
for general use




### Machine Tap
for stainless steels




Tap for machine use in through hole.
The spiral point pushes the chips ahead.



| UNF | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **UNF No 3 x 56** | 2,52 | 2,8 | 50 | 9 | 2,1 | 2,10 | | 150405001 |
| **UNF No 4 x 48** | 2,85 | 3,5 | 50 | 10 | 2,7 | 2,40 | 150401001 | 150405002 |
| **UNF No 5 x 44** | 3,18 | 3,5 | 56 | 11 | 2,7 | 2,70 | 150401002 | 150405003 |
| **UNF No 6 x 40** | 3,51 | 4,0 | 56 | 12 | 3,0 | 3,00 | 150401003 | 150405004 |
| **UNF No 8 x 36** | 4,17 | 4,5 | 63 | 13 | 3,4 | 3,50 | 150401004 | 150405005 |
| **UNF No 10 x 32** | 4,83 | 6,0 | 70 | 15 | 4,9 | 4,10 | 150401005 | 150405006 |
| **UNF No 12 x 28** | 5,49 | 6,0 | 70 | 16 | 4,9 | 4,70 | 150401006 | 150405007 |
| **UNF 1/4 x 28** | 6,35 | 7,0 | 80 | 17 | 5,5 | 5,50 | 150401007 | 150405008 |
| **UNF 5/16 x 24** | 7,94 | 8,0 | 90 | 17 | 6,2 | 6,90 | 150401008 | 150405009 |
| **UNF 3/8 x 24** | 9,53 | 9,0 | 100 | 18 | 7,0 | 8,50 | 150401009 | 150405010 |
| **UNF 7/16 x 20** | 11,11 | 8,0 | 100 | 22 | 6,2 | 9,90 | 150401010 | 150405011 |
| **UNF 1/2 x 20** | 12,70 | 9,0 | 100 | 22 | 7,0 | 11,50 | 150401011 | 150405012 |
| **UNF 9/16 x 18** | 14,29 | 11,0 | 100 | 22 | 9,0 | 12,90 | 150401012 | 150405013 |
| **UNF 5/8 x 18** | 15,88 | 12,0 | 100 | 22 | 9,0 | 14,50 | 150401013 | 150405014 |
| **UNF 3/4 x 16** | 19,05 | 14,0 | 110 | 25 | 11,0 | 17,50 | 150401014 | 150405015 |
| **UNF 7/8 x 14** | 22,23 | 18,0 | 140 | 26 | 14,5 | 20,25 | 150401015 | 150405016 |
| **UNF 1" x 12** | 25,40 | 20,0 | 150 | 28 | 16,0 | 23,25 | 150401016 | 150405017 |
| **UNF 1" x 14** | 25,40 | 20,0 | 150 | 28 | 16,0 | 23,30 | 150401017 | |
| **UNF 1.1/4 x 12** | 31,75 | 22,0 | 150 | 30 | 18,0 | 29,50 | 150401018 | |
| **UNF 1.1/2 x 12** | 38,10 | 32,0 | 170 | 33 | 24,0 | 36,00 | 150401019 | |

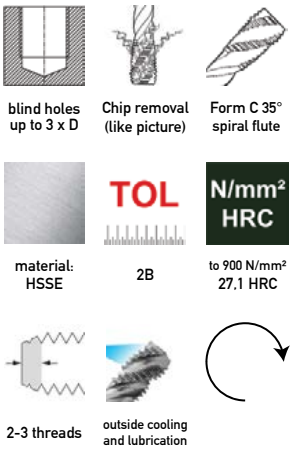
# Machine Taps - Form C (with spiral flutes) for blind holes

## UNF

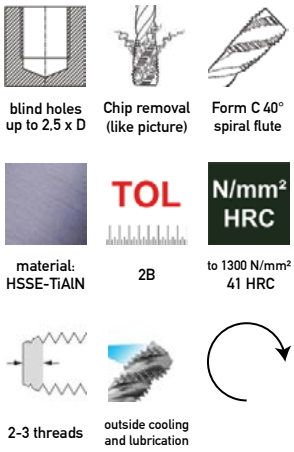
**Unified fine thread ANSI B1.1**

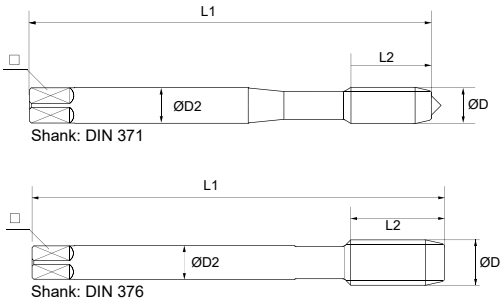
Tap for machine use in blind holes.
The fast spiral flutes provide good chip removal from the blind hole.

### Machine Tap
for general use




### Machine Tap
for stainless steels



| UNF | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **UNF No 3 x 56** | 2,52 | 2,8 | 50 | 6 | 2,1 | 2,10 | | 150605001 |
| **UNF No 4 x 48** | 2,85 | 3,5 | 50 | 6 | 2,7 | 2,40 | 150601001 | 150605002 |
| **UNF No 5 x 44** | 3,18 | 3,5 | 56 | 7 | 2,7 | 2,70 | 150601002 | 150605003 |
| **UNF No 6 x 40** | 3,51 | 4,0 | 56 | 7 | 3,0 | 3,00 | 150601003 | 150605004 |
| **UNF No 8 x 36** | 4,17 | 4,5 | 63 | 8 | 3,4 | 3,50 | 150601004 | 150605005 |
| **UNF No 10 x 32** | 4,83 | 6,0 | 70 | 10 | 4,9 | 4,10 | 150601005 | 150605006 |
| **UNF No 12 x 28** | 5,49 | 6,0 | 70 | 10 | 4,9 | 4,70 | 150601006 | 150605007 |
| **UNF 1/4 x 28** | 6,35 | 7,0 | 80 | 10 | 5,5 | 5,50 | 150601007 | 150605008 |
| **UNF 5/16 x 24** | 7,94 | 8,0 | 90 | 10 | 6,2 | 6,90 | 150601008 | 150605009 |
| **UNF 3/8 x 24** | 9,53 | 9,0 | 100 | 10 | 7,0 | 8,50 | 150601009 | 150605010 |
| **UNF 7/16 x 20** | 11,11 | 8,0 | 100 | 13 | 6,2 | 9,90 | 150601010 | 150605011 |
| **UNF 1/2 x 20** | 12,70 | 9,0 | 100 | 13 | 7,0 | 11,50 | 150601011 | 150605012 |
| **UNF 9/16 x 18** | 14,29 | 11,0 | 100 | 15 | 9,0 | 12,90 | 150601012 | 150605013 |
| **UNF 5/8 x 18** | 15,88 | 12,0 | 100 | 15 | 9,0 | 14,50 | 150601013 | 150605014 |
| **UNF 3/4 x 16** | 19,05 | 14,0 | 110 | 17 | 11,0 | 17,50 | 150601014 | 150605015 |
| **UNF 7/8 x 14** | 22,23 | 18,0 | 140 | 17 | 14,5 | 20,25 | 150601015 | 150605016 |
| **UNF 1" x 12** | 25,40 | 20,0 | 150 | 20 | 16,0 | 23,25 | 150601016 | 150605017 |
| **UNF 1" x 14** | 25,40 | 20,0 | 150 | 20 | 16,0 | 23,30 | 150601017 | |
| **UNF 1.1/4 x 12** | 31,75 | 22,0 | 150 | 22 | 18,0 | 29,50 | 150601018 | |
| **UNF 1.1/2 x 12** | 38,10 | 32,0 | 170 | 25 | 24,0 | 36,00 | 150601019 | |

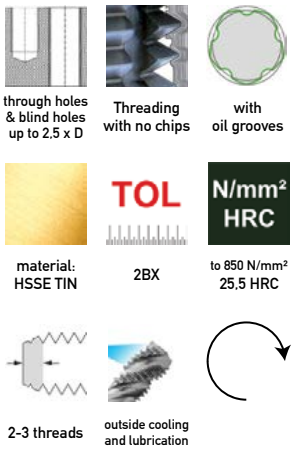
# UNiForm Machine Forming Taps

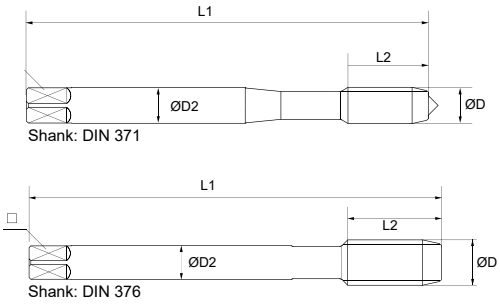
# UNF

**Unified fine thread**
**ANSI B1.1**

Machine Forming Taps have following advantages:
- No chips
- Up to 20 times longer lifetime (compared to taps)
- Same forming tap for through and blind hole
- Wide range of materials can be processed
- Intersection of the thread is impossible
- Very high trueness
- Increased strength of the thread
- Higher surface quality
- Much higher cutting speed

**Machine Forming Taps**
for universal use



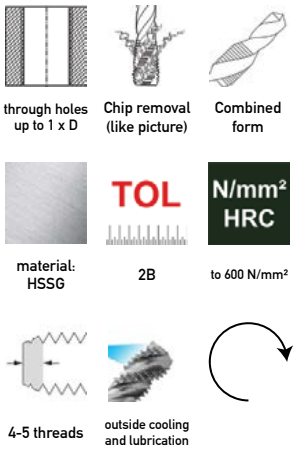
| UNF | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| **UNF No 2 x 64** | 2,18 | 2,8 | 45 | 7 | 2,1 | 2,02 | 151101001 |
| **UNF No 4 x 48** | 2,85 | 3,5 | 56 | 11 | 2,7 | 2,62 | 151101002 |
| **UNF No 6 x 40** | 3,51 | 4,0 | 56 | 12 | 3,0 | 3,22 | 151101003 |
| **UNF No 8 x 36** | 4,17 | 4,5 | 63 | 13 | 3,4 | 3,85 | 151101004 |
| **UNF No 10 x 32** | 4,83 | 6,0 | 70 | 15 | 4,9 | 4,45 | 151101005 |
| **UNF 1/4 x 28** | 6,35 | 7,0 | 80 | 17 | 5,5 | 5,95 | 151101006 |
| **UNF 5/16 x 24** | 7,94 | 8,0 | 90 | 17 | 6,2 | 7,45 | 151101007 |
| **UNF 3/8 x 24** | 9,53 | 10,0 | 90 | 18 | 8,0 | 9,05 | 151101008 |
| **UNF 7/16 x 20** | 11,11 | 8,0 | 100 | 22 | 6,2 | 10,55 | 151101009 |
| **UNF 1/2 x 20** | 12,70 | 9,0 | 100 | 22 | 7,0 | 12,15 | 151101010 |
| **UNF 5/8 x 18** | 15,88 | 12,0 | 100 | 22 | 9,0 | 15,25 | 151101011 |
| **UNF 3/4 x 16** | 19,05 | 14,0 | 110 | 25 | 11,0 | 18,35 | 151101012 |

# 1/4“ Combined-Bit-Taps

# UNF

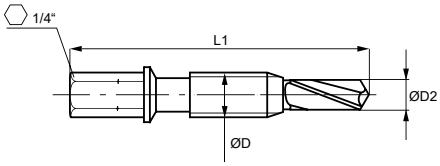
**Unified fine thread**
**ANSI B1.1**

**Kombi-Bit-Taps**
for through holes




Efficient internal thread cutting with battery-powered screwdriver (min. 7,5 Volt). Core hole drilling and thread tapping in one fluent process.

**Application**:
non abrasive material up to 600 N/mm²
unalloyed and low alloyed steel

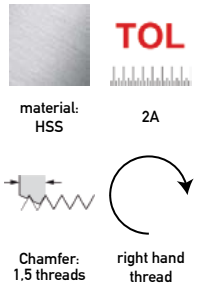


| UNF | D1 | D2 | L1 | ⬡ | No. |
|---|---|---|---|---|---|
| **UNF No 4 x 48** | 2,85 | 2,4 | 36 | 1/4" | 151301001 |
| **UNF No 5 x 44** | 3,18 | 2,7 | 36 | 1/4" | 151301002 |
| **UNF No 6 x 40** | 3,51 | 3,0 | 39 | 1/4" | 151301003 |
| **UNF No 8 x 36** | 4,17 | 3,5 | 39 | 1/4" | 151301004 |
| **UNF No 10 x 32** | 4,83 | 4,1 | 41 | 1/4" | 151301005 |
| **UNF No 12 x 28** | 5,49 | 4,7 | 41 | 1/4" | 151301006 |
| **UNF 1/4 x 28** | 6,35 | 5,5 | 44 | 1/4" | 151301007 |
| **UNF 5/16 x 24** | 7,94 | 6,9 | 50 | 1/4" | 151301008 |
| **UNF 3/8 x 24** | 9,53 | 8,5 | 59 | 1/4" | 151301009 |

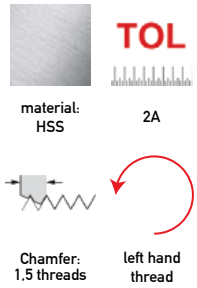
# UNF

**Unified fine thread**
**ANSI B1.1**

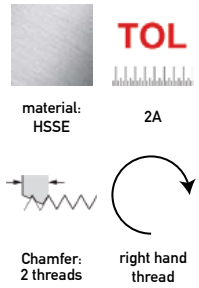
## Round Dies
for general use

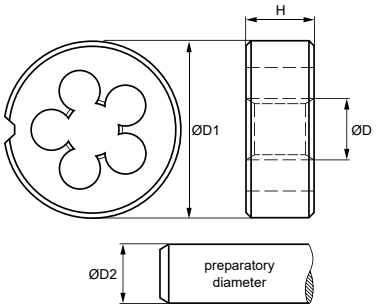



## Round Dies
for general use
Left Hand




## Round Dies
for stainless steels



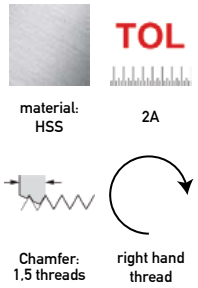
| UNF | D | D1 | H | D2 | No. | No. | No. |
|---|---|---|---|---|---|---|---|
| **UNF NR. 0 x 80** | 1,52 | 16 | 5 | 1,47 | 151401001 | | |
| **UNF NR. 1 x 72** | 1,85 | 16 | 5 | 1,79 | 151401002 | | |
| **UNF NR. 2 x 64** | 2,18 | 16 | 5 | 2,12 | 151401003 | | |
| **UNF NR. 3 x 56** | 2,52 | 16 | 5 | 2,44 | 151401004 | | |
| **UNF NR. 4 x 48** | 2,85 | 20 | 5 | 2,77 | 151401005 | | |
| **UNF NR. 5 x 44** | 3,18 | 20 | 5 | 3,10 | 151401006 | | |
| **UNF NR. 6 x 40** | 3,51 | 20 | 5 | 3,42 | 151401007 | | |
| **UNF NR. 8 x 36** | 4,17 | 20 | 7 | 4,08 | 151401008 | | |
| **UNF NR. 10 x 32** | 4,83 | 20 | 7 | 4,73 | 151401009 | 151402001 | 151405001 |
| **UNF NR. 12 x 28** | 5,49 | 20 | 7 | 5,38 | 151401010 | | |
| **UNF 1/4 x 28** | 6,35 | 20 | 7 | 6,24 | 151401011 | 151402002 | 151405002 |
| **UNF 5/16 x 24** | 7,94 | 25 | 9 | 7,82 | 151401012 | 151402003 | 151405003 |
| **UNF 3/8 x 24** | 9,53 | 30 | 11 | 9,41 | 151401013 | 151402004 | 151405004 |
| **UNF 7/16 x 20** | 11,11 | 30 | 11 | 10,98 | 151401014 | 151402005 | 151405005 |
| **UNF 1/2 x 20** | 12,70 | 38 | 10 | 12,56 | 151401015 | 151402006 | |
| **UNF 9/16 x 18** | 14,29 | 38 | 10 | 14,14 | 151401016 | 151402007 | |
| **UNF 5/8 x 18** | 15,88 | 45 | 14 | 15,73 | 151401017 | 151402008 | |
| **UNF 3/4 x 16** | 19,05 | 45 | 14 | 18,89 | 151401018 | 151402009 | |
| **UNF 7/8 x 14** | 22,23 | 55 | 16 | 22,05 | 151401019 | 151402010 | |
| **UNF 1" x 12** | 25,40 | 55 | 16 | 25,21 | 151401020 | 151402011 | |
| **UNF 1" x 14** | 25,40 | 55 | 16 | 25,23 | 151401021 | | |
| **UNF 1.1/8 x 12** | 28,58 | 65 | 18 | 28,38 | 151401022 | | |
| **UNF 1.1/4 x 12** | 31,75 | 65 | 18 | 31,55 | 151401023 | | |
| **UNF 1.3/8 x 12** | 34,93 | 65 | 18 | 34,73 | 151401024 | | |
| **UNF 1.1/2 x 12** | 38,10 | 65 | 18 | 37,90 | 151401025 | | |
| **UNF 1.1/2 x 12** | 38,10 | 75 | 20 | 37,90 | 151401026 | | |

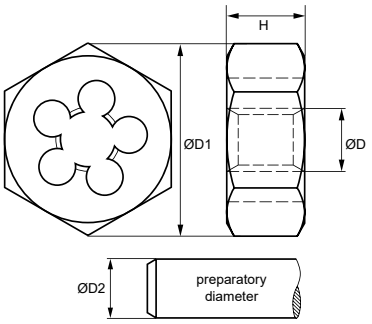
# Hexagon Die Nuts

# UNF

**Unified fine thread**
**ANSI B1.1**

**Hexagon Die Nuts**
for general use



| UNF | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **UNF 1/4 x 28** | 6,35 | 19 | 7 | 6,24 | 151501001 |
| **UNF 5/16 x 24** | 7,94 | 22 | 9 | 7,82 | 151501002 |
| **UNF 3/8 x 24** | 9,53 | 27 | 11 | 9,41 | 151501003 |
| **UNF 7/16 x 20** | 11,11 | 27 | 11 | 10,98 | 151501004 |
| **UNF 1/2 x 20** | 12,70 | 36 | 10 | 12,56 | 151501005 |
| **UNF 9/16 x 18** | 14,29 | 36 | 10 | 14,14 | 151501006 |
| **UNF 5/8 x 18** | 15,88 | 41 | 14 | 15,73 | 151501007 |
| **UNF 3/4 x 16** | 19,05 | 41 | 14 | 18,89 | 151501008 |
| **UNF 7/8 x 14** | 22,23 | 50 | 16 | 22,05 | 151501009 |
| **UNF 1" x 12** | 25,40 | 50 | 16 | 25,21 | 151501010 |
| **UNF 1.1/8 x 12** | 28,58 | 60 | 18 | 28,38 | 151501011 |
| **UNF 1.1/4 x 12** | 31,75 | 60 | 18 | 31,55 | 151501012 |
| **UNF 1.3/8 x 12** | 34,93 | 60 | 18 | 34,73 | 151501013 |
| **UNF 1.1/2 x 12** | 38,10 | 70 | 20 | 37,90 | 151501014 |

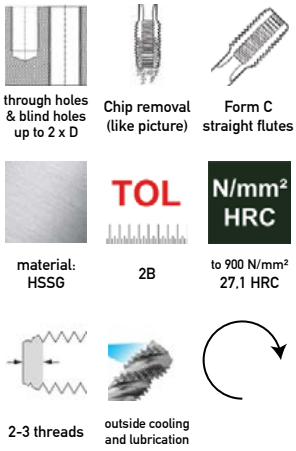
# UNS

**Unified thread with special threads per inch (TPI)**

Tap for machine use in through hole and blind hole. The short lead-in chamfer makes that tap universal in application. The flutes can hold the most part of the chips.

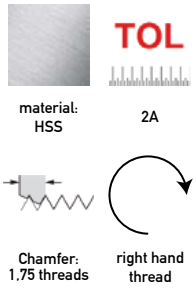
## Machine Taps

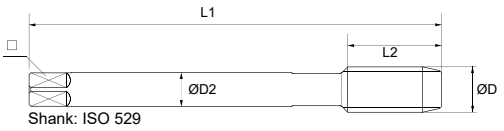
Form C for through holes and blind holes

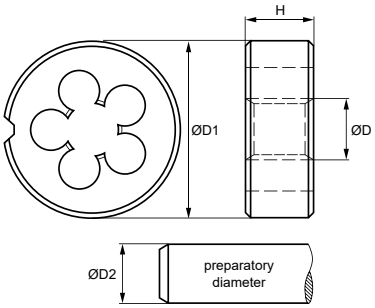



## Round Dies

for general use





| UNS | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| **UNS 1/4 x 24** | 6,35 | 6,3 | 66 | 19 | 5,0 | 5,40 | 160501001 |
| **UNS 1/4 x 36** | 6,35 | 6,3 | 66 | 19 | 5,0 | 5,70 | 160501002 |
| **UNS 1/4 x 40** | 6,35 | 6,3 | 66 | 19 | 5,0 | 5,75 | 160501003 |
| **UNS 3/8 x 27** | 9,53 | 10,0 | 80 | 24 | 8,0 | 8,35 | 160501004 |
| **UNS 7/16 x 24** | 11,11 | 8,0 | 85 | 25 | 6,3 | 10,10 | 160501005 |
| **UNS 1/2 x 24** | 12,70 | 9,0 | 89 | 29 | 7,1 | 11,75 | 160501006 |
| **UNS 5/8 x 27** | 15,88 | 12,5 | 102 | 32 | 10,0 | 14,70 | 160501007 |
| **UNS 3/4 x 24** | 19,05 | 14,0 | 112 | 37 | 11,2 | 18,00 | 160501008 |
| **UNS 7/8 x 18** | 22,23 | 16,0 | 118 | 38 | 12,5 | 21,00 | 160501009 |
| **UNS 1" x 14** | 25,40 | 18,0 | 130 | 45 | 14,0 | 23,75 | 160501010 |

| UNS | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **UNS 1/4 x 24** | 6,35 | 20 | 7 | 6,24 | 161401001 |
| **UNS 1/4 x 36** | 6,35 | 20 | 5 | 6,26 | 161401002 |
| **UNS 1/4 x 40** | 6,35 | 20 | 5 | 6,27 | 161401003 |
| **UNS 3/8 x 27** | 9,53 | 30 | 11 | 9,41 | 161401004 |
| **UNS 7/16 x 24** | 11,11 | 30 | 11 | 11,00 | 161401005 |
| **UNS 1/2 x 24** | 12,70 | 38 | 10 | 12,59 | 161401006 |
| **UNS 5/8 x 27** | 15,88 | 45 | 14 | 15,76 | 161401007 |
| **UNS 7/8 x 18** | 22,23 | 55 | 16 | 22,08 | 161401008 |
| **UNS 1" x 14** | 25,40 | 55 | 16 | 25,23 | 161401009 |

# Hand Tap Sets and Machine Taps

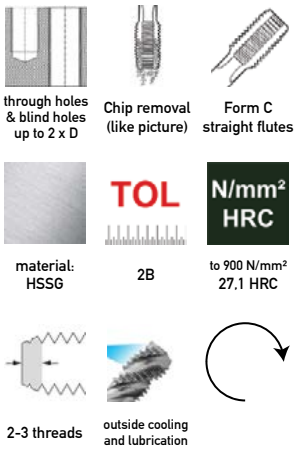
# UNEF

**Unified extra fine thread**
**ANSI B1.1**

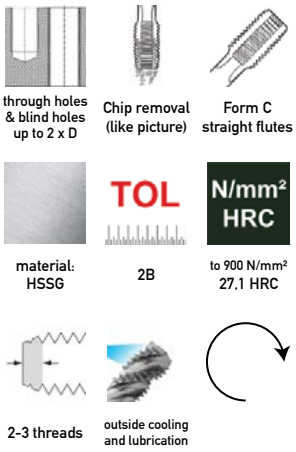
Efficient internal thread cutting.
The short structural type of the Hand Tap Sets makes that tap usable by hand. The Short-Machine-Tap is also usable by machine.

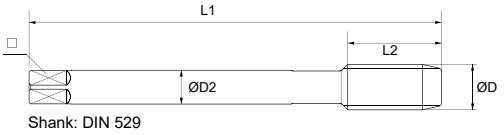
A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

## Hand Tap Sets
for general use




## Machine Taps
Form C for through holes and blind holes



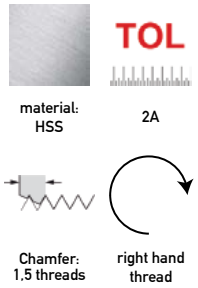
Shank: DIN 529

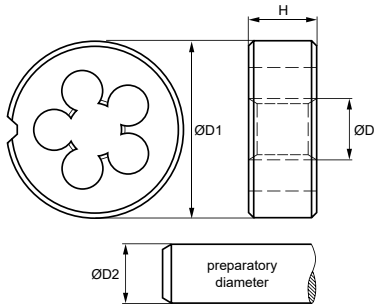
| UNEF | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **UNEF No 12 x 32** | 5,49 | 5,6 | 62 | 17 | 4,5 | 4,75 | | 170501001 |
| **UNEF 1/4 x 32** | 6,35 | 6,3 | 66 | 19 | 5,0 | 5,60 | 170313001 | 170501002 |
| **UNEF 5/16 x 32** | 7,94 | 8,0 | 72 | 22 | 6,3 | 7,20 | 170313002 | 170501003 |
| **UNEF 3/8 x 32** | 9,53 | 10,0 | 80 | 24 | 8,0 | 8,80 | 170313003 | 170501004 |
| **UNEF 7/16 x 28** | 11,11 | 8,0 | 85 | 25 | 6,3 | 10,25 | 170313004 | 170501005 |
| **UNEF 1/2 x 28** | 12,70 | 9,0 | 89 | 29 | 7,1 | 11,80 | 170313005 | 170501006 |
| **UNEF 9/16 x 24** | 14,29 | 11,2 | 95 | 30 | 9,0 | 13,30 | 170313006 | 170501007 |
| **UNEF 5/8 x 24** | 15,88 | 12,5 | 102 | 32 | 10,0 | 14,90 | 170313007 | 170501008 |
| **UNEF 11/16 x 24** | 17,46 | 14,0 | 112 | 37 | 11,2 | 16,50 | | 170501009 |
| **UNEF 3/4 x 20** | 19,05 | 14,0 | 112 | 37 | 11,2 | 17,75 | 170313008 | 170501010 |
| **UNEF 13/16 x 20** | 20,64 | 16,0 | 118 | 38 | 12,5 | 19,50 | | 170501011 |
| **UNEF 7/8 x 20** | 22,23 | 16,0 | 118 | 38 | 12,5 | 21,00 | 170313009 | 170501012 |
| **UNEF 15/16 x 20** | 23,81 | 18,0 | 130 | 45 | 14,0 | 22,50 | | 170501013 |
| **UNEF 1" x 20** | 25,40 | 16,0 | 130 | 45 | 14,0 | 24,25 | 170313010 | 170501014 |
| **UNEF 1.1/16 x 18** | 26,99 | 20,0 | 138 | 48 | 16,0 | 25,70 | | 170501015 |
| **UNEF 1.1/8 x 18** | 28,58 | 20,0 | 138 | 48 | 16,0 | 27,25 | | 170501016 |
| **UNEF 1.3/16 x 18** | 30,16 | 22,4 | 151 | 51 | 18,0 | 28,75 | | 170501017 |
| **UNEF 1.1/4 x 18** | 31,75 | 22,4 | 151 | 51 | 18,0 | 30,50 | | 170501018 |
| **UNEF 1.5/16 x 18** | 33,34 | 25,0 | 162 | 57 | 20,0 | 32,00 | | 170501019 |
| **UNEF 1.3/8 x 18** | 34,93 | 25,0 | 162 | 57 | 20,0 | 33,50 | | 170501020 |
| **UNEF 1.7/16 x 18** | 36,51 | 28,0 | 170 | 60 | 22,4 | 35,20 | | 170501021 |
| **UNEF 1.1/2 x 18** | 38,10 | 28,0 | 170 | 60 | 22,4 | 36,80 | | 170501022 |
| **UNEF 1.9/16 x18** | 39,69 | 28,0 | 170 | 60 | 22,4 | 38,40 | | 170501023 |
| **UNEF 1.5/8 x 18** | 41,28 | 28,0 | 170 | 60 | 22,4 | 40,00 | | 170501024 |
| **UNEF 1.11/16 x 18** | 42,86 | 31,5 | 187 | 67 | 25,0 | 41,50 | | 170501025 |
| **UNEF 1.3/4 x 18** | 44,45 | 31,5 | 187 | 67 | 25,0 | 43,00 | | 170501026 |
| **UNEF 2" x 18** | 50,80 | 35,5 | 200 | 70 | 28,0 | 49,50 | | 170501027 |

# UNEF

**Unified extra fine thread**
**ANSI B1.1**

**Round Dies**
for general use



| UNEF | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **UNEF No 12 x 32** | 5,49 | 20 | 7 | 5,39 | 171401001 |
| **UNEF 1/4 x 32** | 6,35 | 20 | 7 | 6,25 | 171401002 |
| **UNEF 5/16 x 32** | 7,94 | 25 | 9 | 7,84 | 171401003 |
| **UNEF 3/8 x 32** | 9,53 | 30 | 11 | 9,42 | 171401004 |
| **UNEF 7/16 x 28** | 11,11 | 30 | 11 | 11,00 | 171401005 |
| **UNEF 1/2 x 28** | 12,70 | 38 | 10 | 12,59 | 171401006 |
| **UNEF 9/16 x 24** | 14,29 | 38 | 10 | 14,17 | 171401007 |
| **UNEF 5/8 x 24** | 15,88 | 45 | 14 | 15,75 | 171401008 |
| **UNEF 11/16 x 24** | 17,46 | 45 | 14 | 17,33 | 171401009 |
| **UNEF 3/4 x 20** | 19,05 | 45 | 14 | 18,91 | 171401010 |
| **UNEF 13/16 x 20** | 20,64 | 55 | 16 | 20,50 | 171401011 |
| **UNEF 7/8 x 20** | 22,23 | 55 | 16 | 22,09 | 171401012 |
| **UNEF 15/16 x 20** | 23,81 | 55 | 16 | 23,67 | 171401013 |
| **UNEF 1" x 20** | 25,40 | 55 | 16 | 25,26 | 171401014 |
| **UNEF 1.1/16 x 18** | 26,99 | 65 | 18 | 26,84 | 171401015 |
| **UNEF 1.1/8 x 18** | 28,58 | 65 | 18 | 28,58 | 171401016 |
| **UNEF 1.3/16 x 18** | 30,23 | 65 | 18 | 30,16 | 171401017 |
| **UNEF 1.1/4 x 18** | 31,75 | 65 | 18 | 31,75 | 171401018 |
| **UNEF 1.5/16 x 18** | 33,34 | 65 | 18 | 33,34 | 171401019 |
| **UNEF 1.3/8 x 18** | 34,93 | 65 | 18 | 34,93 | 171401020 |
| **UNEF 1.7/16 x 18** | 36,51 | 75 | 20 | 36,51 | 171401021 |
| **UNEF 1.1/2 x 18** | 38,10 | 75 | 20 | 38,10 | 171401022 |

# Hand Tap Sets and Machine Taps

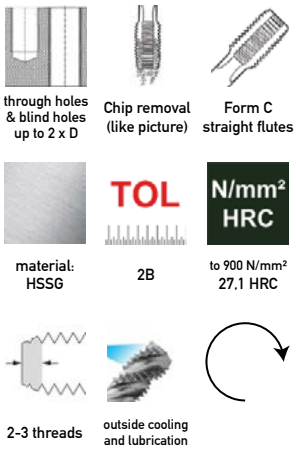
# 8-UN

**Unified thread series with 8-threads per inch (TPI)**

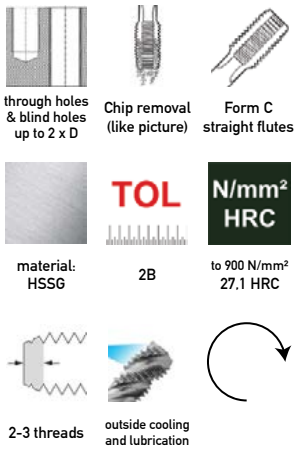
Efficient internal thread cutting.
The short structural type makes that tap usable by hand. The Short-Machine-Tap is also usable by machine.

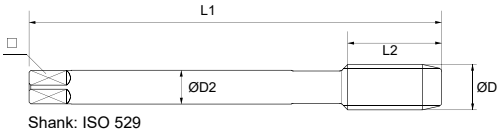
A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

## Hand Tap Sets
for general use




## Machine Taps
Form C for through holes and blind holes



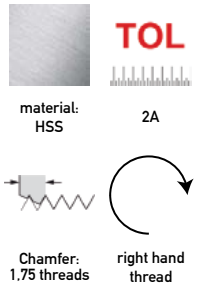
Shank: ISO 529

| 8-UN | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **UN 1.1/16 x 8** | 26,99 | 20,0 | 138 | 48 | 16,0 | 23,90 | 180301001 | 180501001 |
| **UN 1.1/8 x 8** | 28,58 | 20,0 | 138 | 48 | 16,0 | 25,50 | 180301002 | 180501002 |
| **UN 1.3/16 x 8** | 30,16 | 22,4 | 151 | 51 | 18,0 | 27,10 | 180301003 | 180501003 |
| **UN 1.1/4 x 8** | 31,75 | 22,4 | 151 | 51 | 18,0 | 28,75 | 180301004 | 180501004 |
| **UN 1.5/16 x 8** | 33,34 | 25,0 | 162 | 57 | 20,0 | 30,30 | 180301005 | 180501005 |
| **UN 1.3/8 x 8** | 34,93 | 25,0 | 162 | 57 | 20,0 | 31,75 | 180301006 | 180501006 |
| **UN 1.1/2 x 8** | 38,10 | 28,0 | 170 | 60 | 22,4 | 35,00 | 180301007 | 180501007 |
| **UN 1.5/8 x 8** | 41,28 | 28,0 | 170 | 60 | 22,4 | 38,00 | 180301008 | 180501008 |
| **UN 1.3/4 x 8** | 44,45 | 31,5 | 187 | 67 | 25,0 | 41,50 | 180301009 | 180501009 |
| **UN 1.7/8 x 8** | 47,63 | 31,5 | 187 | 67 | 25,0 | 44,50 | 180301010 | 180501010 |
| **UN 2" x 8** | 50,80 | 35,5 | 200 | 70 | 28,0 | 47,75 | 180301011 | 180501011 |
| **UN 2.1/8 x 8** | 53,98 | 35,5 | 200 | 70 | 28,0 | 50,90 | 180301012 | 180501012 |
| **UN 2.1/4 x 8** | 57,15 | 40,0 | 221 | 76 | 31,5 | 54,00 | 180301013 | 180501013 |
| **UN 2.1/2 x 8** | 63,50 | 40,0 | 224 | 79 | 31,5 | 60,40 | 180301014 | 180501014 |
| **UN 2.3/4 x 8** | 69,85 | 45,0 | 234 | 79 | 35,5 | 66,70 | 180301015 | 180501015 |
| **UN 3" x 8** | 76,20 | 50,0 | 258 | 83 | 40,0 | 73,10 | 180301016 | 180501016 |
| **UN 3.1/4 x 8** | 82,55 | 50,0 | 261 | 86 | 40,0 | 79,40 | 180301017 | 180501017 |
| **UN 3.1/2 x 8** | 88,90 | 50,0 | 261 | 86 | 40,0 | 85,80 | 180301018 | 180501018 |
| **UN 3.3/4 x 8** | 95,25 | 56,0 | 279 | 89 | 45,0 | 92,10 | 180301019 | 180501019 |
| **UN 4" x 8** | 101,60 | 56,0 | 279 | 89 | 45,0 | 98,50 | 180301020 | 180501020 |

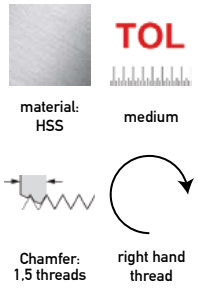
# 8-UN

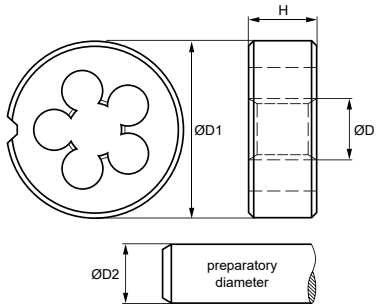
**Unified thread series with 8-threads per inch (TPI)**

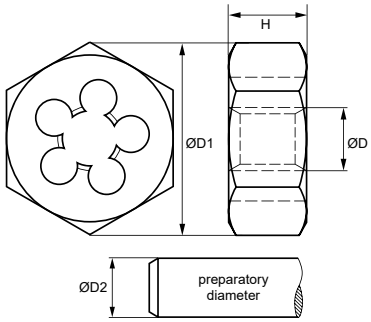
## Round Dies
for general use




## Hexagon Die Nuts
for general use





| 8-UN | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **UN 1.1/8 x 8** | 28,58 | 65 | 25 | 28,33 | 181401001 |
| **UN 1.1/4 x 8** | 31,75 | 65 | 25 | 31,51 | 181401002 |
| **UN 1.3/8 x 8** | 34,93 | 65 | 25 | 34,68 | 181401003 |
| **UN 1.1/2 x 8** | 38,10 | 75 | 20 | 37,85 | 181401004 |
| **UN 1.3/4 x 8** | 44,45 | 90 | 22 | 44,20 | 181401005 |
| **UN 2" x 8** | 50,80 | 90 | 22 | 50,55 | 181401006 |

| 8-UN | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **UN 1.1/8 x 8** | 28,58 | 60 | 25 | 28,33 | 181501001 |
| **UN 1.1/4 x 8** | 31,75 | 60 | 25 | 31,51 | 181501002 |
| **UN 1.3/8 x 8** | 34,93 | 60 | 25 | 34,68 | 181501003 |
| **UN 1.1/2 x 8** | 38,10 | 60 | 25 | 37,85 | 181501004 |
| **UN 1.5/8 x 8** | 41,28 | 70 | 30 | 41,03 | 181501005 |
| **UN 1.3/4 x 8** | 44,45 | 85 | 36 | 44,20 | 181501006 |
| **UN 1.7/8 x 8** | 47,63 | 85 | 22 | 47,38 | 181501007 |
| **UN 2" x 8** | 50,80 | 85 | 22 | 50,55 | 181501008 |
| **UN 2.1/8 x 8** | 53,98 | 85 | 22 | | 181501009 |
| **UN 2.1/4 x 8** | 57,15 | 100 | 22 | | 181501010 |
| **UN 2.1/2 x 8** | 63,50 | 115 | 22 | | 181501011 |

# Hand Tap Sets and Machine Taps

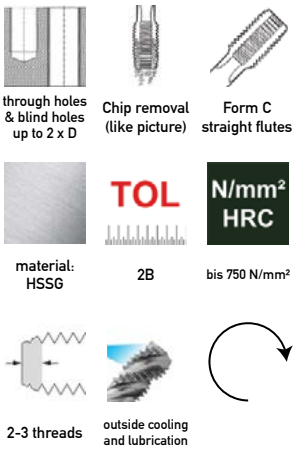
# 12-UN

**Unified thread series with 12-threads per inch (TPI)**

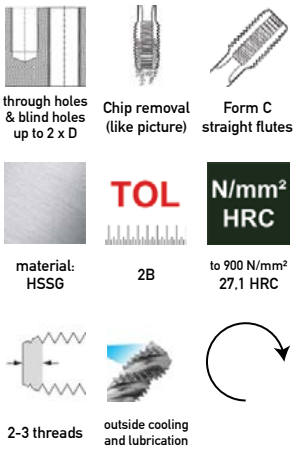
Efficient internal thread cutting.
The short structural type makes that tap usable by hand. The Short-Machine-Tap is also usable by machine.

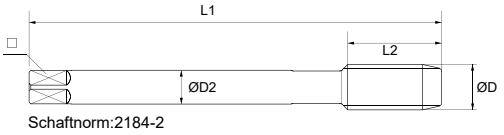
A Hand-Tap-Set includes 2-3 taps:
Taper Tap
(Intermediate Tap)
Finish Tap

## Hand Tap Sets
for general use




## Machine Taps
Form C for through holes and blind holes



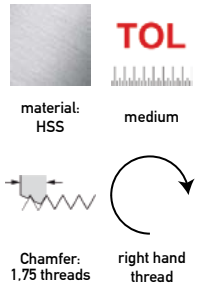



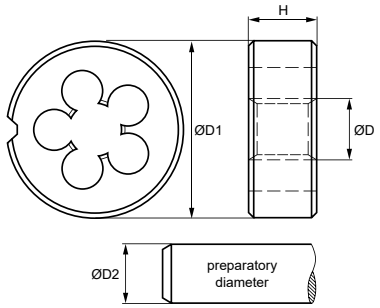
| 12-UN | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| UN 1/2 x 12 | 12,70 | 9,0 | 75 | 25 | 7,0 | 10,65 | 190301001 | |
| UN 5/8 x 12 | 15,88 | 12,0 | 80 | 25 | 9,0 | 13,80 | 190301002 | |
| UN 11/16 x 12 | 17,46 | 14,0 | 80 | 25 | 11,0 | 15,40 | 190301003 | |
| UN 3/4 x 12 | 19,05 | 14,0 | 80 | 25 | 11,0 | 17,00 | 190301004 | |
| UN 13/16 x 12 | 20,64 | 16,0 | 80 | 25 | 12,0 | 18,60 | 190301005 | |
| UN 7/8 x 12 | 22,23 | 18,0 | 80 | 25 | 14,5 | 20,20 | 190301006 | |
| UN 15/16 x 12 | 23,81 | 18,0 | 90 | 25 | 14,5 | 21,80 | 190301007 | |
| UN 1.1/16 x 12 | 26,99 | 20,0 | 90 | 28 | 16,0 | 24,90 | 190301008 | |
| UN 1.3/16 x 12 | 30,16 | 22,0 | 90 | 28 | 18,0 | 28,10 | 190301009 | |
| UN 1.5/16 x 12 | 33,34 | 28,0 | 125 | 32 | 22,0 | 31,30 | 190301010 | |
| UN 1.7/16 x 12 | 36,51 | 28,0 | 125 | 32 | 22,0 | 34,50 | 190301011 | |
| UN 1.5/8 x 12 | 41,28 | 32,0 | 125 | 32 | 24,0 | 39,20 | 190301012 | 190501001 |
| UN 1.3/4 x 12 | 44,45 | 36,0 | 125 | 32 | 29,0 | 42,40 | 190301013 | 190501002 |
| UN 1.7/8 x 12 | 47,63 | 36,0 | 140 | 32 | 29,0 | 45,60 | 190301014 | 190501003 |
| UN 2 x 12 | 50,80 | 40,0 | 140 | 32 | 32,0 | 48,75 | 190301015 | 190501004 |
| UN 2.1/8 x 12 | 53,98 | 35,5 | 200 | 70 | 28,0 | 51,90 | | 190501005 |
| UN 2.1/4 x 12 | 57,15 | 40,0 | 221 | 76 | 31,5 | 55,10 | | 190501006 |
| UN 2.1/2 x 12 | 63,50 | 40,0 | 224 | 79 | 31,5 | 61,50 | | 190501007 |
| UN 2.3/4 x 12 | 69,85 | 45,0 | 234 | 79 | 35,5 | 67,80 | | 190501008 |
| UN 3" x 12 | 76,20 | 50,0 | 258 | 83 | 40,0 | 74,20 | | 190501009 |
| UN 3.1/4 x 12 | 82,55 | 50,0 | 261 | 86 | 40,0 | 80,50 | | 190501010 |
| UN 3.1/2 x 12 | 88,90 | 50,0 | 261 | 86 | 40,0 | 86,90 | | 190501011 |
| UN 3.3/4 x 12 | 95,25 | 56,0 | 279 | 89 | 45,0 | 93,20 | | 190501012 |
| UN 4" x 12 | 101,60 | 56,0 | 279 | 89 | 45,0 | 99,60 | | 190501013 |

# 12-UN

**Unified thread series with 12-threads per inch (TPI)**

**Round Dies**
for general use



| 12-UN | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **UN 1.1/16 x 12** | 26,99 | 65 | 18 | 26,80 | 191401001 |
| **UN 1.5/16 x 12** | 33,34 | 65 | 18 | 33,15 | 191401002 |
| **UN 1.5/8 x 12** | 41,28 | 75 | 20 | 41,09 | 191401003 |
| **UN 1.3/4 x 12** | 44,45 | 90 | 22 | 44,26 | 191401004 |
| **UN 2" x 12** | 50,80 | 90 | 22 | 50,61 | 191401005 |

# Thread Cutting Kits with Taps, Dies and Tools

# BSW

**British standard BS 84**
**whitworth coarse thread**

## BAER Hand-Tap Sets, Round Dies and Tools Sets

**(example picture)**

### BAER Set BSW 1/8“ - 1/2“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | BSW 1/8 x 40 \| BSW 3/16 x 24 \| BSW 1/4 x 20 \| BSW 5/16 x 18 \| BSW 3/8 x 16 \| BSW 7/16 x 14 \| BSW 1/2 x 12 | Item No.: 264803010 |
| **BAER HSS Round Dies** | BSW 1/8 x 40 \| BSW 3/16 x 24 \| BSW 1/4 x 20 \| BSW 5/16 x 18 \| BSW 3/8 x 16 \| BSW 7/16 x 14 \| BSW 1/2 x 12 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 4-12 \| 5/32-1/2 \| G 1/8 | |
| **BAER Die Stocks - zinc die cast** | 20 x 5 \| 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 | |
| **Screw extractor** | | |

### BAER Set BSW 1/4“ - 1/2“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | BSW 1/4 x 20 \| BSW 5/16 x 18 \| BSW 3/8 x 16 \| BSW 7/16 x 14 \| BSW 1/2 x 12 | Item No.: 264803110 |
| **BAER HSS Round Dies** | BSW 1/4 x 20 \| BSW 5/16 x 18 \| BSW 3/8 x 16 \| BSW 7/16 x 14 \| BSW 1/2 x 12 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 4-12 \| 5/32-1/2 \| G 1/8 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 | |
| **Screw extractor** | | |

### BAER Set BSW 1/4“ - 3/4“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | BSW 1/4 x 20 \| BSW 5/16 x 18 \| BSW 3/8 x 16 \| BSW 7/16 x 14 \| BSW 1/2 x 12 \| BSW 5/8 x 11 \| BSW 3/4 x 10 | Item No.: 264803210 |
| **BAER HSS Round Dies** | BSW 1/4 x 20 \| BSW 5/16 x 18 \| BSW 3/8 x 16 \| BSW 7/16 x 14 \| BSW 1/2 x 12 \| BSW 5/8 x 11 \| BSW 3/4 x 10 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 5-20 \| 7/32-3/4“ \| G 1/8-1/2 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 \| 45 x 18 | |
| **Screw extractor** | | |

### BAER Set BSW 1/4“ - 1“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | BSW 1/4 x 20 \| BSW 5/16 x 18 \| BSW 3/8 x 16 \| BSW 7/16 x 14 \| BSW 1/2 x 12 \| BSW 5/8 x 11 \| BSW 3/4 x 10 \| BSW 7/8 x 9 BSW 1“ x 8 | Item No.: 264803410 |
| **BAER HSS Round Dies** | BSW 1/4 x 20 \| BSW 5/16 x 18 \| BSW 3/8 x 16 \| BSW 7/16 x 14 \| BSW 1/2 x 12 \| BSW 5/8 x 11 \| BSW 3/4 x 10 \| BSW 7/8 x 9 BSW 1“ x 8 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 11-27 \| 7/16-1“ \| G 1/4-3/4 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 \| 45 x 18 \| 55 x 22 | |
| **Screw extractor** | | |

### BAER Set BSW 1/4“ - 1.1/2“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts)** | BSW 1/4 x 20 \| BSW 5/16 x 18 \| BSW 3/8 x 16 \| BSW 7/16 x 14 \| BSW 1/2 x 12 \| BSW 5/8 x 11 \| BSW 3/4 x 10 \| BSW 7/8 x 9 BSW 1“ x 8 \| BSW 1.1/8“ x 7 \| BSW 1/1.4“ x 7 \| BSW 1.3/8“ x 6 \| BSW 1.1/2“ x 6 | Item No.: 264803510 |
| **BAER HSS Round Dies** | BSW 1/4 x 20 \| BSW 5/16 x 18 \| BSW 3/8 x 16 \| BSW 7/16 x 14 \| BSW 1/2 x 12 \| BSW 5/8 x 11 \| BSW 3/4 x 10 \| BSW 7/8 x 9 BSW 1“ x 8 \| BSW 1.1/8“ x 7 \| BSW 1/1.4“ x 7 \| BSW 1.3/8“ x 6 \| BSW 1.1/2“ x 6 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 5-20 \| 7/32-3/4 \| G 1/8-1/2 & M 13-32 \| 1/2-1.1/4“ \| G 1/4-1“ | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 \| 45 x 18 \| 55 x 22 \| 65 x 25 | |
| **Screw extractor** | | |

# Thread Cutting Kits with Taps and Dies

# BSW

**British standard BS 84**
**whitworth coarse thread**

## BAER Short Machine Taps und Round Dies Sets BSW 1/4“ - 1/2“

**(example picture)**

**BAER Set BSW 1/4“ - 1/2“**
**HSSG Short Machine Taps & Drill bits for core holes**
**HSS Round Dies**

| | | |
|---|---|---|
| **BAER HSSG Short Machine Tap Form D for through hole & blind hole (up to 4 x D)** | BSW 1/4 x 20 \| BSW 5/16 x 18 \| BSW 3/8 x 16 \| BSW 7/16 x 14 \| BSW 1/2 x 12 | Item No.: BES4 |
| **BAER HSSG Drill bits for core holes** | 5,1 mm \| 6,5 mm \| 7,9 mm \| 9,3 mm \| 10,5 mm | |
| **BAER HSS Round Dies** | BSW 1/4 x 20 \| BSW 5/16 x 18 \| BSW 3/8 x 16 \| BSW 7/16 x 14 \| BSW 1/2 x 12 | |

# Hand Tap Sets

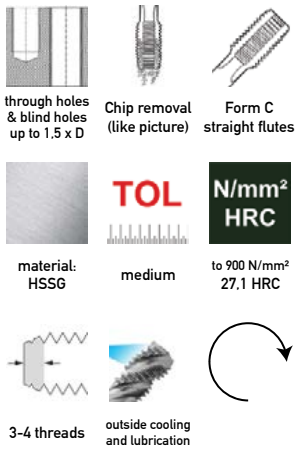
## BSW

**British standard BS 84 whitworth coarse thread**

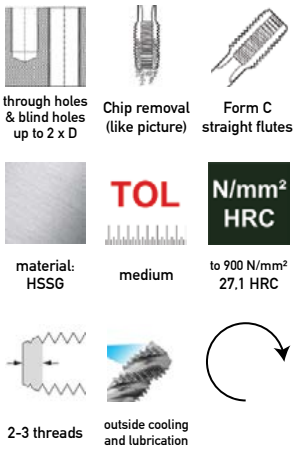
Efficient internal thread cutting.
The short structural type makes that tap usable by hand.

A Hand-Tap-Set includes 3 taps:
Taper Tap
Intermediate Tap
Finish Tap

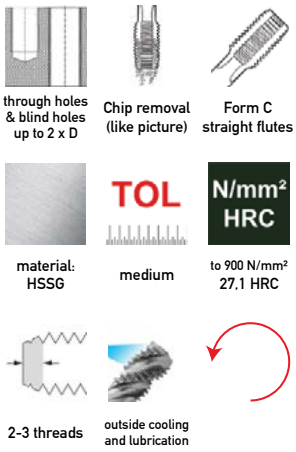
### Short Machine Taps
Form D for through holes and blind holes

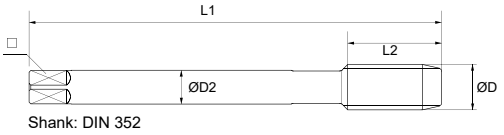



### Hand Tap Sets
for general use




### Hand Tap Sets
for general use — Left Hand



Shank: DIN 352

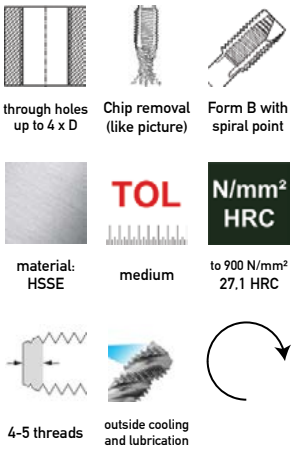
| BSW | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **BSW 1/16 x 60** | 1,59 | 2,5 | 36 | 10 | 2,1 | 1,20 | 210101001 | 210301001 | |
| **BSW 3/32 x 48** | 2,38 | 2,8 | 36 | 10 | 2,1 | 1,90 | 210101002 | 210301002 | |
| **BSW 1/8 x 40** | 3,18 | 3,5 | 40 | 12 | 2,7 | 2,60 | 210101003 | 210301003 | 210302001 |
| **BSW 5/32 x 32** | 3,97 | 4,5 | 45 | 14 | 3,4 | 3,20 | 210101004 | 210301004 | 210302002 |
| **BSW 3/16 x 24** | 4,76 | 6,0 | 50 | 18 | 4,9 | 3,80 | 210101005 | 210301005 | 210302003 |
| **BSW 7/32 x 24** | 5,56 | 6,0 | 50 | 18 | 4,9 | 4,60 | 210101006 | 210301006 | |
| **BSW 1/4 x 20** | 6,35 | 6,0 | 50 | 19 | 4,9 | 5,10 | 210101007 | 210301007 | 210302004 |
| **BSW 5/16 x 18** | 7,94 | 6,0 | 56 | 22 | 4,9 | 6,50 | 210101008 | 210301008 | 210302005 |
| **BSW 3/8 x 16** | 9,53 | 7,0 | 70 | 24 | 5,5 | 7,90 | 210101009 | 210301009 | 210302006 |
| **BSW 7/16 x 14** | 11,11 | 8,0 | 70 | 24 | 6,2 | 9,30 | 210101010 | 210301010 | 210302007 |
| **BSW 1/2 x 12** | 12,70 | 9,0 | 75 | 29 | 7,0 | 10,50 | 210101011 | 210301011 | 210302008 |
| **BSW 9/16 x 12** | 14,29 | 11,0 | 80 | 30 | 9,0 | 12,00 | 210101012 | 210301012 | 210302009 |
| **BSW 5/8 x 11** | 15,88 | 12,0 | 80 | 32 | 9,0 | 13,50 | 210101013 | 210301013 | 210302010 |
| **BSW 3/4 x 10** | 19,05 | 14,0 | 95 | 40 | 11,0 | 16,50 | 210101014 | 210301014 | 210302011 |
| **BSW 7/8 x 9** | 22,23 | 18,0 | 100 | 40 | 14,5 | 19,50 | 210101015 | 210301015 | 210302012 |
| **BSW 1" x 8** | 25,40 | 18,0 | 110 | 50 | 14,5 | 22,00 | 210101016 | 210301016 | 210302013 |
| **BSW 1.1/8 x 7** | 28,58 | 22,0 | 132 | 56 | 18,0 | 25,00 | 210101017 | 210301017 | |
| **BSW 1.1/4 x 7** | 31,75 | 22,0 | 132 | 56 | 18,0 | 28,00 | 210101018 | 210301018 | |
| **BSW 1.3/8 x 6** | 34,93 | 28,0 | 150 | 63 | 22,0 | 30,50 | 210101019 | 210301019 | |
| **BSW 1.1/2 x 6** | 38,10 | 32,0 | 150 | 63 | 24,0 | 33,50 | 210101020 | 210301020 | |
| **BSW 1.5/8 x 5** | 41,28 | 32,0 | 160 | 70 | 24,0 | 35,50 | 210101021 | 210301021 | |
| **BSW 1.3/4 x 5** | 44,45 | 36,0 | 160 | 70 | 29,0 | 39,00 | 210101022 | 210301022 | |
| **BSW 1.7/8 x 4,5** | 47,63 | 36,0 | 190 | 80 | 29,0 | 41,50 | 210101023 | 210301023 | |
| **BSW 2" x 4,5** | 50,80 | 40,0 | 190 | 80 | 32,0 | 44,50 | 210101024 | 210301024 | |
| **BSW 2.1/4 x 4** | 57,15 | 45,0 | 220 | 80 | 35,0 | 50,00 | 210101025 | 210301025 | |
| **BSW 2.1/2 x 4** | 63,50 | 50,0 | 220 | 80 | 39,0 | 56,50 | 210101026 | 210301026 | |
| **BSW 2.3/4 x 3,5** | 69,85 | 50,0 | 240 | 80 | 39,0 | 62,00 | 210101027 | 210301027 | |
| **BSW 3" x 3,5** | 76,20 | 50,0 | 260 | 80 | 39,0 | 68,00 | 210101028 | 210301028 | |

# Machine Taps for through holes und blind holes

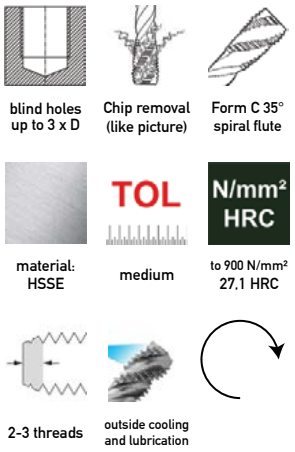
# BSW

**British standard BS 84 whitworth coarse thread**

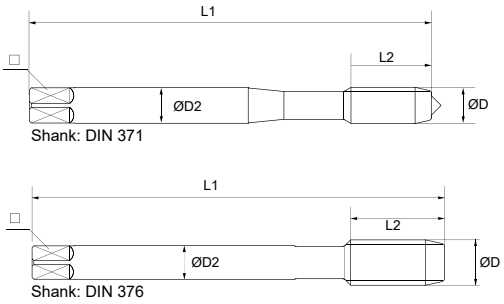
**Machine Tap**
for general use
**in through hole**




**Machine Tap**
for general use
**in blind hole**




Tap for machine use in through hole and blind hole.



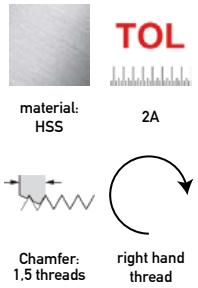
| BSW | D1 | D2 | L1 | L2 | □ | | No. | D1 | D2 | L1 | L2 | □ | No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DIN 371** | | | | | | | | **DIN 371** | | | | | |
| **BSW 1/8 x 40** | 3,18 | 3,5 | 56 | 11 | 2,7 | 2,60 | 210401001 | 3,18 | 3,5 | 56 | 7 | 2,7 | 210601001 |
| **BSW 5/32 x 32** | 3,97 | 4,5 | 63 | 13 | 3,4 | 3,20 | 210401002 | 3,97 | 4,5 | 63 | 7 | 3,4 | 210601002 |
| **BSW 3/16 x 24** | 4,76 | 6,0 | 70 | 15 | 4,9 | 3,80 | 210401003 | 4,76 | 6,0 | 70 | 10 | 4,9 | 210601003 |
| **BSW 1/4 x 20** | 6,35 | 7,0 | 80 | 17 | 5,5 | 5,10 | 210401004 | 6,35 | 7,0 | 80 | 13 | 5,5 | 210601004 |
| **BSW 5/16 x 18** | 7,94 | 8,0 | 90 | 20 | 6,2 | 6,50 | 210401005 | 7,94 | 8,0 | 90 | 14 | 6,2 | 210601005 |
| **BSW 3/8 x 16** | 9,53 | 9,0 | 100 | 22 | 7,0 | 7,90 | 210401006 | 9,53 | 9,0 | 100 | 16 | 7,0 | 210601006 |
| **BSW 7/16 x 14** | 11,11 | 11,0 | 100 | 22 | 9,0 | 9,30 | 210401007 | 11,11 | 11,0 | 100 | 17 | 9,0 | 210601007 |
| **BSW 1/2 x 12** | 12,70 | 12,0 | 110 | 25 | 9,0 | 10,50 | 210401008 | 12,70 | 12,0 | 110 | 20 | 9,0 | 210601008 |
| **DIN 376** | | | | | | | | **DIN 376** | | | | | |
| **BSW 1/4 x 20** | 6,35 | 4,5 | 80 | 17 | 3,4 | 5,10 | 210401009 | 6,35 | 4,5 | 80 | 13 | 3,4 | 210601009 |
| **BSW 5/16 x 18** | 7,94 | 6,0 | 90 | 20 | 4,9 | 6,50 | 210401010 | 7,94 | 6,0 | 90 | 14 | 4,9 | 210601010 |
| **BSW 3/8 x 16** | 9,53 | 7,0 | 100 | 22 | 5,5 | 7,90 | 210401011 | 9,53 | 7,0 | 100 | 16 | 5,5 | 210601011 |
| **BSW 7/16 x 14** | 11,11 | 8,0 | 100 | 22 | 6,2 | 9,30 | 210401012 | 11,11 | 8,0 | 100 | 17 | 6,2 | 210601012 |
| **BSW 1/2 x 12** | 12,70 | 9,0 | 110 | 25 | 7,0 | 10,50 | 210401013 | 12,70 | 9,0 | 110 | 20 | 7,0 | 210601013 |
| **BSW 9/16 x 12** | 14,29 | 11,0 | 110 | 26 | 9,0 | 12,00 | 210401014 | 14,29 | 11,0 | 110 | 20 | 9,0 | 210601014 |
| **BSW 5/8 x 11** | 15,88 | 12,0 | 110 | 27 | 9,0 | 13,50 | 210401015 | 15,88 | 12,0 | 110 | 22 | 9,0 | 210601015 |
| **BSW 3/4 x 10** | 19,05 | 14,0 | 125 | 30 | 11,0 | 16,50 | 210401016 | 19,05 | 14,0 | 125 | 25 | 11,0 | 210601016 |
| **BSW 7/8 x 9** | 22,23 | 18,0 | 140 | 32 | 14,5 | 19,50 | 210401017 | 22,23 | 18,0 | 140 | 27 | 14,5 | 210601017 |
| **BSW 1" x 8** | 25,40 | 20,0 | 160 | 36 | 16,0 | 22,00 | 210401018 | 25,40 | 20,0 | 160 | 30 | 16,0 | 210601018 |
| **BSW 1.1/4 x 7** | 31,75 | 22,0 | 180 | 40 | 18,0 | 28,00 | 210401019 | 31,75 | 22,0 | 180 | 35 | 18,0 | 210601019 |
| **BSW 1.3/8 x 6** | 34,93 | 28,0 | 200 | 50 | 22,0 | 30,50 | 210401020 | 34,93 | 28,0 | 200 | 40 | 22,0 | 210601020 |
| **BSW 1.1/2 x 6** | 38,10 | 32,0 | 200 | 50 | 24,0 | 33,50 | 210401021 | 38,10 | 32,0 | 200 | 40 | 24,0 | 210601021 |

# Round Dies

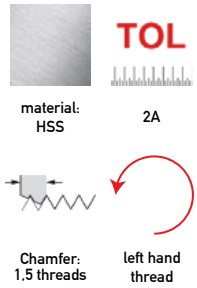
# BSW

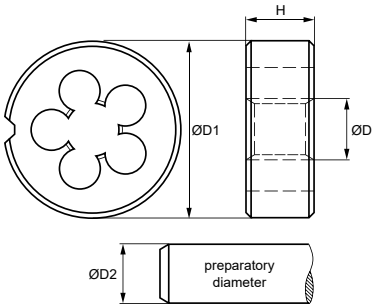
**British standard BS 84**
**whitworth coarse thread**

**Round Dies**
for general use




**Round Dies**
for general use
Left Hand



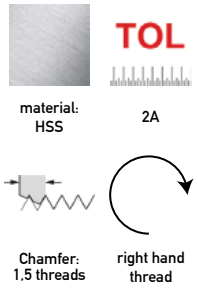



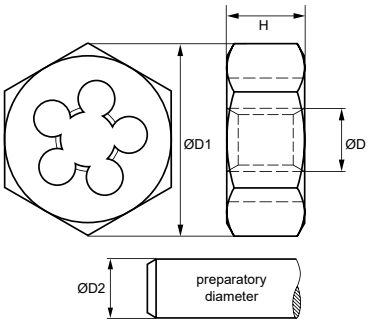
| BSW | D | D1 | H | D2 | No. | No. |
|---|---|---|---|---|---|---|
| **BSW 3/32 x 48** | 2,38 | 16 | 5 | 2,30 | 211401002 | |
| **BSW 1/8 x 40** | 3,18 | 20 | 5 | 3,09 | 211401003 | 211402001 |
| **BSW 5/32 x 32** | 3,97 | 20 | 5 | 3,88 | 211401004 | 211402002 |
| **BSW 3/16 x 24** | 4,76 | 20 | 7 | 4,66 | 211401005 | 211402003 |
| **BSW 7/32 x 24** | 5,56 | 20 | 7 | 5,46 | 211401006 | |
| **BSW 1/4 x 20** | 6,35 | 20 | 7 | 6,24 | 211401007 | 211402004 |
| **BSW 5/16 x 18** | 7,94 | 25 | 9 | 7,82 | 211401008 | 211402005 |
| **BSW 3/8 x 16** | 9,53 | 30 | 11 | 9,40 | 211401009 | 211402006 |
| **BSW 7/16 x 14** | 11,11 | 30 | 11 | 10,98 | 211401010 | 211402007 |
| **BSW 1/2 x 12** | 12,70 | 38 | 14 | 12,56 | 211401011 | 211402008 |
| **BSW 9/16 x 12** | 14,29 | 38 | 14 | 14,14 | 211401012 | 211402009 |
| **BSW 5/8 x 11** | 15,88 | 45 | 18 | 15,72 | 211401013 | 211402010 |
| **BSW 3/4 x 10** | 19,05 | 45 | 18 | 18,89 | 211401014 | 211402011 |
| **BSW 7/8 x 9** | 22,23 | 55 | 22 | 22,10 | 211401015 | 211402012 |
| **BSW 1" x 8** | 25,40 | 55 | 22 | 25,27 | 211401016 | 211402013 |
| **BSW 1.1/8 x 7** | 28,58 | 65 | 25 | 28,44 | 211401017 | |
| **BSW 1.1/4 x 7** | 31,75 | 65 | 25 | 31,61 | 211401018 | |
| **BSW 1.3/8 x 6** | 34,93 | 65 | 25 | 34,77 | 211401019 | |
| **BSW 1.1/2 x 6** | 38,10 | 65 | 25 | 37,95 | 211401020 | |
| **BSW 1.1/2 x 6** | 38,10 | 75 | 30 | 37,95 | 211401021 | |
| **BSW 1.5/8 x 5** | 41,28 | 75 | 30 | 41,11 | 211401022 | |
| **BSW 1.3/4 x 5** | 44,45 | 90 | 36 | 44,28 | 211401023 | |
| **BSW 1.7/8 x 4,5** | 47,63 | 90 | 36 | 47,46 | 211401024 | |
| **BSW 2" x 4,5** | 50,80 | 90 | 36 | 50,63 | 211401025 | |
| **BSW 2.1/4 x 4** | 57,15 | 105 | 36 | 56,98 | 211401026 | |
| **BSW 2.1/2 x 4** | 63,50 | 105 | 36 | 63,34 | 211401027 | |
| **BSW 2.3/4 x 3,5** | 69,85 | 120 | 36 | 69,68 | 211401028 | |
| **BSW 3" x 3,5** | 76,20 | 120 | 36 | 76,03 | 211401029 | |

# BSW

**British standard BS 84**
**whitworth coarse thread**

**Hexagon Die Nuts**
for general use



| BSW | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **BSW 1/8 x 40** | 3,18 | 20 | 5 | 3,09 | 211501001 |
| **BSW 3/16 x 24** | 4,76 | 20 | 7 | 4,66 | 211501002 |
| **BSW 1/4 x 20** | 6,35 | 20 | 7 | 6,24 | 211501003 |
| **BSW 5/16 x 18** | 7,94 | 25 | 9 | 7,82 | 211501004 |
| **BSW 3/8 x 16** | 9,53 | 30 | 11 | 9,40 | 211501005 |
| **BSW 7/16 x 14** | 11,11 | 30 | 11 | 10,98 | 211501006 |
| **BSW 1/2 x 12** | 12,70 | 38 | 14 | 12,56 | 211501007 |
| **BSW 9/16 x 12** | 14,29 | 38 | 14 | 14,14 | 211501008 |
| **BSW 5/8 x 11** | 15,88 | 45 | 18 | 15,72 | 211501009 |
| **BSW 3/4 x 10** | 19,05 | 45 | 18 | 18,89 | 211501010 |
| **BSW 7/8 x 9** | 22,23 | 55 | 22 | 22,10 | 211501011 |
| **BSW 1" x 8** | 25,40 | 55 | 22 | 25,27 | 211501012 |
| **BSW 1.1/8 x 7** | 28,58 | 65 | 25 | 28,44 | 211501013 |
| **BSW 1.1/4 x 7** | 31,75 | 65 | 25 | 31,61 | 211501014 |
| **BSW 1.3/8 x 6** | 34,93 | 65 | 25 | 34,77 | 211501015 |
| **BSW 1.1/2 x 6** | 38,10 | 65 | 25 | 37,95 | 211501016 |
| **BSW 2" x 4,5** | 50,80 | 90 | 36 | 50,63 | 211501017 |
| **BSW 2.1/4 x 4** | 57,15 | 105 | 36 | 56,98 | 211501018 |
| **BSW 2.1/2 x 4** | 63,50 | 105 | 36 | 63,34 | 211501019 |
| **BSW 2.3/4 x 3,5** | 69,85 | 120 | 36 | 69,68 | 211501020 |
| **BSW 3" x 3,5** | 76,20 | 120 | 36 | 76,03 | 211501021 |

# Thread Cutting Kits with Taps, Dies and Tools

# BSF

**British standard BS 84**
**whitworth fine thread**

## BAER Hand-Tap Sets, Round Dies and Tools Sets

**(example picture)**

### BAER Set BSF 1/4“ - 1/2“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (2 parts)** | BSF 1/4 x 26 \| BSF 5/16 x 22 \| BSF 3/8 x 20 \| BSF 7/16 x 18 \| BSF 1/2 x 16 | Item No.: 264804111 |
| **BAER HSS Round Dies** | BSF 1/4 x 26 \| BSF 5/16 x 22 \| BSF 3/8 x 20 \| BSF 7/16 x 18 \| BSF 1/2 x 16 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 4-12 \| 5/32-1/2 \| G 1/8 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 10 | |
| **Screw extractor** | | |

### BAER Set BSF 1/4“ - 3/4“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (2 parts)** | BSF 1/4 x 26 \| BSF 5/16 x 22 \| BSF 3/8 x 20 \| BSF 7/16 x 18 \| BSF 1/2 x 16 \| BSF 5/8 x 14 \| BSF 3/4 x 12 | Item No.: 264804211 |
| **BAER HSS Round Dies** | BSF 1/4 x 26 \| BSF 5/16 x 22 \| BSF 3/8 x 20 \| BSF 7/16 x 18 \| BSF 1/2 x 16 \| BSF 5/8 x 14 \| BSF 3/4 x 12 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 5-20 \| 7/32-3/4 \| G 1/8-1/2 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 10 \| 45 x 14 | |
| **Screw extractor** | | |

### BAER Set BSF 1/4“ - 1“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (2 parts)** | BSF 1/4 x 26 \| BSF 5/16 x 22 \| BSF 3/8 x 20 \| BSF 7/16 x 18 \| BSF 1/2 x 16 \| BSF 5/8 x 14 \| BSF 3/4 x 12 \| BSF 7/8 x 11<br>BSF 1“ x 10 | Item No.: 264804411 |
| **BAER HSS Round Dies** | BSF 1/4 x 26 \| BSF 5/16 x 22 \| BSF 3/8 x 20 \| BSF 7/16 x 18 \| BSF 1/2 x 16 \| BSF 5/8 x 14 \| BSF 3/4 x 12 \| BSF 7/8 x 11<br>BSF 1“ x 10 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 11-27 \| 7/16-1“ \| G 1/4-3/4 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 10 \|45 x 14 \| 55 x 16 | |
| **Screw extractor** | | |

### BAER Set BSW & BSF 1/4“ - 3/4“
### HSSG Hand Tap Sets & HSS Round Dies & Tools

| | | |
|---|---|---|
| **BAER HSSG Hand Tap Sets (3 parts) UNC**<br>**BAER HSSG Hand Tap Sets (2 parts) UNF** | BSW 1/4 \| BSW 5/16 \| BSW 3/8 \| BSW 7/16 \| BSW 1/2 \| BSW 5/8 \| BSW 3/4<br>BSF 1/4 \| BSF 5/16 \| BSF 3/8 \| BSF 7/16 \| BSF 1/2 \| BSF 5/8 \| BSF 3/4 | Item No.: 2648046210 |
| **BAER HSS Round Dies UNC**<br>**BAER HSS Round Dies UNF** | BSW 1/4 \| BSW 5/16 \| BSW 3/8 \| BSW 7/16 \| BSW 1/2 \| BSW 5/8 \| BSW 3/4<br>BSF 1/4 \| BSF 5/16 \| BSF 3/8 \| BSF 7/16 \| BSF 1/2 \| BSF 5/8 \| BSF 3/4 | |
| **BAER adjustable Tap Wrenches - zinc die cast** | M 1-10 \| 1/16-3/8 \| G 1/8 & M 5-20 \| 7/32-3/4“ \| G 1/8-1/2 | |
| **BAER Die Stocks - zinc die cast** | 20 x 7 \| 25 x 9 \| 30 x 11 \| 38 x 14 \| 45 x 18 | |
| **Screw extractor** | | |

# Thread Cutting Kits with Taps and Dies

# BSF

**British standard BS 84**
**whitworth fine thread**

## BAER Short Machine Taps und Round Dies Sets BSF 1/4“ - 1/2“

**(example picture)**

**BAER Set BSF 1/4“ - 1/2“**
**HSSG Short Machine Taps & Drill bits for core holes**
**HSS Round Dies**

| | | |
|---|---|---|
| **BAER HSSG Short Machine Tap Form D for through hole & blind hole (up to 4 x D)** | BSF 1/4 x 26 \| BSF 5/16 x 22 \| BSF 3/8 x 20 \| BSF 7/16 x 18 \| BSF 1/2 x 16 | Item No.: BES5 |
| **BAER HSSG Drill bits for core holes** | 5,2 mm \| 6,6 mm \| 8,1 mm \| 9,5 mm \| 11 mm | |
| **BAER HSS Round Dies** | BSF 1/4 x 26 \| BSF 5/16 x 22 \| BSF 3/8 x 20 \| BSF 7/16 x 18 \| BSF 1/2 x 16 | |

# Short Machine Taps and Hand Tap Sets

## BSF

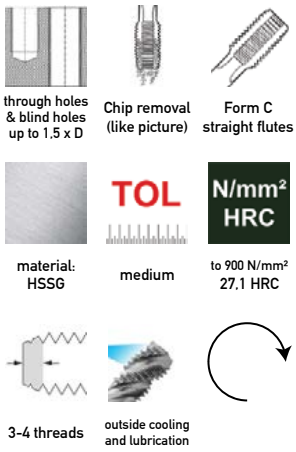
**British standard BS 84 whitworth fine thread**

Efficient internal thread cutting.
The short structural type makes that tap usable by hand. The Short-Machine-Tap is also usable by machine.

A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

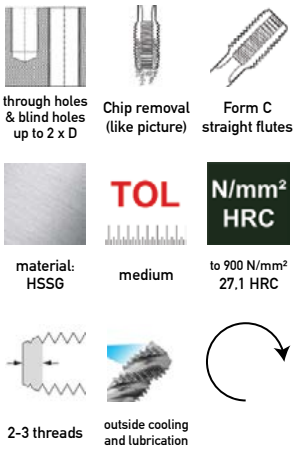
### Short Machine Taps

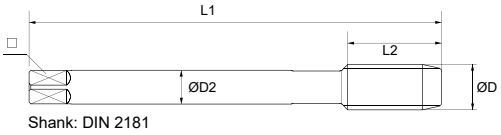
Form D for through holes and blind holes




### Hand Tap Sets

for general use




Shank: DIN 2181

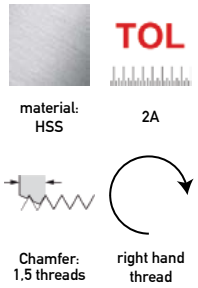
| BSF | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **BSF 3/16 x 32** | 4,76 | 6,0 | 50 | 14 | 4,9 | 3,90 | 220101001 | 220301001 |
| **BSF 1/4 x 26** | 6,35 | 6,0 | 50 | 18 | 4,9 | 5,30 | 220101002 | 220301002 |
| **BSF 5/16 x 22** | 7,94 | 6,0 | 56 | 22 | 4,9 | 6,80 | 220101003 | 220301003 |
| **BSF 3/8 x 20*** | 9,53 | 7,0 | 63 | 22 | 5,5 | 8,30 | 220101004 | 220301004 |
| **BSF 7/16 x 18** | 11,11 | 8,0 | 63 | 22 | 6,2 | 9,70 | 220101005 | 220301005 |
| **BSF 1/2 x 16** | 12,70 | 9,0 | 75 | 24 | 7,0 | 11,10 | 220101006 | 220301006 |
| **BSF 9/16 x 16** | 14,29 | 11,0 | 80 | 28 | 9,0 | 12,70 | 220101007 | 220301007 |
| **BSF 5/8 x 14** | 15,88 | 12,0 | 80 | 28 | 9,0 | 14,00 | 220101008 | 220301008 |
| **BSF 3/4 x 12** | 19,05 | 14,0 | 95 | 32 | 11,0 | 16,80 | 220101009 | 220301009 |
| **BSF 7/8 x 11** | 22,23 | 18,0 | 100 | 36 | 14,5 | 19,70 | 220101010 | 220301010 |
| **BSF 1" x 10** | 25,40 | 18,0 | 110 | 40 | 14,5 | 22,70 | 220101011 | 220301011 |

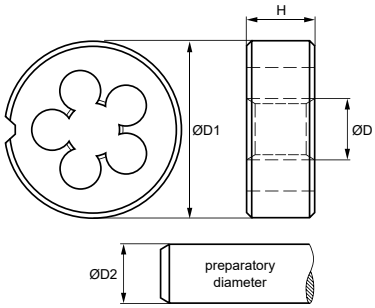
* BSF 3/8 = Fisher thread

# BSF

**British standard BS 84 whitworth fine thread**

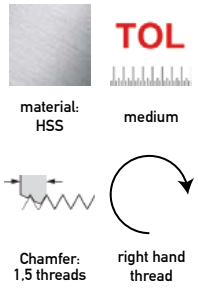
## Round Dies
for general use

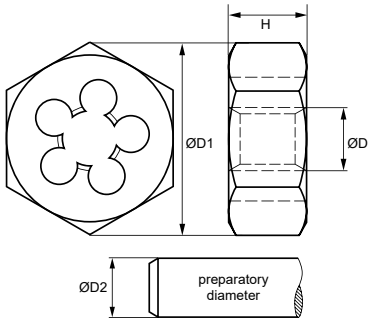


| BSF | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **BSF 3/16 x 32** | 4,76 | 20 | 7 | 4,67 | 221401001 |
| **BSF 1/4 x 26** | 6,35 | 20 | 7 | 6,25 | 221401002 |
| **BSF 5/16 x 22** | 7,94 | 25 | 9 | 7,83 | 221401003 |
| **BSF 3/8 x 20** | 9,53 | 30 | 11 | 9,41 | 221401004 |
| **BSF 7/16 x 18** | 11,11 | 30 | 11 | 10,99 | 221401005 |
| **BSF 1/2 x 16** | 12,70 | 38 | 10 | 12,57 | 221401006 |
| **BSF 9/16 x 16** | 14,29 | 38 | 10 | 14,12 | 221401007 |
| **BSF 5/8 x 14** | 15,88 | 45 | 14 | 15,73 | 221401008 |
| **BSF 3/4 x 12** | 19,05 | 45 | 14 | 18,89 | 221401009 |
| **BSF 7/8 x 11** | 22,23 | 55 | 22 | 22,11 | 221401010 |
| **BSF 1" x 10** | 25,40 | 55 | 22 | 25,28 | 221401011 |

## Hexagon Die Nuts
for general use



| BSF | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **BSF 3/16 x 32** | 4,76 | 19 | 7 | 4,67 | 221501001 |
| **BSF 1/4 x 26** | 6,35 | 19 | 7 | 6,25 | 221501002 |
| **BSF 5/16 x 22** | 7,94 | 22 | 9 | 7,83 | 221501003 |
| **BSF 3/8 x 20** | 9,53 | 27 | 11 | 9,41 | 221501004 |
| **BSF 7/16 x 18** | 11,11 | 27 | 11 | 10,99 | 221501005 |
| **BSF 1/2 x 16** | 12,70 | 36 | 10 | 12,57 | 221501006 |
| **BSF 9/16 x 16** | 14,29 | 36 | 10 | 14,12 | 221501007 |
| **BSF 5/8 x 14** | 15,88 | 41 | 14 | 15,73 | 221501008 |
| **BSF 3/4 x 12** | 19,05 | 41 | 14 | 18,89 | 221501009 |
| **BSF 7/8 x 11** | 22,23 | 50 | 16 | 22,11 | 221501010 |
| **BSF 1" x 10** | 25,40 | 50 | 16 | 25,28 | 221501011 |

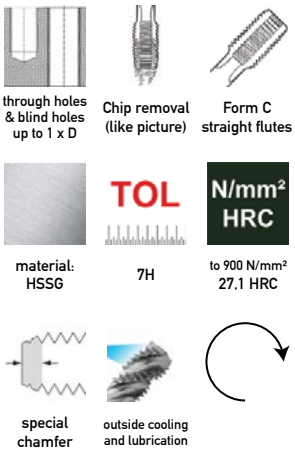
# Short Machine Taps and Hand-Tap-Set

## TR Trapezoidal thread DIN 103

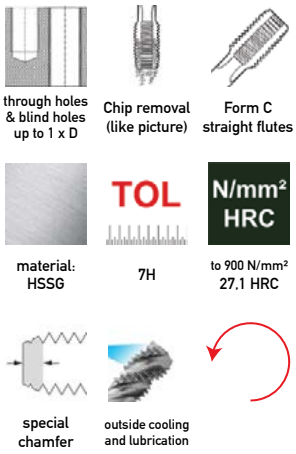
Efficient internal thread cutting.
The short structural type makes that tap usable by hand. The Short-Machine-Tap is also usable by machine.

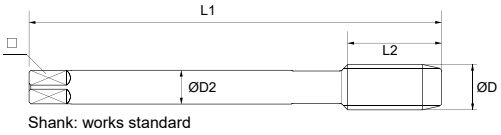
A Hand-Tap-Set includes 3 taps:
Taper Tap
Intermediate Tap
Finish Tap

### Hand Tap Sets
for general use




### Hand Tap Sets
for general use
Left Hand



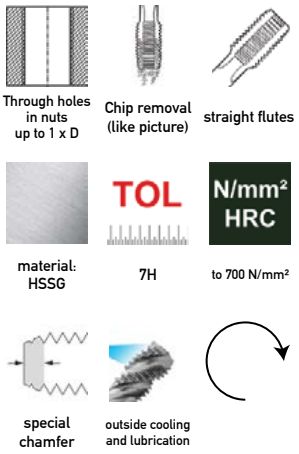
| TR | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|
| **TR 9 x 1,5** | 7,0 | 100,0 | 22 | 5,5 | 7,60 | 230301001 | 230302001 |
| **TR 10 x 1,5** | 7,0 | 100,0 | 22 | 5,5 | 8,60 | 230301002 | 230302002 |
| **TR 10 x 2** | 7,0 | 90,0 | 34 | 5,5 | 8,20 | 230301003 | 230302003 |
| **TR 10 x 3** | 7,0 | 100,0 | 40 | 5,5 | 7,60 | 230301004 | 230302004 |
| **TR 11 x 2** | 8,0 | 100,0 | 22 | 6,2 | 9,20 | 230301005 | 230302005 |
| **TR 12 x 2** | 9,0 | 110,0 | 25 | 7,0 | 10,20 | 230301006 | 230302006 |
| **TR 12 x 3** | 8,0 | 110,0 | 40 | 6,2 | 9,25 | 230301007 | 230302007 |
| **TR 14 x 2** | 11,0 | 110,0 | 26 | 9,0 | 12,20 | 230301008 | 230302008 |
| **TR 14 x 3** | 10,0 | 130,0 | 45 | 8,0 | 11,25 | 230301009 | 230302009 |
| **TR 14 x 4** | 10,0 | 130,0 | 55 | 8,0 | 10,70 | 230301010 | 230302010 |
| **TR 16 x 2** | 12,0 | 110,0 | 27 | 9,0 | 14,20 | 230301011 | 230302011 |
| **TR 16 x 4** | 11,0 | 140,0 | 55 | 9,0 | 12,25 | 230301012 | 230302012 |
| **TR 18 x 2** | 14,0 | 125,0 | 27 | 11,0 | 16,20 | 230301013 | 230302013 |
| **TR 18 x 4** | 12,0 | 150,0 | 55 | 9,0 | 14,25 | 230301014 | 230302014 |
| **TR 20 x 2** | 16,0 | 140,0 | 27 | 12,0 | 18,20 | 230301015 | 230302015 |
| **TR 20 x 4** | 14,0 | 160,0 | 55 | 11,0 | 16,25 | 230301016 | 230302016 |
| **TR 22 x 3** | 18,0 | 160,0 | 34 | 14,5 | 19,25 | 230301017 | 230302017 |
| **TR 22 x 5** | 16,0 | 175,0 | 65 | 12,0 | 17,30 | 230301018 | 230302018 |
| **TR 24 x 3** | 18,0 | 160,0 | 36 | 14,5 | 21,25 | 230301019 | 230302019 |
| **TR 24 x 5** | 18,0 | 190,0 | 65 | 14,5 | 19,30 | 230301020 | 230302020 |
| **TR 26 x 3** | 20,0 | 160,0 | 36 | 16,0 | 23,25 | 230301021 | 230302021 |
| **TR 26 x 5** | 20,0 | 210,0 | 70 | 16,0 | 21,30 | 230301022 | 230302022 |
| **TR 28 x 3** | 22,0 | 180,0 | 40 | 18,0 | 25,25 | 230301023 | 230302023 |
| **TR 28 x 5** | 22,0 | 220,0 | 70 | 18,0 | 23,30 | 230301024 | 230302024 |
| **TR 30 x 3** | 22,0 | 180,0 | 40 | 18,0 | 27,25 | 230301025 | 230302025 |
| **TR 30 x 6** | 22,0 | 240,0 | 80 | 18,0 | 24,30 | 230301026 | 230302026 |
| **TR 32 x 6** | 25,0 | 255,0 | 80 | 20,0 | 26,30 | 230301027 | 230302027 |

# Machine Nut Taps

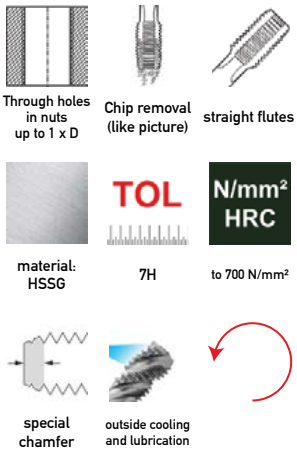
## TR Trapezoidal thread DIN 103

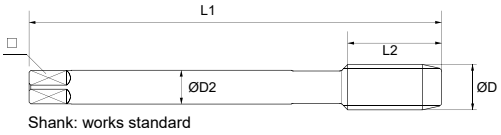
Machine Nut Tap with long shank for cutting Nuts.
For all through holes up to a max. thread depth of 1,0 x diameter.
Please note that this tap can only take cutting forces up to 1,0 times diameter.

### Machine Nut Taps
for general use




### Machine Nut Taps
for general use
Left Hand



Shank: works standard

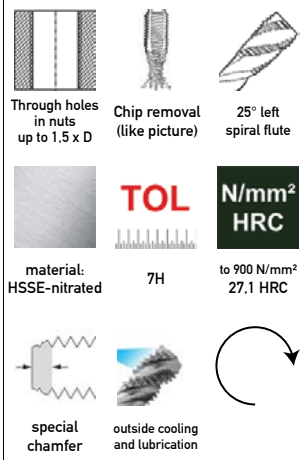
| TR | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|
| **TR 8 x 1,5** | 6,0 | 90,0 | 55 | 4,9 | 6,70 | | |
| **TR 9 x 2** | 7,0 | 110,0 | 63 | 5,5 | 7,20 | | |
| **TR 10 x 2** | 7,0 | 110,0 | 63 | 5,5 | 8,20 | 230901001 | 230902001 |
| **TR 10 x 3** | 7,0 | 125,0 | 75 | 5,5 | 7,60 | 230901002 | 230902002 |
| **TR 12 x 2** | 9,0 | 135,0 | 75 | 7,0 | 10,20 | | |
| **TR 12 x 3** | 8,0 | 165,0 | 111 | 6,2 | 9,25 | 230901003 | 230902003 |
| **TR 14 x 2** | 10,0 | 150 | 90 | 8,0 | 12,20 | | |
| **TR 14 x 3** | 10,0 | 140 | 85 | 8,0 | 11,25 | 230901004 | 230902004 |
| **TR 14 x 4** | 10,0 | 170 | 112 | 8,0 | 10,70 | 230901005 | 230902005 |
| **TR 16 x 2** | 12,0 | 160 | 90 | 9,0 | 14,20 | | |
| **TR 16 x 4** | 11,0 | 180 | 116 | 9,0 | 12,25 | 230901006 | 230902006 |
| **TR 18 x 2** | 14,0 | 175 | 90 | 11,0 | 16,20 | | |
| **TR 18 x 4** | 12,0 | 190 | 120 | 9,0 | 14,25 | 230901007 | 230902007 |
| **TR 20 x 2** | 16,0 | 185 | 105 | 12,0 | 18,20 | | |
| **TR 20 x 4** | 14,0 | 200 | 124 | 11,0 | 16,25 | 230901008 | 230902008 |
| **TR 22 x 3** | 16,0 | 220 | 125 | 12,0 | 19,25 | | |
| **TR 22 x 4** | 16,0 | 210 | 130 | 12,0 | 18,25 | 230901009 | |
| **TR 22 x 5** | 16,0 | 235 | 155 | 12,0 | 17,30 | 230901010 | 230902009 |
| **TR 24 x 3** | 18,0 | 220 | 130 | 14,5 | 21,25 | | |
| **TR 24 x 5** | 18,0 | 245 | 160 | 14,5 | 19,30 | 230901011 | 230902010 |
| **TR 26 x 3** | 20,0 | 235 | 130 | 16,0 | 23,25 | | |
| **TR 26 x 5** | 20,0 | 255 | 165 | 16,0 | 21,30 | 230901012 | 230902011 |
| **TR 28 x 3** | 22,0 | 245 | 140 | 18,0 | 25,25 | | |
| **TR 28 x 5** | 22,0 | 265 | 170 | 18,0 | 23,30 | 230901013 | 230902012 |
| **TR 30 x 3** | 22,0 | 250 | 140 | 18,0 | 27,25 | | |
| **TR 30 x 6** | 22,0 | 290 | 185 | 18,0 | 24,30 | 230901014 | 230902013 |
| **TR 32 x 6** | 25,0 | 300 | 191 | 20,0 | 26,30 | 230901015 | 230902014 |
| **TR 36 x 6** | 28,0 | 310 | 200 | 22,0 | 30,50 | 230901016 | 230902015 |

# Machine Nut Taps

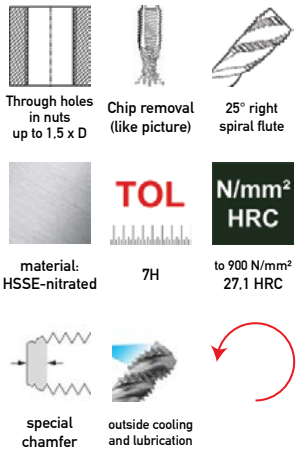
## TR Trapezoidal thread DIN 103

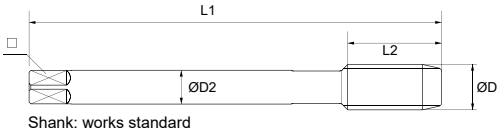
Machine Nut Tap with long shank for cutting Nuts.
For all through holes up to a max. thread depth of 1,5 x diameter.
Please note that this tap can only take cutting forces up to 1,5 times diameter.

### Machine Nut Taps
for stainless steels




### Machine Nut Taps
for stainless steels
Left Hand



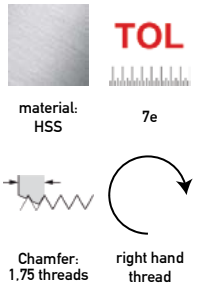



Shank: works standard

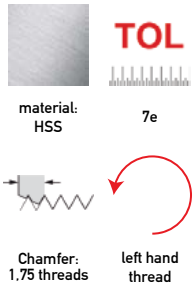
| TR | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|
| **TR 8 x 1,5** | 6,0 | 90,0 | 55 | 4,9 | 6,70 | 230905001 | 230905001L |
| **TR 9 x 2** | 7,0 | 110,0 | 63 | 5,5 | 7,20 | 230905002 | 230905002L |
| **TR 10 x 2** | 7,0 | 110,0 | 63 | 5,5 | 8,20 | 230905003 | 230905003L |
| **TR 10 x 3** | 7,0 | 125,0 | 75 | 5,5 | 7,60 | 230905004 | 230905004L |
| **TR 12 x 2** | 9,0 | 135,0 | 75 | 7,0 | 10,20 | 230905005 | 230905005L |
| **TR 12 x 3** | 8,0 | 165,0 | 111 | 6,2 | 9,25 | 230905006 | 230905006L |
| **TR 14 x 2** | 10,0 | 150,0 | 90 | 8,0 | 12,20 | 230905007 | 230905007L |
| **TR 14 x 3** | 10,0 | 140,0 | 85 | 8,0 | 11,25 | 230905008 | 230905008L |
| **TR 14 x 4** | 10,0 | 170,0 | 112 | 8,0 | 10,70 | 230905009 | 230905009L |
| **TR 16 x 2** | 12,0 | 160,0 | 90 | 9,0 | 14,20 | 230905010 | 230905010L |
| **TR 16 x 4** | 11,0 | 180,0 | 116 | 9,0 | 12,25 | 230905011 | 230905011L |
| **TR 18 x 2** | 14,0 | 175,0 | 90 | 11,0 | 16,20 | 230905012 | 230905012L |
| **TR 18 x 4** | 12,0 | 190,0 | 120 | 9,0 | 14,25 | 230905013 | 230905013L |
| **TR 20 x 2** | 16,0 | 185,0 | 105 | 12,0 | 18,20 | 230905014 | 230905014L |
| **TR 20 x 4** | 14,0 | 200,0 | 124 | 11,0 | 16,25 | 230905015 | 230905015L |
| **TR 22 x 3** | 16,0 | 220,0 | 125 | 12,0 | 19,25 | 230905016 | 230905016L |
| **TR 22 x 4** | 16,0 | 210,0 | 130 | 12,0 | 18,25 | 230905017 | 230905017L |
| **TR 22 x 5** | 16,0 | 235,0 | 155 | 12,0 | 17,30 | 230905018 | 230905018L |
| **TR 24 x 3** | 18,0 | 220,0 | 130 | 14,5 | 21,25 | 230905019 | 230905019L |
| **TR 24 x 5** | 18,0 | 245,0 | 160 | 14,5 | 19,30 | 230905020 | 230905020L |
| **TR 26 x 3** | 20,0 | 235,0 | 130 | 16,0 | 23,25 | 230905021 | 230905021L |
| **TR 26 x 5** | 20,0 | 255,0 | 165 | 16,0 | 21,30 | 230905022 | 230905022L |
| **TR 28 x 3** | 22,0 | 245,0 | 140 | 18,0 | 25,25 | 230905023 | 230905023L |
| **TR 28 x 5** | 22,0 | 265,0 | 170 | 18,0 | 23,30 | 230905024 | 230905024L |
| **TR 30 x 3** | 22,0 | 250,0 | 140 | 18,0 | 27,25 | 230905025 | 230905025L |
| **TR 30 x 6** | 22,0 | 290,0 | 185 | 18,0 | 24,30 | 230905026 | 230905026L |
| **TR 32 x 6** | 25,0 | 300,0 | 191 | 20,0 | 26,30 | 230905027 | 230905027L |

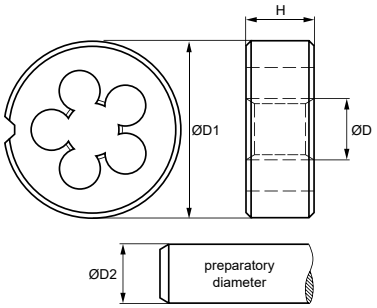
# TR Trapezoidal thread DIN 103

**Round Dies**
for general use




**Round Dies**
for general use
Left Hand



| TR | D1 | H | D2 | No. | No. |
|---|---|---|---|---|---|
| **TR 10 x 2** | 38,0 | 14 | 9,91 | 231401001 | 231402001 |
| **TR 10 x 3** | 38,0 | 14 | 9,88 | 231401002 | 231402002 |
| **TR 12 x 2** | 38,0 | 14 | 11,91 | 231401003 | 231402003 |
| **TR 12 x 3** | 38,0 | 14 | 11,88 | 231401004 | 231402004 |
| **TR 14 x 2** | 38,0 | 14 | 13,91 | 231401005 | 231402005 |
| **TR 14 x 3** | 45,0 | 18 | 13,88 | 231401006 | 231402006 |
| **TR 14 x 4** | 45,0 | 18 | 13,85 | 231401007 | 231402007 |
| **TR 16 x 2** | 45,0 | 18 | 15,91 | 231401008 | 231402008 |
| **TR 16 x 4** | 45,0 | 18 | 15,85 | 231401009 | 231402009 |
| **TR 18 x 2** | 45,0 | 18 | 17,91 | 231401010 | 231402010 |
| **TR 18 x 4** | 45,0 | 18 | 17,85 | 231401011 | 231402011 |
| **TR 20 x 2** | 45,0 | 18 | 19,91 | 231401012 | 231402012 |
| **TR 20 x 4** | 55,0 | 22 | 19,85 | 231401013 | 231402013 |
| **TR 22 x 5** | 55,0 | 22 | 21,84 | 231401014 | 231402014 |
| **TR 24 x 5** | 65,0 | 25 | 23,84 | 231401015 | 231402015 |
| **TR 26 x 5** | 65,0 | 25 | 25,84 | 231401016 | 231402016 |
| **TR 28 x 5** | 65,0 | 25 | 27,84 | 231401017 | 231402017 |
| **TR 30 x 6** | 65,0 | 25 | 29,82 | 231401018 | 231402018 |

# Short Machine Taps

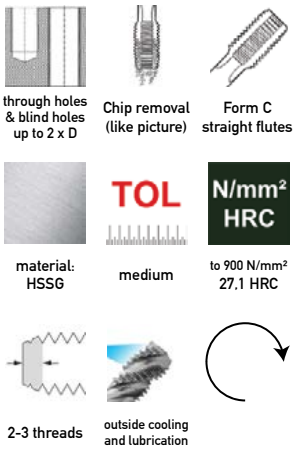
# NPT

**National standard taper 1:16 pipe thread ANSI B 1.20.1**

# NPTF

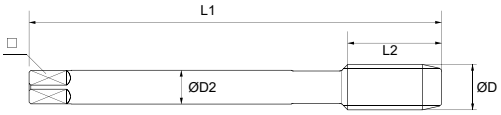
**National standard sealing pipe thread ANSI B 1.20.3**

**Short Machine Taps**
Form D for through holes and blind holes




Efficient internal thread cutting.
The short structural type makes that tap usable by machine and hand.

**Application**:
non abrasive material up to 900 N/mm²
unalloyed and low alloyed steel



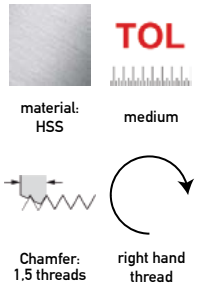
| NPT | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| **NPT 1/16 x 27** | 7,90 | 19,0 | 65 | 19 | 5,5 | 6,00 | 240101001 |
| **NPT 1/8 x 27** | 10,24 | 19,0 | 65 | 19 | 5,5 | 8,25 | 240101002 |
| **NPT 1/4 x 18** | 13,62 | 25,0 | 70 | 25 | 9,0 | 10,70 | 240101003 |
| **NPT 3/8 x 18** | 17,06 | 26,0 | 75 | 26 | 9,0 | 14,10 | 240101004 |
| **NPT 1/2 x 14** | 21,22 | 31,0 | 80 | 31 | 12,0 | 17,40 | 240101005 |
| **NPT 3/4 x 14** | 26,57 | 33,0 | 100 | 33 | 16,0 | 22,60 | 240101006 |
| **NPT 1" x 11,5** | 33,23 | 38,0 | 110 | 38 | 20,0 | 28,50 | 240101007 |
| **NPT 1.1/4 x 11,5** | 41,99 | 41,0 | 125 | 41 | 24,0 | 37,00 | 240101008 |
| **NPT 1.1/2 x 11,5** | 48,05 | 42,0 | 140 | 42 | 29,0 | 43,50 | 240101009 |
| **NPT 2" x 11,5** | 60,09 | 44,0 | 160 | 44 | 29,0 | 55,00 | 240101010 |

| NPTF | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| **NPTF 1/16 x 27** | 7,87 | 19,0 | 65 | 19 | 5,5 | 6,00 | 250101001 |
| **NPTF 1/8 x 27** | 10,22 | 19,0 | 65 | 19 | 5,5 | 8,25 | 250101002 |
| **NPTF 1/4 x 18** | 13,58 | 25,0 | 70 | 25 | 9,0 | 10,70 | 250101003 |
| **NPTF 3/8 x 18** | 17,02 | 26,0 | 75 | 26 | 9,0 | 14,10 | 250101004 |
| **NPTF 1/2 x 14** | 21,21 | 31,0 | 80 | 31 | 12,0 | 17,40 | 250101005 |
| **NPTF 3/4 x 14** | 26,57 | 33,0 | 100 | 33 | 16,0 | 22,60 | 250101006 |
| **NPTF 1" x 11,5** | 33,20 | 38,0 | 110 | 38 | 20,0 | 28,50 | 250101007 |
| **NPTF 1.1/4 x 11,5** | 41,95 | 41,0 | 125 | 41 | 24,0 | 37,00 | 250101008 |
| **NPTF 1.1/2 x 11,5** | 48,02 | 42,0 | 140 | 42 | 29,0 | 43,50 | 250101009 |
| **NPTF 2" x 11,5** | 60,06 | 44,0 | 160 | 44 | 29,0 | 55,00 | 250101010 |

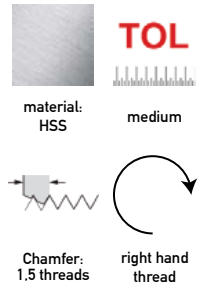
# NPT

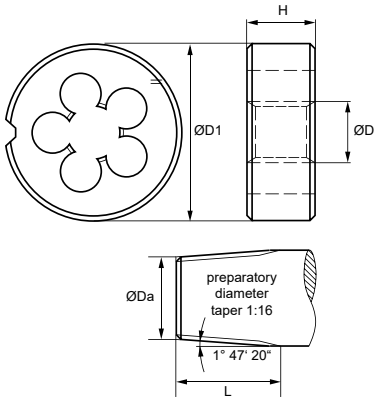
**National standard taper 1:16 pipe thread ANSI B 1.20.1**

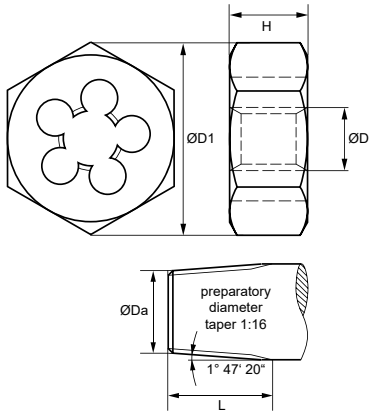
## Round Dies
for general use




## Hexagon Die Nuts
for general use





| NPT | D | D1 | H | Da x L | No. |
|---|---|---|---|---|---|
| **NPT 1/16 x 27** | 7,90 | 25 | 9 | 7,58 x 8,4 | 241401001 |
| **NPT 1/8 x 27** | 10,24 | 30 | 11 | 9,93 x 8,5 | 241401002 |
| **NPT 1/4 x 18** | 13,62 | 38 | 14 | 13,18 x 12,7 | 241401003 |
| **NPT 3/8 x 18** | 17,06 | 45 | 14 | 16,60 x 12,9 | 241401004 |
| **NPT 1/2 x 14** | 21,22 | 45 | 18 | 20,63 x 16,8 | 241401005 |
| **NPT 5/8 x 14** | 23,90 | 55 | 22 | | 241401006 |
| **NPT 3/4 x 14** | 26,57 | 55 | 22 | 25,95 x 17,1 | 241401007 |
| **NPT 7/8 x 14** | 29,90 | 65 | 25 | | 241401008 |
| **NPT 1" x 11,5** | 33,23 | 65 | 25 | 32,51 x 21,3 | 241401009 |
| **NPT 1.1/4 x 11,5** | 41,99 | 75 | 26 | 41,23 x 21,9 | 241401010 |
| **NPT 1.1/2 x 11,5** | 48,05 | 90 | 27 | 47,30 x 22,3 | 241401011 |
| **NPT 2" x 11,5** | 60,09 | 105 | 28 | 59,31 x 23,1 | 241401012 |

| NPT | D | D1 | H | Da x L | No. |
|---|---|---|---|---|---|
| **NPT 1/16 x 27** | 7,90 | 22 | 9 | 7,58 x 8,4 | 241501001 |
| **NPT 1/8 x 27** | 10,24 | 27 | 11 | 9,93 x 8,5 | 241501002 |
| **NPT 1/4 x 18** | 13,62 | 36 | 14 | 13,18 x 12,7 | 241501003 |
| **NPT 3/8 x 18** | 17,06 | 41 | 14 | 16,60 x 12,9 | 241501004 |
| **NPT 1/2 x 14** | 21,22 | 41 | 14 | 20,63 x 16,8 | 241501005 |
| **NPT 3/4 x 14** | 26,57 | 50 | 22 | 25,95 x 17,1 | 241501006 |
| **NPT 1" x 11,5** | 33,23 | 60 | 25 | 32,51 x 21,3 | 241501007 |
| **NPT 1.1/4 x 11,5** | 41,99 | 70 | 25 | 41,23 x 21,9 | 241501008 |
| **NPT 1.1/2 x 11,5** | 48,05 | 85 | 28 | 47,30 x 22,3 | 241501009 |
| **NPT 2" x 11,5** | 60,09 | 100 | 28 | 59,31 x 23,1 | 241501010 |

# Short Machine Taps and Round Dies

# NPS

**National standard straight pipe thread**

Efficient internal thread cutting.
The short structural type makes that tap usable by machine and hand.

**Application:**
non abrasive material up to 900 N/mm²
unalloyed and low alloyed steel

## Short Machine Taps

Form C for through holes and blind holes

through holes & blind holes up to 2 x D

Chip removal (like picture)

Form C straight flutes

material: HSSG

TOL medium

N/mm² HRC to 900 N/mm² 27,1 HRC

2-3 threads

outside cooling and lubrication

## Round Dies

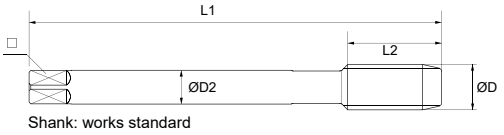
for general use

material: HSS

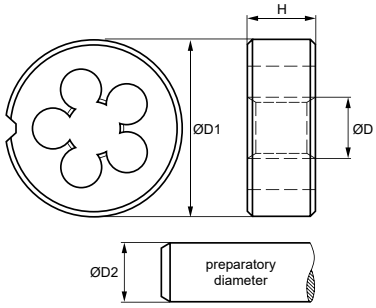
TOL medium

Chamfer: 1,75 threads

right hand thread




Shank: works standard



| NPS | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| **NPS 1/16 x 27** | 7,90 | 8,0 | 54 | 18 | 6,0 | 6,40 | 260101001 |
| **NPS 1/8 x 27** | 10,24 | 8,0 | 55 | 19 | 6,0 | 8,90 | 260101002 |
| **NPS 1/4 x 18** | 13,62 | 11,0 | 62 | 28 | 9,0 | 11,50 | 260101003 |
| **NPS 3/8 x 18** | 17,06 | 14,0 | 65 | 28 | 11,0 | 15,00 | 260101004 |
| **NPS 1/2 x 14** | 21,22 | 18,0 | 80 | 35 | 14,0 | 18,50 | 260101005 |
| **NPS 3/4 x 14** | 26,57 | 23,0 | 85 | 35 | 17,0 | 23,80 | 260101006 |
| **NPS 1" x 11,5** | 33,23 | 26,0 | 95 | 45 | 21,0 | 29,90 | 260101007 |
| **NPS 1,1/4 x 11,5** | 41,99 | 32,0 | 105 | 45 | 26,0 | 38,60 | 260101008 |
| **NPS 1,1/2 x 11,5** | 48,05 | 38,0 | 110 | 45 | 29,0 | 44,70 | 260101009 |
| **NPS 2" x 11,5** | 60,09 | 46,0 | 120 | 50 | 35,0 | 56,70 | 260101010 |

| NPSM | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **NPSM 1/8 x 27** | 10,24 | 30 | 11 | 9,99 | 261401001 |
| **NPSM 1/4 x 18** | 13,62 | 38 | 10 | 13,25 | 261401002 |
| **NPSM 3/8 x 18** | 17,06 | 45 | 14 | 16,70 | 261401003 |
| **NPSM 1/2 x 14** | 21,22 | 45 | 14 | 20,78 | 261401004 |
| **NPSM 3/4 x 14** | 26,57 | 55 | 16 | 26,14 | 261401005 |
| **NPSM 1" x 11,5** | 33,23 | 65 | 18 | 32,69 | 261401006 |
| **NPSM 1.1/4 x 11,5** | 41,99 | 75 | 20 | 41,45 | 261401007 |

# Short Machine Taps and Hexagon Die Nuts

# RC (BSPT)

**Whitworth tapered pipe thread**
**DIN 2999**

# RP (BSPP)

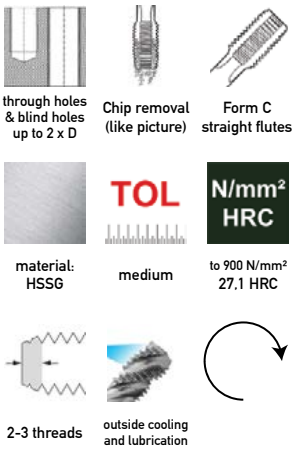
**British standard whitworth pipe thread**
**ISO 7-1**

Efficient internal thread cutting.
The short structural type makes that tap usable by machine and hand.

**Application:**
non abrasive material up to 900 N/mm²
unalloyed and low alloyed steel

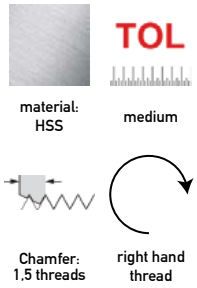
## Short Machine Taps

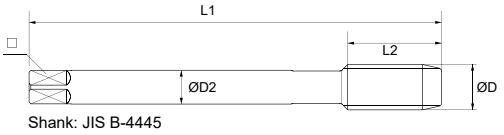
Form C for through holes and blind holes

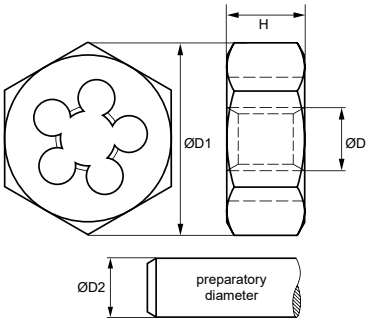



## Hexagon Die Nuts

for general use





| RC (BSPT) | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| **RC 1/16 x 28** | 7,72 | 8,0 | 55 | 17,5 | 6,0 | 6,30 | |
| **RC 1/8 x 28** | 9,73 | 8,0 | 55 | 19 | 6,0 | 8,30 | 270101001 |
| **RC 1/4 x 19** | 13,16 | 11,0 | 62 | 28 | 9,0 | 11,10 | 270101002 |
| **RC 3/8 x 19** | 16,66 | 14,0 | 65 | 28 | 11,0 | 14,50 | 270101003 |
| **RC 1/2 x 14** | 20,95 | 18,0 | 80 | 35 | 14,0 | 18,10 | 270101004 |
| **RC 3/4 x 14** | 26,44 | 23,0 | 85 | 35 | 17,0 | 23,50 | 270101005 |
| **RC 1" x 11** | 33,25 | 26,0 | 95 | 45 | 21,0 | 29,50 | 270101006 |
| **RC 1.1/4 x 11** | 41,91 | 32,0 | 105 | 45 | 26,0 | 38,25 | |
| **RC 1.1/2 x 11** | 47,80 | 38,0 | 110 | 45 | 29,0 | 44,25 | |
| **RC 2" x 11** | 59,61 | 46,0 | 120 | 50 | 35,0 | 56,00 | |

| RP (BSPP) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **RP 1/16 x 28** | 7,72 | 8,0 | 55 | 18 | 6,0 | 6,55 | 280101001 |
| **RP 1/8 x 28** | 9,73 | 8,0 | 55 | 19 | 6,0 | 8,60 | 280101002 |
| **RP 1/4 x 19** | 13,16 | 11,0 | 62 | 28 | 9,0 | 11,50 | 280101003 |
| **RP 3/8 x 19** | 16,66 | 14,0 | 65 | 28 | 11,0 | 15,00 | 280101004 |
| **RP 1/2 x 14** | 20,95 | 18,0 | 80 | 35 | 14,0 | 18,50 | 280101005 |
| **RP 3/4 x 14** | 26,44 | 23,0 | 85 | 35 | 17,0 | 24,00 | 280101006 |
| **RP 1" x 11** | 33,25 | 26,0 | 95 | 45 | 21,0 | 30,25 | 280101007 |
| **RP 1.1/4 x 11** | 41,91 | 32,0 | 105 | 45 | 26,0 | 38,75 | 280101008 |
| **RP 1.1/2 x 11** | 47,80 | 38,0 | 110 | 45 | 29,0 | 44,75 | 280101009 |
| **RP 2" x 11** | 59,61 | 46,0 | 120 | 50 | 35,0 | 56,50 | 280101010 |

| R (BSPT) | D | D1 | H | No. |
|---|---|---|---|---|
| **R 1/8 x 28** | 9,73 | 27 | 11 | 271501001 |
| **R 1/4 x 19** | 13,16 | 36 | 14 | 271501002 |
| **R 3/8 x 19** | 16,66 | 41 | 15 | 271501003 |
| **R 1/2 x 14** | 20,95 | 50 | 19 | 271501004 |
| **R 3/4 x 14** | 26,44 | 60 | 20 | 271501005 |
| **R 1" x 11** | 33,25 | 60 | 25 | 271501006 |
| **R 1.1/4 x 11** | 41,91 | 85 | 26 | 271501007 |
| **R 1.1/2 x 11** | 47,80 | 85 | 26 | 271501008 |
| **R 2" x 11** | 59,61 | 100 | 31 | 271501009 |

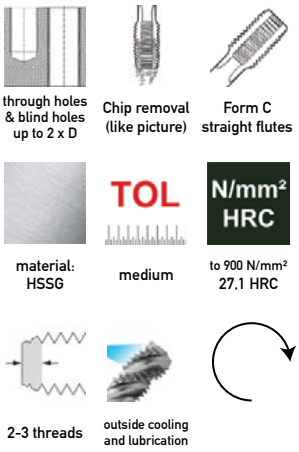
# Hand Tap Sets (conical) and Round Dies

## BA British Association thread BS 93

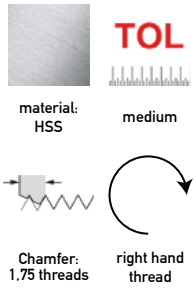
Efficient internal thread cutting.
The short structural type makes that tap usable by hand. The Short-Machine-Tap is also usable by machine.

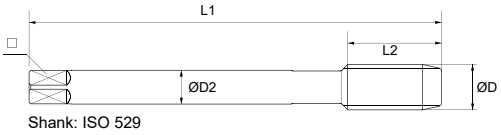
A Hand-Tap-Set includes 3 taps:
Taper Tap
Intermediate Tap
Finish Tap

### Hand Tap Sets
for general use

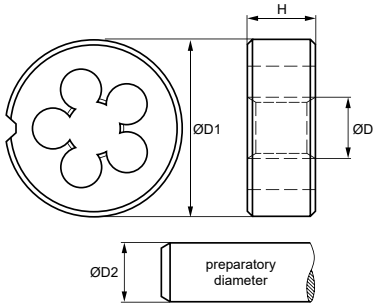



### Round Dies
for general use




Shank: ISO 529



| BA | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| BA 0 | 6,00 | 6,3 | 66 | 19,0 | 5,0 | 5,10 | 290313001 |
| BA 1 | 5,30 | 5,6 | 62 | 17,0 | 4,5 | 4,50 | 290313002 |
| BA 2 | 4,70 | 5,0 | 58 | 16,0 | 4,0 | 4,00 | 290313003 |
| BA 3 | 4,10 | 4,5 | 53 | 13,0 | 3,6 | 3,40 | 290313004 |
| BA 4 | 3,60 | 3,6 | 50 | 13,0 | 2,8 | 3,00 | 290313005 |
| BA 5 | 3,20 | 3,2 | 48 | 11,0 | 2,5 | 2,65 | 290313006 |
| BA 6 | 2,80 | 2,8 | 45 | 9,5 | 2,2 | 2,30 | 290313007 |

| BA | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| BA 0 | 6,00 | 20,6 | 6,35 | 5,90 | 291401001 |
| BA 1 | 5,30 | 20,6 | 6,35 | 5,21 | 291401002 |
| BA 2 | 4,70 | 20,6 | 6,35 | 4,61 | 291401003 |
| BA 3 | 4,10 | 20,6 | 6,35 | 4,02 | 291401004 |
| BA 4 | 3,60 | 20,6 | 6,35 | 3,52 | 291401005 |
| BA 5 | 3,20 | 20,6 | 6,35 | 3,14 | 291401006 |
| BA 6 | 2,80 | 20,6 | 6,35 | 2,74 | 291401007 |
| BA 7 | 2,50 | 20,6 | 6,35 | 2,44 | 291401008 |
| BA 8 | 2,20 | 20,6 | 6,35 | 2,15 | 291401009 |
| BA 10 | 1,70 | 20,6 | 6,35 | 1,66 | 291401010 |

# Short Machine Taps and Round Dies

## W

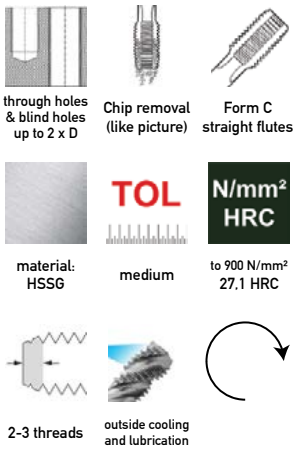
**Tapered whitworth DIN 477**
**for screw sockets taper 3:25**

Efficient internal thread cutting.
The short structural type makes that tap usable by machine and hand.

**Application:**
non abrasive material up to 900 N/mm²
unalloyed and low alloyed steel

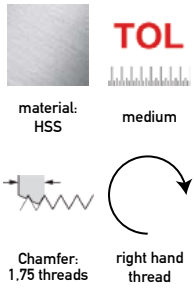
### Short Machine Taps

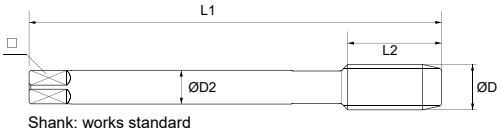
Form C for through holes and blind holes



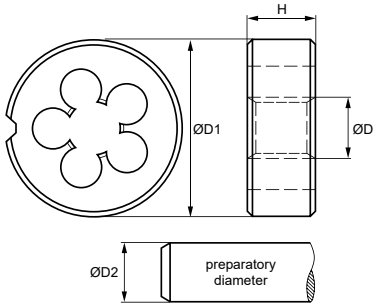

### Round Dies

for general use




Shank: works standard



| W | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| **W 19,8 x 14 conical** | 19,80 | 16,0 | 90 | 32 | 12,0 | 14,70 | 300101001 |
| **W 28,8 x 14 conical** | 28,80 | 22,0 | 100 | 40 | 18,0 | 22,70 | 300101002 |
| **W 31,3 x 14 conical** | 31,30 | 22,0 | 110 | 40 | 18,0 | 25,20 | 300101003 |
| **W 21,8 x 14 cyl. - right** | 21,80 | 18,0 | 80 | 22 | 14,5 | 19,75 | 310101004 |
| **W 21,8 x 14 cyl. - left** | 21,80 | 18,0 | 80 | 22 | 14,5 | 19,75 | 310101005 |
| **W 24,32 x 14 cylindrical** | 24,32 | 18,0 | 90 | 22 | 14,5 | 22,25 | 310101006 |

| W | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **W 19,8 x 14 conical** | 19,80 | 45 | 25 | 17,34 | 301401001 |
| **W 28,8 x 14 conical** | 28,80 | 65 | 30 | 25,74 | 301401002 |
| **W 21,8 x 14 cyl. - right** | 21,80 | 55 | 16 | 21,58 | 311401003 |
| **W 21,8 x 14 cyl. - left** | 21,80 | 55 | 16 | 21,58 | 311401004 |
| **W 24,32 x 14 cylindrical** | 24,32 | 55 | 16 | 24,10 | 311401005 |

# Short Machine Taps and Round Dies

## PG Steel Conduit Thread DIN 40430

Efficient internal thread cutting.
The short structural type makes that tap usable by machine and hand.

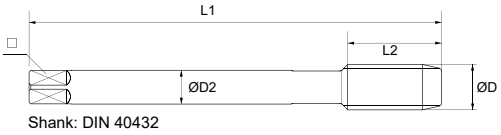
**Application:**
non abrasive material up to 900 N/mm²
unalloyed and low alloyed steel

### Short Machine Taps
Form D for through holes and blind holes

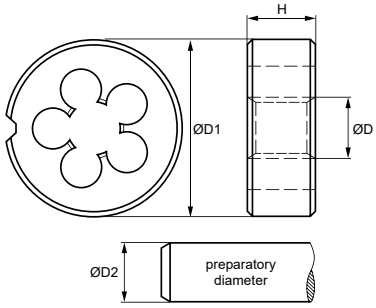
through holes & blind holes up to 4 x D
Chip removal (like picture)
Form D straight flutes
material: HSSG
medium
to 900 N/mm² 27,1 HRC
4-5 threads
outside cooling and lubrication

### Round Dies
for general use

material: HSS
medium
Chamfer: 1,5 threads
right hand thread



Shank: DIN 40432

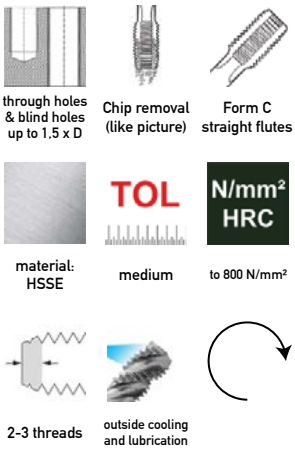


| PG | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| PG 7 x 20 | 12,50 | 9,0 | 70 | 22 | 7,0 | 11,35 | 320101001 |
| PG 9 x 18 | 15,20 | 12,0 | 70 | 22 | 9,0 | 13,95 | 320101002 |
| PG 11 x 18 | 18,60 | 14,0 | 80 | 22 | 11,0 | 17,35 | 320101003 |
| PG 13,5 x 18 | 20,40 | 16,0 | 80 | 22 | 12,0 | 19,15 | 320101004 |
| PG 16 x 18 | 22,50 | 18,0 | 80 | 22 | 14,5 | 21,25 | 320101005 |
| PG 21 x 16 | 28,30 | 22,0 | 90 | 22 | 18,0 | 26,90 | 320101006 |
| PG 29 x 16 | 37,00 | 28,0 | 100 | 25 | 22,0 | 35,60 | 320101007 |
| PG 36 x 16 | 47,00 | 36,0 | 140 | 40 | 29,0 | 45,60 | 320101008 |
| PG 42 x 16 | 54,00 | 40,0 | 140 | 40 | 32,0 | 52,60 | 320101009 |
| PG 48 x 16 | 59,30 | 45,0 | 160 | 40 | 35,0 | 57,90 | 320101010 |

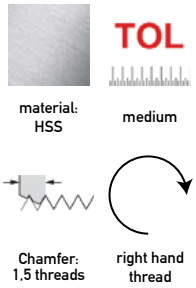
| PG | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| PG 7 x 20 | 12,50 | 38 | 10 | 12,50 | 321401001 |
| PG 9 x 18 | 15,20 | 45 | 14 | 15,20 | 321401002 |
| PG 11 x 18 | 18,60 | 45 | 14 | 18,60 | 321401003 |
| PG 13,5 x 18 | 20,40 | 45 | 14 | 20,40 | 321401004 |
| PG 16 x 18 | 22,50 | 55 | 16 | 22,50 | 321401005 |
| PG 21 x 16 | 28,30 | 65 | 18 | 28,30 | 321401006 |
| PG 29 x 16 | 37,00 | 65 | 18 | 37,00 | 321401007 |
| PG 36 x 16 | 47,00 | 90 | 22 | 47,00 | 321401008 |
| PG 42 x 16 | 54,00 | 105 | 22 | 54,00 | 321401009 |
| PG 48 x 16 | 59,30 | 105 | 22 | 59,30 | 321401010 |

# FG Bicycle thread DIN 79012
# BSC British bicycle thread RS 811

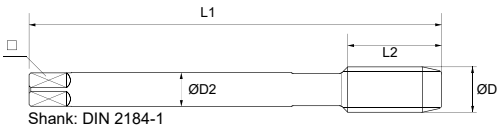
## Short Machine Taps
Form C for through holes and blind holes

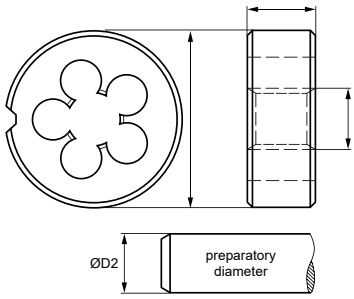



## Round Dies
for general use




Tap for machine use in through hole and blind hole. The short lead-in chamfer makes that tap universal in application. The flutes can hold the most part of the chips.





| FG | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| FG 6,35 x 26 | 6,35 | 7,0 | 80 | 14 | 5,5 | 5,50 | 330501001 |
| FG 7,9 x 26 | 7,90 | 8,0 | 90 | 16 | 6,2 | 7,00 | 330501002 |
| FG 9,5 x 26 | 9,50 | 7,0 | 90 | 16 | 5,5 | 8,60 | 330501003 |
| FG 14,3 x 20 right | 14,30 | 11,0 | 100 | 22 | 9,0 | 13,10 | 330501004 |
| FG 14,3 x 20 left | 14,30 | 11,0 | 100 | 22 | 9,0 | 13,10 | 330501005 |
| FG 25,4 x 24 | 25,40 | 14,0 | 110 | 22 | 11,0 | 24,50 | 330501006 |

| BSC | | | | | | | |
|---|---|---|---|---|---|---|---|
| BSC 1/4 x 26 | 6,35 | 6,0 | 56 | 14 | 4,9 | 5,55 | 340101001 |
| BSC 5/16 x 26 | 7,94 | 6,0 | 63 | 16 | 4,9 | 7,10 | 340101002 |
| BSC 3/8 x 26 | 9,53 | 7,0 | 63 | 16 | 5,5 | 8,65 | 340101003 |
| BSC 9/16 x 20 right | 14,29 | 11,0 | 70 | 22 | 9,0 | 13,15 | 340101004 |
| BSC 9/16 x 20 left | 14,29 | 11,0 | 70 | 22 | 9,0 | 13,15 | 340101005 |
| BSC 1“ x 24 | 25,40 | 14,0 | 70 | 22 | 11,0 | 24,50 | 340101006 |

| FG | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| FG 6,35 x 26 | 6,35 | 20 | 7 | 6,24 | 331401001 |
| FG 7,9 x 26 | 7,90 | 25 | 9 | 7,82 | 331401002 |
| FG 9,5 x 26 | 9,50 | 30 | 11 | 9,40 | 331401003 |
| FG 14,3 x 20 right | 14,30 | 38 | 10 | 14,40 | 331401004 |
| FG 14,3 x 20 left | 14,30 | 38 | 10 | 14,40 | 331401005 |
| FG 25,4 x 24 | 25,40 | 55 | 16 | 25,25 | 331401006 |

| BSC | | | | | |
|---|---|---|---|---|---|
| BSC 1/4 x 26 | 6,35 | 20,6 | 6,35 | 6,24 | 341401001 |
| BSC 5/16 x 26 | 7,94 | 25,4 | 9,5 | 7,82 | 341401002 |
| BSC 3/8 x 26 | 9,53 | 25,4 | 9,5 | 9,40 | 341401003 |
| BSC 7/16 x 26 | 11,11 | 25,4 | 9,5 | 10,98 | 341401004 |
| BSC 9/16 x 20 right | 14,29 | 38,1 | 12,7 | 14,14 | 341401005 |
| BSC 9/16 x 20 left | 14,29 | 38,1 | 12,7 | 14,14 | 341401006 |
| BSC 1" x 24 | 25,40 | 55 | 16 | 25,25 | 341401007 |

# Machine Taps and Round Dies

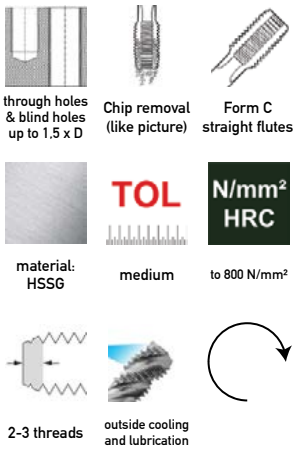
## RD knuckle thread DIN 405

## RMS Royal Microscopical Society DIN 58888

Tap for machine use in through hole and blind hole. The short lead-in chamfer makes that tap universal in application. The flutes can hold the most part of the chips.

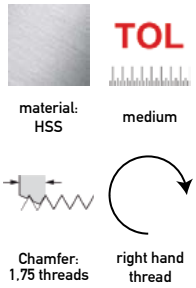
### Short Machine Taps

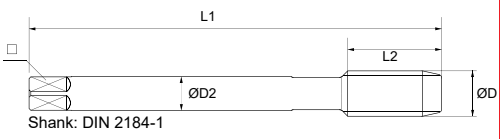
Form C for through holes and blind holes

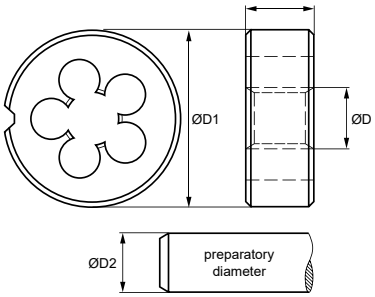



### Round Dies

for general use





| RD | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| **Rd 8 x 1/10** | 8,25 | 6,0 | 90 | 26 | 4,9 | 5,71 | 350501001 |
| **Rd 9 x 1/10** | 9,25 | 7,0 | 90 | 26 | 5,5 | 6,71 | 350501002 |
| **Rd 10 x 1/10** | 10,25 | 7,0 | 100 | 28 | 5,5 | 7,71 | 350501003 |
| **Rd 11 x 1/10** | 11,25 | 8,0 | 100 | 28 | 6,2 | 8,71 | 350501004 |
| **Rd 12 x 1/10** | 12,25 | 9,0 | 110 | 28 | 7,0 | 9,71 | 350501005 |
| **Rd 14 x 1/8** | 14,32 | 11,0 | 110 | 32 | 9,0 | 11,14 | 350501006 |
| **Rd 16 x 1/8** | 16,32 | 12,0 | 110 | 32 | 9,0 | 13,14 | 350501007 |
| **Rd 18 x 1/8** | 18,32 | 14,0 | 125 | 32 | 11,0 | 15,14 | 350501008 |
| **Rd 20 x 1/8** | 20,32 | 16,0 | 140 | 32 | 12,0 | 17,14 | 350501009 |
| **Rd 22 x 1/8** | 22,32 | 18,0 | 140 | 32 | 14,5 | 19,14 | 350501010 |
| **Rd 24 x 1/8** | 24,32 | 18,0 | 160 | 34 | 14,5 | 21,14 | 350501011 |
| **Rd 26 x 1/8** | 26,32 | 20,0 | 160 | 36 | 16,0 | 23,14 | 350501012 |
| **Rd 28 x 1/8** | 28,32 | 20,0 | 160 | 36 | 16,0 | 25,14 | 350501013 |
| **Rd 30 x 1/8** | 30,32 | 22,0 | 180 | 36 | 18,0 | 27,14 | 350501014 |
| **Rd 32 x 1/8** | 32,82 | 25,0 | 180 | 36 | 20,0 | 29,14 | 350501015 |
| **Rd 34 x 1/8** | 34,32 | 28,0 | 200 | 36 | 22,0 | 31,14 | 350501016 |
| **Rd 36 x 1/8** | 36,32 | 28,0 | 200 | 36 | 22,0 | 33,14 | 350501017 |
| **Rd 38 x 1/8** | 38,32 | 28,0 | 200 | 38 | 22,0 | 35,14 | 350501018 |
| **Rd 40 x 1/6** | 40,42 | 32,0 | 200 | 50 | 24,0 | 36,19 | 350501019 |

| RD | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **Rd 10 x 1/10** | 10,25 | 38 | 14 | 9,84 | 351401001 |
| **Rd 11 x 1/10** | 11,25 | 38 | 14 | 10,84 | 351401002 |
| **Rd 12 x 1/10** | 12,25 | 38 | 14 | 11,84 | 351401003 |
| **Rd 14 x 1/8** | 14,32 | 45 | 18 | 13,82 | 351401004 |
| **Rd 16 x 1/8** | 16,32 | 45 | 18 | 15,82 | 351401005 |
| **Rd 18 x 1/8** | 18,32 | 45 | 18 | 17,82 | 351401006 |
| **Rd 20 x 1/8** | 20,32 | 55 | 22 | 19,82 | 351401007 |
| **Rd 22 x 1/8** | 22,32 | 55 | 22 | 21,82 | 351401008 |
| **Rd 24 x 1/8** | 24,32 | 55 | 22 | 23,82 | 351401009 |
| **Rd 26 x 1/8** | 26,32 | 65 | 25 | 25,82 | 351401010 |
| **Rd 28 x 1/8** | 28,32 | 65 | 25 | 27,82 | 351401011 |
| **Rd 30 x 1/8** | 30,32 | 65 | 25 | 29,82 | 351401012 |
| **Rd 32 x 1/8** | 32,82 | 65 | 25 | 31,82 | 351401013 |

| RMS | D1 | D2 | L1 | L2 | □ | | No. |
|---|---|---|---|---|---|---|---|
| **W 0,8 x 36** | 20,35 | 16,0 | 80 | 18 | 12,0 | 19,45 | 360501001 |

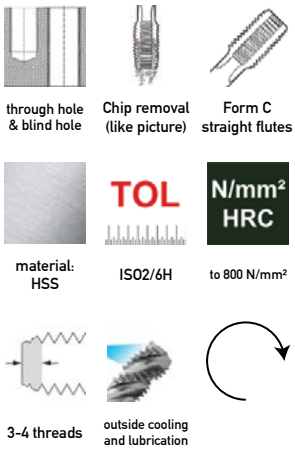
| RMS | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **W 0,8 x 36** | 20,35 | 45 | 14 | 20,00 | 361401002 |

# Mini Gewindebohrer - Form C (straight flutes) for through holes and blind holes

## MINI

**Metric Mini-thread and Nano-thread**

**Machine Tap**
for general use




Efficient internal thread cutting in clock and watch industry as well as apparatus construction and fine mechanics.
For through and blind holes. Very break-proof.
Suitable for automatic lathe and tapping machine.

| MINI | D1 | D2 | L1 | L2 | steel | brass | No. | packing unit [PU] |
|---|---|---|---|---|---|---|---|---|
| **M 0,3 x 0,08** | 0,3 | 1,0 | 22 | 2 | 0,2 | 0,24 | 370501001 | 10 pieces |
| **M 0,35 x 0,09** | 0,4 | 1,0 | 22 | 2 | 0,3 | 0,28 | 370501002 | 10 pieces |
| **M 0,4 x 0,1** | 0,4 | 1,0 | 22 | 2,5 | 0,3 | 0,32 | 370501003 | 10 pieces |
| **M 0,5 x 0,125** | 0,5 | 1,0 | 22 | 3 | 0,4 | 0,40 | 370501004 | 10 pieces |
| **M 0,6 x 0,15** | 0,6 | 1,0 | 22 | 3,5 | 0,5 | 0,49 | 370501005 | 10 pieces |
| **M 0,7 x 0,175** | 0,7 | 1,5 | 25 | 4,5 | 0,6 | 0,57 | 370501006 | 10 pieces |
| **M 0,8 x 0,2** | 0,8 | 1,5 | 25 | 5 | 0,7 | 0,65 | 370501007 | 10 pieces |
| **M 0,9 x 0,225** | 0,9 | 1,5 | 25 | 5,5 | 0,8 | 0,73 | 370501008 | 10 pieces |
| **M 1 x 0,15** | 1,0 | 1,5 | 25 | 6 | 0,9 | 0,89 | 370501009 | 10 pieces |
| **M 1 x 0,2** | 1,0 | 1,5 | 25 | 6 | 0,9 | 0,85 | 370501010 | 10 pieces |
| **M 1 x 0,25** | 1,0 | 1,5 | 25 | 6 | 0,8 | 0,81 | 370501011 | 10 pieces |
| **M 1,1 x 0,25** | 1,1 | 1,5 | 25 | 7 | 0,9 | 0,91 | 370501012 | 10 pieces |
| **M 1,2 x 0,15** | 1,2 | 1,5 | 25 | 7 | 1,1 | 1,09 | 370501013 | 10 pieces |
| **M 1,2 x 0,2** | 1,2 | 1,5 | 25 | 7 | 1,1 | 1,05 | 370501014 | 10 pieces |
| **M 1,2 x 0,25** | 1,2 | 1,5 | 25 | 7 | 1,0 | 1,01 | 370501015 | 10 pieces |
| **M 1,3 x 0,3** | 1,3 | 1,5 | 25 | 8 | 1,1 | 1,07 | 370501016 | 10 pieces |
| **M 1,4 x 0,2** | 1,4 | 2,0 | 30 | 9 | 1,3 | 1,25 | 370501017 | 10 pieces |
| **M 1,4 x 0,25** | 1,4 | 2,0 | 30 | 9 | 1,2 | 1,21 | 370501018 | 10 pieces |
| **M 1,4 x 0,3** | 1,4 | 2,0 | 30 | 8,5 | 1,2 | 1,17 | 370501019 | 10 pieces |
| **M 1,5 x 0,3** | 1,5 | 2,0 | 30 | 10 | 1,3 | 1,27 | 370501020 | 10 pieces |
| **M 1,6 x 0,2** | 1,6 | 2,0 | 30 | 10 | 1,5 | 1,45 | 370501021 | 10 pieces |
| **M 1,6 x 0,25** | 1,6 | 2,0 | 30 | 10 | 1,4 | 1,41 | 370501022 | 10 pieces |
| **M 1,6 x 0,35** | 1,6 | 2,0 | 30 | 10 | 1,3 | 1,30 | 370501023 | 10 pieces |
| **M 1,7 x 0,35** | 1,7 | 2,0 | 30 | 10 | 1,4 | 1,40 | 370501024 | 10 pieces |
| **M 1,8 x 0,2** | 1,8 | 2,0 | 30 | 10 | 1,7 | 1,65 | 370501025 | 10 pieces |
| **M 1,8 x 0,25** | 1,8 | 2,0 | 30 | 10 | 1,6 | 1,61 | 370501026 | 10 pieces |
| **M 1,8 x 0,35** | 1,8 | 2,0 | 30 | 10 | 1,5 | 1,50 | 370501027 | 10 pieces |
| **M 2 x 0,2** | 2,0 | 3,0 | 35 | 13 | 1,9 | 1,85 | 370501028 | 10 pieces |
| **M 2 x 0,25** | 2,0 | 3,0 | 35 | 13 | 1,8 | 1,81 | 370501029 | 10 pieces |
| **M 2 x 0,4** | 2,0 | 3,0 | 35 | 13 | 1,7 | 1,65 | 370501030 | 10 pieces |
| **M 2,2 x 0,45** | 2,2 | 3,0 | 35 | 13 | 1,8 | 1,80 | 370501031 | 10 pieces |
| **M 2,3 x 0,4** | 2,3 | 3,0 | 35 | 13 | 2,0 | 1,95 | 370501032 | 10 pieces |
| **M 2,4 x 0,45** | 2,4 | 3,0 | 40 | 15 | 2,0 | 2,00 | 370501033 | 10 pieces |
| **M 2,5 x 0,45** | 2,5 | 3,0 | 40 | 15 | 2,1 | 2,10 | 370501034 | 10 pieces |
| **M 2,6 x 0,45** | 2,6 | 3,0 | 40 | 15 | 2,2 | 2,20 | 370501035 | 10 pieces |

# Camera-Tripod

**Camera tripod & C-Mount thread**
**DIN 4503**

Efficient internal thread cutting.
The short structural type makes that tap usable by hand.
The Short-Machine-Tap is also usable by machine.

A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

## Short Machine Taps

Form D for through holes and blind holes

through holes & blind holes up to 4 x D | Chip removal (like picture) | Form D straight flutes

material: HSSG | medium | to 900 N/mm² 27,1 HRC

4-5 threads | outside cooling and lubrication

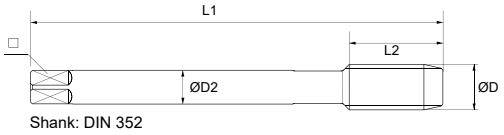
## Hand Tap Sets

for general use

through holes & blind holes up to 2 x D | Chip removal (like picture) | Form C straight flutes

material: HSSG | medium | to 900 N/mm² 27,1 HRC

2-3 threads | outside cooling and lubrication

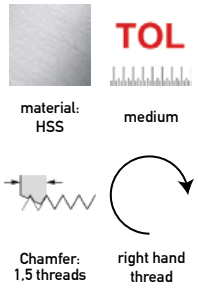


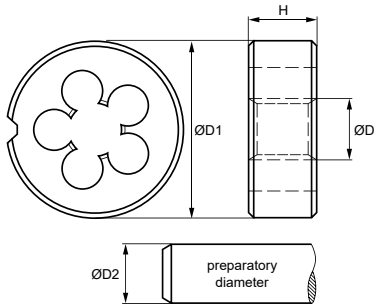
| Camera | D1 | D2 | L1 | L2 | □ | | No. | No. |
|---|---|---|---|---|---|---|---|---|
| **Cam.-Tripod 1/4"** | 6,35 | 6,0 | 50 | 19 | 4,9 | 5,20 | 380101001 | |
| **Cam.-Tripod 3/8"** | 9,53 | 7,0 | 70 | 24 | 5,5 | 8,00 | 380101002 | |
| **C-Mount 1" x 32** | 25,40 | 18,0 | 130 | 45 | 14,0 | 23,75 | 380101003 | |
| **S-Mount 12 x 0,5** | 12,00 | 9,0 | 70 | 22 | 7,0 | 11,50 | | 380301004 |

# Camera-Tripod

**Camera tripod & C-Mount thread**
**DIN 4503**

**Round Dies**
for general use



| Camera | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **Camera-Tripod 1/4"** | 6,35 | 20 | 7 | 6,22 | 381401001 |
| **Camera-Tripod 3/8"** | 9,53 | 20 | 7 | 9,37 | 381401002 |
| **C-Mount 1" x 32** | 25,40 | 55 | 16 | 25,25 | 381401003 |
| **S-Mount 12 x 0,5** | 12,00 | 38 | 10 | 11,92 | 381401004 |

# Taps

## VG Valve thread DIN 7756

Efficient internal thread cutting.
The short structural type makes that tap usable by hand.
The Short-Machine-Tap is also usable by machine.

A Hand-Tap-Set includes 2 taps:
Taper Tap
Finish Tap

### Short Machine Taps
Form D for through holes and blind holes

through holes & blind holes up to 4 x D | Chip removal (like picture) | Form D straight flutes

material: HSSG | TOL medium | N/mm² HRC to 900 N/mm² 27,1 HRC

4-5 threads | outside cooling and lubrication

### Hand Tap Sets
for general use

through holes & blind holes up to 2 x D | Chip removal (like picture) | Form C straight flutes

material: HSSG | TOL medium | N/mm² HRC to 900 N/mm² 27,1 HRC

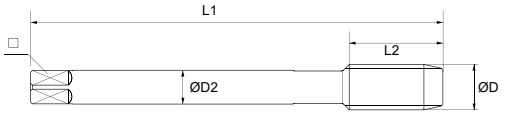
2-3 threads | outside cooling and lubrication

### Short Machine Taps
Form C for through holes and blind holes

through holes & blind holes up to 1,5 x D | Chip removal (like picture) | Form C straight flutes

material: HSSG | TOL medium | N/mm² HRC to 800 N/mm²

2-3 threads | outside cooling and lubrication

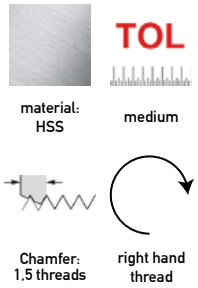


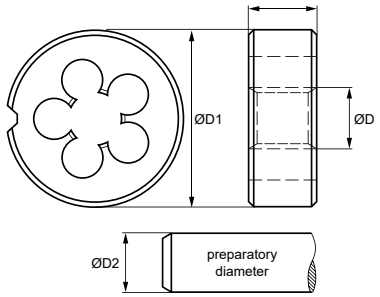
| VG | D1 | D2 | L1 | L2 | □ | | No. | No. | No. |
|---|---|---|---|---|---|---|---|---|---|
| **DIN 2181** | | | | | | | | | |
| **VG 5 x 36** | 5,15 | 6,0 | 50 | 12 | 4,9 | 4,65 | 390101001 | 390301001 | |
| **VG 5,2 x 24** | 5,23 | 6,0 | 56 | 17 | 4,9 | 4,25 | 390101002 | 390301002 | |
| **VG 6 x 32** | 5,98 | 6,0 | 56 | 14 | 4,9 | 5,35 | 390101003 | 390301003 | |
| **VG 8 x 32** | 7,68 | 7,0 | 56 | 16 | 5,5 | 6,90 | 390101004 | 390301004 | |
| **VG 10 x 28** | 10,27 | 8,0 | 63 | 18 | 6,2 | 9,35 | 390101005 | 390301005 | |
| **VG 12 x 26** | 12,17 | 9,0 | 70 | 22 | 7,0 | 11,15 | 390101006 | 390301006 | |
| **DIN 374** | | | | | | | | | |
| **VG 5 x 36** | 5,15 | 6,0 | 70 | 12 | 4,9 | 4,65 | | | 390501001 |
| **VG 5,2 x 24** | 5,23 | 6,0 | 80 | 17 | 4,9 | 4,25 | | | 390501002 |
| **VG 6 x 32** | 5,98 | 7,0 | 80 | 14 | 5,5 | 5,35 | | | 390501003 |
| **VG 8 x 32** | 7,68 | 8,0 | 80 | 16 | 6,2 | 6,90 | | | 390501004 |
| **VG 10 x 28** | 10,27 | 8,0 | 90 | 18 | 6,2 | 9,35 | | | 390501005 |
| **VG 12 x 26** | 12,17 | 9,0 | 100 | 22 | 7,0 | 11,15 | | | 390501006 |

# VG

**Valve thread**
**DIN 7756**

**Round Dies**
for general use

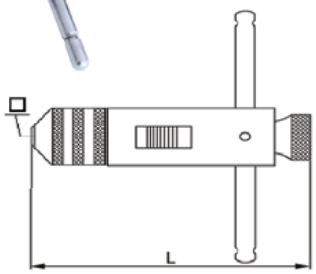


| VG | D | D1 | H | D2 | No. |
|---|---|---|---|---|---|
| **VG 5 x 36** | 5,15 | 20 | 7 | 5,15 | 391401001 |
| **VG 5,2 x 24** | 5,23 | 20 | 7 | 5,23 | 391401002 |
| **VG 6 x 32** | 5,98 | 20 | 7 | 5,98 | 391401003 |
| **VG 8 x 32** | 7,68 | 25 | 9 | 9,60 | 391401004 |
| **VG 10 x 28** | 10,27 | 30 | 11 | 10,27 | 391401005 |
| **VG 12 x 26** | 12,17 | 30 | 11 | 12,17 | 391401006 |

# Holding Tools

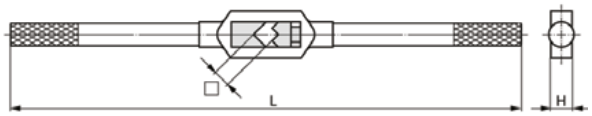
## BAER Tap holders with ratchet




| for taps size | metric | inch-sizes | □ | L1 | No. |
|---|---|---|---|---|---|
| 1 | M 3 - M 10 | 1/8 - 3/8 | 2,4 - 5,5 | 85 | 491625001 |
| 2 | M 5 - M 12 | 7/32 - 1/2 | 4,5 - 8,0 | 100 | 491625002 |
| 10 | M 3 - M 10 | 1/8 - 3/8 | 2,4 - 5,5 | 250 | 491625010 |
| 20 | M 5 - M 12 | 7/32 - 1/2 | 4,5 - 8,0 | 300 | 491625020 |

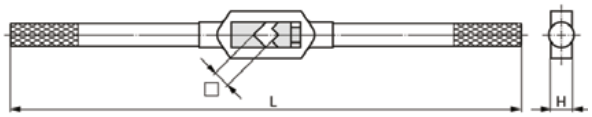
## Adjustable Tap Wrenches - zinc die cast

| for taps size | metric | inch-sizes | pipe-threads | □ | L1 | No. |
|---|---|---|---|---|---|---|
| 0 | M 1 - M8 | 1/16 - 1/4 | | 2,0 - 5,0 | 130 | 491723000 |
| 1 | M 1 - M10 | 1/16 - 3/8 | G 1/8 | 2,0 - 6,3 | 176 | 491723010 |
| 1.1/2 | M 1 - M12 | 1/16 - 1/2 | G 1/8 | 2,1 - 8,0 | 176 | 491723015 |
| 2 | M 4 - M12 | 5/32 - 1/2 | G 1/8 | 3,0 - 9,0 | 280 | 491723020 |
| 3 | M 5 - M20 | 7/32 - 3/4 | G 1/8 - G 1/2 | 4,9 - 12 | 380 | 491723030 |
| 4 | M 11 - M27 | 7/16 - 1" | G 1/4 - G 3/4 | 5,5 - 16 | 505 | 491723040 |
| 5 | M 13 - M32 | 1/2 - 1.1/4 | G 1/4 - G 1" | 7,0 - 20 | 700 | 491723050 |




## Adjustable Tap Wrenches - steel

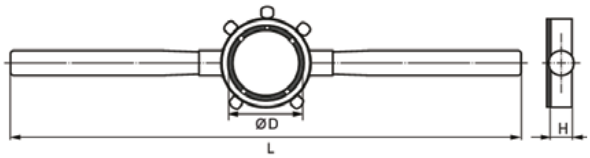
| for taps | metric | inch-sizes | pipe-threads | □ | L1 | No. |
|---|---|---|---|---|---|---|
| 0 | M 1 - M 8 | 1/16 - 1/4 | | 2,0 - 5,0 | 130 | 491724000 |
| 1 | M 1 - M 10 | 1/16 - 3/8 | | 2,0 - 6,3 | 180 | 491724010 |
| 1.1/2 | M 1 - M 12 | 1/16 - 1/2 | G 1/8 | 2,1 - 8,0 | 205 | 491724015 |
| 2 | M 4 - M 12 | 5/32 - 1/2 | G 1/8 | 3,0 - 9,0 | 280 | 491724020 |
| 3 | M 5 - M 20 | 7/32 - 3/4 | G 1/8 - G 1/2 | 4,9 - 12 | 380 | 491724030 |
| 4 | M 11 - M 27 | 7/16 - 1" | G 1/4 - G 3/4 | 5,5 - 16 | 500 | 491724040 |
| 5 | M 13 - M 32 | 1/2 - 1.1/4 | G 1/4 - G 1" | 7,0 - 20 | 700 | 491724050 |
| 6 | M 18 - M 42 | 3/4 - 1.1/2 | G 1/2 - G 1.1/4 | 11 - 24 | 1000 | 491724060 |
| 7 | M 27 - M 52 | 1.1/8 - 2" | G 3/4 - G 1.3/4 | 16 - 32 | 1250 | 491724070 |
| 8 | M 27 - M 64 | 1.1/8 – 3" | G 3/4 - G 3" | 16 - 40 | 1250 | 491724080 |



# Holding Tools

## Die Stocks - zinc die cast

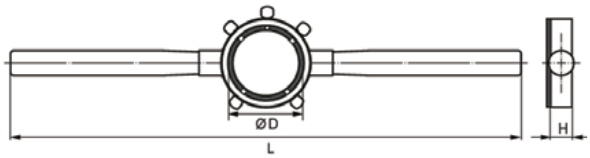
| Ø D x H | For Round Dies metric | inch-sizes | L1 | No. |
|---|---|---|---|---|
| 16 x 5 | M 1 - M 2,6 | BSW 1/16 - BSW 3/32 | 160 | 491823001 |
| 20 x 5 | M 3 - M 4 | BSW 1/8 - BSW 5/32 | 200 | 491823002 |
| 20 x 7 | M 4.5 - M 6 | BSW 3/16 - BSW 1/4 | 200 | 491823003 |
| 25 x 9 | M 7 - M 9 | BSW 5/16 | 224 | 491823004 |
| 30 x 11 | M 10 - M 11 | BSW 3/8 - BSW 7/16 | 280 | 491823005 |
| 38 x 10 | MF 12 - MF 15 | G 1/4 | 315 | 491823006 |
| 38 x 14 | M 12 - M 14 | BSW 1/2 - BSW 9/16 | 315 | 491823007 |
| 45 x 14 | MF 16 - MF 20 | G 3/8-1/2 | 450 | 491823008 |
| 45 x 18 | M 16 - M 20 | BSW 5/8 - BSW 13/16 | 450 | 491823009 |
| 55 x 16 | MF 22 - MF 26 | G 5/8 - G 3/4 | 560 | 491823010 |
| 55 x 22 | M 22 - M 24 | BSW 7/8 - BSW 1" | 560 | 491823011 |
| 65 x 18 | MF 27 - MF 36 | G 7/8 - G 1" | 630 | 491823012 |
| 65 x 25 | M 27 - M 36 | BSW 1.1/8 - BSW 1.3/8 | 630 | 491823013 |




| Ø D in inch | For Round Dies Ø D (mm) x H (mm) | Ø D (inch) x H (inch) | L1 | No. |
|---|---|---|---|---|
| 13/16" | 20,6 x 6,35 | 13/16 x 1/4 | 200 | 491823014 |
| 1" | 25,4 x 9,5 | 1" x 3/8 | 224 | 491823015 |
| 1.5/16" | 33,4 x 11,1 | 1.5/16 x 7/16 | 270 | 491823016 |
| 1.1/2" | 38,1 x 12,7 | 1.1/2 x 1/2 | 315 | 491823017 |
| 2" | 50,8 x 15,9 | 2" x 5/8 | 560 | 491823018 |
| 2.1/4" | 57,1 x 17,5 | 2.1/4 x 11/16 | 560 | 491823019 |
| 2.1/2" | 63,5 x 19,0 | 2.1/2 x 3/4 | 630 | 491823020 |
| 3" | 76,2 x 22,2 | 3" x 7/8 | 900 | 491823021 |
| 3.1/2" | 88,9 x 25,4 | 3.1/2" x 1" | 900 | 491823022 |
| 4" | 101,6 x 25,4 | 4" x 1" | 1000 | 491823023 |

## Die Stocks - steel

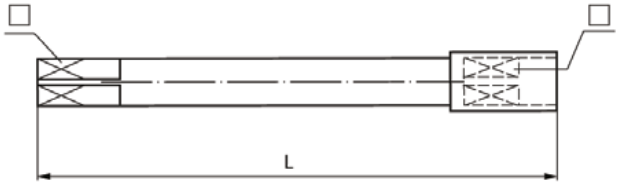
| Ø D x H | For Round Dies metric | inch-sizes | L1 | No. |
|---|---|---|---|---|
| 45 x 18 | M 16 - M 20 | BSW 5/8 - BSW 13/16 | 450 | 491824001 |
| 55 x 22 | M 22 - M 24 | BSW 7/8 - BSW 1" | 560 | 491824002 |
| 65 x 25 | M 27 - M 36 | BSW 1.1/8 - BSW 1.3/8 | 630 | 491824003 |
| 75 x 20 | MF 38 - MF 42 | G 1.1/8 - G 1.1/4 | 800 | 491824004 |
| 75 x 30 | M 38 - M 42 | BSW 1.1/2 - BSW 1.5/8 | 800 | 491824005 |
| 90 x 22 | MF 45 - MF 52 | G 1.3/8 - G 1.5/8 | 900 | 491824006 |
| 90 x 36 | M 45 - M 52 | BSW 1.3/4 - BSW 2" | 900 | 491824007 |
| 105 x 22 | MF 54 - MF 63 | G 1.3/4 - G 2" | 975 | 491824008 |
| 105 x 36 | M 54 - M 63 | BSW 2.1/4 | 975 | 491824009 |
| 120 x 22 | MF 64 - MF 71 | G 2.1/4 - G 2.3/4 | 956 | 491824010 |
| 120 x 36 | M 64 - M 71 | BSW 2.1/2 - BSW 2.3/4 | 956 | 491824011 |
| 130 x 25 | | G 3" | 966 | 491824012 |
| 130 x 36 | | | 966 | 491824013 |
| 140 x 22 | | | 976 | 491824014 |
| 150 x 25 | | G 3.1/2" | 986 | 491824015 |
| 160 x 25 | | G 4" | 996 | 491824016 |



# Holding Tools

## Extension sleeves for taps

| □ | L1 | for taps metric acc. to DIN 352 | No. |
|---|---|---|---|
| 2,1 | 60 | **M 1 - M 2,6** | 491925021 |
| 2,4 | 70 | | 491925024 |
| 2,7 | 80 | **M 3** | 491925027 |
| 3,0 | 90 | **M 3,5** | 491925030 |
| 3,4 | 95 | **M 4** | 491925034 |
| 3,8 | 100 | | 491925038 |
| 4,3 | 105 | | 491925043 |
| 4,9 | 110 | **M 4,5 - M 8** | 491925049 |
| 5,5 | 115 | **M 9 - M 10** | 491925055 |
| 6,2 | 120 | **M 11** | 491925062 |
| 7,0 | 125 | **M 12** | 491925070 |
| 8,0 | 125 | | 491925080 |
| 9,0 | 130 | **M 14 - M 16** | 491925090 |
| 10,0 | 140 | | 491925100 |
| 11,0 | 150 | **M 18** | 491925110 |
| 12,0 | 155 | **M 20** | 491925120 |
| 13,0 | 165 | | 491925130 |
| 14,5 | 175 | **M 22 - M 24** | 491925145 |
| 16,0 | 180 | **M 27** | 491925160 |
| 18,0 | 200 | **M 30** | 491925180 |
| 20,0 | 220 | **M 33** | 491925200 |
| 22,0 | 220 | **M 36** | 491925220 |
| 24,0 | 235 | **M 39 - M 42** | 491925240 |
| 26,0 | 250 | | 491925260 |
| 29,0 | 265 | **M 45 - M 48** | 491925290 |
| 32,0 | 285 | **M 52** | 491925320 |




## Die Guides M 3 - M 12

for Round Dies DIN 223 = EN 22568 and
Die Stocks DIN 225 = EN 22568

**Application:**
The guide helps cutting an external thread with cutting dies. The guides will be laid together with the cutting dies into the die holder.

**Advantages:**
- accurate aligned threads
- clear thread flanks
- less deficient products
- better evacuation of the chip, because of the leading with clearance holes
- able to cut right- or left-hand threads as well as all possible pitches

Item No.: 492025312

# Cutting Paste

## BAER High Performance cutting paste

Cutting paste with high pressure additives achieves extremely high lubricity. The paste adhering to the cutting edges only gets liquid when used (use cutting paste undiluted).

Lubrication is important for chip removal processes.

**Advantages:**
- Contains no petroleum, chlorine or sulfur
- Significantly improved tool life time
- Does not leave a greasy film of oil on the workpiece

**Applications:**
Drilling, tapping, thread milling, reaming, milling, core drilling, sawing, as well as for heavy chipping and for all machining operations.

**For all steels** such as: iron, steel, tool steel, high alloy steels, chromium-nickel alloys, Aluminum, titanium, manganese, cast steel, cast iron, brass, bronze and all stainless steels AISI 304, AISI 316, INOX etc.

**100 ml**
Item No.: SP100

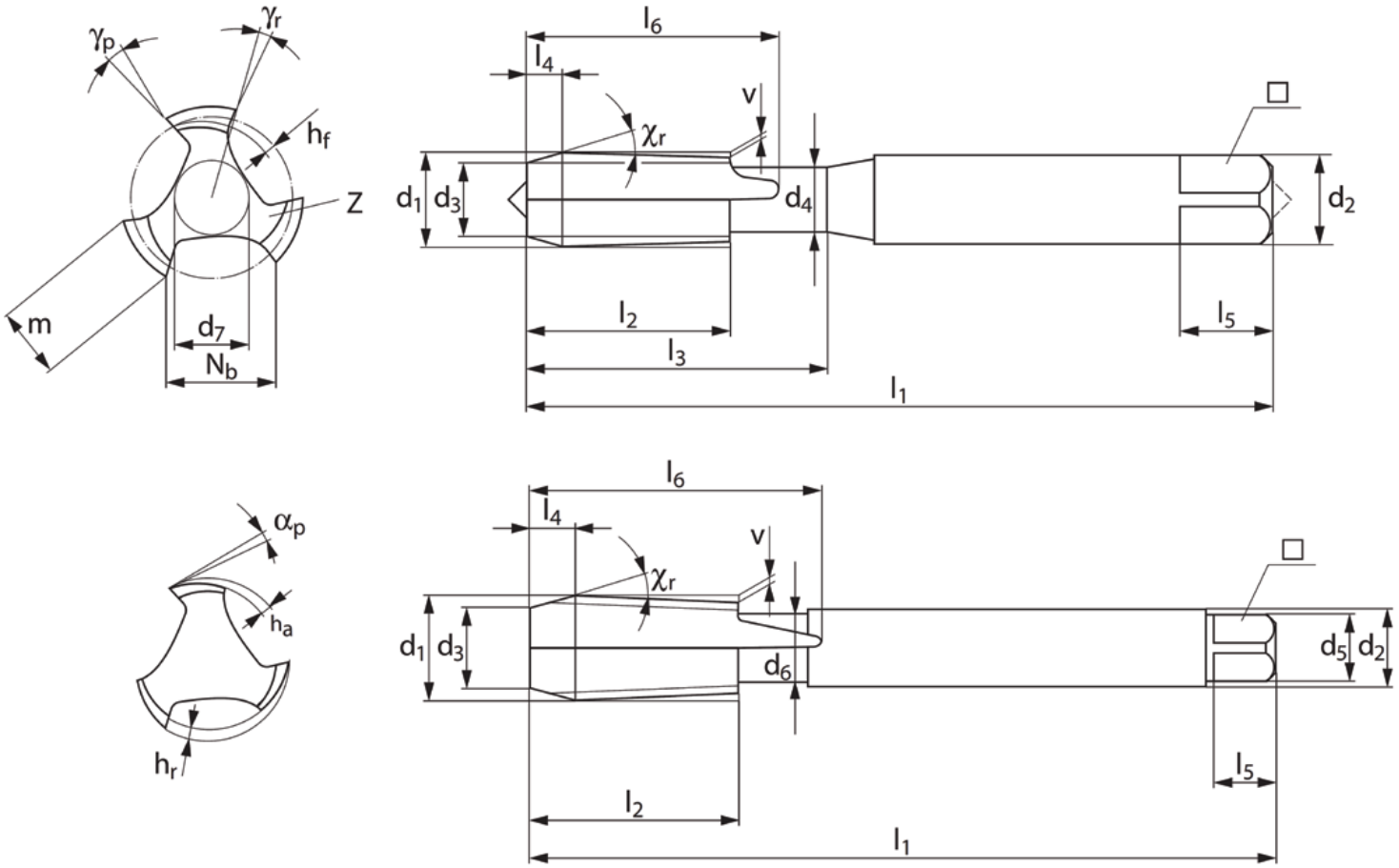
## BAER Countersink

| | **HSSG 90° Countersink** for general use | **HSSE-VAP 90° Countersink** for stainless steels | **HSSG-Bit 90° Countersink** for electric screw drivers |
|---|---|---|---|
| | | | |
| **dimension** | No. | No. | No. |
| **6,3 mm (M 3)** | 74563 | 74663 | 744063 |
| **8,3 mm (M 4)** | 74583 | 74683 | 744083 |
| **10,4 mm (M 5)** | 745104 | 746104 | 744104 |
| **12,4 mm (M 6)** | 745124 | 746124 | 744124 |
| **16,5 mm (M 8)** | 745165 | 746165 | 744165 |
| **20,5 mm (M 10)** | 745205 | 746205 | 744205 |
| **25,0 mm (M 12)** | 745250 | 746250 | |
| **31,0 mm (M 16)** | 745310 | 746310 | |
| **Set 6,3 \| 8,3 \| 10,4 \| 12,4 \| 16,5 \| 20,5 mm*** | 1571 | 1573 | 1576 |
| **Set 6,3 \| 10,4 \| 16,5 \| 20,5 \| 25,0 mm*** | 1572 | 1574 | |

* picture of sets

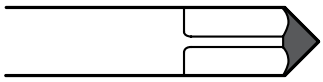
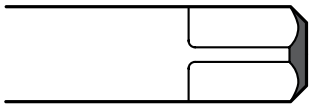
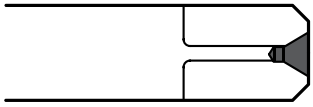
# Technical Information

## Tap Geometries



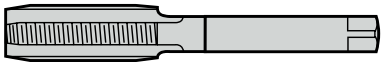
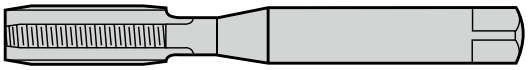
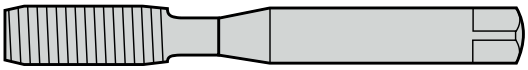

| | | | |
|---|---|---|---|
| **d1** | Thread diameter | **Z** | Number of flutes |
| **d2** | Shank diameter | **v** | Back taper (axial relief) |
| **d3** | Chamfer diameter | **xr** | Chamfer angle |
| **d4** | Neck diameter | **Nb** | Width of flute |
| **d5** | Recessed square diameter | **m** | Width of land |
| **d6** | Neck diameter | **ha** | Chamfer relief |
| **d7** | Web diameter | **hf** | Relief on flanks |
| **l1** | Total length | **hr** | Chamfer relief |
| **l2** | Thread length | **αp** | Relief angle |
| **l3** | Useful length | **γp** | Rake angle |
| **l4** | Chamfer lead length | | |
| **l5** | Square length | | |
| **l6** | Flute length | | |
| □ | Sqaure dimension | | |

## Tap Centering

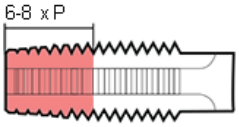
| | | |
|---|---|---|
| Centre point | Ø 0,8 mm - 6,0 mm |  Centre point |
| Centring point set off | Ø 6,0 mm - 12,8 mm |  Centring bevel |
| Centring hole | > Ø 12,8 mm |  Centring hole |

# Technical Information

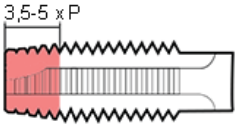
## Tap Construction dimensions

| | | | | | |
|---|---|---|---|---|---|
|  Gewindebohrer / Tap | DIN 352 | DIN 2181 | DIN 5157 | DIN 40432 | |
|  Gewindebohrer / Tap | DIN 371 | DIN 40435 | | | |
| Gewindebohrer / Tap | DIN 376 | DIN 374 | DIN 5156 | DIN 40433 | DIN 40435 |
|  Gewindeformer / Forming Tap | DIN 2174 | DIN 371 | | | |
| Gewindeformer / Forming Tap | DIN2174 | DIN 376 | DIN 2189 | | |

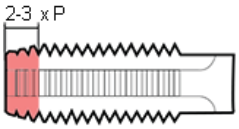
## Tap Chamfer Forms



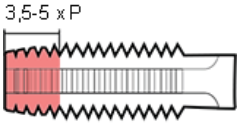

**Form A**
long, 6 - 8 thread
straight flutes
for short through holes



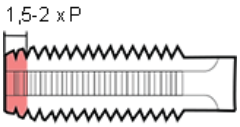

**Form B**
medium, 3,5 - 5,5 threads
straight flutes with spiral point
for through holes in medium- and long chipping materials



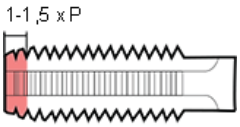

**Form C**
short, 2 - 3 threads
straight and spiral flutes
for blind holes in medium- and long chipping materials
for through holes in short chipping materials




**Form D**
medium, 3,5 - 5 threads
straight and spiral flutes 15°
for blind holes with long thread runout
for short through holes




**Form E**
very short, 1,5 - 2 threads
straight and spiral flutes 15°
for blind holes with short thread runout

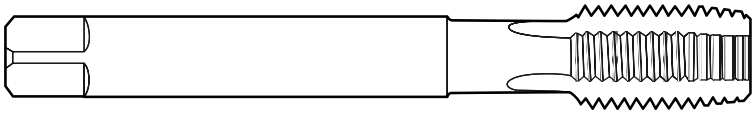


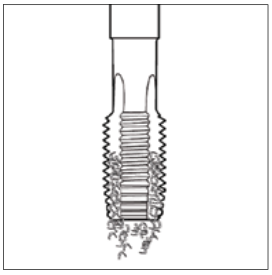

**Form F**
very short, 1 - 1,5 threads
straight and spiral flutes
for blind holes with short thread runout
Avoid if possible.

**Please note:**
Short chamfers cut threads close to the bottom of the borehole.
Long chamfers reduce the forced on the cutting edges (recommended for materials with higher material strength)
Long chamfers increase the required torque.

# Technical Information

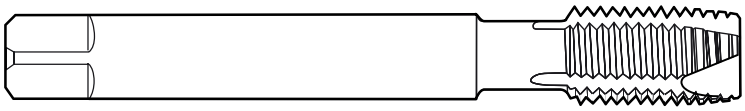
## Tap flutes

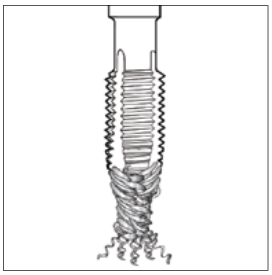




**Form A, C, E**
straight-fluted
for through and blind holes

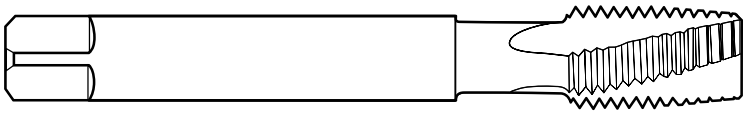
The flutes can hold a part of the chips. Chips get only partically removed in cutting direction. For this reason it is not recommended to use the tap for deep holes.

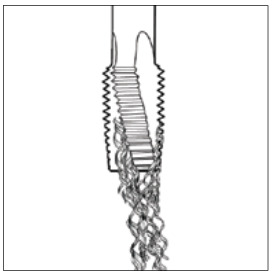




**Form B**
straight-fluted with spiral point
for through holes

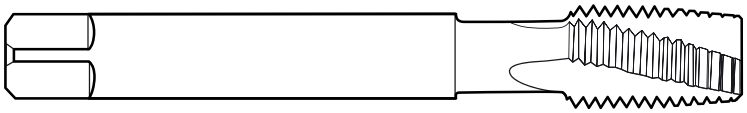
Due to the spiral point the chips are getting removed tightly rolled in cutting direction and prevents chip-packing.
Coolant-lubricant can flow freely.





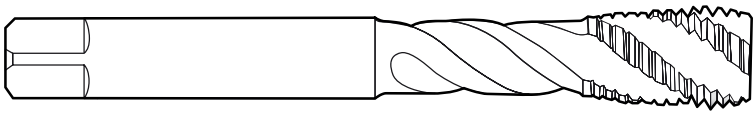
**Form C, D**
8 - 15° left-hand spiral flutes
for through holes

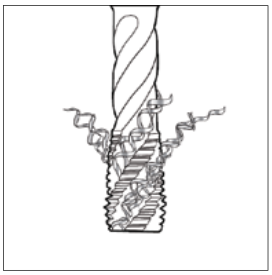
Due to the left-hand spiral flutes the rake angle remains constant and ensure stable chamfer teeth to produce threads in high-strength materials.
The left-hand spiral flutes forces the chips to remove ahead of the tap.



**Form C, E**
10 - 15° right-hand spiral flutes
for blind holes

Especially suitable for automatic lathes and multi-spindle machines. Due to the chip removal against the cutting direction a secured tapping process is assured in hard conditions, even for threads with cross holes.



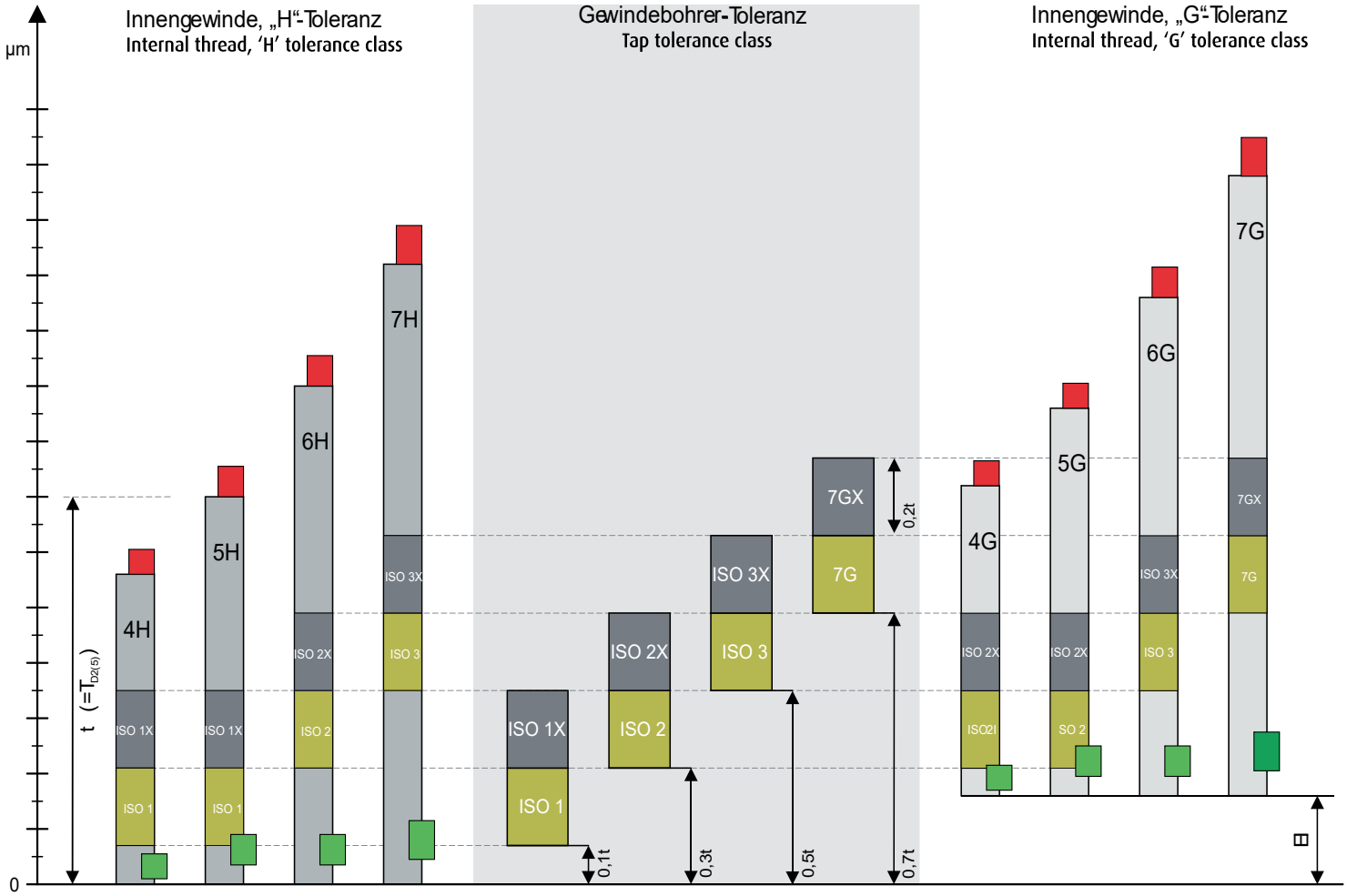


**Form C, E**
35 - 50° right-hand spiral flutes
for blind holes

Due to the high spiral flutes, the chips can be removed securely also in long-chipping and deep blind holes.

# Technical Information

## Tolerances




Flankendurchmesser-Toleranz des Innengewindes nach DIN ISO 965-1
Pitch diameter tolerance of internal thread acc. DIN ISO 965-1

Gewindebohrer mit spezieller Flankendurchmesser-Toleranz
Taps with specific pitch diameter tolerance

Flankendurchmesser-Toleranz des Gewindebohrers nach DIN EN 22857
Pitch diameter tolerance of the tap acc. DIN EN 22857

Flankendurchmesser-Toleranz des Ausschusslehrdorns nach DIN ISO 1502
Pitch diameter tolerance of the no-go thread plug gauge acc. DIN ISO 1502

Flankendurchmesser-Toleranz des Gutlehrdorns nach DIN ISO 1502
Pitch diameter tolerance of the go thread plug gauge acc. DIN ISO 1502

El = Grundmaß
Basis

t = Toleranzklasse 5 des Innengewindes (Toleranzeinheit)
Tolerance class of the internal thread (tolerance unit)

TD2 = Toleranz des Flankendurchmessers
Pitch diameter tolerance

| tolerance class of tap | | tolerance field internal thread | | | | | remarks | Applications |
|---|---|---|---|---|---|---|---|---|
| 4H (DIN 802/1) | ISO 1 | 4H | 5H | | | | undersize | Threads with small clearance |
| 6H (DIN 802/1) | ISO 2 | 4G | 5G | 6H | | | normal | Thread with normal clearance |
| 6G (DIN 802/1) | ISO 3 | | | 6G | 7H | 8H | oversize | Threads with large clearance |
| 7G (DIN 802/4) | | | | | 7G | 8G | oversize | before heat treatment, causing distortion |
| 6H +0,1 | | | | | | | oversize | Electroplating allowance ≈ 25µm thickness |
| 6H +0,2 | | | | | | | oversize | Electroplating allowance ≈ 50µm thickness |

# Technical Information

## Tap Surface Treatments

**TIN (titanium nitride) coating**
The TIN surface treatment (titanium-nitride gold-yellow) increases the surface hardness (approx. 2300 HV) and the sliding properties. It provides a better cutting performance and increased tool life time.

**VAP (vaporized - steam tempered)**
The oxide surface (vaporized) improves the adhesion of the cutting oil and provides a stabil lubricant film. Cold welding in the tap flanks is reduced.

**TiAlN (titanium aluminium nitride) coating**
The TiAlN surface treatment increases the surface hardness (approx. 3300 HV), the sliding properties (friction coefficient: 0,25) and with high temperature resistance up to 800°C. It provides a better cutting performance and increased tool life time.

**TiCN (titanium carbonitride) coating**
The TiCN surface treatment (titanium carbon nitride - grey violet) increases the surface hardness (approx. 3000 HV) and the sliding properties (coefficient of friction: 0,3). It provides a better cutting performance and increased tool life time.

**Coating services**
Every threading tool of our product range - whether or not cataloged - can be delivered with any coating or surface treatment in short time.

## Troubleshooting guide for tapping

| | |
|---|---|
| **Tapping undersized threads** | Pitch error<br>Too small tolerance<br>Geometry of the tap is not suitable for the material |
| **Tapping oversized threads** | Cutting speed is too high<br>Bad running accuracy<br>Chip jammings in flutes<br>Incorrect positioning of workpiece or tap<br>Inconsistent feed of tap<br>Too high tolerance |
| **Poor thread surface** | Cutting speed not suitable<br>Cooling is not suitalbe or not existing<br>Geometry of the tap is not suitable for the material<br>Core hole too small |
| **Thread break of the thread to be cut** | Geometry of the tap is not suitable for the material<br>Core hole too small<br>Core hole not deep enough<br>Chip jammings in flutes<br>Bad running accuracy<br>Incorrect positioning of workpiece or tap<br>Inconsistent feed of tap |
| **Low tap lifetime** | Cutting speed not suitable<br>Cooling is not suitalbe or not existing<br>Geometry of the tap is not suitable for the material<br>Surface treatment/ coating for tap needed<br>Core hole too small |
| **Tool outbreaks** | Geometry of the tap is not suitable for the material<br>Core hole too small<br>Core hole not deep enough<br>Chip jammings in flutes<br>Bad running accuracy<br>Incorrect positioning of workpiece or tap<br>Inconsistent feed of tap<br>Worn tap |
| **Cold welding on the tap** | Cutting speed not suitable<br>Increase coolant supply |

# Technical Information

## Tap Cutting speeds

The cutting speeds for taps depend on following parameters:
- material of the workpiece
- tap geometries
- lubrication
- and more.

You can fin the cutting speed in the product describtions of the taps in our online-shop. Just enter the item number into the Search-field and find the cutting speeds in the bottom part of the product describtion.

## Lubrication and cooling

It is recommended to use one of the following coolings or lubrications to improve the thread results andtool life time.

**Dry machining and pressurized air**
- cast iron
- (Cooled) pressurized air is used for chip removal

**Emulsion**
- Most common coolant-lubricant for thread cutting

**Thread cutting oil**
- Achieving excellent thread surfaces and tool life time

**Thread cutting paste**
- suitable for forming taps
- good results with horizontal cutting direction
- for bigger diameters and through holes

**MQL - Minimum-quantity lubrication**
- cooling by aerosol

# Technical Information

## Formula

| Describtion | Symbol | Unit | Formula | Example |
|---|---|---|---|---|
| Rotation speed | n | $min^{-1}$ | | |
| Angular speed | $\omega$ | $s^{-1}$ | $\omega = \frac{2 \cdot \pi \cdot n}{60}$ | $n = 400\ min^{-1}$<br>$\omega = \frac{2 \cdot \pi \cdot 400}{60}$<br>$\omega = 41{,}89\ s^{-1}$ |
| Cutting speed | $v_c$ | m/min | $v_c = \frac{d \cdot \omega}{33{,}3}$<br>$v_c = \frac{d \cdot \pi \cdot n}{1000}$ | $n = 400\ min^{-1}$, $d = 20$ mm<br>$v_c = \frac{20 \cdot \pi \cdot 400}{1000}$<br>$v_c = 25{,}133$ m/min |
| Feed per revolution | f | mm | | |
| Feed speed | $v_f$ | mm/min | $v_f = f \cdot n$ | $n = 400\ min^{-1}$<br>$f = 0{,}800$ mm<br>$v_f = 0{,}800 \cdot 400$<br>$v_f = 320$ mm/min |
| Force | F | N | $F = k_c \cdot A$ | |
| Torque | M | Nm | $M = \frac{F \cdot d}{2000}$ | $F = 200$ N, $d = 20$ mm<br>$M = \frac{200 \cdot 20}{2000}$<br>$M = 2$ Nm |
| Mechanical work | W | J | $W = F \cdot U$ | $F = 200$ N, $d = 20$ mm<br>$U = \frac{d \cdot \pi}{1000} = 0{,}063$ m<br>$W = 200 \cdot 0{,}063 = 12{,}6$ J |
| Performance | P | W | $P = \frac{F \cdot v_c}{60}$<br>$P = M \cdot \omega$ | $F = 200$ N, $v_c = 25{,}133$ m/min<br>$P = 83{,}78$ W<br>$M = 2$ Nm, $\omega = 41{,}89\ s^{-1}$<br>$P = 83{,}78$ W |
| Efficiency | $\eta$ | – | $\eta = \frac{P_{ab}}{P_{an}}$<br>$\eta < 1$ | $P_{ab} = 58{,}65$, $P_{an} = 83{,}78$ W<br>$\eta = \frac{58{,}65}{83{,}78} = 0{,}7$ |

$\pi = 3{,}141592654$

d = Diameter in mm

U = circumference in m

1 kW = 1,36 PS

1 PS = 0,736 kW

$1\ \frac{m}{s} = 60\ \frac{m}{min}$

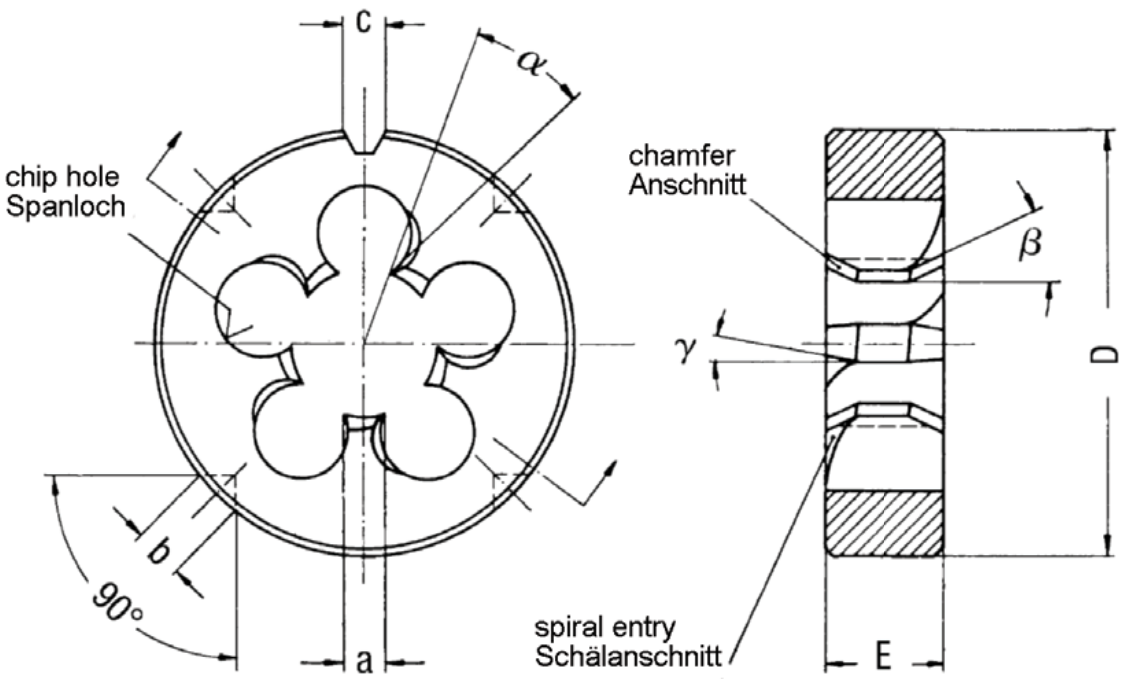
1/s = 60/min = 1 Hz

$1J = 1\ Nm = 1\ \frac{kg \cdot m^2}{s^2}$

$1W = 1\ \frac{J}{s} = 1\ \frac{Nm}{s} = 1\ \frac{kg \cdot m^2}{s^3}$

# Technical Information

## Round Dies Geometries




| | | | |
|---|---|---|---|
| **D** | outside diameter | **b** | diameter of hole for fixing screw |
| **E** | thickness | **α** | rake angle |
| **a** | width of tooth | **β** | chamfer angle |
| **c** | width of notch | **γ** | spiral angle |

**Preparation of workpiece:**
- concentrical chamfer - ease entry of cutting
- workpiece diameter must be less than the nominal diameter

**Chamfer**
- Standard chamfer (length, see at the item)
- Spiral entry: free flow of chips ahead of the die and a reducing of cutting torque.
  This result in an improved surface finish on the cut threads and longer die life
- 70° (short chamfer) - chamfer length: 1,25 pitch = 70°

## Tolerances for Round Dies

Metric ISO thread acc. DIN 13 - coarse and fine thread

4h = tolerance class „fine“
6h = tolerance class „middle“, for small diameters (up to M 1,4)
6g = tolerance class „middle“ - Standard
6e = undersize tolerance; for bolts that receive a surface treatment or a galvanizing (layer thickness up to 8 µm).
Cutting dies with 6e tolerance are cutting about 0,03 mm smaller than normal cutting dies with 6g tolerance.
8e = undersize tolerance; for bolts that receive a strong surface coating (layer thickness about 16 - 18 µm)

Unified thread UNC, UNF, UNEF, UNS, UN, UNJC, UNJF etc.

3A = tolerance „fine“
2A = standard tolerance „middle“
1A = tolerance „coarse“

Whitworth pipe thread G (BSP) acc. DIN-ISO 228

A = standard tolerance „middle“
B = tolerance „coarse“

# Technical Information

## Cutting speeds for Machine Forming Taps

| materials | tensile strength | forming speed in m/min | recommended lubrication |
|---|---|---|---|
| construction steels, free-macining steels, cold-extrusion steels etc. | < 600 N/mm² | 20 - 80 | Cutting oil/ Emulsion |
| construction steels, heat-treatable steels, cast steels etc. | < 800 N/mm² | 20 - 60 | Cutting oil/ Emulsion |
| heat-treatable steels, cold-extrusion steels, nitriding steels etc. | < 1000 N/mm² | 10 - 40 | Cutting oil |
| corrosion and acid proof steels ferritic, martensitic | < 950 N/mm² | 10 - 25 (with emulsion just limitedly applicable) | Cutting oil |
| corrosion and acid proof steels austenitic | < 950 N/mm² | 10 - 25 (with emulsion just limitedly applicable) | Cutting oil |
| aluminium wrought alloys | < 550 N/mm² | 15 - 40 | Cutting oil/ Emulsion |
| aluminium cast alloys | Si < 12% | 15 - 40 | Cutting oil/ Emulsion |
| pure copper | < 400 N/mm² | 20 - 40 | Cutting oil/ Emulsion |
| copper-zinc alloys (brass long-chipping) | < 550 N/mm² | 40 - 80 | Emulsion |

forming (cutting) speed [m/min] = (diameter * π * number of rotation) / 1000
number of rotation n [1/min] = (cutting speed in m/min * 1000) / (diameter * π)
feed programming [mm/min] = number of rotation * pitch
Please notice that the mentioned cutting speeds are only for orientation.
The right cutting speed is depend on lubrication and application.

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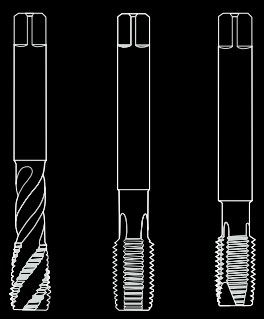
**www.threading-tools.com**

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