



METALLO



Maschi e Filiere professionali
Baer Tools

Online Shop:
www.intense-shop.it

Intense srl
tel: +39 02 9218151
www.intense.it



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.



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.



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.



Distributors

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

M Metric coarse thread ISO DIN 13



Thread Cutting Sets
p. 10-19



Short Machine Taps
p. 20



Hand Tap Sets
p. 21-23



Machine Taps
p. 24-33



Forming Taps
p. 34-35



Bit Taps
p. 36-37



Round Dies
p. 38-40



Hexagon Die Nuts
p. 41

MF Metric fine thread ISO DIN 13



Thread Cutting Sets
p. 42-43



Short Machine Taps
p. 44



Hand Tap Sets
p. 45-52



Machine Taps
p. 53-65



Forming Taps
p. 66



Bit Taps
p. 67



Round Dies
p. 68-73



Hexagon Die Nuts
p. 74-75

G(BSP) British standard whitworth pipe thread DIN ISO 228



Thread Cutting Sets
p. 76-77



Short Machine Taps
p. 78



Hand Tap Sets
p. 79



Machine Taps
p. 80-81



Forming Taps
p. 82



Round Dies
p. 83



Hexagon Die Nuts
p. 84

UNC Unified coarse thread ANSI B1.1



Thread Cutting Sets
p. 86-87



Short Machine Taps
p. 88



Hand Tap Sets
p. 88



Machine Taps
p. 89-90



Forming Taps
p. 91



Combined Bit Taps
p. 92



Round Dies
p. 93



Hexagon Die Nuts
p. 94

UNF Unified fine thread ANSI B1.1



Thread Cutting Sets
p. 96-97



Short Machine Taps
p. 98



Hand Tap Sets
p. 98



Machine Taps
p. 99-100



Forming Taps
p. 101



Combined Bit Taps
p. 102



Round Dies
p. 103



Hexagon Die Nuts
p. 104

UNS Unified thread with special threads per inch (TPI)



Machine Taps
p. 105



Round Dies
p. 105

UNEF Unified extra fine thread ANSI B1.1



Hand Tap Sets
p. 106



Machine Taps
p. 106



Round Dies
p. 107

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



Hand Tap Sets
p. 108



Machine Taps
p. 108



Round Dies
p. 109



Hexagon Die Nuts
p. 109

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



BSW British standard BS 84 whitworth coarse thread



BSF British standard BS 84 whitworth fine thread



TR Trapezoidal thread DIN 103



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

NPTF National standard sealing pipe thread ANSI B 1.20.3



NPS National standard straight pipe thread



RC (BSPT) Whitworth tapered pipe thread DIN 2999

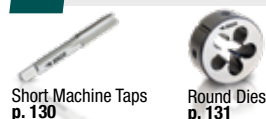
RP(BSPP) British standard whitworth pipe thread ISO 7-1



BA British Association thread BS 93



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



PG Steel Conduit Thread DIN 40430



FG Bicycle thread DIN 79012 BSC British bicycle thread RS 811



RD Knuckle thread DIN 405 RMS Royal Microscopical Society DIN 58888



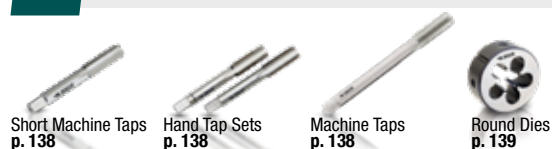
MINI Metric Mini-thread and Nano-thread



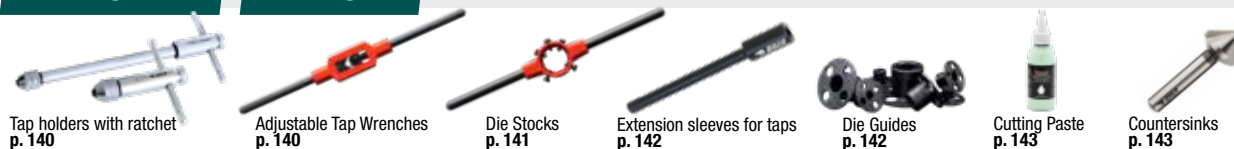
CAMERA-Tripod Camera tripod and C-Mount thread DIN 4503



VG Valve thread DIN 7756



Holding Tools Cutting Oil



Technical Information

p. 144	Tap Geometries	p. 148	Troubleshooting guide for tapping
p. 144	Tap Centering	p. 149	Tap Cutting speeds
p. 145	Tap Construction dimensions	p. 149	Lubrication and cooling
p. 145	Tap Chamfer Forms	p. 150	Formula
p. 146	Tap flutes	p. 151	Round Dies Geometries
p. 147	Tolerances	p. 151	Tolerances for Round Dies
p. 148	Tap Surface Treatments	p. 152	Cutting speeds for Machine Forming Taps

UNI*T*AP

UNI*T*ap - Universal High-End Threading Tap

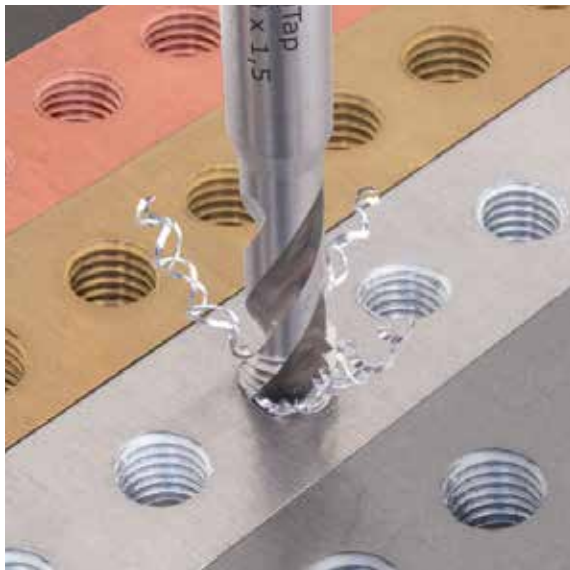
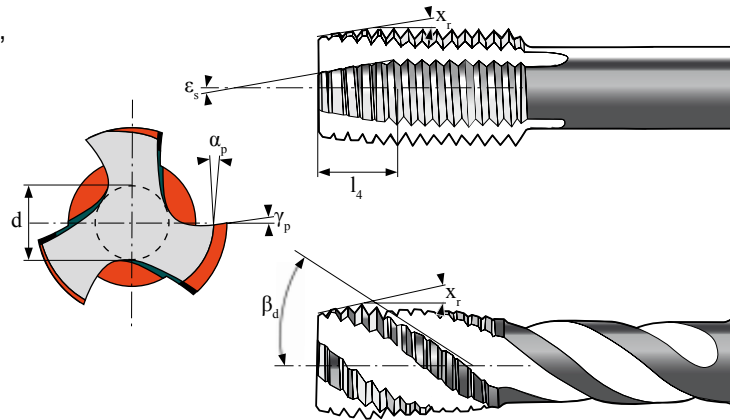
A real revolution in the production of internal threads

UNI*T*ap - Unique cutting geometry

The unique geometry of UNI*T*ap 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 occur at the lead-in chamfer, which is strikingly relieved by structural changes in the UNI*T*ap. 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 jamming. 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



A professional for all applications and materials

- Steels and Steel alloys up to 1200 N/mm
- Stainless Steels; Inoxidable Steels up to 1000 N/mm; VASsteels; 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/mm
- Pure Titanium and Titanium alloys up to 900 N/mm
- Pure Nickel and Nickel alloys up to 900 N/mm
- Pure Copper; Copper alloys; Brass; Bronze (all chip lengths)

Cost savings and flexibility

Due to its universal application possibilities, one UNI*T*ap 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	EUR / pc.
normal steels	6,98
stainless steels	11,68
aluminium and alloys	34,57
cast and grey cast iron	19,64
titanium and alloys	47,30
brass and copper	11,81
total:	131,98



same result with



BAER HSSE UNI*T*ap Machine Tap for through holes M 6 x 1,0

17,33 EUR over 85% savings

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.



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

Stainless Steel, Inoxidable 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

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

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 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

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

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

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 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

$$\text{cutting speed } v_c \text{ [m/min]} = (\text{diameter} * \pi * \text{number of rotations}) / 1000$$

$$\text{number of rotations } n \text{ [1/min]} = (\text{cutting speed in m/min} * 1000) / (\text{diameter} * \pi)$$

$$\text{feed programming [mm/min]} = \text{number of rotations} * \text{pitch}$$

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

INTENSE s.r.l.
Via Novara 1 - 20060 Cernusco Sul Naviglio (MI)
Tel. +39 02 921815.1 - Fax +39 02 92104594
www.intense.it - info@intense.it

BAER UNIⁱTap Set M 3 - M 12

HSSE UNIⁱTap Machine Taps for through holes
incl. HSSE/Co extreme drill bits for core holes



through holes up to 4 x D



chip removal (like picture)



Form B with spiral point



4-5 threads



ISO2/6H

Set Content

BAER UNI ⁱ Tap HSSE Machine Taps for through holes	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/Co extreme 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 UNIⁱTap Set M 3 - M 12

HSSE UNIⁱTap Machine Taps for blind holes
incl. HSSE/Co Extreme drill bits for core holes



blind holes up to 3 x D



chip removal (like picture)



Form C 40° right spiral flutes



2-3 threads



ISO2/6H

Set Content

BAER UNI ⁱ Tap HSSE Machine Taps for through holes	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/Co extreme 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
--	--



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



through- & blind holes up to 2 x D



Chip removal (like picture)



Form C straight flutes



2-3 threads



ISO2/6H



Set Content

BAER HSSG Short Machine Taps	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 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 adjustable Tap Wrenches - zinc die cast	M 1-12 1/16-1/2 G 1/8
--	---------------------------

BAER Short Machine Taps Set M 3 - M 12

HSSG Short Machine Taps (3 pcs. each dimension)

incl. HSS drill bits for core holes



through- & blind holes up to 2 x D



Chip removal (like picture)



Form C straight flutes



2-3 threads



ISO2/6H



Set Content

BAER HSSG Short Machine Taps	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 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 Machine Taps Set M 3 - M 12

HSSE Machine Taps for through hole

incl. HSS Drill bits for core holes



through holes up to 4 x D



Chip removal (like picture)



Form B with spiral point



4-5 threads



ISO2/6H



Set Content

BAER HSSE Machine Taps through hole	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 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 Machine Taps Set M 3 - M 12

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
right spiral
flutes



2-3 threads

TOL



ISO2/6H

Set Content

BAER HSSE Machine Taps for blind holes	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 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 Machine Taps Set M 3 - M 12

HSSE-TIN Machine Taps for through hole
incl. HSS-TIN Drill bits for core holes



through- &
blind holes
up to 4 x D



chip removal
(like picture)



Form B with
spiral point



4-5 threads

TOL



ISO2/6H



Set Content

BAER HSSE-TIN Machine Taps through hole	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 HSSG-TIN 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 Machine Taps Set M 3 - M 12

HSSE-TIN Machine Taps for through hole
incl. HSS-TIN Drill bits for core holes



blind holes
up to 3 x D



Chip removal
(like picture)



Form B with
spiral point



2-3 threads

TOL



ISO2/6H

Set Content

BAER HSSE Machine Taps for blind holes	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 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

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

 through holes
 up to 4 x D

 chip removal
 (like picture)

 Form B with
 spiral point


4-5 threads



ISO2/6H



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 M 6 x 1,0 M 8 x 1,25 M 10 x 1,5 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 6,8 mm 8,5 mm 10,2 mm

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

 blind holes
 up to 3 x D

 Chip removal
 (like picture)

 Form C with
 right spiral
 flutes


2-3 threads



ISO2/6H



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 M 6 x 1,0 M 8 x 1,25 M 10 x 1,5 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 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

 through holes
 up to 4 x D

 Chip removal
 (like picture)

 Form B with
 spiral point


4-5 threads



ISO2/6H



Set Content

BAER HSSE Left Machine Taps through hole	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 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 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
right 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 M 6 x 1,0 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 6,8 mm 8,5 mm 10,2 mm

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 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 M 6 x 1,0 M 8 x 1,25 M 10 x 1,5
--------------------------------	--

1/4" Hexagonal-Bit-Adapter



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
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
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
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
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
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
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
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

BAER ULTRA Threading Tools Set



through- & blind holes up to 2 x D	Chip removal (like picture)	Form C straight flutes	2-3 threads	ISO2/6H

Set Content M 3 - M 12

BAER Ultra 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
BAER 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 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 6,8 mm 8,5 mm 10,2 mm
BAER PRO adjustable Tap Wrenches	No. 1: M 1-10 1/16-3/8 G 1/8 No. 2: M 4-12 5/32-1/2 G 1/8
BAER PRO 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
BAER PRO Die Guides	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 Cutting Paste	100 ml
Thread pitch gauge	for metric threads
Screw extractor	

* contains HSSE Drill bits

M 3 - 12



HSSG Hand Tap Sets: taper tap with pilot nose



HSS Round Dies acc. to DIN 223

M 3 - 12 stainless steels*



HSSE-VAP Hand Tap Sets: taper tap with pilot nose



HSSE-NT Round Dies acc. to DIN 223

BAER Short Machine Taps Set M 3 - M 12

HSSG Short Machine Taps
incl. HSS drill bits for core holes and tap wrench in metal box

through- & blind holes up to 2 x D	Chip removal (like picture)	Form C straight flutes	2-3 threads	ISO2/6H

Set Content

BAER HSSG Short Machine Taps	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 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 adjustable Tap Wrenches - zinc die cast	M 1-12 1/16-1/2 G 1/8



M

metric coarse thread / ISO DIN 13

BAER Hand-Tap Sets, Round Dies and Tools Set



through- & blind holes up to 2 x D



Chip removal (like picture)



Form C straight flutes



2-3 threads



ISO2/6H

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 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 M 8 x 1,25 M 10 x 1,5 M 12 x 1,75
BAER adjustable Tap Wrench	No. 1.1/2: M 1-12 1/16-1/2 G 1/8
BAER Die Stock	25 x 9
Thread pitch gauge	for metric threads
Screw extractor	



Drill Bit Sets



Wood drill set Ø 3 - 10 mm (15 pieces)

Set Content

3 x 3 mm | 2 x 3,5 mm | 2 x 4 mm | 1 x 4,5 mm
1 x 5 mm | 1 x 5,5 mm | 1 x 6 mm | 1 x 6,5 mm
1 x 7 mm | 1 x 8 mm | 1 x 10 mm



Concrete- & masonry drill bit set Ø 3 - 10 mm (15 pieces)

Set Content

3 x 3 mm | 3 x 4 mm | 3 x 5 mm
2 x 6 mm | 2 x 8 mm | 2 x 10 mm



SDS-Plus Hammer Drill Set Ø 5 - 12 mm (7 pieces) - 160mm

Set Content

1 x 5 mm | 2 x 6 mm | 2 x 8 mm
1 x 10 mm | 1 x 12 mm

M

Metric coarse thread / ISO DIN 13



**M 3 - 12
Standard**

**M 3 - 12
Left**

**M 3 - 12
stainless
steels***

* contains HSSE Taps and Dies

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

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 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 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 6,8 mm 8,5 mm 10,2 mm
BAER adjustable Tap Wrenches	M 1-10 1/16-3/8 G 1/8 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***

* 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 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
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 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
BAER adjustable Tap Wrenches	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	20 x 5 20 x 7 25 x 9 30 x 11 38 x 14 45 x 18
BAER Tap Holder Ratchet	M 3-10 M 5-12
BAER Tap Holder Ratchet	M 3-10 M 5-12
Thread pitch gauge	for metric threads
Screw extractor	

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
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
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
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
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	

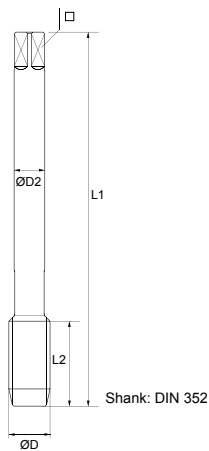
BAER Set M 5 - M 30 HSSG Hand Tap Sets & HSS Round Dies & Tools

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
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	

- 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



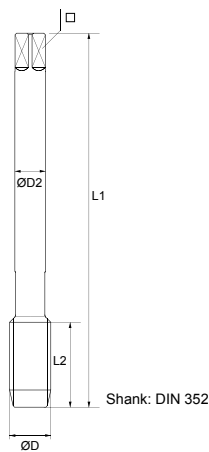
M	D1	D2	L1	L2	□	
M 2 x 0,4	2,0	2,8	36	8	2,1	1,60
M 2,5 x 0,45	2,5	2,8	40	9	2,1	2,05
M 3 x 0,5	3,0	3,5	40	11	2,7	2,50
M 3,5 x 0,6	3,5	4,0	45	13	3,0	2,90
M 4 x 0,7	4,0	4,5	45	13	3,4	3,30
M 5 x 0,8	5,0	6,0	50	16	4,9	4,20
M 6 x 1,0	6,0	6,0	50	19	4,9	5,00
M 8 x 1,25	8,0	6,0	56	22	4,9	6,80
M 10 x 1,5	10,0	7,0	70	24	5,5	8,50
M 12 x 1,75	12,0	9,0	75	29	7,0	10,20
M 14 x 2,0	14,0	11,0	80	30	9,0	12,00
M 16 x 2,0	16,0	12,0	80	32	9,0	14,00
M 18 x 2,5	18,0	14,0	95	40	11,0	15,50
M 20 x 2,5	20,0	16,0	95	40	12,0	17,50
M 22 x 2,5	22,0	18,0	100	40	14,5	19,50
M 24 x 3,0	24,0	18,0	110	50	14,5	21,00
M 27 x 3,0	27,0	20,0	110	50	16,0	24,00
M 30 x 3,5	30,0	22,0	125	56	18,0	26,50

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

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

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

2-3 threads
outside cooling and lubrication

Hand Tap Sets for general use Left Hand

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

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

2-3 threads
outside cooling and lubrication

Hand Tap Sets for stainless steels

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

material: HSSE steam tempered
ISO2/6H
to 1400 N/mm² 44,5 HRC

2-3 threads
outside cooling and lubrication

Taper Tap with guide nose

M	D1	D2	L1	L2	□	
M 1 x 0,25	1,0	2,5	32	6	2,1	0,75
M 1,1 x 0,25	1,1	2,5	32	6	2,1	0,85
M 1,2 x 0,25	1,2	2,5	32	6	2,1	0,95
M 1,4 x 0,3	1,4	2,5	32	7	2,1	1,10
M 1,6 x 0,35	1,6	2,5	32	8	2,1	1,25
M 1,7 x 0,35	1,7	2,5	32	8	2,1	1,30
M 1,8 x 0,35	1,8	2,5	32	8	2,1	1,45
M 2 x 0,4	2,0	2,8	36	8	2,1	1,60
M 2,2 x 0,45	2,2	2,8	36	9	2,1	1,75
M 2,3 x 0,4	2,3	2,8	36	9	2,1	1,90
M 2,5 x 0,45	2,5	2,8	40	9	2,1	2,05
M 2,6 x 0,45	2,6	2,8	40	9	2,1	2,10
M 3 x 0,5	3,0	3,5	40	11	2,7	2,50
M 3 x 0,6 *	3,0	3,5	40	11	2,7	2,40
M 3,5 x 0,6	3,5	4,0	45	13	3,0	2,90
M 3,5 x 0,75 *	3,5	4,0	45	13	3,0	2,75
M 4 x 0,7	4,0	4,5	45	13	3,4	3,30
M 4 x 0,75	4,0	4,5	45	13	3,4	3,25
M 4,5 x 0,75	4,5	6,0	50	16	4,9	3,70
M 5 x 0,8	5,0	6,0	50	16	4,9	4,20
M 5 x 0,9 *	5,0	6,0	50	16	4,9	4,10
M 5,5 x 0,9	5,5	6,0	50	18	4,9	4,60
M 6 x 1,0	6,0	6,0	50	19	4,9	5,00
M 7 x 1,0	7,0	6,0	50	19	4,9	6,00
M 8 x 1,25	8,0	6,0	56	22	4,9	6,80
M 9 x 1,25	9,0	7,0	63	22	5,5	7,80
M 10 x 1,5	10,0	7,0	70	24	5,5	8,50
M 11 x 1,5	11,0	8,0	70	24	6,2	9,50
M 12 x 1,75	12,0	9,0	75	29	7,0	10,20
M 14 x 2,0	14,0	11,0	80	30	9,0	12,00

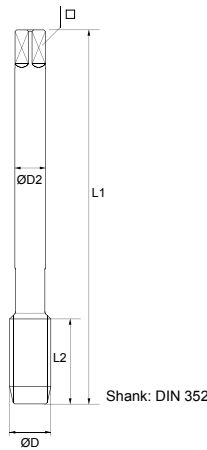
* special pitch

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

through holes & blind holes up to 2 x D

Chip removal (like picture)

Form C straight flutes

material: HSSG

ISO2/6H

to 900 N/mm² 27,1 HRC

2-3 threads

outside cooling and lubrication

Hand Tap Sets for general use Left Hand

through holes & blind holes up to 2 x D

Chip removal (like picture)

Form C straight flutes

material: HSSG

ISO2/6H

to 900 N/mm² 27,1 HRC

2-3 threads

outside cooling and lubrication

Hand Tap Sets for stainless steels

through holes & blind holes up to 2 x D

Chip removal (like picture)

Form C straight flutes

material: HSSE steam tempered

ISO2/6H

to 1400 N/mm² 44,5 HRC

2-3 threads

outside cooling and lubrication

Taper Tap with guide nose

M	D1	D2	L1	L2	□	
M 15 x 2,0	15,0	12,0	80	32	9,0	13,00
M 16 x 2,0	16,0	12,0	80	32	9,0	14,00
M 18 x 2,5	18,0	14,0	95	40	11,0	15,50
M 20 x 2,5	20,0	16,0	95	40	12,0	17,50
M 22 x 2,5	22,0	18,0	100	40	14,5	19,50
M 24 x 3,0	24,0	18,0	110	50	14,5	21,00
M 27 x 3,0	27,0	20,0	110	50	16,0	24,00
M 30 x 3,5	30,0	22,0	125	56	18,0	26,50
M 33 x 3,5	33,0	25,0	125	56	20,0	29,50
M 36 x 4,0	36,0	28,0	150	63	22,0	32,00
M 39 x 4,0	39,0	32,0	150	63	24,0	35,00
M 42 x 4,5	42,0	32,0	150	63	24,0	37,50
M 45 x 4,5	45,0	36,0	160	70	29,0	40,50
M 48 x 5,0	48,0	36,0	180	75	29,0	43,00
M 52 x 5,0	52,0	40,0	180	75	32,0	47,00
M 56 x 5,5	56,0	45,0	200	85	35,0	50,50
M 60 x 5,5	60,0	45,0	200	85	35,0	54,50
M 64 x 6,0	64,0	50,0	220	90	39,0	58,00
M 68 x 6,0	68,0	50,0	220	90	39,0	62,00
M 72 x 6,0	72,0	50,0	240	80	39,0	66,00
M 76 x 6,0	76,0	50,0	240	80	39,0	70,00
M 80 x 6,0	80,0	50,0	260	85	39,0	74,00
M 84 x 6,0	84,0	50,0	260	85	39,0	78,00
M 88 x 6,0	88,0	50,0	260	85	39,0	82,00
M 90 x 6,0	90,0	50,0	260	85	39,0	84,00
M 92 x 6,0	92,0	56,0	280	90	44,0	86,00
M 96 x 6,0	96,0	56,0	280	90	44,0	90,00
M 100 x 6,0	100,0	56,0	280	90	44,0	94,00

* special pitch

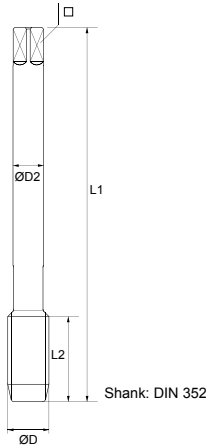
M

Metric coarse thread / ISO DIN 13

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

A Hand-Tap-Set includes 3 taps:

- ⚙️ Taper Tap
- ⚙️ Intermediate Tap
- ⚙️ Finish Tap



Hand Tap Sets with conical profile

through holes & blind holes up to 2 x D

Chip removal (like picture)

Form straight flutes

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

2-3 threads outside cooling and lubrication

Hand Tap Sets HSSE for higher demands

through holes & blind holes up to 2 x D

Chip removal (like picture)

Form with spiral point

material: HSSE ISO2/6H to 1000 N/mm² 32 HRC

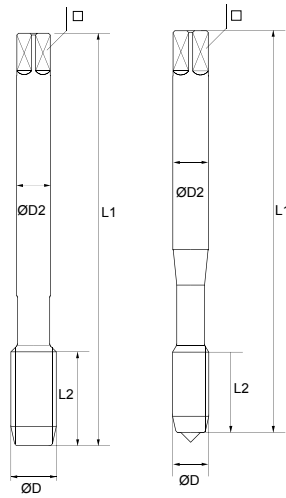
2-3 threads outside cooling and lubrication

M

	D1	D2	L1	L2	□	
M 2 x 0,4	2,0	2,8	36	8	2,1	1,60
M 2,5 x 0,45	2,5	2,8	40	9	2,1	2,05
M 3 x 0,5	3,0	3,5	40	11	2,7	2,50
M 4 x 0,7	4,0	4,5	45	13	3,4	3,30
M 5 x 0,8	5,0	6,0	50	16	4,9	4,20
M 6 x 1,0	6,0	6,0	50	19	4,9	5,00
M 8 x 1,25	8,0	6,0	56	22	4,9	6,80
M 9 x 1,25	9,0	7,0	63	22	5,5	7,80
M 10 x 1,5	10,0	7,0	70	24	5,5	8,50
M 11 x 1,5	11,0	8,0	70	24	6,2	9,50
M 12 x 1,75	12,0	9,0	75	29	7,0	10,20
M 13 x 1,75	12,0	9,0	75	29	7,0	11,20
M 14 x 2,0	14,0	11,0	80	30	9,0	12,00
M 16 x 2,0	16,0	12,0	80	32	9,0	14,00
M 18 x 2,5	18,0	14,0	95	40	11,0	15,50
M 19 x 2,5	18,0	14,0	95	40	11,0	16,50
M 20 x 2,5	20,0	16,0	95	40	12,0	17,50
M 22 x 2,5	22,0	18,0	100	40	14,5	19,50
M 24 x 3,0	24,0	18,0	110	50	14,5	21,00
M 27 x 3,0	27,0	20,0	110	50	16,0	24,00
M 30 x 3,5	30,0	22,0	125	56	18,0	26,50
M 33 x 3,5	33,0	25,0	125	56	20,0	29,50
M 36 x 4,0	36,0	28,0	150	63	22,0	32,00
M 39 x 4,0	39,0	32,0	150	63	24,0	35,00
M 42 x 4,5	42,0	32,0	150	63	24,0	37,50

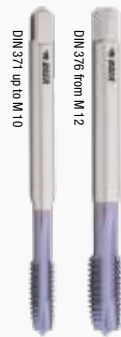
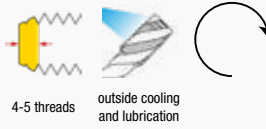
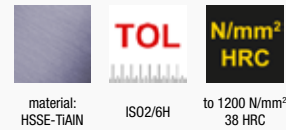
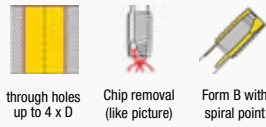
M metric coarse thread / ISO DIN 13

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

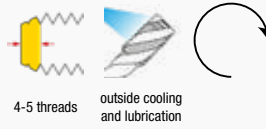
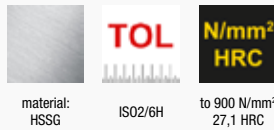
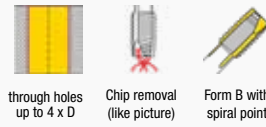


Shank: DIN 376 Shank: DIN 371

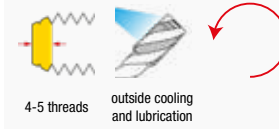
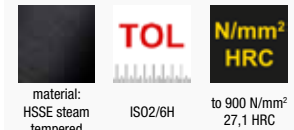
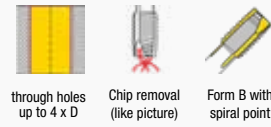
Machine Tap for universal use



Machine Tap for general use



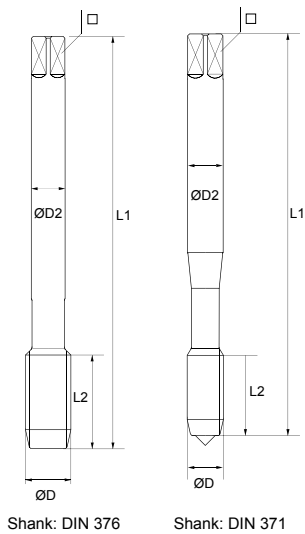
Machine Tap for general use Left-hand thread



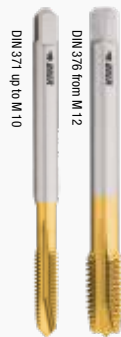
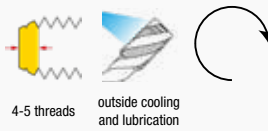
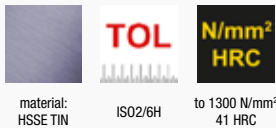
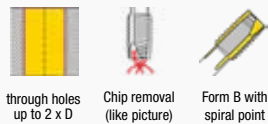
M	D1	D2	L1	L2	□	
DIN 371						
M 2 x 0,4	2,0	2,8	45	8	2,1	1,60
M 2,2 x 0,45	2,2	2,8	45	8	2,1	1,75
M 2,5 x 0,45	2,5	2,8	50	9	2,1	2,05
M 3 x 0,5	3,0	3,5	56	11	2,7	2,50
M 3,5 x 0,6	3,5	4,0	56	13	3,0	2,90
M 4 x 0,7	4,0	4,5	63	13	3,4	3,30
M 5 x 0,8	5,0	6,0	70	16	4,9	4,20
M 6 x 1,0	6,0	6,0	80	19	4,9	5,00
M 7 x 1,0	7,0	7,0	80	19	5,5	6,00
M 8 x 1,25	8,0	8,0	90	22	6,2	6,80
M 10 x 1,5	10,0	10,0	100	24	8,0	8,50
DIN 376						
M 3 x 0,5	3,0	2,2	56	11	-	2,50
M 4 x 0,7	4,0	2,8	63	13	2,1	3,30
M 5 x 0,8	5,0	3,5	70	16	2,7	4,20
M 6 x 1,0	6,0	4,5	80	19	3,4	5,00
M 8 x 1,25	8,0	6,0	90	22	4,9	6,80
M 10 x 1,5	10,0	7,0	100	24	5,5	8,50
M 12 x 1,75	12,0	9,0	110	29	7,0	10,20
M 14 x 2,0	14,0	11,0	110	30	9,0	12,00
M 16 x 2,0	16,0	12,0	110	32	9,0	14,00
M 18 x 2,5	18,0	14,0	125	34	11,0	15,50
M 20 x 2,5	20,0	16,0	140	34	12,0	17,50
M 22 x 2,5	22,0	18,0	140	34	14,5	19,50
M 24 x 3,0	24,0	18,0	160	38	14,5	21,00
M 27 x 3,0	27,0	20,0	160	38	16,0	24,00
M 30 x 3,5	30,0	22,0	180	45	18,0	26,50
M 33 x 3,5	33,0	25,0	180	50	20,0	29,50
M 36 x 4,0	36,0	28,0	200	56	22,0	32,00
M 39 x 4,0	39,0	32,0	200	60	24,0	35,00
M 42 x 4,5	42,0	32,0	200	60	24,0	37,50
M 45 x 4,5	45,0	36,0	220	65	29,0	40,50
M 48 x 5,0	48,0	36,0	250	70	29,0	43,00
M 52 x 5,0	52,0	40,0	250	70	32,0	47,00

M metric coarse thread / ISO DIN 13

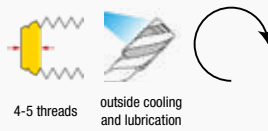
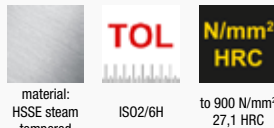
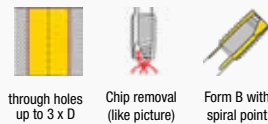
- ✓ Tap for machine use in through hole.
- ✓ The spiral point pushes the chips ahead.



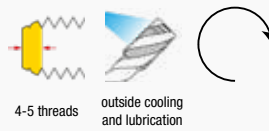
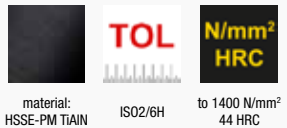
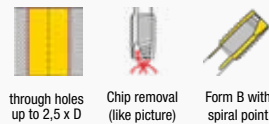
Machine Tap for high-alloyed steels and longer tool life time



Machine Tap ECO for stainless steels with high tool life time



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

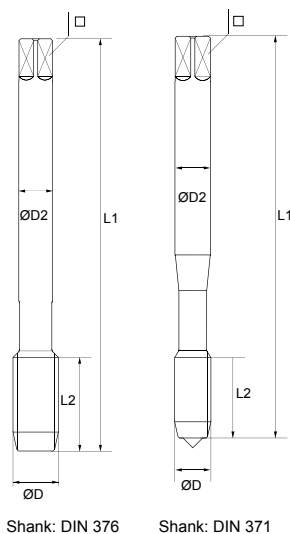


M	D1	D2	L1	L2	□	
M 2 x 0,4	2,0	2,8	45	8	2,1	1,60
M 2,5 x 0,45	2,5	2,8	50	9	2,1	2,05
M 3 x 0,5	3,0	3,5	56	11	2,7	2,50
M 3,5 x 0,6	3,5	4,0	56	13	3,0	2,90
M 4 x 0,7	4,0	4,5	63	13	3,4	3,30
M 5 x 0,8	5,0	6,0	70	16	4,9	4,20
M 6 x 1,0	6,0	6,0	80	19	4,9	5,00
M 7 x 1,0	7,0	7,0	80	19	5,5	6,00
M 8 x 1,25	8,0	8,0	90	22	6,2	6,80
M 9 x 1,25	9,0	9,0	90	18	6,2	7,80
M 10 x 1,5	10,0	10,0	100	24	8,0	8,50
M 12 x 1,75	12,0	9,0	110	29	7,0	10,20
M 14 x 2,0	14,0	11,0	110	30	9,0	12,00
M 16 x 2,0	16,0	12,0	110	32	9,0	14,00
M 18 x 2,5	18,0	14,0	125	34	11,0	15,50
M 20 x 2,5	20,0	16,0	140	34	12,0	17,50
M 22 x 2,5	22,0	18,0	140	34	14,5	19,50
M 24 x 3,0	24,0	18,0	160	38	14,5	21,00
M 27 x 3,0	27,0	20,0	160	38	16,0	24,00
M 30 x 3,5	30,0	22,0	180	45	18,0	26,50

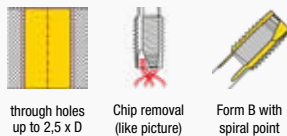
M

Metric coarse thread / ISO DIN 13

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



Machine Tap for aluminum



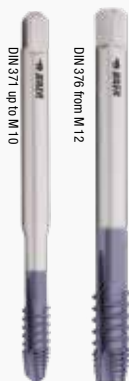
through holes up to 2,5 x D
Chip removal (like picture)
Form B with spiral point



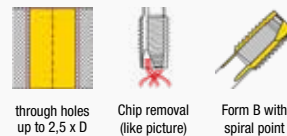
material: HSSE-TiAlN
ISO2/6H
bis 700 N/mm²



4-5 threads
outside cooling and lubrication



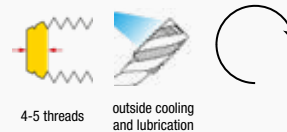
Machine Tap for special alloys (Inconel, Hastelloy etc.)



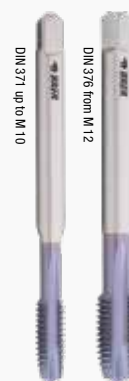
through holes up to 2,5 x D
Chip removal (like picture)
Form B with spiral point



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



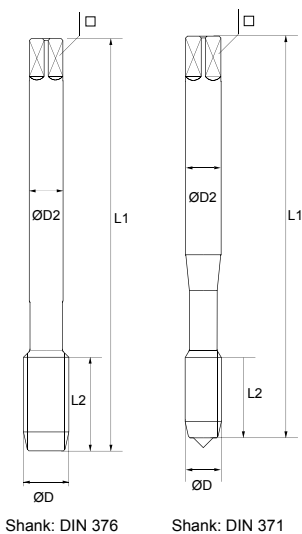
4-5 threads
outside cooling and lubrication



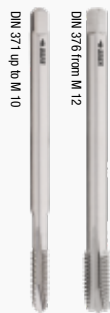
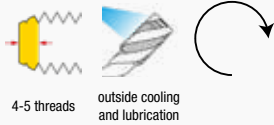
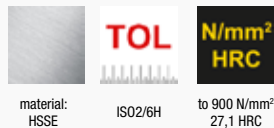
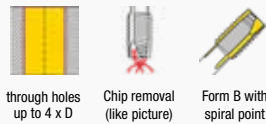
M	D1	D2	L1	L2	□	
M 2 x 0,4	2,0	2,8	45	8	2,1	1,60
M 2,5 x 0,45	2,5	2,8	50	9	2,1	2,05
M 3 x 0,5	3,0	3,5	56	11	2,7	2,50
M 4 x 0,7	4,0	4,5	63	13	3,4	3,30
M 5 x 0,8	5,0	6,0	70	16	4,9	4,20
M 6 x 1,0	6,0	6,0	80	19	4,9	5,00
M 8 x 1,25	8,0	8,0	90	22	6,2	6,80
M 10 x 1,5	10,0	10,0	100	24	8,0	8,50
M 12 x 1,75	12,0	9,0	110	29	7,0	10,20
M 14 x 2,0	14,0	11,0	110	30	9,0	12,00
M 16 x 2,0	16,0	12,0	110	32	9,0	14,00
M 18 x 2,5	18,0	14,0	125	34	11,0	15,50
M 20 x 2,5	20,0	16,0	140	34	12,0	17,50
M 24 x 3,0	24,0	18,0	160	38	14,5	21,00
M 27 x 3,0	27,0	20,0	160	38	16,0	24,00
M 30 x 3,5	30,0	22,0	180	45	18,0	26,50

M metric coarse thread / ISO DIN 13

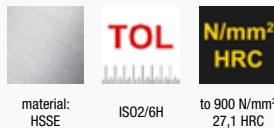
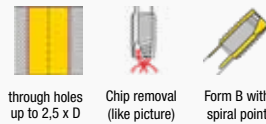
- ✓ Tap for machine use in through hole.
- ✓ The spiral point pushes the chips ahead.



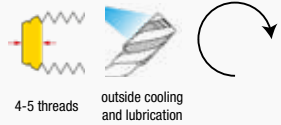
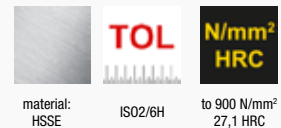
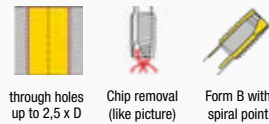
Machine Tap for general use **overlengthed (long shank)**



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



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



M	D1	D2	L1	L2	□	
---	----	----	----	----	---	--

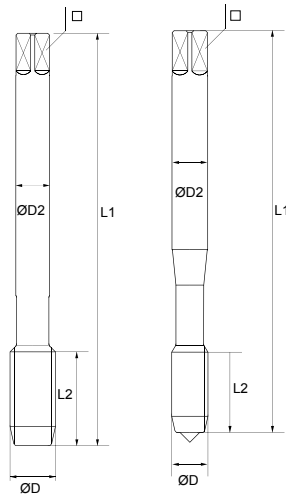
M 2 x 0,4	2,0	2,8	45	8	2,1	1,60
M 2,5 x 0,45	2,5	2,8	50	9	2,1	2,05
M 3 x 0,5	3,0	3,5	56	11	2,7	2,50
M 4 x 0,7	4,0	4,5	63	13	3,4	3,30
M 5 x 0,8	5,0	6,0	70	16	4,9	4,20
M 6 x 1,0	6,0	6,0	80	19	4,9	5,00
M 8 x 1,25	8,0	8,0	90	22	6,2	6,80
M 10 x 1,5	10,0	10,0	100	24	8,0	8,50
M 12 x 1,75	12,0	9,0	110	29	7,0	10,20
M 14 x 2,0	14,0	11,0	110	30	9,0	12,00
M 16 x 2,0	16,0	12,0	110	32	9,0	14,00
M 18 x 2,5	18,0	14,0	125	34	11,0	15,50
M 20 x 2,5	20,0	16,0	140	34	12,0	17,50

M 3 x 0,5	3,0	3,5	56	11	2,7	2,50
M 4 x 0,7	4,0	4,5	63	13	3,4	3,30
M 5 x 0,8	5,0	6,0	70	16	4,9	4,20
M 6 x 1,0	6,0	6,0	80	19	4,9	5,00
M 8 x 1,25	8,0	8,0	90	22	6,2	6,80
M 10 x 1,5	10,0	10,0	100	24	8,0	8,50
M 12 x 1,75	12,0	9,0	110	29	7,0	10,20

M 3 x 0,5	3,0	3,5	56	11	2,7	2,50
M 4 x 0,7	4,0	4,5	63	13	3,4	3,30
M 5 x 0,8	5,0	6,0	70	16	4,9	4,20
M 6 x 1,0	6,0	6,0	80	19	4,9	5,00
M 8 x 1,25	8,0	8,0	90	22	6,2	6,80
M 10 x 1,5	10,0	10,0	100	24	8,0	8,50
M 12 x 1,75	12,0	9,0	110	29	7,0	10,20

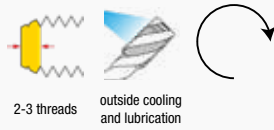
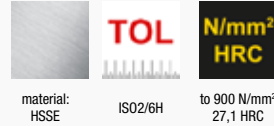
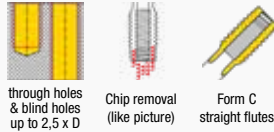
M metric coarse thread / ISO DIN 13

- ✓ 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.

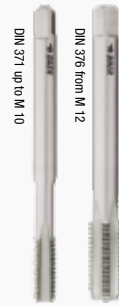
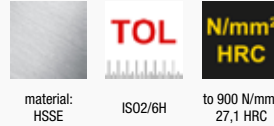
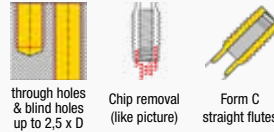


Shank: DIN 376 Shank: DIN 371

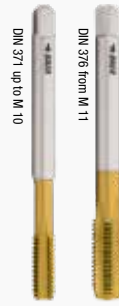
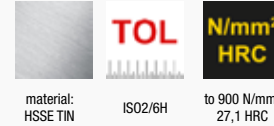
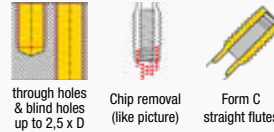
Machine Tap for general use



Machine Tap for general use Left-hand thread



Machine Tap with longer tool life time

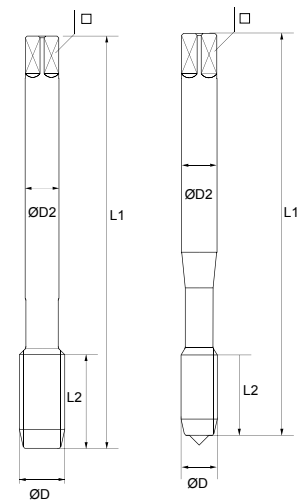


M	D1	D2	L1	L2	□	🔩
DIN 371						
M 2 x 0,4	2,0	2,8	45	8	2,1	1,60
M 2,2 x 0,45	2,2	2,8	45	8	2,1	1,75
M 2,3 x 0,4	2,3	2,8	45	9	2,1	1,90
M 2,5 x 0,45	2,5	2,8	50	9	2,1	2,05
M 2,6 x 0,45	2,6	2,8	50	9	2,1	2,10
M 3 x 0,5	3,0	3,5	56	11	2,7	2,50
M 3,5 x 0,6	3,5	4,0	56	13	3,0	2,90
M 4 x 0,7	4,0	4,5	63	13	3,4	3,30
M 5 x 0,8	5,0	6,0	70	16	4,9	4,20
M 6 x 1,0	6,0	6,0	80	19	4,9	5,00
M 7 x 1,0	7,0	7,0	80	19	5,5	6,00
M 8 x 1,25	8,0	8,0	90	22	6,2	6,80
M 9 x 1,25	9,0	9,0	90	18	6,2	7,80
M 10 x 1,5	10,0	10,0	100	24	8,0	8,50
DIN 376						
M 3 x 0,5	3,0	2,2	56	11	-	2,50
M 4 x 0,7	4,0	2,8	63	13	2,1	3,30
M 5 x 0,8	5,0	3,5	70	16	2,7	4,20
M 6 x 1,0	6,0	4,5	80	19	3,4	5,00
M 8 x 1,25	8,0	6,0	90	22	4,9	6,80
M 10 x 1,5	10,0	7,0	100	24	5,5	8,50
M 11 x 1,5	11,0	8,0	100	22	6,2	9,50
M 12 x 1,75	12,0	9,0	110	29	7,0	10,20
M 14 x 2,0	14,0	11,0	110	30	9,0	12,00
M 16 x 2,0	16,0	12,0	110	32	9,0	14,00
M 18 x 2,5	18,0	14,0	125	34	11,0	15,50
M 20 x 2,5	20,0	16,0	140	34	12,0	17,50
M 22 x 2,5	22,0	18,0	140	34	14,5	19,50
M 24 x 3,0	24,0	18,0	160	38	14,5	21,00
M 27 x 3,0	27,0	20,0	160	38	16,0	24,00
M 30 x 3,5	30,0	22,0	180	45	18,0	26,50
M 33 x 3,5	33,0	25,0	180	50	20,0	29,50
M 36 x 4,0	36,0	28,0	200	56	22,0	32,00
M 39 x 4,0	39,0	32,0	200	60	24,0	35,00
M 42 x 4,5	42,0	32,0	200	60	24,0	37,50
M 45 x 4,5	45,0	36,0	220	65	29,0	40,50
M 48 x 5,0	48,0	36,0	250	70	29,0	43,00
M 52 x 5,0	52,0	40,0	250	70	32,0	47,00

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

M metric coarse thread / ISO DIN 13

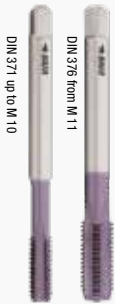
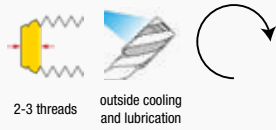
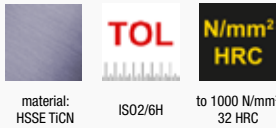
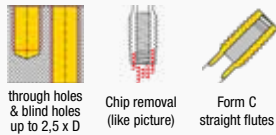
- ✓ Tap for machine use in through hole and blind hole.
- ✓ The short lead-in chamfer makes that tap universal in application. The flutes can hold the most part of the chips.



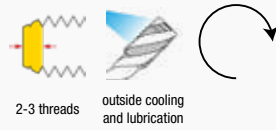
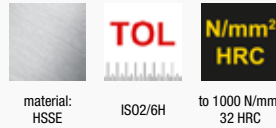
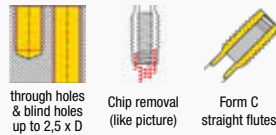
Shank: DIN 376

Shank: DIN 371

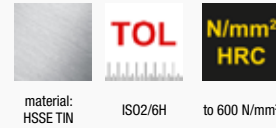
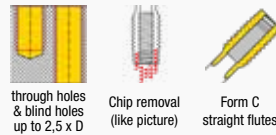
Machine Tap for cast materials



Machine Tap for titanium and titanium alloys



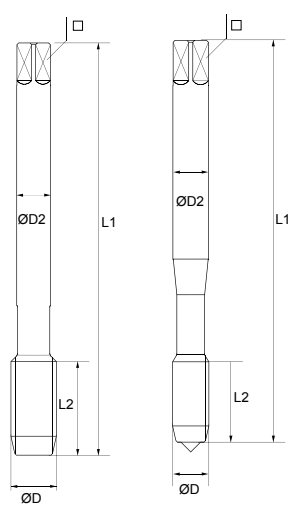
Machine Tap for brass (short-chipping)



M	D1	D2	L1	L2	□	🔩
M 2 x 0,4	2,0	2,8	45	8	2,1	1,60
M 2,5 x 0,45	2,5	2,8	50	9	2,1	2,05
M 3 x 0,5	3,0	3,5	56	11	2,7	2,50
M 3,5 x 0,6	3,5	4,0	56	13	3,0	2,90
M 4 x 0,7	4,0	4,5	63	13	3,4	3,30
M 5 x 0,8	5,0	6,0	70	16	4,9	4,20
M 6 x 1,0	6,0	6,0	80	19	4,9	5,00
M 7 x 1,0	7,0	7,0	80	19	5,5	6,00
M 8 x 1,25	8,0	8,0	90	22	6,2	6,80
M 9 x 1,25	9,0	9,0	90	18	6,2	7,80
M 10 x 1,5	10,0	10,0	100	24	8,0	8,50
M 11 x 1,5	11,0	8,0	100	22	6,2	9,50
M 12 x 1,75	12,0	9,0	110	29	7,0	10,20
M 14 x 2,0	14,0	11,0	110	30	9,0	12,00
M 16 x 2,0	16,0	12,0	110	32	9,0	14,00
M 18 x 2,5	18,0	14,0	125	34	11,0	15,50
M 20 x 2,5	20,0	16,0	140	34	12,0	17,50
M 22 x 2,5	22,0	18,0	140	34	14,5	19,50
M 24 x 3,0	24,0	18,0	160	38	14,5	21,00
M 27 x 3,0	27,0	20,0	160	38	16,0	24,00
M 30 x 3,5	30,0	22,0	180	45	18,0	26,50
M 33 x 3,5	33,0	25,0	180	50	20,0	29,50

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.



Shank: DIN 376 Shank: DIN 371

Machine Tap for universal use

UNITAP

blind holes up to 3 x D Chip removal (like picture) Form C 40° spiral flute

material: HSSE-TiAIN ISO2/6H to 1200 N/mm² 38 HRC

2-3 threads outside cooling and lubrication

DIN 371 up to M 10 DIN 376 from M 12

Machine Tap for general use

blind holes up to 3 x D Chip removal (like picture) Form C 35° spiral flute

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

2-3 threads outside cooling and lubrication

DIN 371 DIN 376

Machine Tap for general use Left-hand thread

blind holes up to 3 x D Chip removal (like picture) Form C 35° left spir. flute

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

2-3 threads outside cooling and lubrication

DIN 371 DIN 376

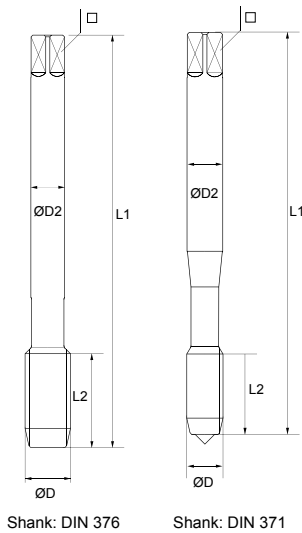
M	D1	D2	L1	L2	□	🔩
DIN 371						
M 2 x 0,4	2,0	2,8	45	6	2,1	1,60
M 2,2 x 0,45	2,2	2,8	45	6	2,1	1,75
M 2,5 x 0,45	2,5	2,8	50	6	2,1	2,05
M 3 x 0,5	3,0	3,5	56	6	2,7	2,50
M 3,5 x 0,6	3,5	4,0	56	13	3,0	2,90
M 4 x 0,7	4,0	4,5	63	7	3,4	3,30
M 5 x 0,8	5,0	6,0	70	8	4,9	4,20
M 6 x 1,0	6,0	6,0	80	10	4,9	5,00
M 7 x 1,0	7,0	7,0	80	19	5,5	6,00
M 8 x 1,25	8,0	8,0	90	14	6,2	6,80
M 10 x 1,5	10,0	10,0	100	16	8,0	8,50
DIN 376						
M 3 x 0,5	3,0	2,2	56	6	-	2,50
M 4 x 0,7	4,0	2,8	63	7	2,1	3,30
M 5 x 0,8	5,0	3,5	70	8	2,7	4,20
M 6 x 1,0	6,0	4,5	80	10	3,4	5,00
M 8 x 1,25	8,0	6,0	90	14	4,9	6,80
M 10 x 1,5	10,0	7,0	100	16	5,5	8,50
M 12 x 1,75	12,0	9,0	110	18	7,0	10,20
M 14 x 2,0	14,0	11,0	110	20	9,0	12,00
M 16 x 2,0	16,0	12,0	110	22	9,0	14,00
M 18 x 2,5	18,0	14,0	125	25	11,0	15,50
M 20 x 2,5	20,0	16,0	140	25	12,0	17,50
M 22 x 2,5	22,0	18,0	140	27	14,5	19,50
M 24 x 3,0	24,0	18,0	160	30	14,5	21,00
M 27 x 3,0	27,0	20,0	160	30	16,0	24,00
M 30 x 3,5	30,0	22,0	180	35	18,0	26,50
M 33 x 3,5	33,0	25,0	180	35	20,0	29,50
M 36 x 4,0	36,0	28,0	200	40	22,0	32,00
M 39 x 4,0	39,0	32,0	200	40	24,0	35,00
M 42 x 4,5	42,0	32,0	200	45	24,0	37,50
M 45 x 4,5	45,0	36,0	220	45	29,0	40,50
M 48 x 5,0	48,0	36,0	250	50	29,0	43,00
M 52 x 5,0	52,0	40,0	250	50	32,0	47,00

M metric coarse thread / ISO DIN 13

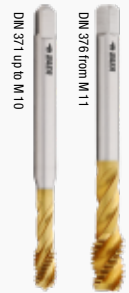
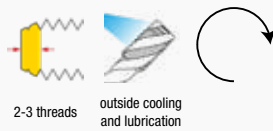
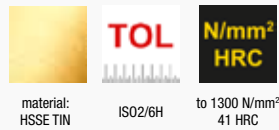
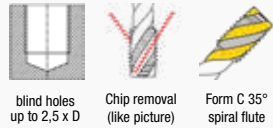
✓ Tap for machine use in blind holes.

The fast spiral flutes

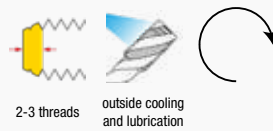
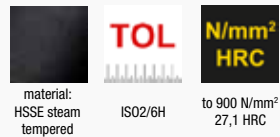
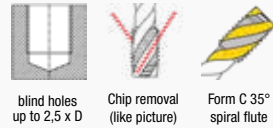
✓ provide good chip removal from the blind hole.



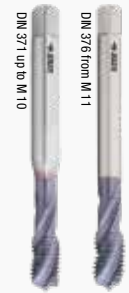
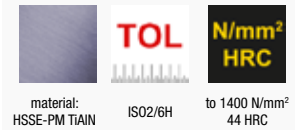
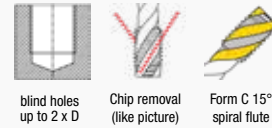
Machine Tap for high-alloyed steels and longer tool life time



Machine Tap ECO for stainless steels with high tool life time



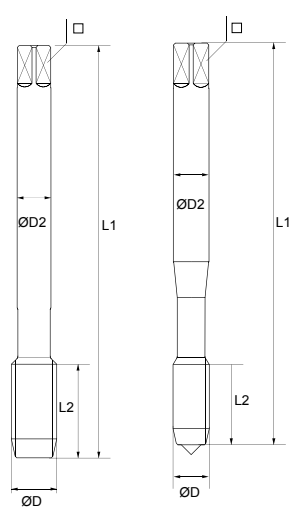
Machine Tap for high alloyed stainless steels and high-tensile materials



M	D1	D2	L1	L2	□	🔧
M 2 x 0,4	2,0	2,8	45	6	2,1	1,60
M 2,5 x 0,45	2,5	2,8	50	6	2,1	2,05
M 3 x 0,5	3,0	3,5	56	6	2,7	2,50
M 3,5 x 0,6	3,5	4,0	56	13	3,0	2,90
M 4 x 0,7	4,0	4,5	63	7	3,4	3,30
M 5 x 0,8	5,0	6,0	70	8	4,9	4,20
M 6 x 1,0	6,0	6,0	80	10	4,9	5,00
M 7 x 1,0	7,0	7,0	80	19	5,5	6,00
M 8 x 1,25	8,0	8,0	90	14	6,2	6,80
M 9 x 1,25	9,0	9,0	90	15	7,0	7,80
M 10 x 1,5	10,0	10,0	100	16	8,0	8,50
M 11 x 1,5	11,0	8,0	100	18	6,2	9,50
M 12 x 1,75	12,0	9,0	110	18	7,0	10,20
M 14 x 2,0	14,0	11,0	110	20	9,0	12,00
M 16 x 2,0	16,0	12,0	110	22	9,0	14,00
M 18 x 2,5	18,0	14,0	125	25	11,0	15,50
M 20 x 2,5	20,0	16,0	140	25	12,0	17,50
M 22 x 2,5	22,0	18,0	140	27	14,5	19,50
M 24 x 3,0	24,0	18,0	160	30	14,5	21,00
M 27 x 3,0	27,0	20,0	160	30	16,0	24,00
M 30 x 3,5	30,0	22,0	180	35	18,0	26,50

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.



Shank: DIN 376 Shank: DIN 371

Machine Tap for aluminum (long-chipping)

blind holes up to 3 x D Chip removal (like picture) Form C 40° spiral flute

material: HSSE ISO2/6H to 350 N/mm² HRC

2-3 threads outside cooling and lubrication

DIN 371 up to M 10
DIN 376 from M 12

Machine Tap for long-chipping materials

blind holes up to 3 x D Chip removal (like picture) Form C 15° spiral flute

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

2-3 threads outside cooling and lubrication

DIN 371 up to M 10
DIN 376 from M 12

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

blind holes up to 2 x D Chip removal (like picture) Form C 15° left spir. flute

material: HSSE-PM TAIN ISO2/6H to 1000 N/mm² 32 HRC

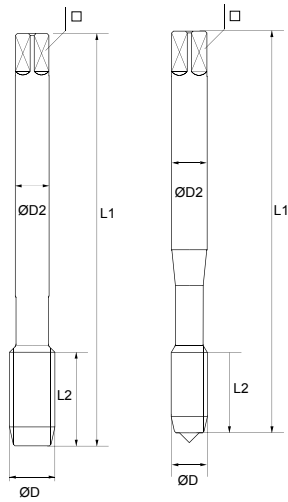
2-3 threads outside cooling and lubrication

DIN 371 up to M 10
DIN 376 from M 12

M	D1	D2	L1	L2	□	🔩
DIN 371						
M 3 x 0,5	3,0	3,5	56	6	2,7	2,50
M 3,5 x 0,6	3,5	4,0	56	13	3,0	2,90
M 4 x 0,7	4,0	4,5	63	7	3,4	3,30
M 5 x 0,8	5,0	6,0	70	8	4,9	4,20
M 6 x 1,0	6,0	6,0	80	10	4,9	5,00
M 7 x 1,0	7,0	7,0	80	19	5,5	6,00
M 8 x 1,25	8,0	8,0	90	14	6,2	6,80
M 10 x 1,5	10,0	10,0	100	16	8,0	8,50
DIN 376						
M 3 x 0,5	3,0	2,2	56	11	-	2,50
M 4 x 0,7	4,0	2,8	63	13	2,1	3,30
M 5 x 0,8	5,0	3,5	70	16	2,7	4,20
M 6 x 1,0	6,0	4,5	80	19	3,4	5,00
M 8 x 1,25	8,0	6,0	90	22	4,9	6,80
M 10 x 1,5	10,0	7,0	100	24	5,5	8,50
M 12 x 1,75	12,0	9,0	110	18	7,0	10,20
M 14 x 2,0	14,0	11,0	110	20	9,0	12,00
M 16 x 2,0	16,0	12,0	110	22	9,0	14,00
M 18 x 2,5	18,0	14,0	125	25	11,0	15,50
M 20 x 2,5	20,0	16,0	140	25	12,0	17,50
M 22 x 2,5	22,0	18,0	140	27	14,5	19,50
M 24 x 3,0	24,0	18,0	160	30	14,5	21,00

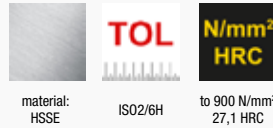
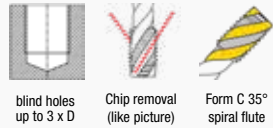
M metric coarse thread / ISO DIN 13

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

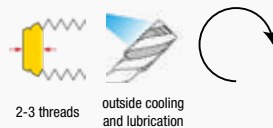
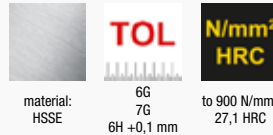
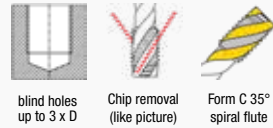


Shank: DIN 376 Shank: DIN 371

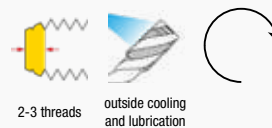
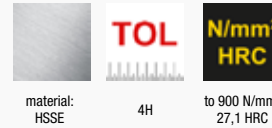
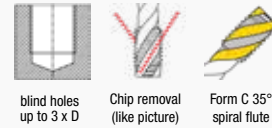
Machine Tap for general use **overlengthed (long shank)**



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



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



M	D1	D2	L1	L2	□	▣
---	----	----	----	----	---	---

M 2 x 0,4	2,0	2,8	45	6	2,1	1,60
M 2,5 x 0,45	2,5	2,8	50	6	2,1	2,05
M 3 x 0,5	3,0	3,5	56	6	2,7	2,50
M 4 x 0,7	4,0	4,5	63	7	3,4	3,30
M 5 x 0,8	5,0	6,0	70	8	4,9	4,20
M 6 x 1,0	6,0	6,0	80	10	4,9	5,00
M 8 x 1,25	8,0	8,0	90	14	6,2	6,80
M 10 x 1,5	10,0	10,0	100	16	8,0	8,50
M 12 x 1,75	12,0	9,0	110	18	7,0	10,20
M 14 x 2,0	14,0	11,0	110	20	9,0	12,00
M 16 x 2,0	16,0	12,0	110	22	9,0	14,00
M 18 x 2,5	18,0	14,0	125	25	11,0	15,50
M 20 x 2,5	20,0	16,0	140	25	12,0	17,50

M 3 x 0,5	3,0	3,5	56	6	2,7	2,50
M 4 x 0,7	4,0	4,5	63	7	3,4	3,30
M 5 x 0,8	5,0	6,0	70	8	4,9	4,20
M 6 x 1,0	6,0	6,0	80	10	4,9	5,00
M 8 x 1,25	8,0	8,0	90	14	6,2	6,80
M 10 x 1,5	10,0	10,0	100	16	8,0	8,50
M 12 x 1,75	12,0	9,0	110	18	7,0	10,20

M 3 x 0,5	3,0	3,5	56	6	2,7	2,50
M 4 x 0,7	4,0	4,5	63	7	3,4	3,30
M 5 x 0,8	5,0	6,0	70	8	4,9	4,20
M 6 x 1,0	6,0	6,0	80	10	4,9	5,00
M 8 x 1,25	8,0	8,0	90	14	6,2	6,80
M 10 x 1,5	10,0	10,0	100	16	8,0	8,50
M 12 x 1,75	12,0	9,0	110	18	7,0	10,20

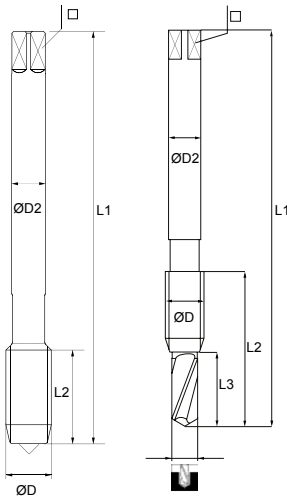
M metric coarse thread / ISO DIN 13

Machine Nut Tap

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

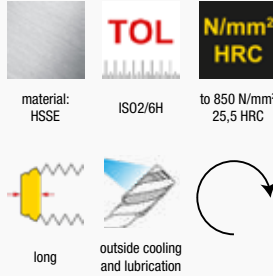
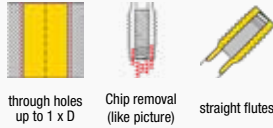
Combined Machine Tap

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

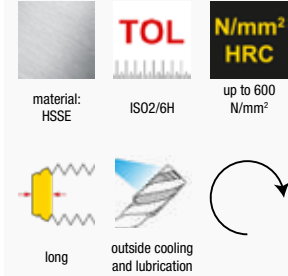
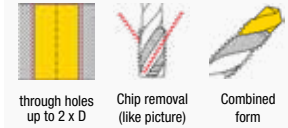


Shank: DIN 357

Machine Nut Tap for general use



Combined Machine Tap for general use



M

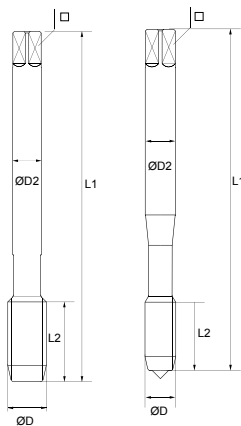
	D1	D2	L1	L2	<input type="checkbox"/>		D2	L1	L2	L3	<input type="checkbox"/>
M 3 x 0,5	3,0	2,2	70	22	-	2,50	3,0	56	22	11	2,4
M 4 x 0,7	4,0	2,8	90	25	2,1	3,30	4,0	63	28	14	3,0
M 5 x 0,8	5,0	3,5	100	28	2,7	4,20	5,0	71	36	18	3,8
M 6 x 1,0	6,0	4,5	110	32	3,4	5,00	6,0	80	44	22	4,9
M 8 x 1,25	8,0	6,0	125	40	4,9	6,80	8,0	95	50	25	6,2
M 10 x 1,5	10,0	7,0	140	45	5,5	8,50	10,0	106	62	31	8,0
M 12 x 1,75	12,0	9,0	180	50	7,0	10,20	12,0	115	70	35	9,0
M 14 x 2,0	14,0	11,0	200	56	9,0	12,00					
M 16 x 2,0	16,0	12,0	200	63	9,0	14,00					
M 18 x 2,5	18,0	14,0	220	63	11,0	15,50					
M 20 x 2,5	20,0	16,0	250	70	12,0	17,50					
M 22 x 2,5	22,0	18,0	280	80	14,5	19,50					
M 24 x 3,0	24,0	18,0	280	80	14,5	21,00					

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



Shank: DIN 376

Shank: DIN 371

Machine Forming Taps for universal use

through holes & blind holes up to 2,5 x D

Threading with no chips

with oil grooves

material: HSSE TIN

TOL ISO2/6HX

N/mm² HRC to 850 N/mm² 25,5 HRC

2-3 threads

outside cooling and lubrication



Machine Forming Taps for higher demands

through holes & blind holes up to 3 x D

Threading with no chips

with oil grooves

material: HSSE-PM TIN

TOL ISO2/6HX

N/mm² HRC to 1200 N/mm² 37,1 HRC

2-3 threads

outside cooling and lubrication



Machine Forming Taps for universal use oversized (diameter)

blind holes up to 3 x D

Chip removal (like picture)

with oil grooves

material: HSSE TIN

TOL ISO3/6GX

N/mm² HRC to 850 N/mm² 25,5 HRC

2-3 threads

outside cooling and lubrication



M	D1	D2	L1	L2	□	⚙️
---	----	----	----	----	---	----

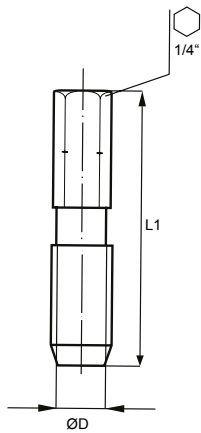
M 2 x 0,4	2,0	2,8	45	8	2,1	1,85
M 2,2 x 0,45	2,2	2,8	45	8	2,1	2,03
M 2,3 x 0,4	2,3	2,8	45	8	2,1	2,15
M 2,5 x 0,45	2,5	2,8	50	9	2,1	2,33
M 2,6 x 0,45	2,6	2,8	50	9	2,1	2,43
M 3 x 0,5	3,0	3,5	56	11	2,7	2,80
M 3,5 x 0,6	3,5	4,0	56	13	3,0	3,25
M 4 x 0,7	4,0	4,5	63	13	3,4	3,70
M 4,5 x 0,75	4,5	6,0	70	14	4,9	4,20
M 5 x 0,8	5,0	6,0	70	16	4,9	4,65
M 6 x 1,0	6,0	6,0	80	19	4,9	5,10
M 8 x 1,25	8,0	8,0	90	22	6,2	7,45
M 10 x 1,5	10,0	10,0	100	24	8,0	9,35
M 12 x 1,75	12,0	9,0	110	29	7,0	11,25
M 14 x 2,0	14,0	11,0	110	30	9,0	13,10
M 16 x 2,0	16,0	12,0	110	32	9,0	15,10
M 18 x 2,5	18,0	14,0	125	34	11,0	16,85
M 20 x 2,5	20,0	16,0	140	34	12,0	18,85

M metric coarse thread / ISO DIN 13

Efficient internal thread cutting with batterypowered screwdriver (min. 7,5 Volt).

Application:

- ⚙ non abrasive material up to 900 N/mm unalloyed and low alloyed steel



Bit-Taps
Form D for through holes and blind holes



M	D1	L1	L2	Hex	Length
M 3 x 0,5	3,0	33	11	1/4"	2,50
M 3,5 x 0,6	3,5	34	10	1/4"	2,90
M 4 x 0,7	4,0	35	12	1/4"	3,30
M 4,5 x 0,75	4,5	35	12	1/4"	3,70
M 5 x 0,8	5,0	36	15	1/4"	4,20
M 5,5 x 0,9	5,5	35	15	1/4"	4,60
M 6 x 1,0	6,0	39	18	1/4"	5,00
M 7 x 1,0	7,0	38	16	1/4"	6,00
M 8 x 1,25	8,0	40	19	1/4"	6,80
M 9 x 1,25	9,0	41	18	1/4"	7,80
M 10 x 1,5	10,0	41	21	1/4"	8,50

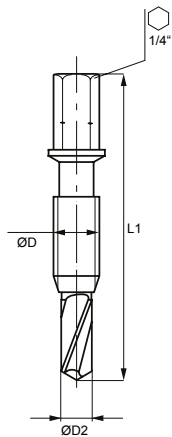
M metric coarse thread / ISO DIN 13

Efficient internal thread cutting with batterypowered 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



Kombi-Bit-Taps for through holes

through holes up to 1 x D Chip removal (like picture) Combined form

material: HSSG ISO2/6H to 600 N/mm² HRC

4-5 threads outside cooling and lubrication



M	D1	D2	L1	Hex
M 3 x 0,5	3,0	2,5	36	1/4"
M 4 x 0,7	4,0	3,3	39	1/4"
M 5 x 0,8	5,0	4,2	41	1/4"
M 6 x 1,0	6,0	5,0	44	1/4"
M 8 x 1,25	8,0	6,8	50	1/4"
M 10 x 1,5	10,0	8,5	59	1/4"

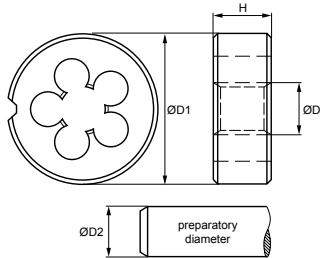
M metric coarse thread / ISO DIN 13

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 ISO-6g	material: HSS ISO-6g	material: HSSE ISO-6g	material: HSSE ISO-6g	material: HSS ISO-6g
Chamfer: 1,5 threads right hand thread	Chamfer: 1,5 threads left hand thread	Chamfer: 1,5 threads right hand thread	Chamfer: 2 threads right hand thread	Chamfer: 1,25 threads right hand thread
		with spiral entry	lapped with spiral entry	lapped with spiral entry

M	D	D1	H	D2
M 1 x 0,25	1,0	16	5	0,96
M 1,1 x 0,25	1,1	16	5	1,05
M 1,2 x 0,25	1,2	16	5	1,15
M 1,4 x 0,3	1,4	16	5	1,36
M 1,6 x 0,35	1,6	16	5	1,55
M 1,7 x 0,35	1,7	16	5	1,64
M 1,8 x 0,35	1,8	16	5	1,75
M 2 x 0,4	2,0	16	5	1,95
M 2,2 x 0,45	2,2	16	5	2,15
M 2,3 x 0,4	2,3	16	5	2,23
M 2,5 x 0,45	2,5	16	5	2,42
M 2,6 x 0,45	2,6	16	5	2,53
M 3 x 0,5	3,0	20	5	2,92
M 3,5 x 0,6	3,5	20	5	3,41
M 4 x 0,7	4,0	20	5	3,90
M 4,5 x 0,75	4,5	20	7	4,40
M 5 x 0,8	5,0	20	7	4,90
M 5 x 0,9	5,0	20	7	4,89
M 5,5 x 0,9	5,5	20	7	5,44
M 6 x 1,0	6,0	20	7	5,88
M 7 x 1,0	7,0	25	9	6,88
M 8 x 1,25	8,0	25	9	7,86
M 9 x 1,25	9,0	25	9	8,86
M 10 x 1,5	10,0	30	11	9,85
M 11 x 1,5	11,0	30	11	10,85
M 12 x 1,75	12,0	38	14	11,83
M 14 x 2,0	14,0	38	14	13,82
M 15 x 2,0	15,0	38	14	14,91
M 16 x 2,0	16,0	45	18	15,82
M 18 x 2,5	18,0	45	18	17,79
M 19 x 2,5	19,0	45	18	18,89
M 20 x 2,5	20,0	45	18	19,79
M 22 x 2,5	22,0	55	22	21,79

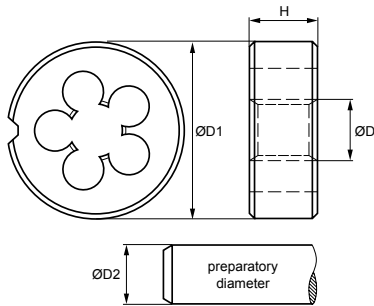
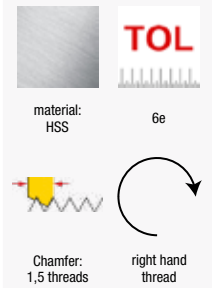
M metric coarse thread / ISO DIN 13

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



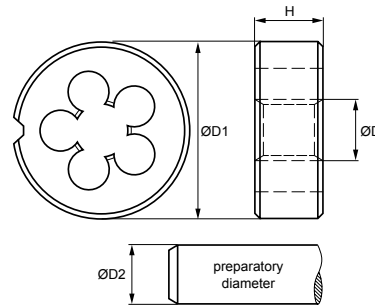
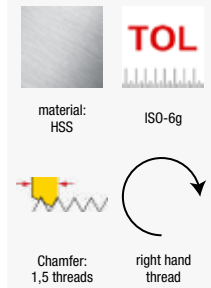
M	D	D1	H	D2
M 24 x 3,0	24,0	55	22	23,76
M 27 x 3,0	27,0	65	25	26,76
M 30 x 3,5	30,0	65	25	29,73
M 33 x 3,5	33,0	65	25	32,73
M 36 x 4,0	36,0	65	25	35,70
M 39 x 4,0	39,0	75	30	38,70
M 42 x 4,5	42,0	75	30	41,68
M 45 x 4,5	45,0	90	36	44,68
M 48 x 5,0	48,0	90	36	47,66
M 52 x 5,0	52,0	90	36	51,66
M 56 x 5,5	56,0	105	36	55,65
M 60 x 5,5	60,0	105	36	59,65
M 64 x 6,0	64,0	120	36	63,62
M 68 x 6,0	68,0	120	36	67,62
M 72 x 6,0	72,0	120	36	
M 76 x 6,0	76,0	120	36	
M 80 x 6,0	80,0	120	36	
M 84 x 6,0	84,0	130	36	
M 88 x 6,0	88,0	140	36	
M 90 x 6,0	90,0	140	36	
M 92 x 6,0	92,0	140	36	
M 96 x 6,0	96,0	140	36	
M 100 x 6,0	100,0	150	36	

Round Dies
for general use
undersized



M	D	D1	H	D2
M 3 x 0,5	3,0	20	5	2,89
M 4 x 0,7	4,0	20	5	3,87
M 5 x 0,8	5,0	20	7	4,86
M 6 x 1,0	6,0	20	7	5,85
M 8 x 1,25	8,0	25	9	7,83
M 10 x 1,5	10,0	30	11	9,81
M 12 x 1,75	12,0	38	14	11,81
M 14 x 2,0	14,0	38	14	13,87
M 16 x 2,0	16,0	45	18	15,87
M 18 x 2,5	18,0	45	18	17,75
M 20 x 2,5	20,0	45	18	19,75

Round Dies
for general use
dimensions: 25 x 9



M	D	D1	H	D2
M 3 x 0,5	3,0	25	9	2,92
M 4 x 0,7	4,0	25	9	3,90
M 5 x 0,8	5,0	25	9	4,90
M 6 x 1,0	6,0	25	9	5,88
M 8 x 1,25	8,0	25	9	7,86
M 10 x 1,5	10,0	25	9	9,85
M 12 x 1,75	12,0	25	9	11,83

M

metric coarse thread / ISO DIN 13

Hexagon Die Nuts for general use

Hexagon Die Nuts for general use Left Hand



material: HSS ISO-6g



Chamfer: 1,5 threads



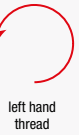
right hand thread



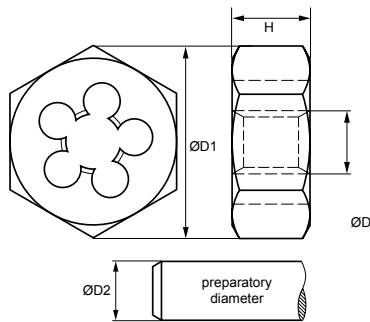
material: HSS ISO-6g



Chamfer: 1,5 threads



left hand thread



M

	D	D1	H	D2
M 3 x 0,5	3,0	19	5	2,92
M 3,5 x 0,6	3,5	19	5	3,41
M 4 x 0,7	4,0	19	5	3,90
M 5 x 0,8	4,5	19	7	4,40
M 6 x 1,0	6,0	19	7	5,88
M 7 x 1,0	7,0	22	9	6,88
M 8 x 1,25	8,0	22	9	7,86
M 9 x 1,25	9,0	22	9	8,86
M 10 x 1,5	10,0	27	11	9,85
M 11 x 1,5	11,0	27	11	10,85
M 12 x 1,75	12,0	36	14	11,83
M 14 x 2,0	14,0	36	14	13,82
M 16 x 2,0	16,0	41	18	15,82
M 18 x 2,5	18,0	41	18	17,79
M 20 x 2,5	20,0	41	18	19,79
M 22 x 2,5	22,0	50	22	21,79
M 24 x 3,0	24,0	50	22	23,76
M 27 x 3,0	27,0	60	25	26,76
M 30 x 3,5	30,0	60	25	29,73
M 33 x 3,5	33,0	60	25	32,73
M 36 x 4,0	36,0	60	25	35,70
M 39 x 4,0	39,0	70	30	38,70
M 42 x 4,5	42,0	70	30	41,68
M 45 x 4,5	45,0	85	36	44,68
M 48 x 5,0	48,0	85	36	47,66
M 52 x 5,0	52,0	85	36	51,66
M 56 x 5,5	56,0	100	36	55,65
M 60 x 5,5	60,0	100	36	59,65
M 64 x 6,0	64,0	100	36	63,62
M 68 x 6,0	68,0	115	36	67,62

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
-----------------------------------	---

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
-----------------------------------	---

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
-----------------------------------	---

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	
-----------------	--

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 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
Form D for through hole & blind hole
(up to 4 x D)

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

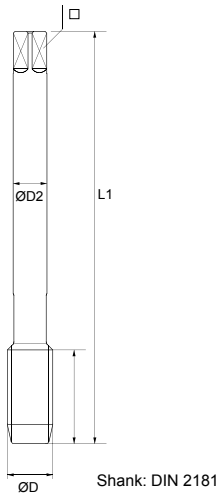
MF Metric fine thread / ISO DIN 13

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 4 x D

Chip removal (like picture)

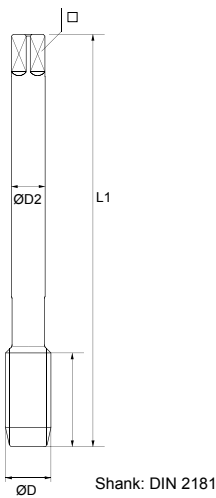
Form D straight flutes

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

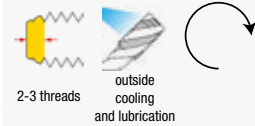
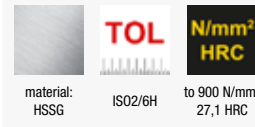
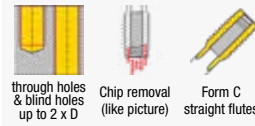
4-5 threads

outside cooling and lubrication

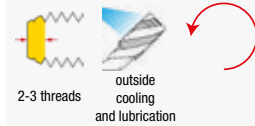
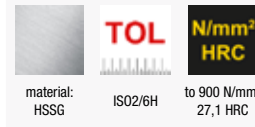
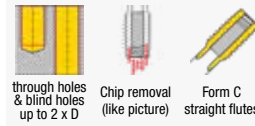
MF	D1	D2	L1	L2	□	
MF 6 x 0,75	6,0	6,0	50	14	4,9	5,20
MF 8 x 0,75	8,0	6,0	50	19	4,9	6,20
MF 8 x 1,0	8,0	6,0	56	22	4,9	7,00
MF 9 x 0,75	9,0	7,0	56	19	5,5	8,20
MF 9 x 1,0	9,0	7,0	63	20	5,5	8,00
MF 10 x 0,75	10,0	7,0	63	20	5,5	9,20
MF 10 x 1,0	10,0	7,0	63	20	5,5	9,00
MF 10 x 1,25	10,0	7,0	70	24	5,5	8,80
MF 12 x 1,0	12,0	9,0	70	22	7,0	11,00
MF 12 x 1,25	12,0	9,0	70	22	7,0	10,80
MF 12 x 1,5	12,0	9,0	70	22	7,0	10,50
MF 13 x 1,0	13,0	11,0	70	22	9,0	12,00
MF 13 x 1,5	13,0	11,0	70	22	9,0	11,50
MF 14 x 1,0	14,0	11,0	70	22	9,0	13,00
MF 14 x 1,25	14,0	11,0	70	22	9,0	12,80
MF 14 x 1,5	14,0	11,0	70	22	9,0	12,50
MF 15 x 1,5	15,0	12,0	70	22	9,0	13,50
MF 16 x 1,5	16,0	12,0	70	22	9,0	14,50
MF 18 x 1,0	18,0	14,0	80	22	11,0	17,00
MF 18 x 1,5	18,0	14,0	80	22	11,0	16,50
MF 20 x 1,5	20,0	16,0	80	22	12,0	18,50
MF 20 x 2,0	20,0	16,0	80	22	12,0	18,00
MF 22 x 1,5	22,0	18,0	80	22	14,5	20,50
MF 22 x 2,0	22,0	18,0	80	22	14,5	20,00
MF 24 x 1,5	24,0	18,0	90	22	14,5	22,50
MF 24 x 2,0	24,0	18,0	90	22	14,5	22,00
MF 25 x 1,5	25,0	18,0	90	22	14,5	23,50
MF 26 x 1,5	26,0	18,0	90	22	14,5	24,50
MF 27 x 1,5	27,0	20,0	90	22	16,0	25,50
MF 28 x 1,5	28,0	20,0	90	22	16,0	26,50
MF 30 x 1,5	30,0	22,0	90	22	18,0	28,50
MF 30 x 2,0	30,0	22,0	90	22	18,0	28,00
MF 32 x 1,5	32,0	22,0	90	22	18,0	30,50



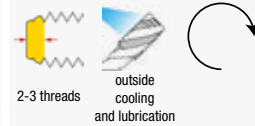
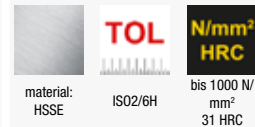
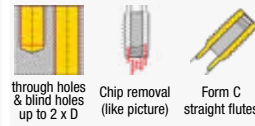
Hand Tap Sets for general use



Hand Tap Sets for general use Left Hand



Hand Tap Sets HSSE for higher demands



MF

	D1	D2	L1	L2	□	🔩
MF 2,5 x 0,35	2,5	2,8	40	9	2,1	2,15
MF 2,6 x 0,35	2,6	2,8	40	9	2,1	2,25
MF 3 x 0,35	3,0	3,5	40	9	2,7	2,65
MF 3,5 x 0,35	3,5	4,0	45	10	3,0	3,15
MF 4 x 0,35	4,0	4,5	45	10	3,4	3,65
MF 4 x 0,5	4,0	4,5	45	10	3,4	3,50
MF 4,5 x 0,5	4,5	6,0	50	12	4,9	4,00
MF 5 x 0,5	5,0	6,0	50	12	4,9	4,50
MF 5 x 0,75	5,0	6,0	50	12	4,9	4,25
MF 5,5 x 0,5	5,5	6,0	50	12	4,9	5,00
MF 6 x 0,5	6,0	6,0	50	14	4,9	5,50
MF 6 x 0,75	6,0	6,0	50	14	4,9	5,20
MF 7 x 0,5	7,0	6,0	50	14	4,9	6,50
MF 7 x 0,75	7,0	6,0	50	14	4,9	6,20
MF 8 x 0,5	8,0	6,0	50	19	4,9	7,50
MF 8 x 0,75	8,0	6,0	50	19	4,9	7,20
MF 8 x 1	8,0	6,0	56	22	4,9	7,00
MF 9 x 0,5	9,0	7,0	56	19	5,5	8,50
MF 9 x 0,75	9,0	7,0	56	19	5,5	8,25
MF 9 x 1	9,0	7,0	63	20	5,5	8,00
MF 10 x 0,5	10,0	7,0	63	20	5,5	9,50
MF 10 x 0,75	10,0	7,0	63	20	5,5	9,20
MF 10 x 1,0	10,0	7,0	63	20	5,5	9,00
MF 10 x 1,25	10,0	7,0	70	24	5,5	8,80
MF 11 x 0,75	11,0	8,0	63	20	6,2	10,20
MF 11 x 1,0	11,0	8,0	63	20	6,2	10,00
MF 11 x 1,25	11,0	8,0	63	22	6,2	10,80
MF 12 x 0,5	12,0	9,0	70	22	7,0	11,50
MF 12 x 0,75	12,0	9,0	70	22	7,0	10,20
MF 12 x 1,0	12,0	9,0	70	22	7,0	11,00
MF 12 x 1,25	12,0	9,0	70	22	7,0	10,80
MF 12 x 1,5	12,0	9,0	70	22	7,0	10,50
MF 13 x 0,5	13,0	11,0	70	22	9,0	12,50


MF Metric fine thread / ISO DIN 13

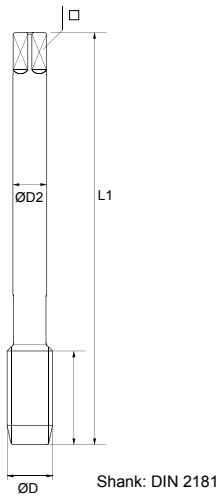
Efficient internal thread cutting.



The short structural type makes that tap usable by machine and hand.

A Hand-Tap-Set includes 2 taps:

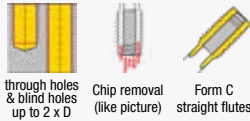
 Taper Tap

 Finish Tap

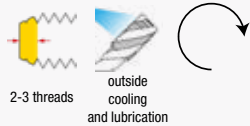


MF	D1	D2	L1	L2		
MF 13 x 0,75	13,0	11,0	70	22	9,0	12,20
MF 13 x 1,0	13,0	11,0	70	22	9,0	12,00
MF 13 x 1,5	13,0	11,0	70	22	9,0	11,50
MF 14 x 0,5	14,0	11,0	70	22	9,0	13,50
MF 14 x 0,75	14,0	11,0	70	22	9,0	13,20
MF 14 x 1,0	14,0	11,0	70	22	9,0	13,00
MF 14 x 1,25	14,0	11,0	70	22	9,0	12,80
MF 14 x 1,5	14,0	11,0	70	22	9,0	12,50
MF 15 x 0,75	15,0	12,0	70	22	9,0	14,20
MF 15 x 1,0	15,0	12,0	70	22	9,0	14,00
MF 15 x 1,5	15,0	12,0	70	22	9,0	13,50
MF 16 x 0,5	16,0	12,0	70	22	9,0	15,50
MF 16 x 0,75	16,0	12,0	70	22	9,0	15,20
MF 16 x 1,0	16,0	12,0	70	22	9,0	15,00
MF 16 x 1,25	16,0	12,0	70	22	9,0	14,80
MF 16 x 1,5	16,0	12,0	70	22	9,0	14,50
MF 17 x 1	17,0	12,0	70	22	9,0	16,00
MF 17 x 1,5	17,0	12,0	70	22	9,0	15,50
MF 18 x 0,5	18,0	14,0	80	22	11,0	17,50
MF 18 x 0,75	18,0	14,0	80	22	11,0	17,20
MF 18 x 1,0	18,0	14,0	80	22	11,0	17,00
MF 18 x 1,25	18,0	14,0	80	22	11,0	16,80
MF 18 x 1,5	18,0	14,0	80	22	11,0	16,50
MF 18 x 2,0	18,0	14,0	80	22	11,0	16,00
MF 19 x 1	19,0	16,0	80	22	12,0	18,00
MF 19 x 1,5	19,0	14,0	80	22	11,0	17,50
MF 20 x 0,5	20,0	16,0	80	22	12,0	19,50
MF 20 x 0,75	20,0	16,0	80	22	12,0	19,20
MF 20 x 1,0	20,0	16,0	80	22	12,0	19,00
MF 20 x 1,25	20,0	16,0	80	22	12,0	18,80
MF 20 x 1,5	20,0	16,0	80	22	12,0	18,50
MF 20 x 2,0	20,0	16,0	80	22	12,0	18,00
MF 21 x 1	21,0	16,0	80	22	12,0	20,00

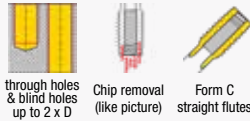
Hand Tap Sets for general use



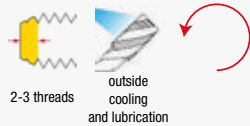
material: HSSG
ISO2/6H
TOL
N/mm² HRC
to 900 N/mm² 27,1 HRC



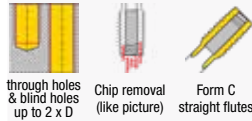
Hand Tap Sets for general use Left Hand



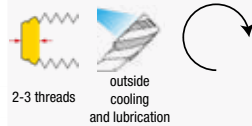
material: HSSG
ISO2/6H
TOL
N/mm² HRC
to 900 N/mm² 27,1 HRC



Hand Tap Sets HSSE for higher demands



material: HSSE
ISO2/6H
TOL
N/mm² HRC
bis 1000 N/mm² 31 HRC



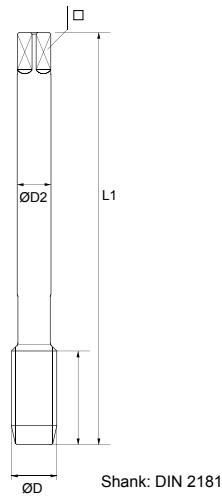
MF Metric fine thread / ISO DIN 13

Efficient internal thread cutting.

The short structural type makes that tap usable by machine and hand.

A Hand-Tap-Set includes 2 taps:

-  Taper Tap
-  Finish Tap



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
ISO2/6H
to 900 N/mm² 27,1 HRC

2-3 threads
outside cooling and lubrication

Hand Tap Sets for general use Left Hand

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

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


2-3 threads
outside cooling and lubrication

Hand Tap Sets HSSE for higher demands

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

material: HSSE
ISO2/6H
bis 1000 N/mm² 31 HRC



2-3 threads
outside cooling and lubrication

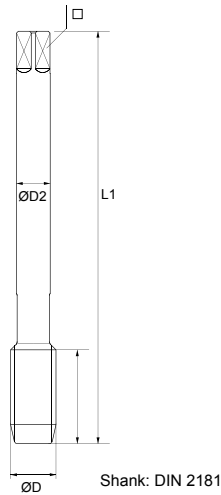
MF	D1	D2	L1	L2	□	
MF 21 x 1,5	21,0	16,0	80	22	12,0	19,50
MF 22 x 0,5	22,0	18,0	80	22	14,5	21,50
MF 22 x 0,75	22,0	18,0	80	22	14,5	21,20
MF 22 x 1,0	22,0	18,0	80	22	14,5	21,00
MF 22 x 1,25	22,0	18,0	80	22	14,5	20,80
MF 22 x 1,5	22,0	18,0	80	22	14,5	20,50
MF 22 x 2,0	22,0	18,0	80	22	14,5	20,00
MF 23 x 1	23,0	18,0	80	22	14,5	22,00
MF 23 x 1,5	23,0	18,0	80	22	14,5	21,50
MF 24 x 0,5	24,0	18,0	90	22	14,5	23,50
MF 24 x 0,75	24,0	18,0	90	22	14,5	23,20
MF 24 x 1,0	24,0	18,0	90	22	14,5	23,00
MF 24 x 1,25	24,0	18,0	90	22	14,5	23,80
MF 24 x 1,5	24,0	18,0	90	22	14,5	22,50
MF 24 x 2,0	24,0	18,0	90	22	14,5	22,00
MF 25 x 1,0	25,0	18,0	90	22	14,5	24,00
MF 25 x 1,5	25,0	18,0	90	22	14,5	23,50
MF 26 x 1,0	26,0	18,0	90	22	14,5	25,00
MF 26 x 1,5	26,0	18,0	90	22	14,5	24,50
MF 26 x 2,0	26,0	18,0	90	22	14,5	24,00
MF 27 x 1	27,0	20,0	90	22	16,0	26,00
MF 27 x 1,5	27,0	20,0	90	22	16,0	25,50
MF 27 x 2,0	27,0	20,0	90	22	16,0	25,00
MF 28 x 1,0	28,0	20,0	90	22	16,0	27,00
MF 28 x 1,5	28,0	20,0	90	22	16,0	26,50
MF 28 x 2,0	28,0	20,0	90	22	16,0	26,00
MF 29 x 1,5	29,0	22,0	90	22	18,0	27,50
MF 30 x 1,0	30,0	22,0	90	22	18,0	29,00
MF 30 x 1,5	30,0	22,0	90	22	18,0	28,50
MF 30 x 2,0	30,0	22,0	90	22	18,0	28,00
MF 30 x 2,5	30,0	22,0	125	56	18,0	27,50
MF 30 x 3,0	30,0	22,0	125	56	18,0	27,00
MF 32 x 1	32,0	22,0	90	22	18,0	31,00

MF Metric fine thread / ISO DIN 13

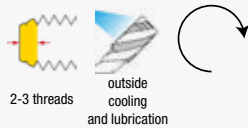
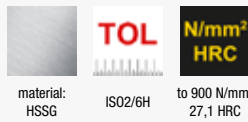
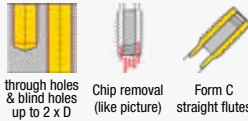
Efficient internal thread cutting.
The short structural type makes that tap usable by machine and hand.

A Hand-Tap-Set includes 2 taps:

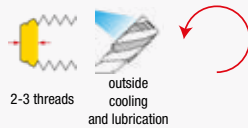
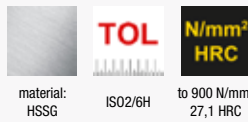
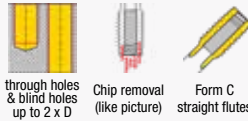
-  Taper Tap
-  Finish Tap



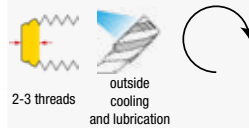
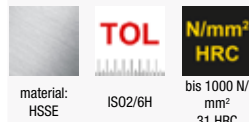
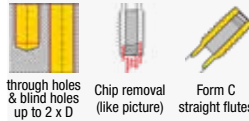
Hand Tap Sets for general use




Hand Tap Sets for general use Left Hand



Hand Tap Sets HSSE for higher demands



MF	D1	D2	L1	L2	□	
MF 32 x 1,5	32,0	22,0	90	22	18,0	30,50
MF 32 x 2,0	32,0	22,0	90	22	18,0	30,00
MF 32 x 3,0	32,0	22,0	125	56	18,0	29,00
MF 33 x 1,5	33,0	25,0	100	25	20,0	31,50
MF 33 x 2,0	33,0	25,0	100	25	20,0	31,00
MF 33 x 3,0	33,0	25,0	125	56	20,0	30,00
MF 34 x 1	34,0	28,0	100	25	22,0	33,00
MF 34 x 1,5	34,0	28,0	100	25	22,0	32,50
MF 34 x 2,0	34,0	28,0	125	40	22,0	32,00
MF 35 x 1	35,0	28,0	100	25	22,0	34,00
MF 35 x 1,5	35,0	28,0	100	25	22,0	33,50
MF 35 x 2	35,0	28,0	125	40	22,0	33,00
MF 36 x 1	36,0	28,0	100	25	22,0	35,00
MF 36 x 1,5	36,0	28,0	100	25	22,0	34,50
MF 36 x 2,0	36,0	28,0	125	40	22,0	34,00
MF 36 x 3,0	36,0	28,0	125	40	22,0	33,00
MF 37 x 1,5	37,0	28,0	100	25	22,0	35,50
MF 38 x 1	38,0	28,0	100	25	22,0	37,00
MF 38 x 1,5	38,0	28,0	100	25	22,0	36,50
MF 38 x 2	38,0	28,0	125	40	22,0	36,00
MF 38 x 3	38,0	28,0	125	40	22,0	35,00
MF 39 x 1,5	39,0	32,0	110	25	24,0	37,50
MF 39 x 2,0	39,0	32,0	125	40	24,0	37,00
MF 39 x 3,0	39,0	32,0	125	40	24,0	36,00
MF 40 x 1	40,0	32,0	110	25	24,0	39,00
MF 40 x 1,5	40,0	32,0	110	25	24,0	38,50
MF 40 x 2,0	40,0	32,0	125	40	24,0	38,00
MF 40 x 3,0	40,0	32,0	125	40	24,0	37,00
MF 42 x 1	42,0	32,0	110	25	24,0	41,00
MF 42 x 1,5	42,0	32,0	110	25	24,0	40,50
MF 42 x 2,0	42,0	32,0	125	40	24,0	40,00
MF 42 x 3,0	42,0	32,0	125	40	24,0	39,00
MF 44 x 1,5	44,0	36,0	110	25	29,0	42,50

MF Metric fine thread / ISO DIN 13

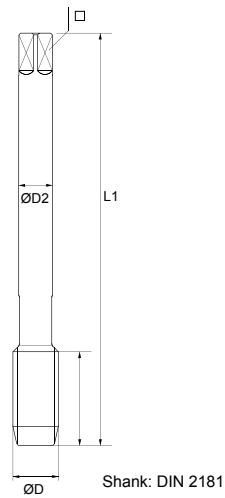
Efficient internal thread cutting.

The short structural type makes that tap usable by machine and hand.

A Hand-Tap-Set includes 2 taps:

Taper Tap

Finish Tap



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
ISO2/6H
to 900 N/mm² 27,1 HRC

2-3 threads
outside cooling and lubrication

Hand Tap Sets for general use Left Hand

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

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

2-3 threads
outside cooling and lubrication

Hand Tap Sets HSSE for higher demands

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

material: HSSE
TOL
ISO2/6H
bis 1000 N/mm² 31 HRC

2-3 threads
outside cooling and lubrication

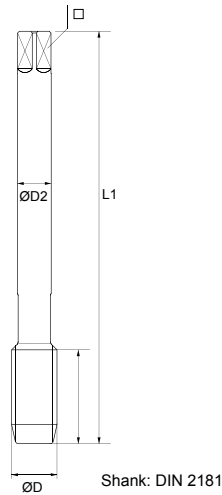
MF	D1	D2	L1	L2	□	
MF 44 x 2	44,0	36,0	125	40	29,0	42,00
MF 45 x 1	45,0	36,0	110	25	29,0	44,00
MF 45 x 1,5	45,0	36,0	110	25	29,0	43,50
MF 45 x 2,0	45,0	36,0	125	40	29,0	43,00
MF 45 x 3,0	45,0	36,0	125	40	29,0	42,00
MF 46 x 1,5	46,0	36,0	140	40	29,0	45,50
MF 48 x 1	48,0	36,0	140	40	29,0	47,00
MF 48 x 1,5	48,0	36,0	140	40	29,0	46,50
MF 48 x 2,0	48,0	36,0	140	40	29,0	46,00
MF 48 x 3,0	48,0	36,0	140	40	29,0	45,00
MF 50 x 1,5	50,0	36,0	140	40	29,0	48,50
MF 50 x 2,0	50,0	36,0	140	40	29,0	48,00
MF 50 x 3,0	50,0	36,0	140	40	29,0	47,00
MF 52 x 1,5	52,0	40,0	140	40	32,0	50,50
MF 52 x 2,0	52,0	40,0	140	40	32,0	50,00
MF 52 x 3,0	52,0	40,0	140	40	32,0	49,00
MF 54 x 1	54,0	40,0	140	32	32,0	53,00
MF 54 x 1,5	54,0	40,0	140	32	32,0	52,50
MF 54 x 2,0	54,0	40,0	140	36	32,0	52,00
MF 54 x 3,0	54,0	40,0	140	40	32,0	51,00
MF 54 x 4,0	54,0	40,0	180	50	32,0	50,00
MF 55 x 1,5	55,0	40,0	140	32	32,0	53,50
MF 55 x 2,0	55,0	40,0	140	36	32,0	53,00
MF 55 x 3,0	55,0	40,0	140	40	32,0	52,00
MF 55 x 4,0	55,0	40,0	180	50	32,0	51,00
MF 56 x 1	56,0	40,0	140	32	32,0	55,00
MF 56 x 1,5	56,0	40,0	140	32	32,0	54,50
MF 56 x 2,0	56,0	40,0	140	36	32,0	54,00
MF 56 x 3,0	56,0	40,0	140	40	32,0	53,00
MF 56 x 4,0	56,0	40,0	180	50	32,0	52,00
MF 58 x 1	58,0	45,0	160	32	35,0	57,00
MF 58 x 1,5	58,0	45,0	160	32	35,0	56,50
MF 58 x 2,0	58,0	45,0	160	36	35,0	56,00
MF 58 x 3,0	58	45	160	40	35	55

MF Metric fine thread / ISO DIN 13

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

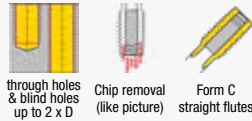
A Hand-Tap-Set includes 2 taps:

- Taper Tap
- Finish Tap

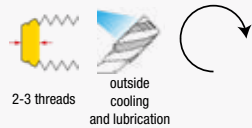


MF	D1	D2	L1	L2	□	
MF 58 x 4,0	58	45	200	55	35	54
MF 60 x 1,5	60	45	160	34	35	58,5
MF 60 x 2,0	60	45	160	36	35	58
MF 60 x 3,0	60	45	160	40	35	57
MF 60 x 4,0	60	45	200	55	35	56
MF 62 x 1,5	62	50	160	34	39	60,5
MF 62 x 2,0	62	50	160	36	39	60
MF 62 x 3,0	62	50	180	45	39	59
MF 62 x 4,0	62	50	220	55	39	58
MF 63 x 1,5	63	50	160	32	39	61,5
MF 64 x 1,5	64	50	160	34	39	62,5
MF 64 x 2,0	64	50	160	36	39	62
MF 64 x 3,0	64	50	180	45	39	61
MF 64 x 4,0	64	50	220	60	39	60
MF 65 x 1,5	65	50	160	34	39	63,5
MF 65 x 2,0	65	50	160	36	39	63
MF 65 x 3,0	65	50	180	45	39	62
MF 65 x 4,0	65	50	220	60	39	61
MF 68 x 1,5	68	50	160	36	39	66,5
MF 68 x 2,0	68	50	160	40	39	66
MF 68 x 3,0	68	50	180	50	39	65
MF 68 x 4,0	68	50	220	60	39	64
MF 70 x 1,5	70	50	160	36	39	68,5
MF 70 x 2,0	70	50	160	40	39	68
MF 70 x 3,0	70	50	200	50	39	67
MF 70 x 4,0	70	50	240	60	39	66
MF 72 x 1,5	72	50	160	36	39	70,5
MF 72 x 2,0	72	50	160	40	39	70
MF 72 x 3,0	72	50	200	50	39	69
MF 72 x 4,0	72	50	240	60	39	68
MF 74 x 1,5	74	50	160	36	39	72,5
MF 74 x 2,0	74	50	160	40	39	72
MF 74 x 3,0	74	50	200	50	39	71
MF 74 x 4,0	74	50	240	60	39	70

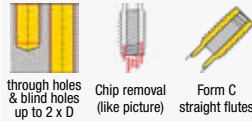
Hand Tap Sets for general use



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



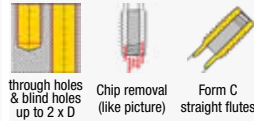
Hand Tap Sets for general use Left Hand



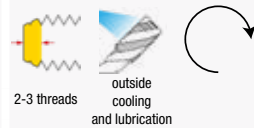
material: HSSG
ISO2/6H
to 900 N/mm²
27,1 HRC



Hand Tap Sets HSSE for higher demands



material: HSSE
ISO2/6H
bis 1000 N/mm²
31 HRC



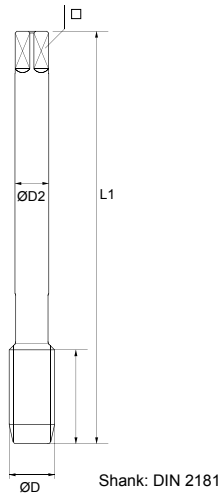
MF Metric fine thread / ISO DIN 13

Efficient internal thread cutting.

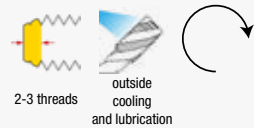
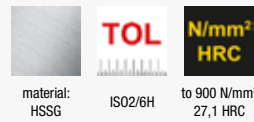
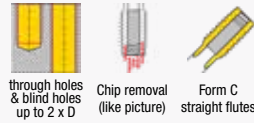
The short structural type makes that tap usable by machine and hand.

A Hand-Tap-Set includes 2 taps:

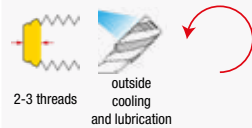
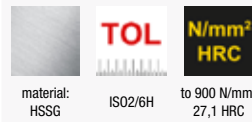
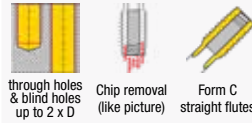
-  Taper Tap
-  Finish Tap



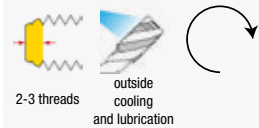
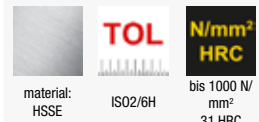
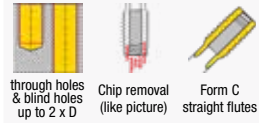
Hand Tap Sets for general use





Hand Tap Sets for general use Left Hand



Hand Tap Sets HSSE for higher demands




MF	D1	D2	L1	L2		
MF 75 x 1,5	75	50	160	36	39	73,5
MF 75 x 2,0	75	50	160	40	39	73
MF 75 x 3,0	75	50	200	50	39	72
MF 75 x 4,0	75	50	240	60	39	71
MF 76 x 1,5	76	50	160	36	39	74,5
MF 76 x 2,0	76	50	160	40	39	74
MF 76 x 3,0	76	50	220	50	39	73
MF 76 x 4,0	76	50	260	60	39	72
MF 78 x 1,5	78	50	160	36	39	76,5
MF 78 x 2,0	78	50	160	40	39	76
MF 78 x 3,0	78	50	220	55	39	75
MF 78 x 4,0	78	50	260	65	39	74
MF 80 x 1,5	80	50	160	36	39	78,5
MF 80 x 2,0	80	50	160	40	39	78
MF 80 x 3,0	80	50	220	55	39	77
MF 80 x 4,0	80	50	260	65	39	76
MF 82 x 1,5	82	50	160	36	39	80,5
MF 82 x 2,0	82	50	160	40	39	80
MF 82 x 3,0	82	50	220	55	39	79
MF 82 x 4,0	82	50	260	65	39	78
MF 84 x 1,5	84	50	160	36	39	82,5
MF 84 x 2,0	84	50	160	40	39	82
MF 84 x 3,0	84	50	220	55	39	81
MF 84 x 4,0	84	50	260	65	39	80
MF 85 x 1,5	85	50	160	36	39	83,5
MF 85 x 2,0	85	50	160	40	39	83
MF 85 x 3,0	85	50	220	55	39	82
MF 85 x 4,0	85	50	260	65	39	81
MF 86 x 1,5	86	50	160	36	39	84,5
MF 86 x 2,0	86	50	160	40	39	84
MF 86 x 3,0	86	50	220	55	39	83
MF 86 x 4,0	86	50	260	65	39	82
MF 88 x 1,5	88	50	160	38	39	86,5
MF 88 x 2,0	88	50	160	40	39	86

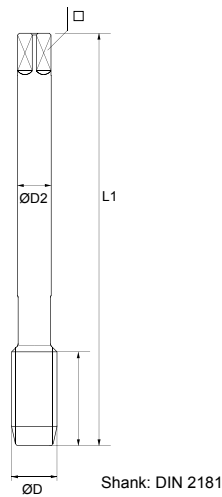
MF Metric fine thread / ISO DIN 13



Efficient internal thread cutting.

The short structural type makes that tap usable by machine and hand.

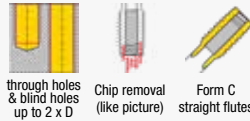
A Hand-Tap-Set includes 2 taps:

-  Taper Tap
-  Finish Tap

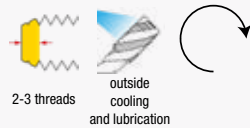


MF	D1	D2	L1	L2		
MF 88 x 3,0	88	50	220	55	39	85
MF 88 x 4,0	88	50	260	65	39	84
MF 90 x 1,5	90	50	160	38	39	88,5
MF 90 x 2,0	90	50	160	40	39	88
MF 90 x 3,0	90	50	220	55	39	87
MF 90 x 4,0	90	50	260	65	39	86
MF 92 x 1,5	92	56	180	40	44	90,5
MF 92 x 2,0	92	56	180	45	44	90
MF 92 x 3,0	92	56	240	60	44	89
MF 92 x 4,0	92	56	280	70	44	88
MF 95 x 1,5	95	56	180	40	44	93,5
MF 95 x 2,0	95	56	180	45	44	93
MF 95 x 3,0	95	56	240	60	44	92
MF 95 x 4,0	95	56	280	70	44	91
MF 96 x 1,5	96	56	180	40	44	94,5
MF 96 x 2,0	96	56	180	45	44	94
MF 96 x 3,0	96	56	240	60	44	93
MF 96 x 4,0	96	56	280	70	44	92
MF 98 x 1,5	98	56	180	40	44	96,5
MF 98 x 2,0	98	56	180	45	44	96
MF 98 x 3,0	98	56	240	60	44	95
MF 98 x 4,0	98	56	280	70	44	94
MF 100 x 1,5	100	56	180	45	44	98,5
MF 100 x 2,0	100	56	180	50	44	98
MF 100 x 3,0	100	56	240	65	44	97
MF 100 x 4,0	100	56	280	75	44	96
MF 105 x 1,5	105	56	180	45	44	103,5
MF 105 x 2,0	105	56	180	50	44	103
MF 105 x 3,0	105	56	240	65	44	102
MF 105 x 4,0	105	56	280	75	44	101
MF 110 x 1,5	110	56	180	45	44	108,5
MF 110 x 2,0	110	56	180	50	44	108
MF 110 x 3,0	110	56	240	65	44	107
MF 110 x 4,0	110	56	280	75	44	106

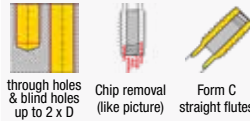
Hand Tap Sets for general use



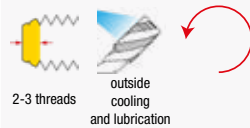
material: HSSG
ISO2/6H
to 900 N/mm²
27,1 HRC



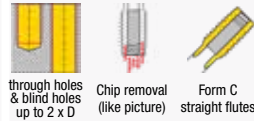
Hand Tap Sets for general use Left Hand



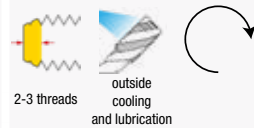
material: HSSG
ISO2/6H
to 900 N/mm²
27,1 HRC



Hand Tap Sets HSSE for higher demands



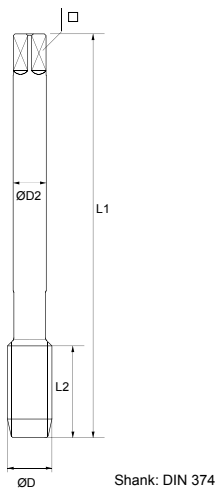
material: HSSE
ISO2/6H
bis 1000 N/mm²
31 HRC



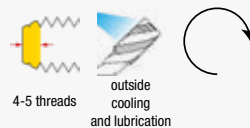
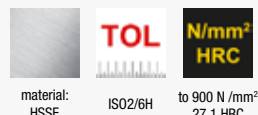
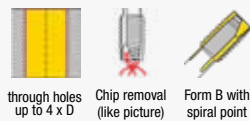
MF

Metric fine thread / ISO DIN 13

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



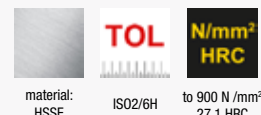
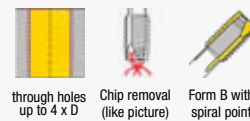
Machine Tap for general use



DIN 374



Machine Tap for general use Left-hand thread



DIN 374

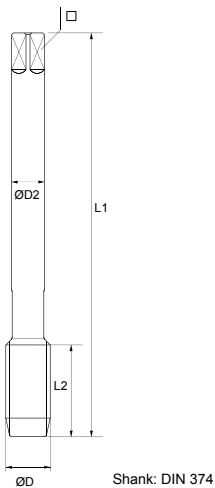

MF

	D1	D2	L1	L2	□	
MF 3 x 0,35	3,0	2,2	56	9	-	2,65
MF 4 x 0,35	4,0	2,8	63	10	2,1	3,65
MF 4 x 0,5	4,0	2,8	63	10	2,1	3,50
MF 5 x 0,5	5,0	3,5	70	12	2,7	4,50
MF 5 x 0,75	5,0	3,5	70	12	2,7	4,25
MF 6 x 0,5	6,0	4,5	80	14	3,4	5,50
MF 6 x 0,75	6,0	4,5	80	14	3,4	5,20
MF 7 x 0,75	7,0	5,5	80	14	4,3	6,20
MF 8 x 0,5	8,0	6,0	80	19	4,9	7,50
MF 8 x 0,75	8,0	6,0	80	19	4,9	7,20
MF 8 x 1,0	8,0	6,0	90	22	4,9	7,00
MF 9 x 0,75	9,0	7,0	80	19	5,5	8,25
MF 9 x 1,0	9,0	7,0	90	22	5,5	8,00
MF 10 x 0,75	10,0	7,0	90	20	5,5	9,20
MF 10 x 1,0	10,0	7,0	90	20	5,5	9,00
MF 10 x 1,25	10,0	7,0	100	24	5,5	8,80
MF 11 x 1,0	11,0	8,0	90	20	6,2	10,00
MF 11 x 1,25	11,0	8,0	90	22	6,2	10,80
MF 12 x 0,75	12,0	9,0	100	22	7,0	10,20
MF 12 x 1,0	12,0	9,0	100	22	7,0	11,00
MF 12 x 1,25	12,0	9,0	100	22	7,0	10,80
MF 12 x 1,5	12,0	9,0	100	22	7,0	10,50
MF 13 x 1,0	13,0	11,0	100	22	9,0	12,00
MF 13 x 1,5	13,0	11,0	100	22	9,0	11,50
MF 14 x 0,75	14,0	11,0	100	22	9,0	13,20
MF 14 x 1,0	14,0	11,0	100	22	9,0	13,00
MF 14 x 1,25	14,0	11,0	100	22	9,0	12,80
MF 14 x 1,5	14,0	11,0	100	22	9,0	12,50
MF 15 x 1,0	15,0	12,0	100	22	9,0	14,00
MF 15 x 1,5	15,0	12,0	100	22	9,0	13,50
MF 16 x 1,0	16,0	12,0	100	22	9,0	15,00
MF 16 x 1,25	16,0	12,0	100	22	9,0	14,80
MF 16 x 1,5	16,0	12,0	100	22	9,0	14,50
MF 18 x 1,0	18,0	14,0	110	25	11,0	17,00
MF 18 x 1,25	18,0	14,0	110	25	11,0	16,80

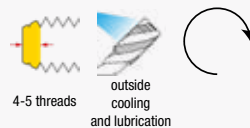
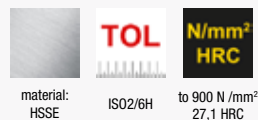
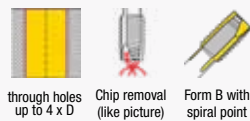
MF

Metric fine thread / ISO DIN 13

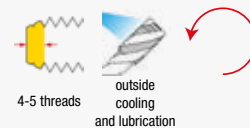
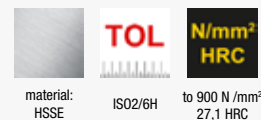
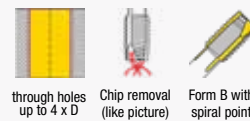
- ✔ Tap for machine use in through hole.
- ✔ The spiral point pushes the chips ahead.



Machine Tap for general use



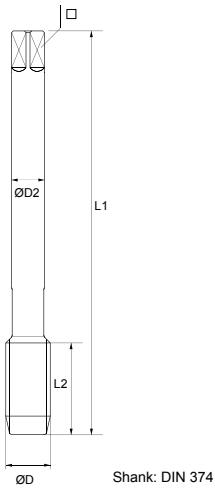
Machine Tap for general use Left-hand thread


MF

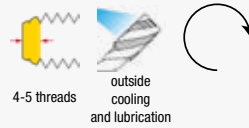
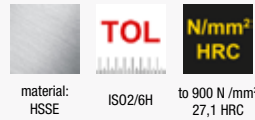
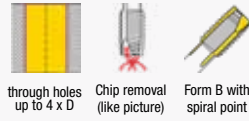
	D1	D2	L1	L2	□	
MF 18 x 1,5	18,0	14,0	110	25	11,0	16,50
MF 18 x 2,0	18,0	14,0	125	34	11,0	16,00
MF 20 x 1,0	20,0	16,0	125	25	12,0	19,00
MF 20 x 1,25	20,0	16,0	125	25	12,0	18,80
MF 20 x 1,5	20,0	16,0	125	25	12,0	18,50
MF 20 x 2,0	20,0	16,0	140	34	12,0	18,00
MF 21 x 1,5	21,0	16,0	125	25	12,0	19,50
MF 22 x 1,0	22,0	18,0	125	25	14,5	21,00
MF 22 x 1,25	22,0	18,0	125	25	14,5	20,80
MF 22 x 1,5	22,0	18,0	125	25	14,5	20,50
MF 22 x 2,0	22,0	18,0	140	34	14,5	20,00
MF 23 x 1,5	23,0	18,0	125	25	14,5	21,50
MF 24 x 1,0	24,0	18,0	140	28	14,5	23,00
MF 24 x 1,25	24,0	18,0	140	28	14,5	23,80
MF 24 x 1,5	24,0	18,0	140	28	14,5	22,50
MF 24 x 2,0	24,0	18,0	140	28	14,5	22,00
MF 25 x 1,0	25,0	18,0	140	28	14,5	24,00
MF 25 x 1,5	25,0	18,0	140	28	14,5	23,50
MF 26 x 1,0	26,0	18,0	140	28	14,5	25,00
MF 26 x 1,5	26,0	18,0	140	28	14,5	24,50
MF 26 x 2,0	26,0	18,0	140	28	14,5	24,00
MF 27 x 1,0	27,0	20,0	140	28	16,0	26,00
MF 27 x 1,5	27,0	20,0	140	28	16,0	25,50
MF 27 x 2,0	27,0	20,0	140	28	16,0	25,00
MF 28 x 1,0	28,0	20,0	140	28	16,0	27,00
MF 28 x 1,5	28,0	20,0	140	28	16,0	26,50
MF 28 x 2,0	28,0	20,0	140	28	16,0	26,00
MF 29 x 1,5	29,0	22,0	150	28	18,0	27,50
MF 30 x 1,0	30,0	22,0	150	28	18,0	29,00
MF 30 x 1,5	30,0	22,0	150	28	18,0	28,50
MF 30 x 2,0	30,0	22,0	150	28	18,0	28,00
MF 30 x 2,5	30,0	22,0	180	45	18,0	27,50
MF 30 x 3,0	30,0	22,0	180	45	18,0	27,00
MF 32 x 1,5	32,0	22,0	150	28	18,0	30,50
MF 32 x 2,0	32,0	22,0	150	28	18,0	30,00

MF Metric fine thread / ISO DIN 13

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



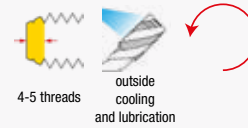
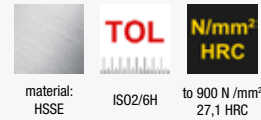
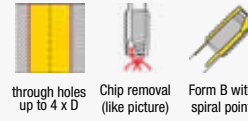
Machine Tap for general use



DIN 374



Machine Tap for general use Left-hand thread



DIN 374

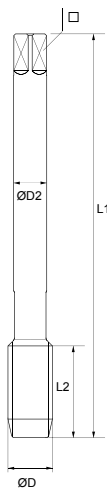


MF	D1	D2	L1	L2	□	
MF 32 x 3,0	32,0	22,0	180	50	18,0	29,00
MF 33 x 1,5	33,0	25,0	160	30	20,0	31,50
MF 33 x 2,0	33,0	25,0	160	30	20,0	31,00
MF 33 x 3,0	33,0	25,0	180	50	20,0	30,00
MF 34 x 1,5	34,0	28,0	170	30	22,0	32,50
MF 34 x 2,0	34,0	28,0	170	30	22,0	32,00
MF 35 x 1,5	35,0	28,0	170	30	22,0	33,50
MF 36 x 1,5	36,0	28,0	170	30	22,0	34,50
MF 36 x 2,0	36,0	28,0	170	30	22,0	34,00
MF 36 x 3,0	36,0	28,0	200	56	22,0	33,00
MF 38 x 1,5	38,0	28,0	170	30	22,0	36,50
MF 39 x 1,5	39,0	32,0	170	30	24,0	37,50
MF 39 x 2,0	39,0	32,0	170	30	24,0	37,00
MF 39 x 3,0	39,0	32,0	200	60	24,0	36,00
MF 40 x 1,5	40,0	32,0	170	30	24,0	38,50
MF 40 x 2,0	40,0	32,0	170	30	24,0	38,00
MF 40 x 3,0	40,0	32,0	200	60	24,0	37,00
MF 42 x 1,5	42,0	32,0	170	30	24,0	40,50
MF 42 x 2,0	42,0	32,0	170	30	24,0	40,00
MF 42 x 3,0	42,0	32,0	200	60	24,0	39,00
MF 45 x 1,5	45,0	36,0	180	32	29,0	43,50
MF 45 x 2,0	45,0	36,0	180	32	29,0	43,00
MF 45 x 3,0	45,0	36,0	200	50	29,0	42,00
MF 48 x 1,5	48,0	36,0	190	32	29,0	46,50
MF 48 x 2,0	48,0	36,0	190	32	29,0	46,00
MF 48 x 3,0	48,0	36,0	225	50	29,0	45,00
MF 50 x 1,5	50,0	36,0	190	32	29,0	48,50
MF 50 x 2,0	50,0	36,0	190	32	29,0	48,00
MF 50 x 3,0	50,0	36,0	225	50	29,0	47,00
MF 52 x 1,5	52,0	40,0	190	32	32,0	50,50
MF 52 x 2,0	52,0	40,0	190	32	32,0	50,00
MF 52 x 3,0	52,0	40,0	225	50	32,0	49,00
MF 63 x 1,5	63,0	50,0	275	50	39,0	61,50

MF

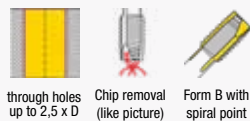
Metric fine thread / ISO DIN 13

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



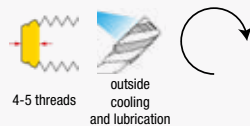
Shank: DIN 374

Machine Tap for high-alloyed steels

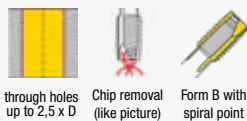


through holes up to 2,5 x D
Chip removal (like picture)
Form B with spiral point

material: HSSE TIN
TOL ISO2/6H
N/mm² HRC to 1300
41 HRC

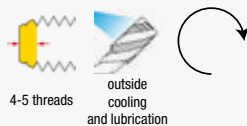


Machine Tap for stainless steels

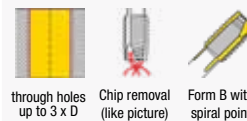


through holes up to 2,5 x D
Chip removal (like picture)
Form B with spiral point

material: HSSE TiAlN
TOL ISO2/6H
N/mm² HRC to 1300
41 HRC

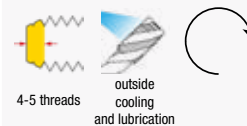


Machine Tap for aluminum



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

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

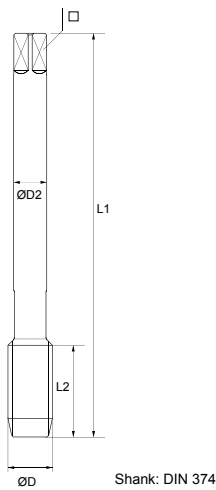


MF

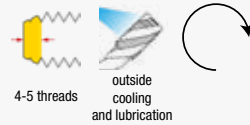
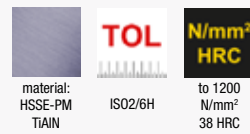
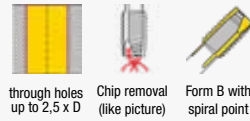
	D1	D2	L1	L2	□	🔩
MF 6 x 0,75	6,0	4,5	80	14	3,4	5,20
MF 8 x 1,0	8,0	6,0	90	22	4,9	7,00
MF 10 x 1,0	10,0	7,0	90	20	5,5	9,00
MF 10 x 1,25	10,0	7,0	100	24	5,5	8,80
MF 12 x 1,0	12,0	9,0	100	22	7,0	11,00
MF 12 x 1,25	12,0	9,0	100	22	7,0	10,80
MF 12 x 1,5	12,0	9,0	100	22	7,0	10,50
MF 14 x 1,25	14,0	11,0	100	22	9,0	12,80
MF 14 x 1,5	14,0	11,0	100	22	9,0	12,50
MF 16 x 1,5	16,0	12,0	100	22	9,0	14,50
MF 18 x 1,5	18,0	14,0	110	25	11,0	16,50
MF 20 x 1,5	20,0	16,0	125	25	12,0	18,50

MF Metric fine thread / ISO DIN 13

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



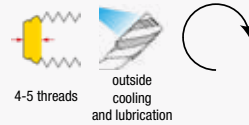
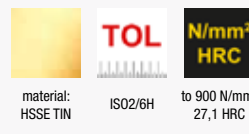
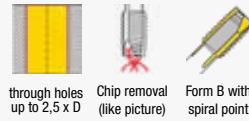
Machine Tap for special alloys (Inconel, Hastelloy etc.)



DIN 374



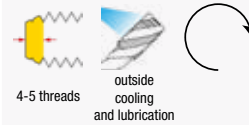
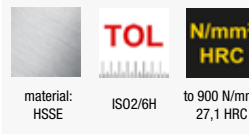
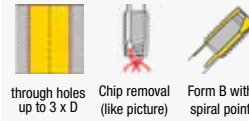
Machine Tap with longer tool life time



DIN 374



Machine Tap for general use oversized (diameter)



DIN 374

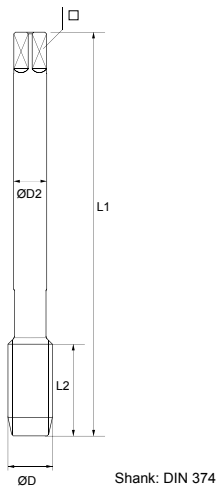


MF D1 D2 L1 L2 □

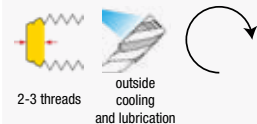
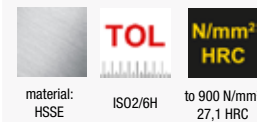
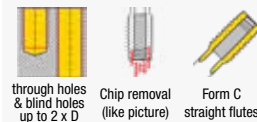
MF 6 x 0,75	6,0	4,5	80	14	3,4	5,20
MF 8 x 1,0	8,0	6,0	90	22	4,9	7,00
MF 10 x 1,0	10,0	7,0	90	20	5,5	9,00
MF 10 x 1,25	10,0	7,0	100	24	5,5	8,80
MF 12 x 1,0	12,0	9,0	100	22	7,0	11,00
MF 12 x 1,25	12,0	9,0	100	22	7,0	10,80
MF 12 x 1,5	12,0	9,0	100	22	7,0	10,50
MF 14 x 1,25	14,0	11,0	100	22	9,0	12,80
MF 14 x 1,5	14,0	11,0	100	22	9,0	12,50
MF 16 x 1,5	16,0	12,0	100	22	9,0	14,50
MF 18 x 1,5	18,0	14,0	110	25	11,0	16,50
MF 20 x 1,5	20,0	16,0	125	25	12,0	18,50

MF Metric fine thread / ISO DIN 13

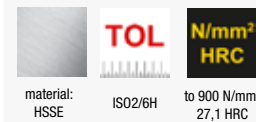
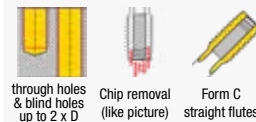
- ✓ Tap for machine use in through hole and blind hole.
- ✓ The short lead-in chamfer makes that tap universal in application. The flutes can hold the most part of the chips.



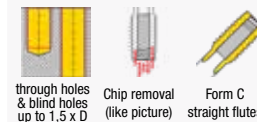
Machine Tap for general use



Machine Tap for general use Left-hand thread



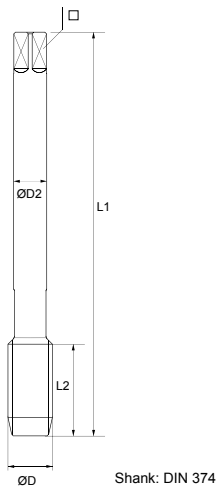
Machine Tap with longer tool life time



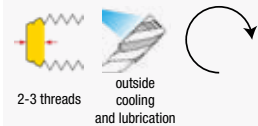
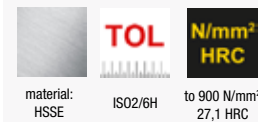
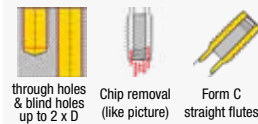
MF	D1	D2	L1	L2	□	
MF 4 x 0,35	4,0	2,8	63	10	2,1	3,65
MF 5 x 0,5	5,0	3,5	70	12	2,7	4,50
MF 6 x 0,5	6,0	4,5	80	14	3,4	5,50
MF 6 x 0,75	6,0	4,5	80	14	3,4	5,20
MF 7 x 0,75	7,0	5,5	80	14	4,3	6,20
MF 8 x 0,75	8,0	6,0	80	19	4,9	7,20
MF 8 x 1,0	8,0	6,0	90	22	4,9	7,00
MF 10 x 0,5	10,0	7,0	90	20	5,5	9,50
MF 10 x 1,0	10,0	7,0	90	20	5,5	9,00
MF 10 x 1,25	10,0	7,0	100	24	5,5	8,80
MF 12 x 0,75	12,0	9,0	100	22	7,0	10,20
MF 12 x 1,0	12,0	9,0	100	22	7,0	11,00
MF 12 x 1,25	12,0	9,0	100	22	7,0	10,80
MF 12 x 1,5	12,0	9,0	100	22	7,0	10,50
MF 14 x 1,0	14,0	11,0	100	22	9,0	13,00
MF 14 x 1,25	14,0	11,0	100	22	9,0	12,80
MF 14 x 1,5	14,0	11,0	100	22	9,0	12,50
MF 16 x 1,0	16,0	12,0	100	22	9,0	15,00
MF 16 x 1,25	16,0	12,0	100	22	9,0	14,80
MF 16 x 1,5	16,0	12,0	100	22	9,0	14,50
MF 18 x 1,0	18,0	14,0	110	25	11,0	17,00
MF 18 x 1,5	18,0	14,0	110	25	11,0	16,50
MF 18 x 2,0	18,0	14,0	125	34	11,0	16,00
MF 20 x 1,0	20,0	16,0	125	25	12,0	19,00
MF 20 x 1,25	20,0	16,0	125	25	12,0	18,80
MF 20 x 1,5	20,0	16,0	125	25	12,0	18,50
MF 20 x 2,0	20,0	16,0	140	34	12,0	18,00
MF 22 x 1,0	22,0	18,0	125	25	14,5	21,00
MF 22 x 1,5	22,0	18,0	125	25	14,5	20,50
MF 22 x 2,0	22,0	18,0	140	34	14,5	20,00

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.



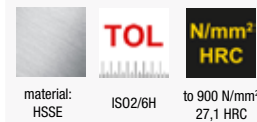
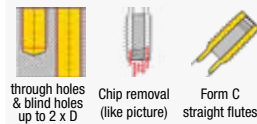
Machine Tap for general use



DIN 374



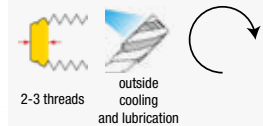
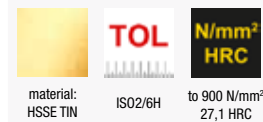
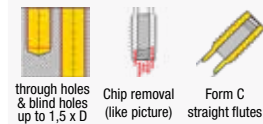
Machine Tap for general use Left-hand thread



DIN 374




Machine Tap with longer tool life time



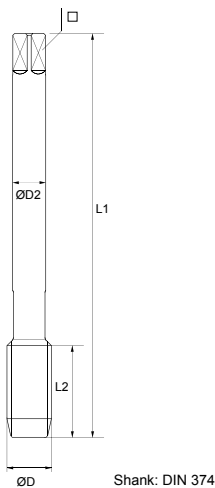
DIN 374



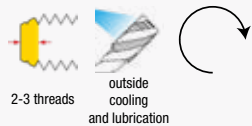
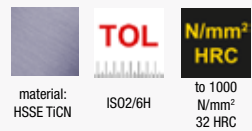
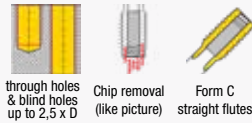
MF	D1	D2	L1	L2	□	
MF 24 x 1,0	24,0	18,0	140	28	14,5	23,00
MF 24 x 1,5	24,0	18,0	140	28	14,5	22,50
MF 24 x 2,0	24,0	18,0	140	28	14,5	22,00
MF 25 x 1,0	25,0	18,0	140	28	14,5	24,00
MF 26 x 1,5	26,0	18,0	140	28	14,5	24,50
MF 27 x 1,5	27,0	20,0	140	28	16,0	25,50
MF 27 x 2,0	27,0	20,0	140	28	16,0	25,00
MF 28 x 1,5	28,0	20,0	140	28	16,0	26,50
MF 30 x 1,5	30,0	22,0	150	28	18,0	28,50
MF 30 x 2,0	30,0	22,0	150	28	18,0	28,00
MF 32 x 1,5	32,0	22,0	150	28	18,0	30,50
MF 32 x 2,0	32,0	22,0	150	28	18,0	30,00
MF 33 x 2,0	33,0	25,0	160	30	20,0	31,00
MF 35 x 1,5	35,0	28,0	170	30	22,0	33,50
MF 36 x 1,5	36,0	28,0	170	30	22,0	34,50
MF 36 x 2,0	36,0	28,0	170	30	22,0	34,00
MF 38 x 1,5	38,0	28,0	170	30	22,0	36,50
MF 40 x 1,5	40,0	32,0	170	30	24,0	38,50
MF 42 x 1,5	42,0	32,0	170	30	24,0	40,50
MF 45 x 1,5	45,0	36,0	180	32	29,0	43,50
MF 48 x 1,5	48,0	36,0	190	32	29,0	46,50
MF 50 x 1,5	50,0	36,0	190	32	29,0	48,50
MF 52 x 1,5	52,0	40,0	190	32	32,0	50,50

MF Metric fine thread / ISO DIN 13

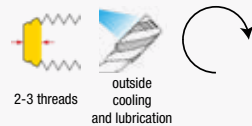
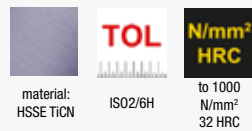
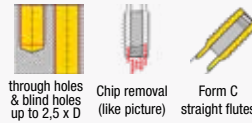
- ✓ Tap for machine use in through hole and blind hole.
- ✓ The short lead-in chamfer makes that tap universal in application. The flutes can hold the most part of the chips.



Machine Tap for cast materials



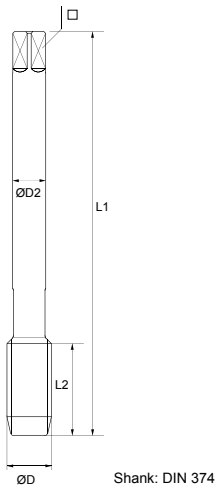
Machine Tap for brass (short-chipping)



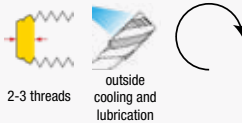
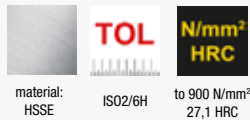
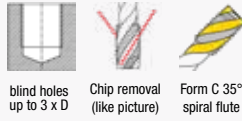
MF	D1	D2	L1	L2	□	
MF 4 x 0,5	4,0	2,8	63	10	2,1	3,50
MF 5 x 0,5	5,0	3,5	70	12	2,7	4,50
MF 6 x 0,75	6,0	4,5	80	14	3,4	5,20
MF 8 x 1,0	8,0	6,0	90	22	4,9	7,00
MF 10 x 1,0	10,0	7,0	90	20	5,5	9,00
MF 10 x 1,25	10,0	7,0	100	24	5,5	8,80
MF 12 x 1,25	12,0	9,0	100	22	7,0	10,80
MF 12 x 1,5	12,0	9,0	100	22	7,0	10,50
MF 14 x 1,25	14,0	11,0	100	22	9,0	12,80
MF 14 x 1,5	14,0	11,0	100	22	9,0	12,50
MF 16 x 1,5	16,0	12,0	100	22	9,0	14,50
MF 18 x 1,5	18,0	14,0	110	25	11,0	16,50
MF 20 x 1,5	20,0	16,0	125	25	12,0	18,50

MF Metric fine thread / ISO DIN 13

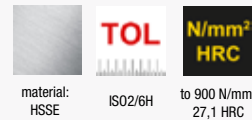
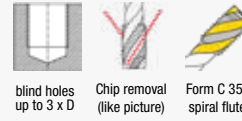
- ✔ Tap for machine use in blind holes.
- ✔ The fast spiral flutes provide good chip removal from the blind hole.




Machine Tap for general use



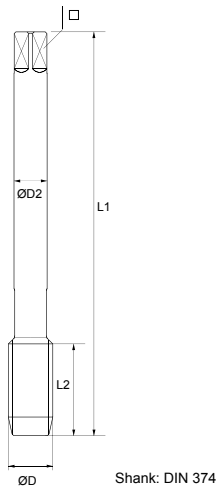
Machine Tap for general use Left-hand thread



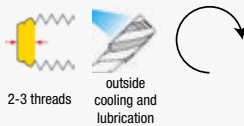
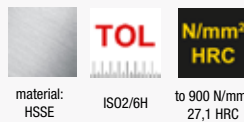
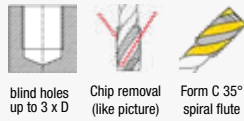
MF	D1	D2	L1	L2	□	
MF 3 x 0,35	3,0	2,2	56	5	-	2,65
MF 4 x 0,35	4,0	2,8	63	5	2,1	3,65
MF 4 x 0,5	4,0	2,8	63	5	2,1	3,50
MF 5 x 0,5	5,0	3,5	70	5	2,7	4,50
MF 5 x 0,75	5,0	3,5	70	8	2,7	4,25
MF 6 x 0,5	6,0	4,5	80	5	3,4	5,50
MF 6 x 0,75	6,0	4,5	80	8	3,4	5,20
MF 7 x 0,75	7,0	5,5	80	8	4,3	6,20
MF 8 x 0,5	8,0	6,0	80	8	4,9	7,50
MF 8 x 0,75	8,0	6,0	80	8	4,9	7,20
MF 8 x 1,0	8,0	6,0	90	10	4,9	7,00
MF 9 x 0,75	9,0	7,0	80	10	5,5	8,25
MF 9 x 1,0	9,0	7,0	90	10	5,5	8,00
MF 10 x 0,75	10,0	7,0	90	10	5,5	9,20
MF 10 x 1,0	10,0	7,0	90	10	5,5	9,00
MF 10 x 1,25	10,0	7,0	100	16	5,5	8,80
MF 11 x 1,0	11,0	8,0	90	11	6,2	10,00
MF 11 x 1,25	11,0	8,0	90	14	6,2	10,80
MF 12 x 0,75	12,0	9,0	100	10	7,0	10,20
MF 12 x 1,0	12,0	9,0	100	11	7,0	11,00
MF 12 x 1,25	12,0	9,0	100	15	7,0	10,80
MF 12 x 1,5	12,0	9,0	100	15	7,0	10,50
MF 13 x 1,0	13,0	11,0	100	11	9,0	12,00
MF 13 x 1,5	13,0	11,0	100	15	9,0	11,50
MF 14 x 0,75	14,0	11,0	100	10	9,0	13,20
MF 14 x 1,0	14,0	11,0	100	11	9,0	13,00
MF 14 x 1,25	14,0	11,0	100	15	9,0	12,80
MF 14 x 1,5	14,0	11,0	100	15	9,0	12,50
MF 15 x 1,0	15,0	12,0	100	12	9,0	14,00
MF 15 x 1,5	15,0	12,0	100	15	9,0	13,50
MF 16 x 1,0	16,0	12,0	100	12	9,0	15,00
MF 16 x 1,25	16,0	12,0	100	15	9,0	14,80
MF 16 x 1,5	16,0	12,0	100	15	9,0	14,50
MF 18 x 1,0	18,0	14,0	110	13	11,0	17,00
MF 18 x 1,25	18,0	14,0	110	15	11,0	16,80

MF Metric fine thread / ISO DIN 13

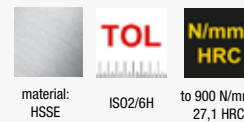
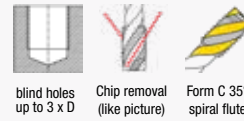
- ✓ Tap for machine use in blind holes.
- ✓ The fast spiral flutes provide good chip removal from the blind hole.




Machine Tap for general use



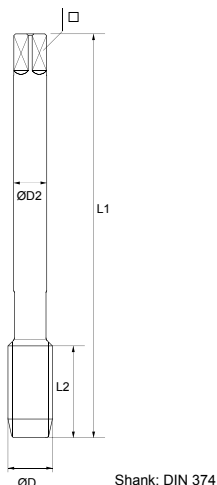
Machine Tap for general use Left-hand thread



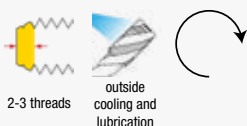
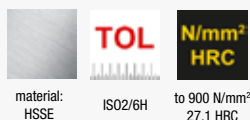
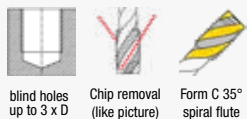
MF	D1	D2	L1	L2	□	
MF 18 x 1,5	18,0	14,0	110	17	11,0	16,50
MF 18 x 2,0	18,0	14,0	125	20	11,0	16,00
MF 20 x 1,0	20,0	16,0	125	14	12,0	19,00
MF 20 x 1,25	20,0	16,0	125	17	12,0	18,80
MF 20 x 1,5	20,0	16,0	125	17	12,0	18,50
MF 20 x 2,0	20,0	16,0	140	20	12,0	18,00
MF 21 x 1,5	21,0	16,0	125	17	12,0	19,50
MF 22 x 1,0	22,0	18,0	125	14	14,5	21,00
MF 22 x 1,25	22,0	18,0	125	17	14,5	20,80
MF 22 x 1,5	22,0	18,0	125	17	14,5	20,50
MF 22 x 2,0	22,0	18,0	140	20	14,5	20,00
MF 23 x 1,5	23,0	18,0	125	17	14,5	21,50
MF 24 x 1,0	24,0	18,0	140	15	14,5	23,00
MF 24 x 1,25	24,0	18,0	140	17	14,5	23,80
MF 24 x 1,5	24,0	18,0	140	20	14,5	22,50
MF 24 x 2,0	24,0	18,0	140	20	14,5	22,00
MF 25 x 1,0	25,0	18,0	140	15	14,5	24,00
MF 25 x 1,5	25,0	18,0	140	20	14,5	23,50
MF 26 x 1,0	26,0	18,0	140	15	14,5	25,00
MF 26 x 1,5	26,0	18,0	140	20	14,5	24,50
MF 26 x 2,0	26,0	18,0	140	20	14,5	24,00
MF 27 x 1,0	27,0	20,0	140	15	16,0	26,00
MF 27 x 1,5	27,0	20,0	140	20	16,0	25,50
MF 27 x 2,0	27,0	20,0	140	20	16,0	25,00
MF 28 x 1,0	28,0	20,0	140	15	16,0	27,00
MF 28 x 1,5	28,0	20,0	140	20	16,0	26,50
MF 28 x 2,0	28,0	20,0	140	20	16,0	26,00
MF 29 x 1,5	29,0	22,0	150	22	18,0	27,50
MF 30 x 1,0	30,0	22,0	150	17	18,0	29,00
MF 30 x 1,5	30,0	22,0	150	22	18,0	28,50
MF 30 x 2,0	30,0	22,0	150	22	18,0	28,00
MF 30 x 2,5	30,0	22,0	180	27	18,0	27,50
MF 30 x 3,0	30,0	22,0	180	30	18,0	27,00
MF 32 x 1,5	32,0	22,0	150	22	18,0	30,50
MF 32 x 2,0	32,0	22,0	150	22	18,0	30,00

MF Metric fine thread / ISO DIN 13

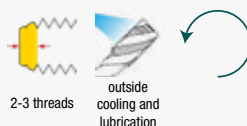
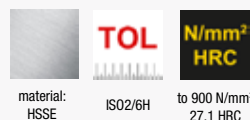
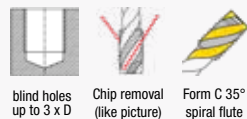
- ✓ Tap for machine use in blind holes.
- ✓ The fast spiral flutes provide good chip removal from the blind hole.



Machine Tap for general use



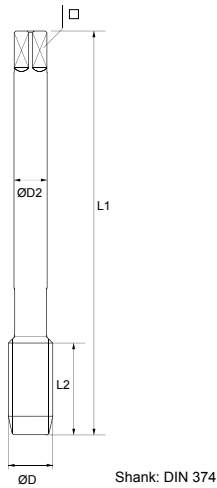
Machine Tap for general use Left-hand thread



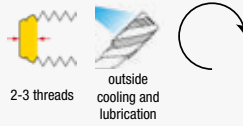
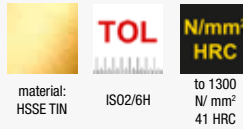
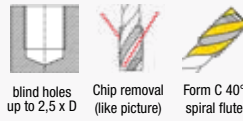
MF	D1	D2	L1	L2	□	
MF 32 x 3,0	32,0	22,0	180	30	18,0	29,00
MF 33 x 1,5	33,0	25,0	160	24	20,0	31,50
MF 33 x 2,0	33,0	25,0	160	24	20,0	31,00
MF 33 x 3,0	33,0	25,0	180	30	20,0	30,00
MF 34 x 1,5	34,0	28,0	170	24	22,0	32,50
MF 34 x 2,0	34,0	28,0	170	24	22,0	32,00
MF 35 x 1,5	35,0	28,0	170	24	22,0	33,50
MF 36 x 1,5	36,0	28,0	170	24	22,0	34,50
MF 36 x 2,0	36,0	28,0	170	24	22,0	34,00
MF 36 x 3,0	36,0	28,0	200	30	22,0	33,00
MF 38 x 1,5	38,0	28,0	170	24	22,0	36,50
MF 39 x 1,5	39,0	32,0	170	25	24,0	37,50
MF 39 x 2,0	39,0	32,0	170	25	24,0	37,00
MF 39 x 3,0	39,0	32,0	200	30	24,0	36,00
MF 40 x 1,5	40,0	32,0	170	25	24,0	38,50
MF 40 x 2,0	40,0	32,0	170	25	24,0	38,00
MF 40 x 3,0	40,0	32,0	200	30	24,0	37,00
MF 42 x 1,5	42,0	32,0	170	25	24,0	40,50
MF 42 x 2,0	42,0	32,0	170	25	24,0	40,00
MF 42 x 3,0	42,0	32,0	200	30	24,0	39,00
MF 45 x 1,5	45,0	36,0	180	27	29,0	43,50
MF 45 x 2,0	45,0	36,0	180	27	29,0	43,00
MF 45 x 3,0	45,0	36,0	200	30	29,0	42,00
MF 48 x 1,5	48,0	36,0	190	27	29,0	46,50
MF 48 x 2,0	48,0	36,0	190	27	29,0	46,00
MF 48 x 3,0	48,0	36,0	225	33	29,0	45,00
MF 50 x 1,5	50,0	36,0	190	27	29,0	48,50
MF 50 x 2,0	50,0	36,0	190	27	29,0	48,00
MF 50 x 3,0	50,0	36,0	225	33	29,0	47,00
MF 52 x 1,5	52,0	40,0	190	27	32,0	50,50
MF 52 x 2,0	52,0	40,0	190	27	32,0	50,00
MF 52 x 3,0	52,0	40,0	225	33	32,0	49,00
MF 63 x 1,5	63,0	50,0	275	40	39,0	61,50

MF Metric fine thread / ISO DIN 13

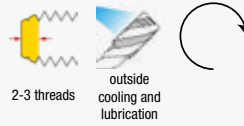
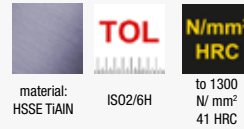
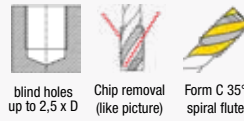
- ✓ Tap for machine use in blind holes.
- ✓ The fast spiral flutes provide good chip removal from the blind hole.



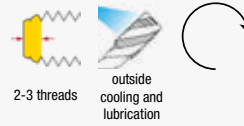
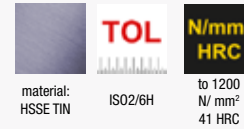
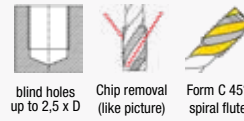
Machine Tap und for high- alloyed steels



Machine Tap PRO for stainless steels with high tool life time



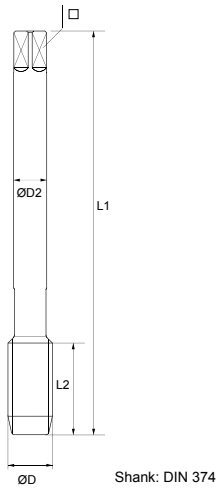
Machine Tap for special alloys (Inconel, Hastelloy etc.)



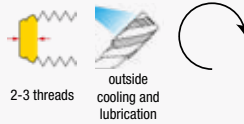
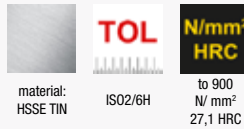
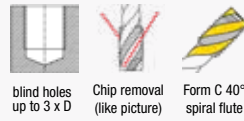
MF	D1	D2	L1	L2	□	🔩
MF 6 x 0,75	6,0	4,5	80	8	3,4	5,20
MF 8 x 1,0	8,0	6,0	90	10	4,9	7,00
MF 10 x 1,0	10,0	7,0	90	10	5,5	9,00
MF 10 x 1,25	10,0	7,0	100	16	5,5	8,80
MF 12 x 1,0	12,0	9,0	100	11	7,0	11,00
MF 12 x 1,25	12,0	9,0	100	15	7,0	10,80
MF 12 x 1,5	12,0	9,0	100	15	7,0	10,50
MF 14 x 1,5	14,0	11,0	100	15	9,0	12,50
MF 16 x 1,5	16,0	12,0	100	15	9,0	14,50
MF 18 x 1,5	18,0	14,0	110	17	11,0	16,50
MF 20 x 1,5	20,0	16,0	125	17	12,0	18,50
MF 22 x 1,5	22,0	18,0	125	17	14,5	20,50

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 for general use oversized (diameter)



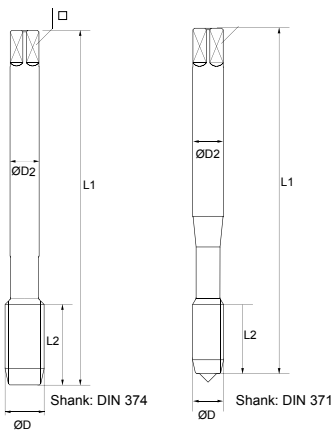
MF D1 D2 L1 L2 □

MF 6 x 0,75	6,0	4,5	80	8	3,4	5,20
MF 8 x 1,0	8,0	6,0	90	10	4,9	7,00
MF 10 x 1,0	10,0	7,0	90	10	5,5	9,00
MF 10 x 1,25	10,0	7,0	100	16	5,5	8,80
MF 12 x 1,5	12,0	9,0	100	15	7,0	10,50
MF 14 x 1,5	14,0	11,0	100	15	9,0	12,50

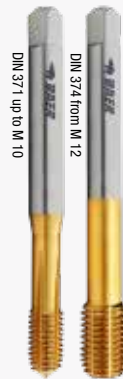
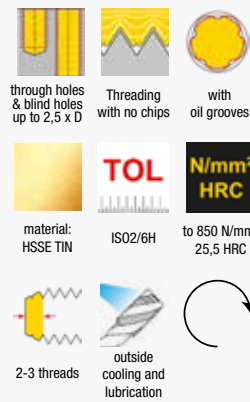
MF Metric fine thread / ISO DIN 13

Machine Forming Taps have following advantages:

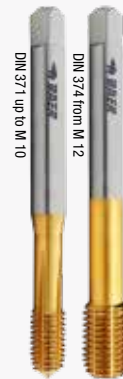
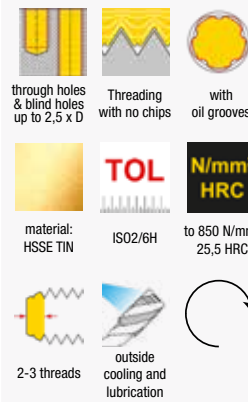
- No chips
- Up to 20 times longer lifetime (compared to taps)
- Same forming tap for through and blind hole
- Wide range of materials can be processed
- Intersection of the thread is impossible
- Very high trueness
- Increased strength of the thread
- Higher surface quality
- Much higher cutting speed



Machine Forming Taps for general use



Machine Forming Taps for general use oversized (diameter)



MF

D1 D2 L1 L2 □

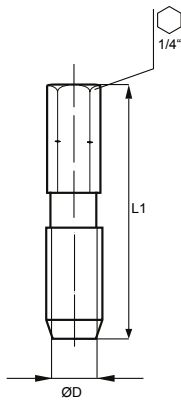
MF 3 x 0,35	3,0	3,5	56	10	2,7	2,85
MF 4 x 0,5	4,0	4,5	63	12	3,4	3,80
MF 5 x 0,5	5,0	6,0	70	14	4,9	4,80
MF 6 x 0,75	6,0	6,0	80	16	4,9	5,65
MF 8 x 1,0	8,0	8,0	90	18	6,2	7,55
MF 10 x 1,0	10,0	10,0	90	18	8,0	9,55
MF 10 x 1,25	10,0	10,0	100	20	8,0	9,45
MF 12 x 1,0	12,0	9,0	100	22	7,0	11,55
MF 12 x 1,25	12,0	9,0	100	22	7,0	11,45
MF 12 x 1,5	12,0	9,0	100	22	7,0	11,30
MF 14 x 1,25	14,0	11,0	100	22	9,0	13,45
MF 14 x 1,5	14,0	11,0	100	22	9,0	13,30
MF 16 x 1,5	16,0	12,0	100	22	9,0	15,30
MF 18 x 1,5	18,0	14,0	110	22	11,0	17,30
MF 20 x 1,5	20,0	16,0	125	25	12,0	19,30

MF Metric fine thread / ISO DIN 13

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



Bit-Taps
Form D for through holes and blind holes

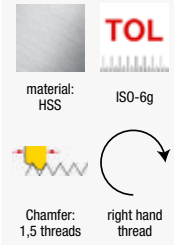
through holes & blind holes up to 2 x D
Chip removal (like picture)
Form D straight flutes

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

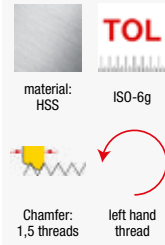
4-5 threads
outside cooling and lubrication

MF	D1	L1	L2	Hex	Length
MF 3 x 0,35	3,0	33,0	11	1/4"	2,65
MF 3,5 x 0,35	3,5	33,5	10	1/4"	3,15
MF 4 x 0,35	4,0	35,0	12	1/4"	3,65
MF 4 x 0,5	4,0	35,0	12	1/4"	3,50
MF 4,5 x 0,5	4,5	35,0	12	1/4"	4,00
MF 5 x 0,5	5,0	36,0	15	1/4"	4,50
MF 5 x 0,75	5,0	36,0	15	1/4"	4,25
MF 5,5 x 0,5	5,5	35,0	15	1/4"	5,00
MF 6 x 0,5	6,0	39,0	18	1/4"	5,50
MF 6 x 0,75	6,0	39,0	18	1/4"	5,20
MF 7 x 0,5	7,0	37,5	16	1/4"	6,50
MF 7 x 0,75	7,0	37,5	16	1/4"	6,20
MF 8 x 0,5	8,0	40,0	19	1/4"	7,50
MF 8 x 0,75	8,0	40,0	19	1/4"	7,20
MF 8 x 1	8,0	40,0	19	1/4"	7,00
MF 9 x 0,5	9,0	40,5	18	1/4"	8,50
MF 9 x 0,75	9,0	40,5	18	1/4"	8,25
MF 9 x 1	9,0	40,5	18	1/4"	8,00
MF 10 x 0,5	10,0	41,0	21	1/4"	9,50
MF 10 x 0,75	10,0	41,0	21	1/4"	9,20
MF 10 x 1,0	10,0	41,0	21	1/4"	9,00
MF 10 x 1,25	10,0	41,0	21	1/4"	8,80

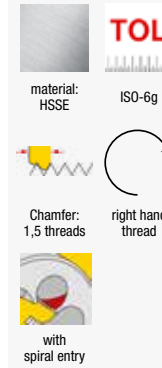
Round Dies for general use



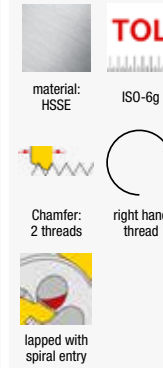
Round Dies for general use Left Hand



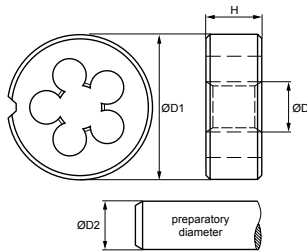
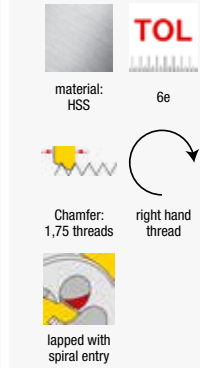
Round Dies for higher demands



Round Dies for stainless steels



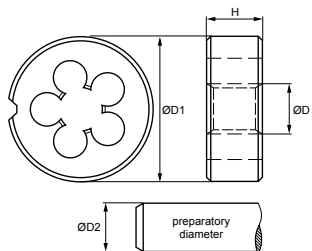
Round Dies undersized



MF

	D	D1	H	D2
MF 2,5 x 0,35	2,5	16	5	2,44
MF 2,6 x 0,35	2,6	16	5	2,54
MF 3 x 0,35	3,0	20	5	2,94
MF 3,5 x 0,35	3,5	20	5	3,44
MF 4 x 0,35	4,0	20	5	3,94
MF 4 x 0,5	4,0	20	5	3,93
MF 4,5 x 0,5	4,5	20	5	4,43
MF 5 x 0,5	5,0	20	5	4,93
MF 5 x 0,75	5,0	20	7	4,91
MF 5,5 x 0,5	5,5	20	5	5,43
MF 6 x 0,5	6,0	20	5	5,93
MF 6 x 0,75	6,0	20	7	5,90
MF 7 x 0,5	7,0	25	9	6,93
MF 7 x 0,75	7,0	25	9	6,90
MF 8 x 0,5	8,0	25	9	7,93
MF 8 x 0,75	8,0	25	9	7,90
MF 8 x 1,0	8,0	25	9	7,83
MF 9 x 0,5	9,0	25	9	8,93
MF 9 x 0,75	9,0	25	9	8,90
MF 9 x 1,0	9,0	25	9	8,88
MF 10 x 0,5	10,0	30	11	9,93
MF 10 x 0,75	10,0	30	11	9,90
MF 10 x 1,0	10,0	30	11	9,88
MF 10 x 1,25	10,0	30	11	9,86
MF 11 x 1,0	11,0	30	11	10,88
MF 11 x 1,25	11,0	30	11	10,86
MF 12 x 0,5	12,0	38	10	11,93
MF 12 x 0,75	12,0	38	10	11,90
MF 12 x 1,0	12,0	38	10	11,88
MF 12 x 1,25	12,0	38	10	11,86
MF 12 x 1,5	12,0	38	10	11,85
MF 13 x 0,5	13,0	38	10	12,93
MF 13 x 1,0	13,0	38	10	12,88

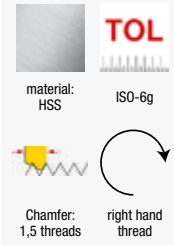
Round Dies for general use	Round Dies for general use Left Hand	Round Dies for higher demands	Round Dies for stainless steels	Round Dies undersized
<p>material: HSS</p> <p>TOL ISO-6g</p> <p>Chamfer: 1,5 threads</p> <p>right hand thread</p>	<p>material: HSS</p> <p>TOL ISO-6g</p> <p>Chamfer: 1,5 threads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



MF

	D	D1	H	D2
MF 13 x 1,5	13,0	38	10	12,85
MF 14 x 0,5	14,0	38	10	13,93
MF 14 x 0,75	14,0	38	10	13,90
MF 14 x 1,0	14,0	38	10	13,88
MF 14 x 1,25	14,0	38	10	13,86
MF 14 x 1,5	14,0	38	10	13,85
MF 15 x 0,75	15,0	38	10	14,90
MF 15 x 1,0	15,0	38	10	14,88
MF 15 x 1,5	15,0	38	10	14,85
MF 16 x 0,5	16,0	45	14	15,93
MF 16 x 0,75	16,0	45	14	15,90
MF 16 x 1,0	16,0	45	14	15,88
MF 16 x 1,25	16,0	45	14	15,86
MF 16 x 1,5	16,0	45	14	15,85
MF 17 x 1,0	17,0	45	14	16,88
MF 17 x 1,5	17,0	45	14	16,85
MF 18 x 0,5	18,0	45	14	17,93
MF 18 x 0,75	18,0	45	14	17,90
MF 18 x 1,0	18,0	45	14	17,88
MF 18 x 1,25	18,0	45	14	17,86
MF 18 x 1,5	18,0	45	14	17,85
MF 18 x 2,0	18,0	45	14	17,82
MF 19 x 1,0	19,0	45	14	18,88
MF 19 x 1,5	19,0	45	14	18,85
MF 20 x 0,5	20,0	45	14	19,93
MF 20 x 0,75	20,0	45	14	19,90
MF 20 x 1,0	20,0	45	14	19,88
MF 20 x 1,25	20,0	45	14	19,86
MF 20 x 1,5	20,0	45	14	19,85
MF 20 x 2,0	20,0	45	14	19,82
MF 21 x 1,0	21,0	45	14	20,88
MF 21 x 1,5	21,0	45	14	20,85
MF 22 x 0,5	22,0	55	16	21,93

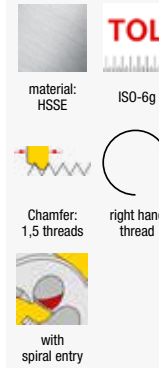
Round Dies for general use



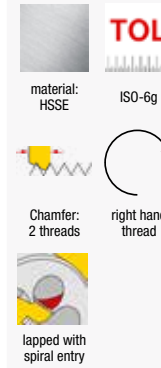
Round Dies for general use Left Hand



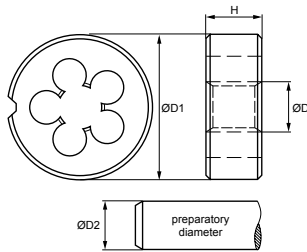
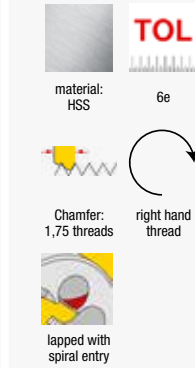
Round Dies for higher demands



Round Dies for stainless steels



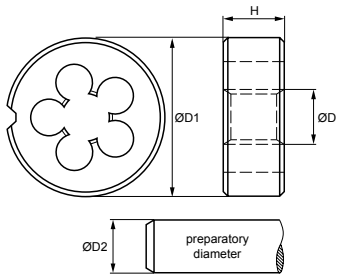
Round Dies undersized



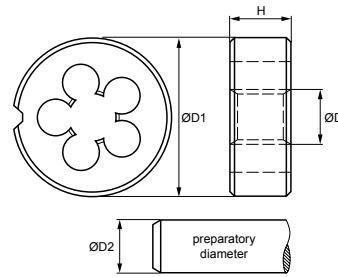
MF

	D	D1	H	D2
MF 22 x 0,75	22,0	55	16	21,90
MF 22 x 1,0	22,0	55	16	21,88
MF 22 x 1,25	22,0	55	16	21,86
MF 22 x 1,5	22,0	55	16	21,85
MF 22 x 2,0	22,0	55	16	21,82
MF 23 x 1,0	23,0	55	16	22,88
MF 23 x 1,5	23,0	55	16	22,85
MF 24 x 0,5	24,0	55	16	23,93
MF 24 x 0,75	24,0	55	16	23,90
MF 24 x 1,0	24,0	55	16	23,88
MF 24 x 1,25	24,0	55	16	23,86
MF 24 x 1,5	24,0	55	16	23,85
MF 24 x 2,0	24,0	55	16	22,82
MF 25 x 1,0	25,0	55	16	24,88
MF 25 x 1,5	25,0	55	16	24,85
MF 26 x 1,0	26,0	55	16	25,88
MF 26 x 1,5	26,0	55	16	25,85
MF 26 x 2,0	26,0	55	16	25,82
MF 27 x 1,0	27,0	65	18	26,88
MF 27 x 1,5	27,0	65	18	26,85
MF 27 x 2,0	27,0	65	18	26,82
MF 28 x 1,0	28,0	65	18	27,88
MF 28 x 1,5	28,0	65	18	27,85
MF 28 x 2,0	28,0	65	18	27,82
MF 29 x 1,5	29,0	65	18	28,85
MF 30 x 1,0	30,0	65	18	29,88
MF 30 x 1,5	30,0	65	18	29,85
MF 30 x 2,0	30,0	65	18	29,82
MF 30 x 2,5	30,0	65	18	29,79
MF 30 x 3,0	30,0	65	25	29,76
MF 32 x 1,0	32,0	65	18	31,88
MF 32 x 1,5	32,0	65	18	31,85
MF 32 x 2,0	32,0	65	18	31,82

Round Dies
for general use



Round Dies
for general use



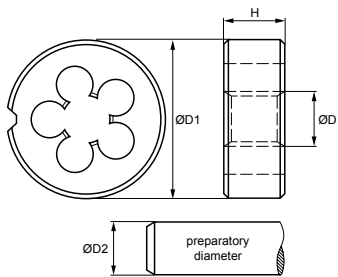
MF

	D	D1	H	D2
MF 32 x 3,0	32,0	65	25	31,77
MF 33 x 1,5	33,0	65	18	32,85
MF 33 x 2,0	33,0	65	18	32,82
MF 33 x 3,0	33,0	65	25	32,76
MF 34 x 1,0	34,0	65	18	33,88
MF 34 x 1,5	34,0	65	18	33,85
MF 34 x 2,0	34,0	65	18	33,82
MF 35 x 1,0	35,0	65	18	34,88
MF 35 x 1,5	35,0	65	18	34,85
MF 35 x 2,0	35,0	65	18	34,82
MF 36 x 1,0	36,0	65	18	35,88
MF 36 x 1,5	36,0	65	18	35,85
MF 36 x 2,0	36,0	65	18	35,82
MF 36 x 3,0	36,0	65	25	35,76
MF 37 x 1,5	37,0	65	18	36,85
MF 38 x 1,0	38,0	75	20	37,88
MF 38 x 1,5	38,0	75	20	37,85
MF 38 x 2,0	38,0	75	20	37,82
MF 38 x 3,0	38,0	75	30	37,77
MF 39 x 1,5	39,0	75	20	38,85
MF 39 x 2,0	39,0	75	20	38,82
MF 39 x 3,0	39,0	75	30	38,76
MF 40 x 1,0	40,0	75	20	39,88
MF 40 x 1,5	40,0	75	20	39,85
MF 40 x 2,0	40,0	75	20	39,82
MF 40 x 3,0	40,0	75	30	39,76
MF 42 x 1,0	42,0	75	20	41,88
MF 42 x 1,5	42,0	75	20	41,85
MF 42 x 2,0	42,0	75	20	41,82
MF 42 x 3,0	42,0	75	30	41,76
MF 44 x 1,5	44,0	90	22	43,85
MF 44 x 2,0	44,0	90	22	43,82
MF 45 x 1,0	45,0	90	22	44,88

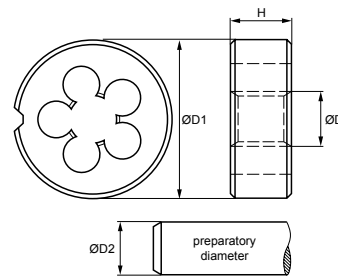
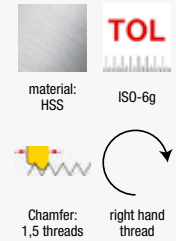
MF

	D	D1	H	D2
MF 45 x 1,5	45,0	90	22	44,85
MF 45 x 2,0	45,0	90	22	44,82
MF 45 x 3,0	45,0	90	36	44,76
MF 46 x 1,5	46,0	90	22	45,85
MF 48 x 1,0	48,0	90	22	47,88
MF 48 x 1,5	48,0	90	22	47,85
MF 48 x 2,0	48,0	90	22	47,82
MF 48 x 3,0	48,0	90	36	47,46
MF 50 x 1,5	50,0	90	22	49,85
MF 50 x 2,0	50,0	90	22	49,82
MF 50 x 3,0	50,0	90	36	49,76
MF 52 x 1,5	52,0	90	22	51,85
MF 52 x 2,0	52,0	90	22	51,82
MF 52 x 3,0	52,0	90	36	51,76
MF 54 x 1,5	54,0	105	22	53,92
MF 54 x 2,0	54,0	105	22	53,91
MF 54 x 3,0	54,0	105	36	53,88
MF 54 x 4,0	54,0	105	36	53,85
MF 55 x 1,5	55,0	105	22	54,85
MF 55 x 2,0	55,0	105	22	54,82
MF 55 x 3,0	55,0	105	36	54,76
MF 55 x 4,0	55,0	105	36	54,73
MF 56 x 1,5	56,0	105	22	55,85
MF 56 x 2,0	56,0	105	22	55,82
MF 56 x 3,0	56,0	105	36	55,76
MF 56 x 4,0	56,0	105	36	55,73
MF 58 x 1,5	58,0	105	22	57,92
MF 58 x 2,0	58,0	105	22	57,91
MF 58 x 3,0	58,0	105	36	57,88
MF 58 x 4,0	58,0	105	36	57,85
MF 60 x 1,5	60,0	105	22	59,92
MF 60 x 2,0	60,0	105	22	59,91
MF 60 x 3,0	60,0	105	36	59,88

Round Dies
for general use



Round Dies
for general use



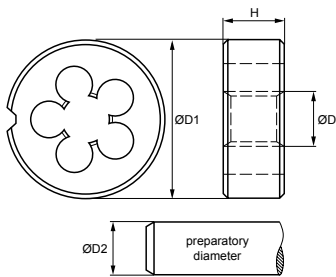
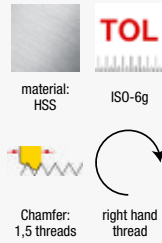
MF

	D	D1	H	D2
MF 60 x 4,0	60,0	105	36	59,85
MF 62 x 1,5	62,0	105	22	61,92
MF 62 x 2,0	62,0	105	22	61,91
MF 62 x 3,0	62,0	105	36	61,88
MF 62 x 4,0	62,0	105	36	61,85
MF 63 x 1,5	63,0	105	22	62,92
MF 64 x 1,5	64,0	120	22	63,92
MF 64 x 2,0	64,0	120	22	63,91
MF 64 x 3,0	64,0	120	36	63,88
MF 64 x 4,0	64,0	120	36	63,85
MF 65 x 1,5	65,0	120	22	64,92
MF 65 x 2,0	65,0	120	22	64,91
MF 65 x 3,0	65,0	120	36	64,88
MF 65 x 4,0	65,0	120	36	64,85
MF 68 x 1,5	68,0	120	22	67,92
MF 68 x 2,0	68,0	120	22	67,91
MF 68 x 3,0	68,0	120	36	67,88
MF 68 x 4,0	68,0	120	36	67,85
MF 70 x 1,5	70,0	120	22	69,92
MF 70 x 2,0	70,0	120	22	69,91
MF 70 x 3,0	70,0	120	36	69,88
MF 70 x 4,0	70,0	120	36	69,85
MF 72 x 1,5	72,0	120	22	71,92
MF 72 x 2,0	72,0	120	22	71,91
MF 72 x 3,0	72,0	120	36	71,88
MF 72 x 4,0	72,0	120	36	71,85
MF 74 x 1,5	74,0	120	22	73,92
MF 74 x 2,0	74,0	120	22	73,91
MF 74 x 3,0	74,0	120	36	73,88
MF 74 x 4,0	74,0	120	36	73,85
MF 75 x 1,5	75,0	120	22	74,92
MF 75 x 2,0	75,0	120	22	74,91
MF 75 x 3,0	75,0	120	36	74,88

MF

	D	D1	H	D2
MF 75 x 4,0	75,0	120	36	74,85
MF 76 x 1,5	76,0	120	22	75,92
MF 76 x 2,0	76,0	120	22	75,91
MF 76 x 3,0	76,0	120	36	75,88
MF 76 x 4,0	76,0	120	36	75,85
MF 78 x 1,5	78,0	120	22	77,92
MF 78 x 2,0	78,0	120	22	77,91
MF 78 x 3,0	78,0	120	36	77,88
MF 78 x 4,0	78,0	120	36	77,85
MF 80 x 1,5	80,0	120	22	79,92
MF 80 x 2,0	80,0	120	22	79,91
MF 80 x 3,0	80,0	120	36	79,88
MF 80 x 4,0	80,0	120	36	79,85
MF 82 x 1,5	82,0	130	25	81,92
MF 82 x 2,0	82,0	130	25	81,91
MF 82 x 3,0	82,0	130	36	81,88
MF 82 x 4,0	82,0	130	36	81,85
MF 84 x 1,5	84,0	130	25	83,92
MF 84 x 2,0	84,0	130	25	83,91
MF 84 x 3,0	84,0	130	36	83,88
MF 84 x 4,0	84,0	130	36	83,85
MF 85 x 1,5	85,0	130	25	84,92
MF 85 x 2,0	85,0	130	25	84,91
MF 85 x 3,0	85,0	130	36	84,88
MF 85 x 4,0	85,0	130	36	84,85
MF 86 x 1,5	86,0	140	22	85,92
MF 86 x 2,0	86,0	140	22	85,91
MF 86 x 3,0	86,0	140	22	85,88
MF 86 x 4,0	86,0	140	22	85,85
MF 88 x 1,5	88,0	140	22	87,92
MF 88 x 2,0	88,0	140	22	87,91
MF 88 x 3,0	88,0	140	22	87,88
MF 88 x 4,0	88,0	140	22	87,85

Round Dies
for general use



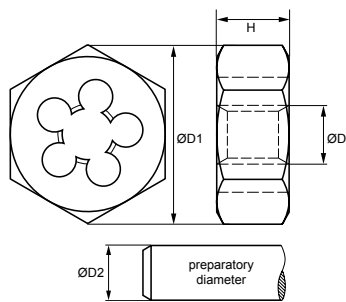
MF

	D	D1	H	D2
MF 90 x 1,5	90,0	140	22	89,92
MF 90 x 2,0	90,0	140	22	89,91
MF 90 x 3,0	90,0	140	22	89,88
MF 90 x 4,0	90,0	140	22	89,85
MF 92 x 1,5	92,0	140	22	91,92
MF 92 x 2,0	92,0	140	22	91,91
MF 92 x 3,0	92,0	140	22	91,88
MF 92 x 4,0	92,0	140	22	91,85
MF 95 x 1,5	95,0	140	22	94,92
MF 95 x 2,0	95,0	140	22	94,91
MF 95 x 3,0	95,0	140	22	94,88
MF 95 x 4,0	95,0	140	22	94,85
MF 96 x 1,5	96,0	140	22	95,92
MF 96 x 2,0	96,0	140	22	95,91
MF 96 x 3,0	96,0	140	22	95,88
MF 96 x 4,0	96,0	140	22	95,85
MF 98 x 1,5	98,0	150	25	94,92
MF 98 x 2,0	98,0	150	25	97,91
MF 98 x 3,0	98,0	150	25	97,88
MF 98 x 4,0	98,0	150	25	97,85
MF 100 x 1,5	100,0	150	25	99,92
MF 100 x 2,0	100,0	150	25	99,91
MF 100 x 3,0	100,0	150	25	99,88
MF 100 x 4,0	100,0	150	25	99,85
MF 105 x 1,5	105,0	150	25	104,92
MF 105 x 2,0	105,0	150	25	104,91
MF 105 x 3,0	105,0	150	25	104,88
MF 105 x 4,0	105,0	150	25	104,85
MF 110 x 1,5	110,0	160	25	109,92
MF 110 x 2,0	110,0	160	25	109,91
MF 110 x 3,0	110,0	160	25	109,88
MF 110 x 4,0	110,0	160	25	109,85

MF

Metric fine thread / ISO DIN 13

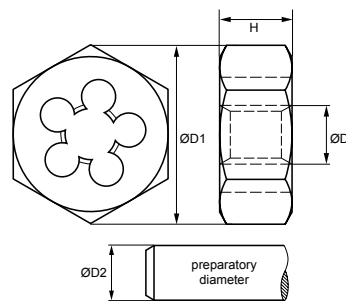
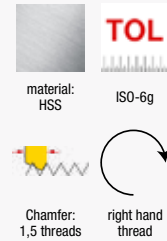
Hexagon Di Nuts for general use



MF

	D	D1	H	D2
MF 3 x 0,35	3,0	19	5	2,94
MF 4 x 0,35	3,5	19	5	3,44
MF 4 x 0,5	4,0	19	5	3,93
MF 5 x 0,5	5,0	19	5	4,93
MF 5 x 0,75	5,0	19	7	4,91
MF 6 x 0,5	6,0	19	5	5,93
MF 6 x 0,75	6,0	19	7	5,90
MF 7 x 0,75	7,0	22	9	6,90
MF 8 x 0,5	8,0	22	9	7,93
MF 8 x 0,75	8,0	22	9	7,90
MF 8 x 1,0	8,0	22	9	7,83
MF 9 x 0,75	9,0	22	9	8,90
MF 9 x 1,0	9,0	22	9	8,88
MF 10 x 0,75	10,0	27	11	9,90
MF 10 x 1,0	10,0	27	11	9,88
MF 10 x 1,25	10,0	27	11	9,86
MF 11 x 1,0	11,0	27	11	10,88
MF 11 x 1,25	11,0	27	11	10,86
MF 12 x 0,75	12,0	36	10	11,90
MF 12 x 1,0	12,0	36	10	11,88
MF 12 x 1,25	12,0	36	10	11,86
MF 12 x 1,5	12,0	36	10	11,85
MF 13 x 1,0	13,0	36	10	12,88
MF 13 x 1,5	13,0	36	10	12,85
MF 14 x 0,75	14,0	36	10	13,90
MF 14 x 1,0	14,0	36	10	13,88
MF 14 x 1,25	14,0	36	10	13,86
MF 14 x 1,5	14,0	36	10	13,85
MF 15 x 1,0	15,0	36	10	14,88
MF 15 x 1,5	15,0	36	10	14,85
MF 16 x 1,0	16,0	41	14	15,88
MF 16 x 1,25	16,0	41	14	15,86
MF 16 x 1,5	16,0	41	14	15,85
MF 18 x 1,0	18,0	41	14	17,88

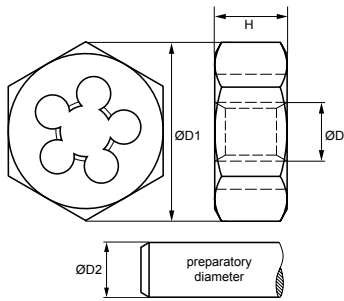
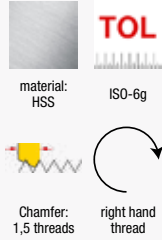
Hexagon Di Nuts for general use



MF

	D	D1	H	D2
MF 18 x 1,25	18,0	41	14	17,86
MF 18 x 1,5	18,0	41	14	17,85
MF 18 x 2,0	18,0	41	14	17,82
MF 20 x 1,0	20,0	41	14	19,88
MF 20 x 1,25	20,0	41	14	19,86
MF 20 x 1,5	20,0	41	14	19,85
MF 20 x 2,0	20,0	41	14	19,82
MF 21 x 1,5	21,0	41	14	20,85
MF 22 x 1,0	22,0	50	16	21,88
MF 22 x 1,25	22,0	50	16	21,86
MF 22 x 1,5	22,0	50	16	21,85
MF 22 x 2,0	22,0	50	16	21,82
MF 23 x 1,5	23,0	50	16	22,85
MF 24 x 1,0	24,0	50	16	23,88
MF 24 x 1,25	24,0	50	16	23,86
MF 24 x 1,5	24,0	50	16	23,85
MF 24 x 2,0	24,0	50	16	23,82
MF 25 x 1,0	25,0	50	16	24,88
MF 25 x 1,5	25,0	50	16	24,85
MF 26 x 1,0	26,0	50	16	25,88
MF 26 x 1,5	26,0	50	16	25,85
MF 26 x 2,0	26,0	50	16	25,82
MF 27 x 1,0	27,0	60	18	26,88
MF 27 x 1,5	27,0	60	18	26,85
MF 27 x 2,0	27,0	60	18	26,82
MF 28 x 1,0	28,0	60	18	27,88
MF 28 x 1,5	28,0	60	18	27,85
MF 28 x 2,0	28,0	60	18	27,82
MF 29 x 1,5	29,0	60	18	28,85
MF 30 x 1,0	30,0	60	18	29,88
MF 30 x 1,5	30,0	60	18	29,85
MF 30 x 2,0	30,0	60	18	29,82
MF 30 x 3,0	30,0	60	25	29,76
MF 32 x 1,5	32,0	60	18	31,85

**Hexagon
Di Nuts**
for general use



MF

	D	D1	H	D2
MF 32 x 2,0	32,0	60	18	31,82
MF 32 x 3,0	32,0	60	25	31,77
MF 33 x 1,5	33,0	60	18	32,85
MF 33 x 2,0	33,0	60	18	32,82
MF 33 x 3,0	33,0	60	25	32,76
MF 34 x 1,5	34,0	60	18	33,85
MF 34 x 2,0	34,0	60	18	33,82
MF 35 x 1,5	35,0	60	18	34,85
MF 36 x 1,5	36,0	60	18	35,85
MF 36 x 2,0	36,0	60	18	35,82
MF 36 x 3,0	36,0	60	25	35,76
MF 38 x 1,5	38,0	70	20	37,85
MF 39 x 1,5	39,0	70	20	38,85
MF 39 x 2,0	39,0	70	20	38,82
MF 39 x 3,0	39,0	70	30	38,76
MF 40 x 1,5	40,0	70	20	39,85
MF 40 x 2,0	40,0	70	20	39,82
MF 40 x 3,0	40,0	70	30	39,76
MF 42 x 1,5	42,0	70	20	41,85
MF 42 x 2,0	42,0	70	20	41,82
MF 42 x 3,0	42,0	70	30	41,76
MF 45 x 1,5	45,0	85	22	44,85
MF 45 x 2,0	45,0	85	22	44,82
MF 45 x 3,0	45,0	85	36	44,76
MF 48 x 1,5	48,0	85	22	47,85
MF 48 x 2,0	48,0	85	22	47,82
MF 48 x 3,0	48,0	85	36	47,46
MF 50 x 1,5	50,0	85	22	49,85
MF 50 x 2,0	50,0	85	22	49,82
MF 50 x 3,0	50,0	85	36	49,76
MF 52 x 1,5	52,0	85	22	51,85
MF 52 x 2,0	52,0	85	22	51,82
MF 52 x 3,0	52,0	85	36	51,76

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
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
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
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	

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" - 3/4"
Short Machine Taps through hole & blind hole
HSS Hexagonal-Die-Nuts



BAER HSSG Short Machine Taps Form 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
BAER HSS 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
HSS Hexagonal-Die-Nuts



BAER HSSG Short Machine Taps Form 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
BAER HSS Hexagonal-Die-Nuts	G 1/8 x 28 G 1/4 x 19 G 3/8 x 19 G 1/2 x 14

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



BAER HSSG Short Machine Taps Form 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
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-Rohr (BSP)

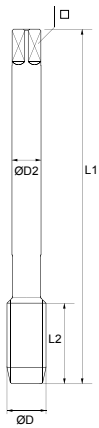
British standard whitworth pipe thread / DIN ISO 228

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

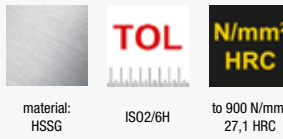
Form D for through holes and blind holes



through holes & blind holes up to 4 x D

Chip removal (like picture)


Form D straight flutes



material: HSSG


ISO2/6H

to 900 N/mm² 27,1 HRC




4-5 threads

outside cooling and lubrication



G(BSP)

	D1	D2	L1	L2	□	
BSP 1/8 x 28	9,73	7,0	63	20	5,5	8,80
BSP 1/4 x 19	13,16	11,0	70	22	9,0	11,80
BSP 3/8 x 19	16,66	12,0	70	22	9,0	15,25
BSP 1/2 x 14	20,95	16,0	80	22	12,0	19,00
BSP 3/4 x 14	26,44	20,0	90	22	16,0	24,50
BSP 1" x 11	33,25	25,0	100	25	20,0	30,75
BSP 1.1/4 x 11	41,91	32,0	125	40	24,0	39,50
BSP 1.1/2 x 11	47,80	36,0	140	40	29,0	45,25
BSP 1.3/4 x 11	53,74	40,0	140	40	32,0	51,20
BSP 2" x 11	59,61	45,0	160	40	35,0	57,00
BSP 2.1/4 x 11	65,71	50,0	160	40	39,0	63,10
BSP 2.1/2 x 11	75,18	50,0	160	40	39,0	72,60
BSP 2.3/4 x 11	81,53	50,0	160	40	39,0	79,00
BSP 3" x 11	87,88	50,0	160	40	39,0	85,50
BSP 3.1/2 x 11	100,3	56,0	180	45	44,0	98,00
BSP 4" x 11	113,0	56,0	180	45	44,0	110,50

G-Rohr (BSP)

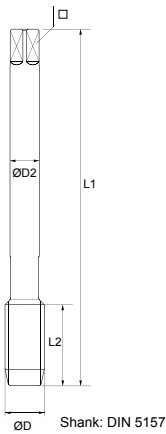
British standard whitworth pipe thread / DIN ISO 228

Efficient internal thread cutting.

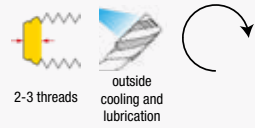
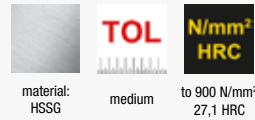
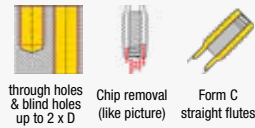
The short structural type makes that tap usable by machine and hand.

A Hand-Tap-Set includes 2 taps:

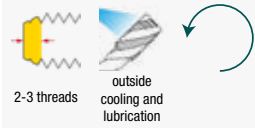
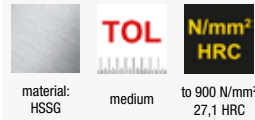
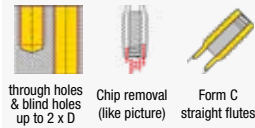
-  Taper Tap
-  Finish Tap



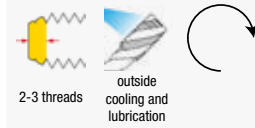
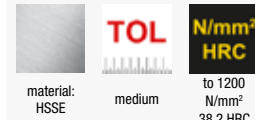
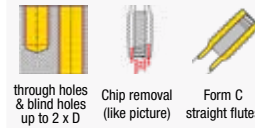
Hand Tap Sets for general use




Hand Tap Sets for general use Left Hand



Hand Tap Sets for high tensile materials



G(BSP)

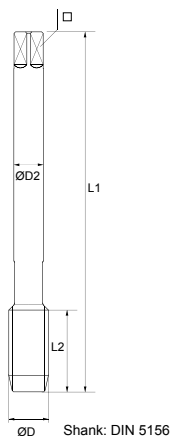
	D1	D2	L1	L2	□	
BSP 1/8 x 28	9,73	7,0	63	20	5,5	8,80
BSP 1/4 x 19	13,16	11,0	70	22	9,0	11,80
BSP 3/8 x 19	16,66	12,0	70	22	9,0	15,25
BSP 1/2 x 14	20,95	16,0	80	22	12,0	19,00
BSP 5/8 x 14	22,91	18,0	80	22	14,5	21,00
BSP 3/4 x 14	26,44	20,0	90	22	16,0	24,50
BSP 7/8 x 14	30,20	22,0	90	22	18,0	28,25
BSP 1" x 11	33,25	25,0	100	25	20,0	30,75
BSP 1.1/8 x 11	37,90	28,0	125	40	22,0	35,30
BSP 1.1/4 x 11	41,91	32,0	125	40	24,0	39,50
BSP 1.3/8 x 11	44,32	36,0	140	40	29,0	41,70
BSP 1.1/2 x 11	47,80	36,0	140	40	29,0	45,25
BSP 1.5/8 x 11	52,00	40,0	140	40	32,0	49,60
BSP 1.3/4 x 11	53,74	40,0	140	40	32,0	51,20
BSP 2" x 11	59,61	45,0	160	40	35,0	57,00
BSP 2.1/4 x 11	65,71	50,0	160	40	39,0	63,10
BSP 2.1/2 x 11	75,18	50,0	160	40	39,0	72,60
BSP 2.3/4 x 11	81,53	50,0	160	40	39,0	79,00
BSP 3" x 11	87,88	50,0	160	40	39,0	85,50
BSP 3.1/2 x 11	100,3	56,0	180	45	44,0	98,00
BSP 4" x 11	113,0	56,0	180	45	44,0	110,50

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.



G(BSP)

	D1	D2	L1	L2	□	
BSP 1/8 x 28	9,73	7,0	90	20	5,5	8,80
BSP 1/4 x 19	13,16	11,0	100	22	9,0	11,80
BSP 3/8 x 19	16,66	12,0	100	22	9,0	15,25
BSP 1/2 x 14	20,95	16,0	125	25	12,0	19,00
BSP 5/8 x 14	22,91	18,0	125	25	14,5	21,00
BSP 3/4 x 14	26,44	20,0	140	28	16,0	24,50
BSP 7/8 x 14	30,20	22,0	150	28	18,0	28,25
BSP 1" x 11	33,25	25,0	160	30	20,0	30,75
BSP 1.1/8 x 11	37,90	28,0	170	30	22,0	35,30
BSP 1.1/4 x 11	41,91	32,0	170	30	24,0	39,50
BSP 1.3/8 x 11	44,32	36,0	180	32	29,0	41,70
BSP 1.1/2 x 11	47,80	36,0	190	32	29,0	45,25
BSP 1.3/4 x 11	53,74	40,0	190	32	32,0	51,20
BSP 2" x 11	59,61	45,0	220	40	35,0	57,00

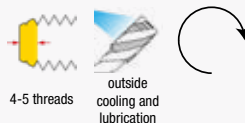
Machine Tap for general use



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



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



4-5 threads

DIN 5156



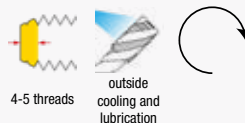
Machine Tap for stainless steels



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



material: HSSE TiAlN
medium
to 1300 N/mm²
41 HRC



4-5 threads

DIN 5156



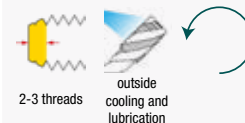
Machine Tap for general use Left-hand thread



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



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



2-3 threads

DIN 5156

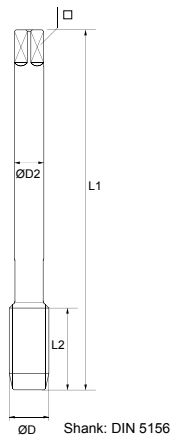


G-Rohr (BSP)

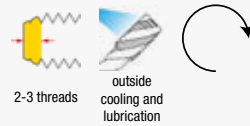
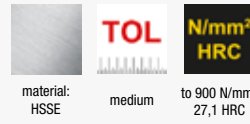
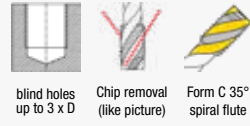
British standard whitworth pipe thread / DIN ISO 228

Tap for machine use in through hole and for left-hand thread in through and blind holes.

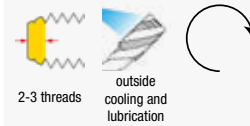
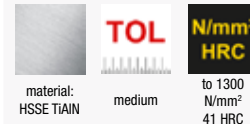
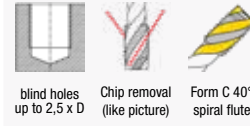
The spiral point pushes the chips ahead.




Machine Tap for general use



Machine Tap for stainless steels



G(BSP)

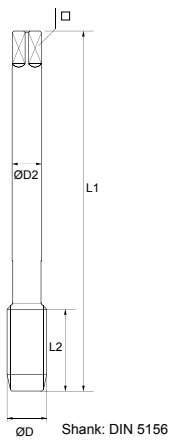
	D1	D2	L1	L2	□	
BSP 1/8 x 28	9,73	7,0	90	20	5,5	8,80
BSP 1/4 x 19	13,16	11,0	100	22	9,0	11,80
BSP 3/8 x 19	16,66	12,0	100	22	9,0	15,25
BSP 1/2 x 14	20,95	16,0	125	25	12,0	19,00
BSP 5/8 x 14	22,91	18,0	125	25	14,5	21,00
BSP 3/4 x 14	26,44	20,0	140	28	16,0	24,50
BSP 7/8 x 14	30,20	22,0	150	28	18,0	28,25
BSP 1" x 11	33,25	25,0	160	30	20,0	30,75
BSP 1.1/8 x 11	37,90	28,0	170	30	22,0	35,30
BSP 1.1/4 x 11	41,91	32,0	170	30	24,0	39,50
BSP 1.3/8 x 11	44,32	36,0	180	32	29,0	41,70
BSP 1.1/2 x 11	47,80	36,0	190	32	29,0	45,25
BSP 1.3/4 x 11	53,74	40,0	190	32	32,0	51,20
BSP 2" x 11	59,61	45,0	220	40	35,0	57,00

G-Rohr (BSP)


British standard whitworth pipe thread / DIN ISO 228

Machine Forming Taps have following advantages:

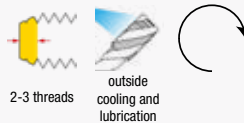
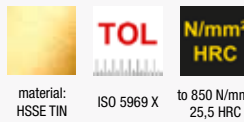
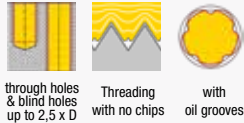
- No chips
- Up to 20 times longer lifetime (compared to taps)
- Same forming tap for through and blind hole
- Wide range of materials can be processed
- Intersection of the thread is impossible
- Very high trueness
- Increased strength of the thread
- Higher surface quality
- Much higher cutting speed



G(BSP)

	D1	D2	L1	L2	□	
BSP 1/8 x 28	9,73	7,0	90	18	5,5	9,25
BSP 1/4 x 19	13,16	11,0	100	22	9,0	12,50
BSP 3/8 x 19	16,66	12,0	100	22	9,0	16,00
BSP 1/2 x 14	20,95	16,0	125	25	12,0	20,00
BSP 3/4 x 14	26,44	20,0	140	28	20,0	25,50

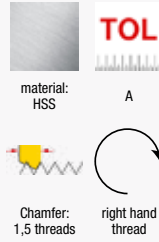
Machine Forming Taps for universal use



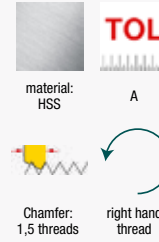
G-Rohr (BSP)

British standard whitworth pipe thread / DIN ISO 228

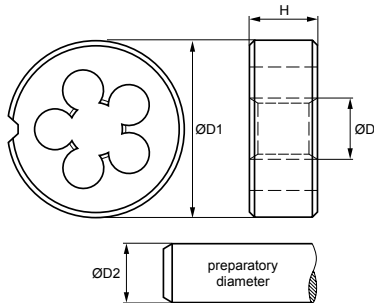
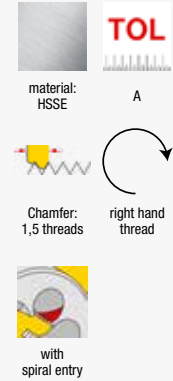
Round Dies for general use



Round Dies for general use Left Hand



Round Dies for stainless steels



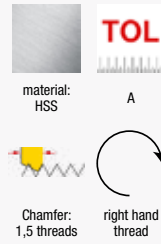
G(BSP)

	D	D1	H	D2
BSP 1/8 x 28	9,73	30	11	9,62
BSP 1/4 x 19	13,16	38	10	13,03
BSP 3/8 x 19	16,66	45	14	16,54
BSP 1/2 x 14	20,95	45	14	20,81
BSP 5/8 x 14	22,91	55	16	22,77
BSP 3/4 x 14	26,44	55	16	26,30
BSP 7/8 x 14	30,20	65	18	30,06
BSP 1" x 11	33,25	65	18	33,07
BSP 1.1/8 x 11	37,90	75	20	37,72
BSP 1.1/4 x 11	41,91	75	20	41,73
BSP 1.3/8 x 11	44,32	90	22	44,14
BSP 1.1/2 x 11	47,80	90	22	47,62
BSP 1.5/8 x 11	52,00	90	22	51,82
BSP 1.3/4 x 11	53,74	105	22	53,57
BSP 2" x 11	59,61	90	22	59,43
BSP 2" x 11	59,61	105	22	59,43
BSP 2.1/4 x 11	65,71	120	22	65,49
BSP 2.1/2 x 11	75,18	120	22	74,97
BSP 2.3/4 x 11	81,53	120	22	81,32
BSP 3" x 11	87,88	130	25	87,67
BSP 3.1/2 x 11	100,33	150	25	100,11
BSP 4" x 11	113,03	160	25	112,81

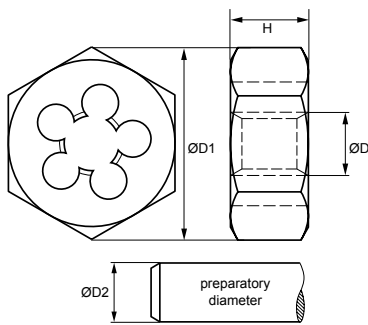
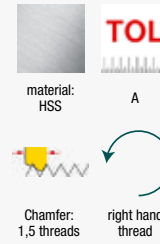
G-Rohr (BSP)

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
BSP 1/8 x 28	9,73	27	11	9,62
BSP 1/4 x 19	13,16	36	10	13,03
BSP 3/8 x 19	16,66	41	14	16,54
BSP 1/2 x 14	20,95	41	14	20,81
BSP 5/8 x 14	22,91	50	16	22,77
BSP 3/4 x 14	26,44	50	16	26,30
BSP 7/8 x 14	30,20	60	18	30,06
BSP 1" x 11	33,25	60	18	33,07
BSP 1.1/8 x 11	37,90	70	20	37,72
BSP 1.1/4 x 11	41,91	70	20	41,73
BSP 1.3/8 x 11	44,32	85	22	44,14
BSP 1.1/2 x 11	47,80	85	22	47,62
BSP 1.5/8 x 11	52,00	85	22	51,82
BSP 1.3/4 x 11	53,74	100	22	53,57
BSP 2" x 11	59,61	100	22	59,43

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

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

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 | UNC 7/8 x 9 | UNC 1" x 8

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 | 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 | UNC 1" x 8 | UNC 1.1/8" x 7 | UNC 1.1/4" x 7 | UNC 1.1/2" x 6

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 | 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 UNC 1/4 | UNC 5/16 | UNC 3/8 | UNC 7/16 | UNC 1/2 | UNC 5/8 | UNC 3/4

BAER HSSG Hand Tap Sets (2 parts) UNF UNF 1/4 | UNF 5/16 | UNF 3/8 | UNF 7/16 | UNF 1/2 | UNF 5/8 | UNF 3/4

BAER HSS Round Dies UNC UNC 1/4 | UNC 5/16 | UNC 3/8 | UNC 7/16 | UNC 1/2 | UNC 5/8 | UNC 3/4

BAER HSS Round Dies UNF 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

UNC

Unified coarse thread / ANSI B1.1

BAER Short Machine Taps and 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
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

UNC

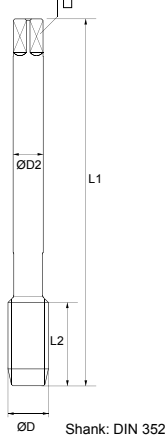
Unified coarse thread / ANSI B1.1

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

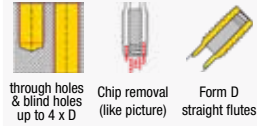


UNC

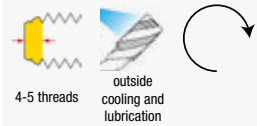
	D1	D2	L1	L2		
UNC No 1 x 64	1,85	2,5	32	10	2,1	1,50
UNC No 2 x 56	2,18	2,8	36	11	2,1	1,80
UNC No 3 x 48	2,52	2,8	36	11	2,1	2,10
UNC No 4 x 40	2,85	3,5	40	12	2,7	2,30
UNC No 5 x 40	3,18	3,5	40	12	2,7	2,60
UNC No 6 x 32	3,51	4,0	45	14	3,0	2,85
UNC No 8 x 32	4,17	4,5	45	14	3,4	3,50
UNC No 10 x 24	4,83	6,0	50	16	4,9	3,90
UNC No 12 x 24	5,49	6,0	50	18	4,9	4,50
UNC 1/4 x 20	6,35	6,0	50	19	4,9	5,20
UNC 5/16 x 18	7,94	6,0	56	22	4,9	6,60
UNC 3/8 x 16	9,53	7,0	70	24	5,5	8,00
UNC 7/16 x 14	11,11	8,0	70	24	6,2	9,40
UNC 1/2 x 13	12,70	9,0	75	29	7,0	10,80
UNC 9/16 x 12	14,29	11,0	80	30	9,0	12,20
UNC 5/8 x 11	15,88	12,0	80	32	9,0	13,50
UNC 3/4 x 10	19,05	14,0	95	40	11,0	16,50
UNC 7/8 x 9	22,23	18,0	100	40	14,5	19,50
UNC 1" x 8	25,40	18,0	110	50	14,5	22,25
UNC 1.1/8 x 7	28,58	22,0	132	56	18,0	25,00
UNC 1.1/4 x 7	31,75	22,0	132	56	18,0	28,25
UNC 1.3/8 x 6	34,93	28,0	150	63	22,0	30,75
UNC 1.1/2 x 6	38,10	32,0	150	63	24,0	34,00
UNC 1.5/8 x 5	41,28	32,0	160	70	24,0	37,10
UNC 1.3/4 x 5	44,45	36,0	160	70	29,0	39,50
UNC 1.7/8 x 4,5	47,63	36,0	190	80	29,0	42,00
UNC 2" x 4,5	50,80	40,0	190	80	32,0	45,00
UNC 2.1/4 x 4,5	57,15	45,0	220	80	35,0	51,50
UNC 2.1/2 x 4	63,50	50,0	220	80	39,0	57,25
UNC 2.3/4 x 4	69,85	50,0	240	80	39,0	63,50
UNC 3" x 4	73,20	50,0	260	80	39,0	70,00

Short Machine Taps

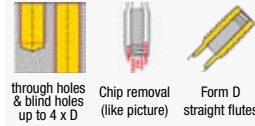
Form D for through holes and blind holes



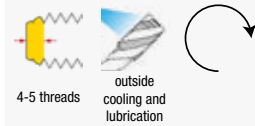
through holes & blind holes up to 4 x D
 Chip removal (like picture)
 Form D straight flutes
 material: HSSG 2B to 900 N/mm² 27,1 HRC



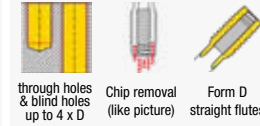
Hand Tap Sets for general use



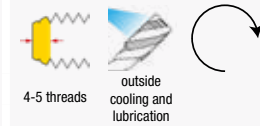
through holes & blind holes up to 4 x D
 Chip removal (like picture)
 Form D straight flutes
 material: HSSG 2B to 900 N/mm² 27,1 HRC



Hand Tap Sets for general use Left Hand



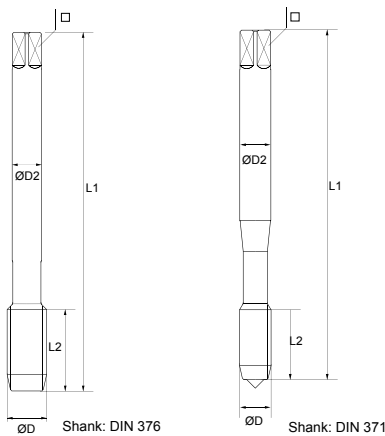
through holes & blind holes up to 4 x D
 Chip removal (like picture)
 Form D straight flutes
 material: HSSG 2B to 900 N/mm² 27,1 HRC



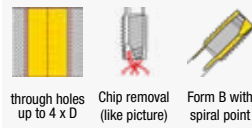
UNC

Unified coarse thread / ANSI B1.1

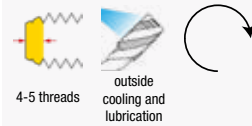
- ✓ Tap for machine use in through hole.
- ✓ The spiral point pushes the chips ahead.



Machine Tap for general use



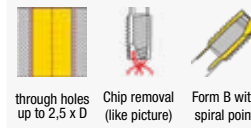
through holes up to 4 x D
Chip removal (like picture)
Form B with spiral point



4-5 threads
outside cooling and lubrication



Machine Tap for stainless steels



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



4-5 threads
outside cooling and lubrication



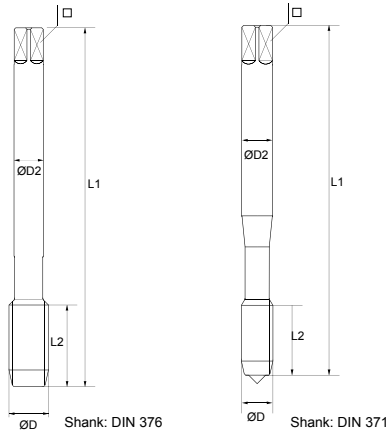
UNC

	D1	D2	L1	L2	□	
DIN 371						
UNC No 2 x 56	2,18	2,8	45	8	2,1	1,85
UNC No 3 x 48	2,52	2,8	50	9	2,1	2,10
UNC No 4 x 40	2,85	3,5	50	10	2,7	2,30
UNC No 5 x 40	3,18	3,5	56	11	2,7	2,60
UNC No 6 x 32	3,51	4,0	56	12	3,0	2,85
UNC No 8 x 32	4,17	4,5	63	13	3,4	3,50
UNC No 10 x 24	4,83	6,0	70	15	4,9	3,90
UNC No 12 x 24	5,49	6,0	70	16	4,9	4,50
UNC 1/4 x 20	6,35	7,0	80	17	5,5	5,20
UNC 5/16 x 18	7,94	8,0	90	20	6,2	6,60
UNC 3/8 x 16	9,53	9,0	100	22	7,0	8,00
DIN 376						
UNC No 4 x 40	2,85	1,8	50	10	-	2,30
UNC No 5 x 40	3,18	2,2	56	11	1,8	2,60
UNC No 6 x 32	3,51	2,5	56	12	2,1	2,85
UNC No 8 x 32	4,17	2,8	63	13	2,1	3,50
UNC No 10 x 24	4,83	3,5	70	15	2,7	3,90
UNC No 12 x 24	5,49	3,5	70	16	2,7	4,50
UNC 1/4 x 20	6,35	4,5	80	17	3,4	5,20
UNC 5/16 x 18	7,94	6,0	90	20	4,9	6,60
UNC 3/8 x 16	9,53	7,0	100	22	5,5	8,00
UNC 7/16 x 14	11,11	8,0	100	22	6,2	9,40
UNC 1/2 x 13	12,70	9,0	110	25	7,0	10,80
UNC 9/16 x 12	14,29	11,0	110	26	9,0	12,20
UNC 5/8 x 11	15,88	12,0	110	27	9,0	13,50
UNC 3/4 x 10	19,05	14,0	125	30	11,0	16,50
UNC 7/8 x 9	22,23	18,0	140	32	14,5	19,50
UNC 1" x 8	25,40	20,0	160	36	16,0	22,25
UNC 1.1/4 x 7	31,75	22,0	180	40	18,0	28,25
UNC 1.1/2 x 6	38,10	32,0	200	50	24,0	34,00
UNC 1.3/4 x 5	44,45	36,0	220	65	29,0	39,50
UNC 2" x 4,5	50,80	40,0	250	70	32,0	45,00

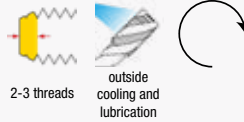
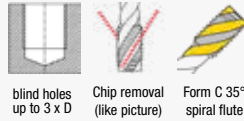
UNC

Unified coarse thread / ANSI B1.1

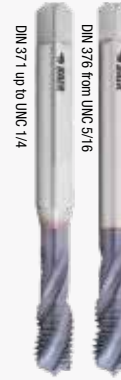
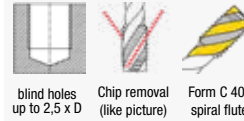
- ✓ Tap for machine use in blind holes.
- ✓ The fast spiral flutes provide good chip removal from the blind hole.



Machine Tap for general use



Machine Tap for stainless steels



UNC

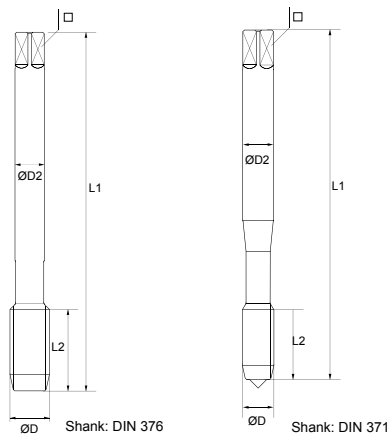
	D1	D2	L1	L2		
DIN 371						
UNC No 2 x 56	2,18	2,8	45	6	2,1	1,85
UNC No 3 x 48	2,52	2,8	50	7	2,1	2,10
UNC No 4 x 40	2,85	3,5	50	6	2,7	2,30
UNC No 5 x 40	3,18	3,5	56	7	2,7	2,60
UNC No 6 x 32	3,51	4,0	56	7	3,0	2,85
UNC No 8 x 32	4,17	4,5	63	8	3,4	3,50
UNC No 10 x 24	4,83	6,0	70	10	4,9	3,90
UNC No 12 x 24	5,49	6,0	70	10	4,9	4,50
UNC 1/4 x 20	6,35	7,0	80	13	5,5	5,20
UNC 5/16 x 18	7,94	8,0	90	14	6,2	6,60
UNC 3/8 x 16	9,53	9,0	100	16	7,0	8,00
DIN 376						
UNC No 4 x 40	2,85	1,8	50	10	-	2,30
UNC No 5 x 40	3,18	2,2	56	11	1,8	2,60
UNC No 6 x 32	3,51	2,5	56	12	2,1	2,85
UNC No 8 x 32	4,17	2,8	63	13	2,1	3,50
UNC No 10 x 24	4,83	3,5	70	15	2,7	3,90
UNC No 12 x 24	5,49	3,5	70	16	2,7	4,50
UNC 1/4 x 20	6,35	4,5	80	17	3,4	5,20
UNC 5/16 x 18	7,94	6,0	90	20	4,9	6,60
UNC 3/8 x 16	9,53	7,0	100	22	5,5	8,00
UNC 7/16 x 14	11,11	8,0	100	22	6,2	9,40
UNC 1/2 x 13	12,70	9,0	110	25	7,0	10,80
UNC 9/16 x 12	14,29	11,0	110	26	9,0	12,20
UNC 5/8 x 11	15,88	12,0	110	27	9,0	13,50
UNC 3/4 x 10	19,05	14,0	125	30	11,0	16,50
UNC 7/8 x 9	22,23	18,0	140	32	14,5	19,50
UNC 1" x 8	25,40	20,0	160	36	16,0	22,25
UNC 1.1/4 x 7	31,75	22,0	180	40	18,0	28,25
UNC 1.1/2 x 6	38,10	32,0	200	50	24,0	34,00
UNC 1.3/4 x 5	44,45	36,0	220	65	29,0	39,50
UNC 2" x 4,5	50,80	40,0	250	70	32,0	45,00

UNC

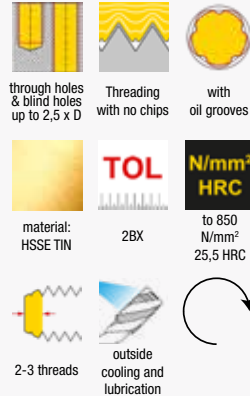
Unified coarse thread / ANSI B1.1

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



UNC

	D1	D2	L1	L2	□	
UNC No 4 x 40	2,85	3,5	56	11	2,7	2,55
UNC No 5 x 40	3,18	3,5	56	10	2,7	2,65
UNC No 6 x 32	3,51	4,0	56	12	3,0	3,15
UNC No 8 x 32	4,17	4,5	63	13	3,4	3,80
UNC No 10 x 24	4,83	6,0	70	15	4,9	4,35
UNC No 12 x 24	5,49	6,0	80	16	4,9	5,00
UNC 1/4 x 20	6,35	7,0	80	17	5,5	5,75
UNC 5/16 x 18	7,94	8,0	90	20	6,2	7,30
UNC 3/8 x 16	9,53	10,0	100	22	8,0	8,80
UNC 7/16 x 14	11,11	8,0	100	22	6,2	10,25
UNC 1/2 x 13	12,70	9,0	110	25	7,0	11,80
UNC 9/16 x 12	14,29	11,0	110	26	9,0	13,30
UNC 5/8 x 11	15,88	12,0	110	27	9,0	14,80
UNC 3/4 x 10	19,05	14,0	125	30	11,0	17,85



UNC

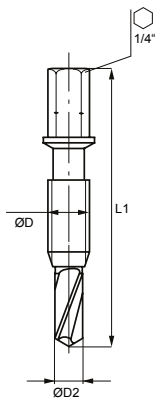
Unified coarse thread / ANSI B1.1

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


Core hole drilling and thread tapping in one fluent process.

Application:

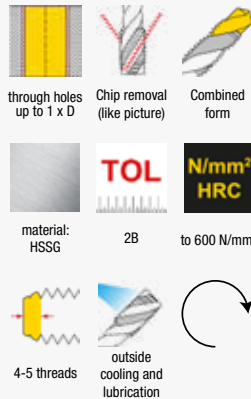
-  non abrasive material up to 600 N/mm²
-  unalloyed and low alloyed steel



UNC

	D1	D2	L1	
UNC No 4 x 40	2,85	2,3	36	1/4"
UNC No 5 x 40	3,18	2,6	36	1/4"
UNC No 6 x 32	3,51	2,9	39	1/4"
UNC No 8 x 32	4,17	3,5	39	1/4"
UNC No 10 x 24	4,83	3,9	41	1/4"
UNC No 12 x 24	5,49	4,5	41	1/4"
UNC 1/4 x 20	6,35	5,2	44	1/4"
UNC 5/16 x 18	7,94	6,6	50	1/4"
UNC 3/8 x 16	9,53	8,0	59	1/4"

Kombi-Bit-Taps for through holes



Round Dies
for general use



material:
HSS

2A



Chamfer:
1,5 threads

right hand
thread

Round Dies
for general use
Left Hand



material:
HSS

2A



Chamfer:
1,5 threads

right hand
thread

Round Dies
for stainless
steels



material:
HSSE

2A

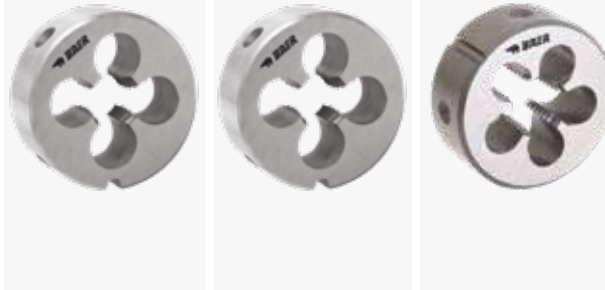
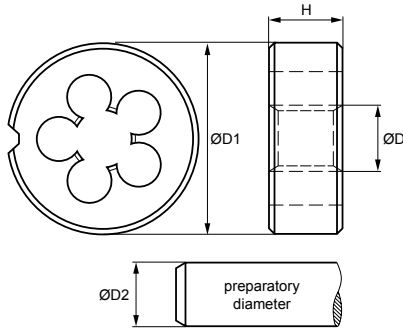


Chamfer:
1,5 threads

right hand
thread



with
spiral entry



UNC

	D	D1	H	D2
UNC No 1 x 64	1,85	16	5	1,79
UNC No 2 x 56	2,18	16	5	2,12
UNC No 3 x 48	2,52	16	5	2,44
UNC No 4 x 40	2,85	20	5	2,76
UNC No 5 x 40	3,18	20	5	3,09
UNC No 6 x 32	3,51	20	7	3,41
UNC No 8 x 32	4,17	20	7	4,07
UNC No 10 x 24	4,83	20	7	4,71
UNC No 12 x 24	5,49	20	7	5,37
UNC 1/4 x 20	6,35	20	7	6,22
UNC 5/16 x 18	7,94	25	9	7,80
UNC 3/8 x 16	9,53	30	11	9,37
UNC 7/16 x 14	11,11	30	11	10,95
UNC 1/2 x 13	12,70	38	14	12,52
UNC 9/16 x 12	14,29	38	14	14,10
UNC 5/8 x 11	15,88	45	18	15,68
UNC 3/4 x 10	19,05	45	18	18,84
UNC 7/8 x 9	22,23	55	22	22,00
UNC 1" x 8	25,40	55	22	25,16
UNC 1.1/8 x 7	28,58	65	25	28,31
UNC 1.1/4 x 7	31,75	65	25	31,49
UNC 1.3/8 x 6	34,93	65	25	34,63
UNC 1.1/2 x 6	38,10	65	25	37,80
UNC 1.1/2 x 6	38,10	75	30	37,80
UNC 1.5/8 x 5	41,28	75	30	40,95
UNC 1.3/4 x 5	44,45	90	36	44,12
UNC 1.7/8 x 4,5	47,63	90	36	47,30
UNC 2" x 4,5	50,80	90	36	50,45

UNC

Unified coarse thread / ANSI B1.1

Hexagon Die Nuts for general use



material:
HSS

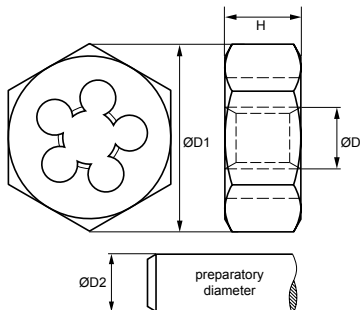
2A



Chamfer:
1,5 threads



right hand
thread



UNC

	D	D1	H	D2
UNC 1/4 x 20	6,35	19	7	6,22
UNC 5/16 x 18	7,94	22	9	7,80
UNC 3/8 x 16	9,53	27	11	9,37
UNC 7/16 x 14	11,11	27	11	10,95
UNC 1/2 x 13	12,70	36	14	12,52
UNC 9/16 x 12	14,29	36	14	14,10
UNC 5/8 x 11	15,88	41	18	15,68
UNC 3/4 x 10	19,05	41	18	18,84
UNC 7/8 x 9	22,23	50	22	22,00
UNC 1" x 8	25,40	50	22	25,16
UNC 1.1/8 x 7	28,58	60	25	28,31
UNC 1.1/4 x 7	31,75	60	25	31,49
UNC 1.3/8 x 6	34,93	60	25	34,63
UNC 1.1/2 x 6	38,10	70	30	37,80

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
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
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 UNF 1" x 12
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 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	UNC 1/4 UNC 5/16 UNC 3/8 UNC 7/16 UNC 1/2 UNC 5/8 UNC 3/4
BAER HSSG Hand Tap Sets (2 parts) UNF	UNF 1/4 UNF 5/16 UNF 3/8 UNF 7/16 UNF 1/2 UNF 5/8 UNF 3/4
BAER HSS Round Dies UNC	UNC 1/4 UNC 5/16 UNC 3/8 UNC 7/16 UNC 1/2 UNC 5/8 UNC 3/4
BAER HSS Round Dies UNF	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	

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
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

UNF

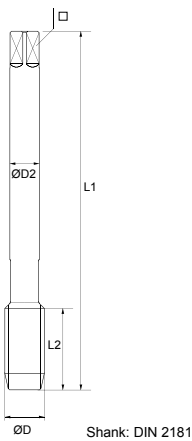
Unified fine thread / ANSI B1.1

Efficient internal thread cutting.

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

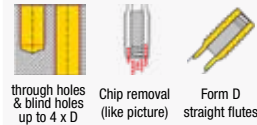
A Hand-Tap-Set includes 2 taps:

- Taper Tap
- Finish Tap



Short Machine Taps

Form D for through holes and blind holes



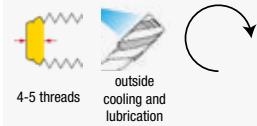
through holes & blind holes up to 4 x D

Chip removal (like picture)

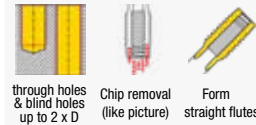
Form D straight flutes

material: HSSG

2B to 900 N/mm² 27,1 HRC



Hand Tap Sets for general use



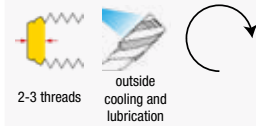
through holes & blind holes up to 2 x D

Chip removal (like picture)

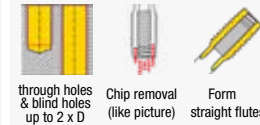
Form straight flutes

material: HSSG

2B to 900 N/mm² 27,1 HRC



Hand Tap Sets for general use Left Hand



through holes & blind holes up to 2 x D

Chip removal (like picture)

Form straight flutes

material: HSSG

2B to 900 N/mm² 27,1 HRC



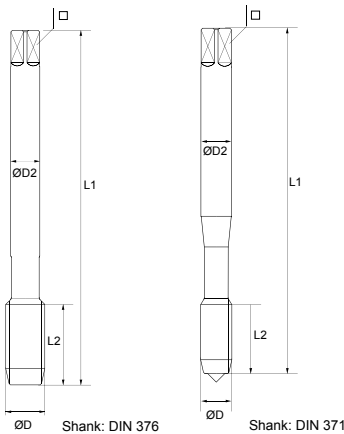
UNF

	D1	D2	L1	L2	□	
UNF No 0 x 80	1,52	2,5	28	8	2,1	1,30
UNF No 1 x 72	1,85	2,8	32	9	2,1	1,60
UNF No 2 x 64	2,18	2,8	32	10	2,1	1,90
UNF No 3 x 56	2,52	2,8	32	10	2,1	2,10
UNF No 4 x 48	2,85	3,5	36	11	2,7	2,40
UNF No 5 x 44	3,18	3,5	36	11	2,7	2,70
UNF No 6 x 40	3,51	4,5	40	12	3,4	3,00
UNF No 8 x 36	4,17	4,5	40	12	3,4	3,50
UNF No 10 x 32	4,83	6,0	45	14	4,9	4,10
UNF No 12 x 28	5,49	6,0	50	14	4,9	4,70
UNF 1/4 x 28	6,35	6,0	50	18	4,9	5,50
UNF 5/16 x 24	7,94	6,0	56	22	4,9	6,90
UNF 3/8 x 24	9,53	7,0	63	22	5,5	8,50
UNF 7/16 x 20	11,11	8,0	63	22	6,2	9,90
UNF 1/2 x 20	12,70	9,0	75	24	7,0	11,50
UNF 9/16 x 18	14,29	11,0	80	28	9,0	12,90
UNF 5/8 x 18	15,88	12,0	80	28	9,0	14,50
UNF 3/4 x 16	19,05	14,0	95	32	11,0	17,50
UNF 7/8 x 14	22,23	18,0	100	36	14,5	20,25
UNF 1" x 12	25,40	18,0	110	40	14,5	23,25
UNF 1 1/8 x 12	28,58	22,0	110	50	18,0	26,50
UNF 1.1/4 x 12	31,75	22,0	132	56	18,0	29,50
UNF 1.3/8 x 12	34,93	28,0	132	56	22,0	32,50
UNF 1.1/2 x 12	38,10	32,0	150	63	24,0	36,00

UNF

Unified fine thread / ANSI B1.1

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



Machine Tap for general use



through holes up to 4 x D

Chip removal (like picture)

Form B with spiral point



TOL

N/mm² HRC

material: HSSG

2B

to 900 N/mm² 27,1 HRC



4-5 threads



outside cooling and lubrication



Machine Tap for stainless steels



through holes up to 2,5 x D

Chip removal (like picture)

Form B with spiral point



TOL

N/mm² HRC

material: HSSE-TiAIN

2B

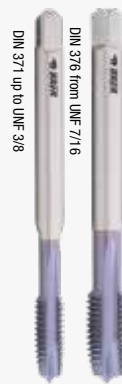
to 1300 N/mm² 41 HRC



4-5 threads



outside cooling and lubrication



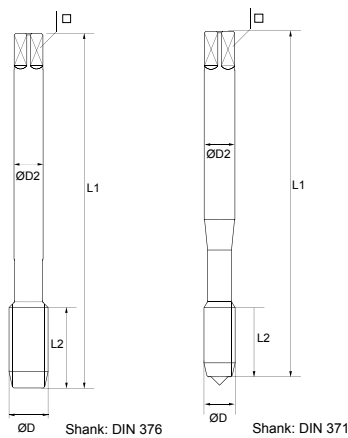
UNF

	D1	D2	L1	L2	□	
UNF No 3 x 56	2,52	2,8	50	9	2,1	2,10
UNF No 4 x 48	2,85	3,5	50	10	2,7	2,40
UNF No 5 x 44	3,18	3,5	56	11	2,7	2,70
UNF No 6 x 40	3,51	4,0	56	12	3,0	3,00
UNF No 8 x 36	4,17	4,5	63	13	3,4	3,50
UNF No 10 x 32	4,83	6,0	70	15	4,9	4,10
UNF No 12 x 28	5,49	6,0	70	16	4,9	4,70
UNF 1/4 x 28	6,35	7,0	80	17	5,5	5,50
UNF 5/16 x 24	7,94	8,0	90	17	6,2	6,90
UNF 3/8 x 24	9,53	9,0	100	18	7,0	8,50
UNF 7/16 x 20	11,11	8,0	100	22	6,2	9,90
UNF 1/2 x 20	12,70	9,0	100	22	7,0	11,50
UNF 9/16 x 18	14,29	11,0	100	22	9,0	12,90
UNF 5/8 x 18	15,88	12,0	100	22	9,0	14,50
UNF 3/4 x 16	19,05	14,0	110	25	11,0	17,50
UNF 7/8 x 14	22,23	18,0	140	26	14,5	20,25
UNF 1" x 12	25,40	20,0	150	28	16,0	23,25
UNF 1" x 14	25,40	20,0	150	28	16,0	23,30
UNF 1.1/4 x 12	31,75	22,0	150	30	18,0	29,50
UNF 1.1/2 x 12	38,10	32,0	170	33	24,0	36,00

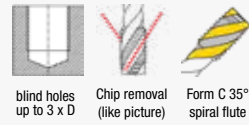
UNF

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.



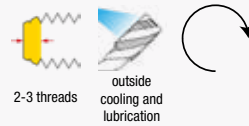
Machine Tap for general use



blind holes up to 3 x D
Chip removal (like picture)
Form C 35° spiral flute



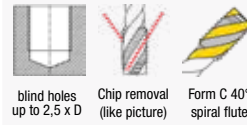
material: HSSG 2B to 900 N/mm² 27,1 HRC



2-3 threads outside cooling and lubrication



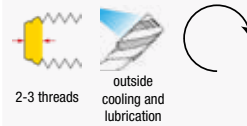
Machine Tap for stainless steels



blind holes up to 2,5 x D
Chip removal (like picture)
Form C 40° spiral flute




material: HSSE-TAIN 2B to 1300 N/mm² 41 HRC



2-3 threads outside cooling and lubrication



UNF

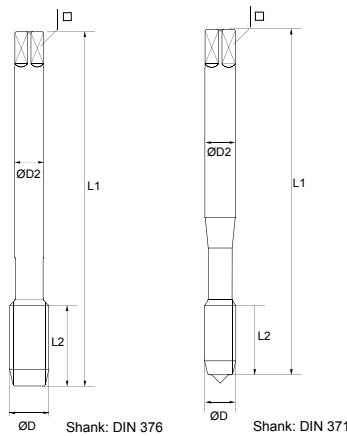
	D1	D2	L1	L2	□	
UNF No 3 x 56	2,52	2,8	50	6	2,1	2,10
UNF No 4 x 48	2,85	3,5	50	6	2,7	2,40
UNF No 5 x 44	3,18	3,5	56	7	2,7	2,70
UNF No 6 x 40	3,51	4,0	56	7	3,0	3,00
UNF No 8 x 36	4,17	4,5	63	8	3,4	3,50
UNF No 10 x 32	4,83	6,0	70	10	4,9	4,10
UNF No 12 x 28	5,49	6,0	70	10	4,9	4,70
UNF 1/4 x 28	6,35	7,0	80	10	5,5	5,50
UNF 5/16 x 24	7,94	8,0	90	10	6,2	6,90
UNF 3/8 x 24	9,53	9,0	100	10	7,0	8,50
UNF 7/16 x 20	11,11	8,0	100	13	6,2	9,90
UNF 1/2 x 20	12,70	9,0	100	13	7,0	11,50
UNF 9/16 x 18	14,29	11,0	100	15	9,0	12,90
UNF 5/8 x 18	15,88	12,0	100	15	9,0	14,50
UNF 3/4 x 16	19,05	14,0	110	17	11,0	17,50
UNF 7/8 x 14	22,23	18,0	140	17	14,5	20,25
UNF 1" x 12	25,40	20,0	150	20	16,0	23,25
UNF 1" x 14	25,40	20,0	150	20	16,0	23,30
UNF 1.1/4 x 12	31,75	22,0	150	22	18,0	29,50
UNF 1.1/2 x 12	38,10	32,0	170	25	24,0	36,00

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

Diagram illustrating the benefits of Machine Forming Taps: through holes & blind holes up to 2,5 x D, Threading with no chips, with oil grooves, material: HSSE TIN, 2BX, N/mm² HRC to 850 N/mm² 25,5 HRC, 2-3 threads, outside cooling and lubrication.

UNF	D1	D2	L1	L2	□	
UNF No 2 x 64	2,18	2,8	45	7	2,1	2,02
UNF No 4 x 48	2,85	3,5	56	11	2,7	2,62
UNF No 6 x 40	3,51	4,0	56	12	3,0	3,22
UNF No 8 x 36	4,17	4,5	63	13	3,4	3,85
UNF No 10 x 32	4,83	6,0	70	15	4,9	4,45
UNF 1/4 x 28	6,35	7,0	80	17	5,5	5,95
UNF 5/16 x 24	7,94	8,0	90	17	6,2	7,45
UNF 3/8 x 24	9,53	10,0	90	18	8,0	9,05
UNF 7/16 x 20	11,11	8,0	100	22	6,2	10,55
UNF 1/2 x 20	12,70	9,0	100	22	7,0	12,15
UNF 5/8 x 18	15,88	12,0	100	22	9,0	15,25
UNF 3/4 x 16	19,05	14,0	110	25	11,0	18,35



UNF

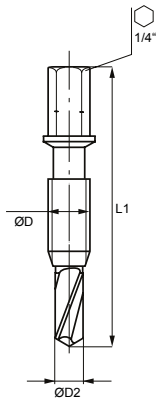
Unified fine thread / ANSI B1.1

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

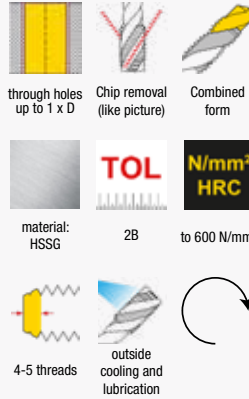
Core hole drilling and thread tapping in one fluent process.

Application:


-  non abrasive material up to 600 N/mm²
-  unalloyed and low alloyed steel



Kombi-Bit-Taps for through holes



UNF

	D1	D2	L1	
UNF No 4 x 48	2,85	2,4	36	1/4"
UNF No 5 x 44	3,18	2,7	36	1/4"
UNF No 6 x 40	3,51	3,0	39	1/4"
UNF No 8 x 36	4,17	3,5	39	1/4"
UNF No 10 x 32	4,83	4,1	41	1/4"
UNF No 12 x 28	5,49	4,7	41	1/4"
UNF 1/4 x 28	6,35	5,5	44	1/4"
UNF 5/16 x 24	7,94	6,9	50	1/4"
UNF 3/8 x 24	9,53	8,5	59	1/4"

Round Dies
for general use



material: HSS 2A

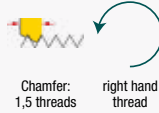


Chamfer: 1,5 threads
right hand thread

Round Dies
for general use
Left Hand



material: HSS 2A

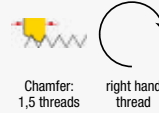


Chamfer: 1,5 threads
right hand thread

Round Dies
for stainless
steels



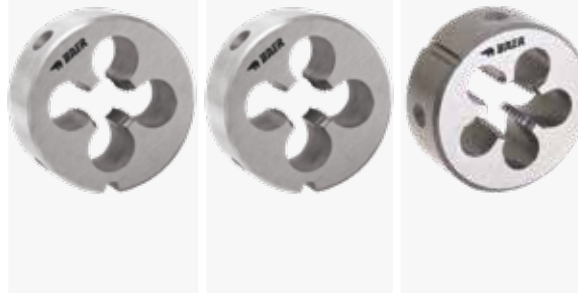
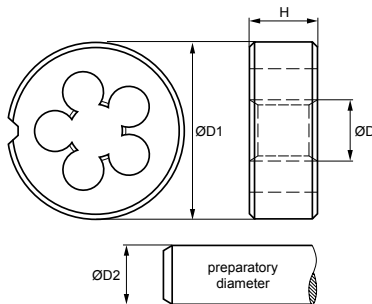
material: HSSE 2A



Chamfer: 1,5 threads
right hand thread



with spiral entry



UNF

	D	D1	H	D2
UNF NR. 0 x 80	1,52	16	5	1,47
UNF NR. 1 x 72	1,85	16	5	1,79
UNF NR. 2 x 64	2,18	16	5	2,12
UNF NR. 3 x 56	2,52	16	5	2,44
UNF NR. 4 x 48	2,85	20	5	2,77
UNF NR. 5 x 44	3,18	20	5	3,10
UNF NR. 6 x 40	3,51	20	5	3,42
UNF NR. 8 x 36	4,17	20	7	4,08
UNF NR. 10 x 32	4,83	20	7	4,73
UNF NR. 12 x 28	5,49	20	7	5,38
UNF 1/4 x 28	6,35	20	7	6,24
UNF 5/16 x 24	7,94	25	9	7,82
UNF 3/8 x 24	9,53	30	11	9,41
UNF 7/16 x 20	11,11	30	11	10,98
UNF 1/2 x 20	12,70	38	10	12,56
UNF 9/16 x 18	14,29	38	10	14,14
UNF 5/8 x 18	15,88	45	14	15,73
UNF 3/4 x 16	19,05	45	14	18,89
UNF 7/8 x 14	22,23	55	16	22,05
UNF 1" x 12	25,40	55	16	25,21
UNF 1" x 14	25,40	55	16	25,23
UNF 1.1/8 x 12	28,58	65	18	28,38
UNF 1.1/4 x 12	31,75	65	18	31,55
UNF 1.3/8 x 12	34,93	65	18	34,73
UNF 1.1/2 x 12	38,10	65	18	37,90
UNF 1.1/2 x 12	38,10	75	20	37,90

UNF

Unified fine thread / ANSI B1.1

Hexagon Die Nuts for general use



material:
HSS

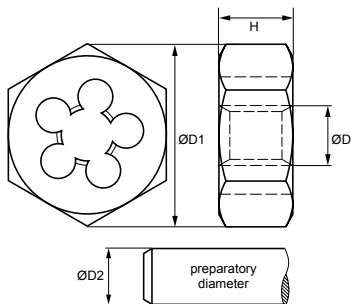
2A



Chamfer:
1,5 threads



right hand
thread



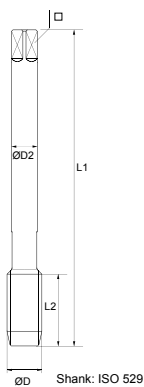
UNF

	D	D1	H	D2
UNF 1/4 x 28	6,35	19	7	6,24
UNF 5/16 x 24	7,94	22	9	7,82
UNF 3/8 x 24	9,53	27	11	9,41
UNF 7/16 x 20	11,11	27	11	10,98
UNF 1/2 x 20	12,70	36	10	12,56
UNF 9/16 x 18	14,29	36	10	14,14
UNF 5/8 x 18	15,88	41	14	15,73
UNF 3/4 x 16	19,05	41	14	18,89
UNF 7/8 x 14	22,23	50	16	22,05
UNF 1" x 12	25,40	50	16	25,21
UNF 1.1/8 x 12	28,58	60	18	28,38
UNF 1.1/4 x 12	31,75	60	18	31,55
UNF 1.3/8 x 12	34,93	60	18	34,73
UNF 1.1/2 x 12	38,10	70	20	37,90

UNS

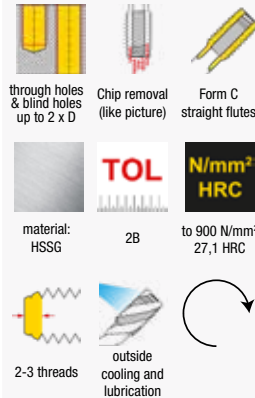
Unified thread with special / threads per inch (TPI)

- ✓ 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.



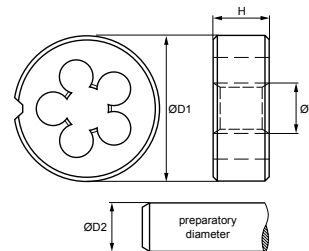
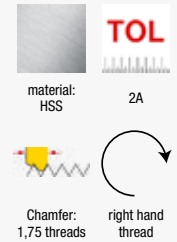
Machine Taps

Form C for through holes and blind holes



Round Dies

for general use



UNS	D1	D2	L1	L2	□	🔩
UNS 1/4 x 24	6,35	6,3	66	19	5,0	5,40
UNS 1/4 x 36	6,35	6,3	66	19	5,0	5,70
UNS 1/4 x 40	6,35	6,3	66	19	5,0	5,75
UNS 3/8 x 27	9,53	10,0	80	24	8,0	8,35
UNS 7/16 x 24	11,11	8,0	85	25	6,3	10,10
UNS 1/2 x 24	12,70	9,0	89	29	7,1	11,75
UNS 5/8 x 27	15,88	12,5	102	32	10,0	14,70
UNS 3/4 x 24	19,05	14,0	112	37	11,2	18,00
UNS 7/8 x 18	22,23	16,0	118	38	12,5	21,00
UNS 1" x 14	25,40	18,0	130	45	14,0	23,75

UNS	D	D1	H	D2
UNS 1/4 x 24	6,35	20	7	6,24
UNS 1/4 x 36	6,35	20	5	6,26
UNS 1/4 x 40	6,35	20	5	6,27
UNS 3/8 x 27	9,53	30	11	9,41
UNS 7/16 x 24	11,11	30	11	11,00
UNS 1/2 x 24	12,70	38	10	12,59
UNS 5/8 x 27	15,88	45	14	15,76
UNS 7/8 x 18	22,23	55	16	22,08
UNS 1" x 14	25,40	55	16	25,23

UNEF

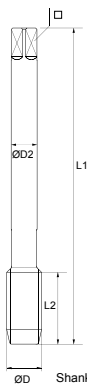
Unified extra fine thread / ANSI B1.1

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.

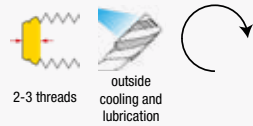
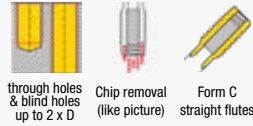
A Hand-Tap-Set includes 2 taps:

- Taper Tap
- Finish Tap

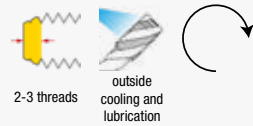
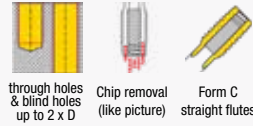


Shank: ISO 529

Hand Tap Sets for general use



Machine Taps Form C for through holes and blind holes



UNEF

	D1	D2	L1	L2	□	
UNEF No 12 x 32	5,49	5,6	62	17	4,5	4,75
UNEF 1/4 x 32	6,35	6,3	66	19	5,0	5,60
UNEF 5/16 x 32	7,94	8,0	72	22	6,3	7,20
UNEF 3/8 x 32	9,53	10,0	80	24	8,0	8,80
UNEF 7/16 x 28	11,11	8,0	85	25	6,3	10,25
UNEF 1/2 x 28	12,70	9,0	89	29	7,1	11,80
UNEF 9/16 x 24	14,29	11,2	95	30	9,0	13,30
UNEF 5/8 x 24	15,88	12,5	102	32	10,0	14,90
UNEF 11/16 x 24	17,46	14,0	112	37	11,2	16,50
UNEF 3/4 x 20	19,05	14,0	112	37	11,2	17,75
UNEF 13/16 x 20	20,64	16,0	118	38	12,5	19,50
UNEF 7/8 x 20	22,23	16,0	118	38	12,5	21,00
UNEF 15/16 x 20	23,81	18,0	130	45	14,0	22,50
UNEF 1" x 20	25,40	16,0	130	45	14,0	24,25
UNEF 1.1/16 x 18	26,99	20,0	138	48	16,0	25,70
UNEF 1.1/8 x 18	28,58	20,0	138	48	16,0	27,25
UNEF 1.3/16 x 18	30,16	22,4	151	51	18,0	28,75
UNEF 1.1/4 x 18	31,75	22,4	151	51	18,0	30,50
UNEF 1.5/16 x 18	33,34	25,0	162	57	20,0	32,00
UNEF 1.3/8 x 18	34,93	25,0	162	57	20,0	33,50
UNEF 1.7/16 x 18	36,51	28,0	170	60	22,4	35,20
UNEF 1.1/2 x 18	38,10	28,0	170	60	22,4	36,80
UNEF 1.9/16 x 18	39,69	28,0	170	60	22,4	38,40
UNEF 1.5/8 x 18	41,28	28,0	170	60	22,4	40,00
UNEF 1.11/16 x 18	42,86	31,5	187	67	25,0	41,50
UNEF 1.3/4 x 18	44,45	31,5	187	67	25,0	43,00
UNEF 2" x 18	50,80	35,5	200	70	28,0	49,50

Round Dies
for general use



material:
HSS

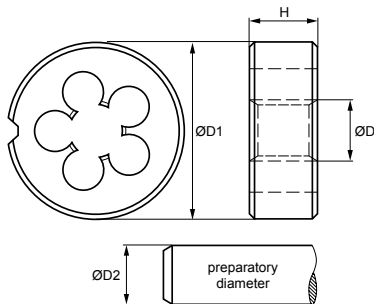
2A



Chamfer:
1,5 threads



right hand
thread



UNEF

	D	D1	H	D2
UNEF No 12 x 32	5,49	20	7	5,39
UNEF 1/4 x 32	6,35	20	7	6,25
UNEF 5/16 x 32	7,94	25	9	7,84
UNEF 3/8 x 32	9,53	30	11	9,42
UNEF 7/16 x 28	11,11	30	11	11,00
UNEF 1/2 x 28	12,70	38	10	12,59
UNEF 9/16 x 24	14,29	38	10	14,17
UNEF 5/8 x 24	15,88	45	14	15,75
UNEF 11/16 x 24	17,46	45	14	17,33
UNEF 3/4 x 20	19,05	45	14	18,91
UNEF 13/16 x 20	20,64	55	16	20,50
UNEF 7/8 x 20	22,23	55	16	22,09
UNEF 15/16 x 20	23,81	55	16	23,67
UNEF 1" x 20	25,40	55	16	25,26
UNEF 1.1/16 x 18	26,99	65	18	26,84
UNEF 1.1/8 x 18	28,58	65	18	28,58
UNEF 1.3/16 x 18	30,23	65	18	30,16
UNEF 1.1/4 x 18	31,75	65	18	31,75
UNEF 1.5/16 x 18	33,34	65	18	33,34
UNEF 1.3/8 x 18	34,93	65	18	34,93
UNEF 1.7/16 x 18	36,51	75	20	36,51
UNEF 1.1/2 x 18	38,10	75	20	38,10

8-UN

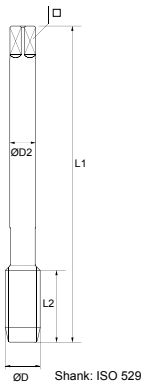
Unified thread series with 8-threads per inch (TPI)

Efficient internal thread cutting.

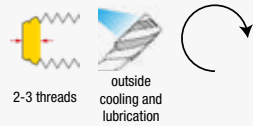
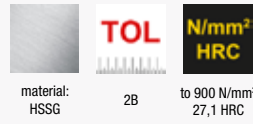
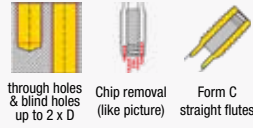
The short structural type of the Hand Tap Sets makes that tap usable by hand. The Short-Machine-Tap is also usable by machine.

A Hand-Tap-Set includes 2 taps:

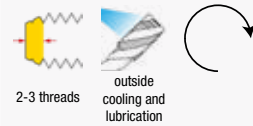
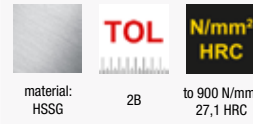
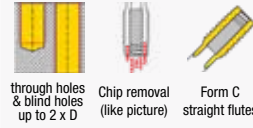
- Taper Tap
- Finish Tap



Hand Tap Sets for general use



Machine Taps Form C for through holes and blind holes



8-UN

	D1	D2	L1	L2		
UN 1.1/16 x 8	26,99	20,0	138	48	16,0	23,90
UN 1.1/8 x 8	28,58	20,0	138	48	16,0	25,50
UN 1.3/16 x 8	30,16	22,4	151	51	18,0	27,10
UN 1.1/4 x 8	31,75	22,4	151	51	18,0	28,75
UN 1.5/16 x 8	33,34	25,0	162	57	20,0	30,30
UN 1.3/8 x 8	34,93	25,0	162	57	20,0	31,75
UN 1.1/2 x 8	38,10	28,0	170	60	22,4	35,00
UN 1.5/8 x 8	41,28	28,0	170	60	22,4	38,00
UN 1.3/4 x 8	44,45	31,5	187	67	25,0	41,50
UN 1.7/8 x 8	47,63	31,5	187	67	25,0	44,50
UN 2" x 8	50,80	35,5	200	70	28,0	47,75
UN 2.1/8 x 8	53,98	35,5	200	70	28,0	50,90
UN 2.1/4 x 8	57,15	40,0	221	76	31,5	54,00
UN 2.1/2 x 8	63,50	40,0	224	79	31,5	60,40
UN 2.3/4 x 8	69,85	45,0	234	79	35,5	66,70
UN 3" x 8	76,20	50,0	258	83	40,0	73,10
UN 3.1/4 x 8	82,55	50,0	261	86	40,0	79,40
UN 3.1/2 x 8	88,90	50,0	261	86	40,0	85,80
UN 3.3/4 x 8	95,25	56,0	279	89	45,0	92,10
UN 4" x 8	101,60	56,0	279	89	45,0	98,50

8-UN

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

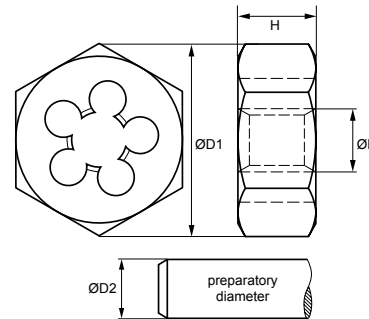
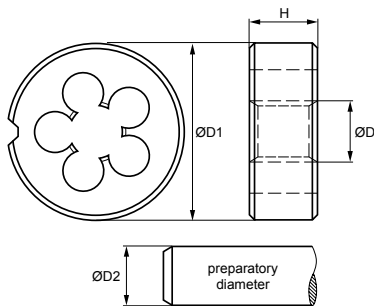
Round Dies for general use



material: HSS 2A



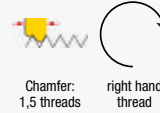
Chamfer: 1,75 threads
right hand thread



Hexagon Die Nuts for general use



material: HSS medium



Chamfer: 1,5 threads
right hand thread

8-UN

	D	D1	H	D2
UN 1.1/8 x 8	28,58	65	25	28,33
UN 1.1/4 x 8	31,75	65	25	31,51
UN 1.3/8 x 8	34,93	65	25	34,68
UN 1.1/2 x 8	38,10	75	20	37,85
UN 1.3/4 x 8	44,45	90	22	44,20
UN 2" x 8	50,80	90	22	50,55

8-UN

	D	D1	H	D2
UN 1.1/8 x 8	28,58	60	25	28,33
UN 1.1/4 x 8	31,75	60	25	31,51
UN 1.3/8 x 8	34,93	60	25	34,68
UN 1.1/2 x 8	38,10	60	25	37,85
UN 1.5/8 x 8	41,28	70	30	41,03
UN 1.3/4 x 8	44,45	85	36	44,20
UN 1.7/8 x 8	47,63	85	22	47,38
UN 2" x 8	50,80	85	22	50,55
UN 2.1/8 x 8	53,98	85	22	
UN 2.1/4 x 8	57,15	100	22	
UN 2.1/2 x 8	63,50	115	22	

12-UN

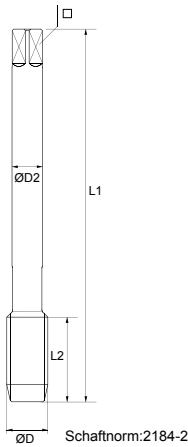
Unified thread series with 12-threads per inch (TPI)

Efficient internal thread cutting.

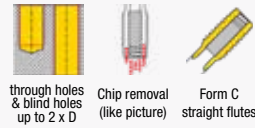
The short structural type makes that tap usable by hand. The Short-Machine-Tap is also usable by machine.

A Hand-Tap-Set includes 2-3 taps:

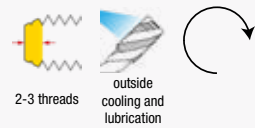
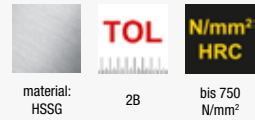
- Taper Tap (Intermediate Tap)
- Finish Tap



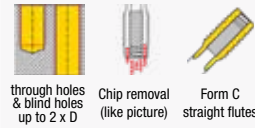
Hand Tap Sets for general use



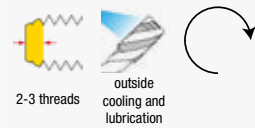
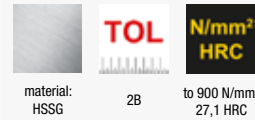
through holes & blind holes up to 2 x D
Chip removal (like picture)
Form C straight flutes



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



12-UN

	D1	D2	L1	L2	□	
UN 1/2 x 12	12,70	9,0	75	25	7,0	10,65
UN 5/8 x 12	15,88	12,0	80	25	9,0	13,80
UN 11/16 x 12	17,46	14,0	80	25	11,0	15,40
UN 3/4 x 12	19,05	14,0	80	25	11,0	17,00
UN 13/16 x 12	20,64	16,0	80	25	12,0	18,60
UN 7/8 x 12	22,23	18,0	80	25	14,5	20,20
UN 15/16 x 12	23,81	18,0	90	25	14,5	21,80
UN 1.1/16 x 12	26,99	20,0	90	28	16,0	24,90
UN 1.3/16 x 12	30,16	22,0	90	28	18,0	28,10
UN 1.5/16 x 12	33,34	28,0	125	32	22,0	31,30
UN 1.7/16 x 12	36,51	28,0	125	32	22,0	34,50
UN 1.5/8 x 12	41,28	32,0	125	32	24,0	39,20
UN 1.3/4 x 12	44,45	36,0	125	32	29,0	42,40
UN 1.7/8 x 12	47,63	36,0	140	32	29,0	45,60
UN 2 x 12	50,80	40,0	140	32	32,0	48,75
UN 2.1/8 x 12	53,98	35,5	200	70	28,0	51,90
UN 2.1/4 x 12	57,15	40,0	221	76	31,5	55,10
UN 2.1/2 x 12	63,50	40,0	224	79	31,5	61,50
UN 2.3/4 x 12	69,85	45,0	234	79	35,5	67,80
UN 3" x 12	76,20	50,0	258	83	40,0	74,20
UN 3.1/4 x 12	82,55	50,0	261	86	40,0	80,50
UN 3.1/2 x 12	88,90	50,0	261	86	40,0	86,90
UN 3.3/4 x 12	95,25	56,0	279	89	45,0	93,20
UN 4" x 12	101,60	56,0	279	89	45,0	99,60

12-UN

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

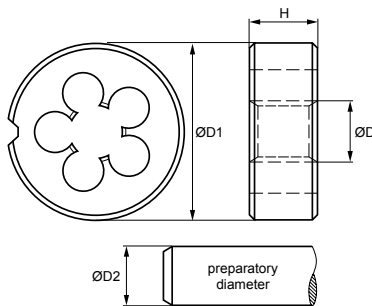
Round Dies
for general use



material: HSS medium



Chamfer: 1,75 threads right hand thread



12-UN

	D	D1	H	D2
UN 1.1/16 x 12	26,99	65	18	26,80
UN 1.5/16 x 12	33,34	65	18	33,15
UN 1.5/8 x 12	41,28	75	20	41,09
UN 1.3/4 x 12	44,45	90	22	44,26
UN 2" x 12	50,80	90	22	50,61

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

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

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

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

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

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

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
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




BSW

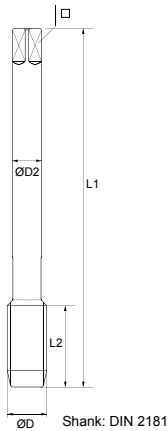
British standard BS 84 whitworth coarse thread

Efficient internal thread cutting.

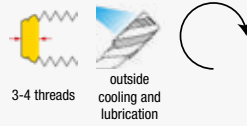
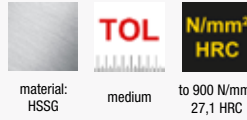
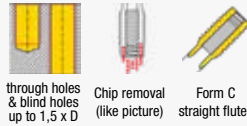
The short structural type makes that tap usable by hand. The Short-Machine-Tap is also usable by machine.

A Hand-Tap-Set includes 3 taps:

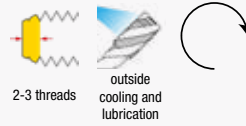
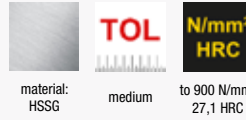
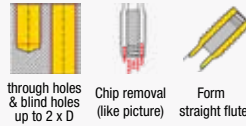
-  Taper Tap
-  Intermediate Tap
-  Finish Tap



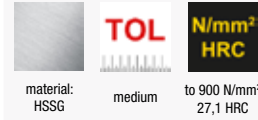
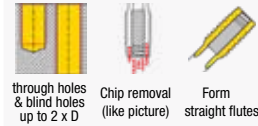
Short Machine Taps
Form D for through holes and blind holes





Hand Tap Sets for general use



Hand Tap Sets for general use Left Hand



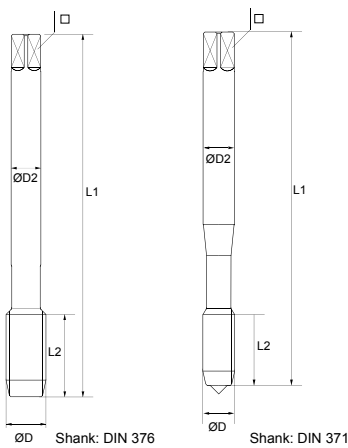
BSW

	D1	D2	L1	L2		
BSW 1/16 x 60	1,59	2,5	36	10	2,1	1,20
BSW 3/32 x 48	2,38	2,8	36	10	2,1	1,90
BSW 1/8 x 40	3,18	3,5	40	12	2,7	2,60
BSW 5/32 x 32	3,97	4,5	45	14	3,4	3,20
BSW 3/16 x 24	4,76	6,0	50	18	4,9	3,80
BSW 7/32 x 24	5,56	6,0	50	18	4,9	4,60
BSW 1/4 x 20	6,35	6,0	50	19	4,9	5,10
BSW 5/16 x 18	7,94	6,0	56	22	4,9	6,50
BSW 3/8 x 16	9,53	7,0	70	24	5,5	7,90
BSW 7/16 x 14	11,11	8,0	70	24	6,2	9,30
BSW 1/2 x 12	12,70	9,0	75	29	7,0	10,50
BSW 9/16 x 12	14,29	11,0	80	30	9,0	12,00
BSW 5/8 x 11	15,88	12,0	80	32	9,0	13,50
BSW 3/4 x 10	19,05	14,0	95	40	11,0	16,50
BSW 7/8 x 9	22,23	18,0	100	40	14,5	19,50
BSW 1" x 8	25,40	18,0	110	50	14,5	22,00
BSW 1.1/8 x 7	28,58	22,0	132	56	18,0	25,00
BSW 1.1/4 x 7	31,75	22,0	132	56	18,0	28,00
BSW 1.3/8 x 6	34,93	28,0	150	63	22,0	30,50
BSW 1.1/2 x 6	38,10	32,0	150	63	24,0	33,50
BSW 1.5/8 x 5	41,28	32,0	160	70	24,0	35,50
BSW 1.3/4 x 5	44,45	36,0	160	70	29,0	39,00
BSW 1.7/8 x 4,5	47,63	36,0	190	80	29,0	41,50
BSW 2" x 4,5	50,80	40,0	190	80	32,0	44,50
BSW 2.1/4 x 4	57,15	45,0	220	80	35,0	50,00
BSW 2.1/2 x 4	63,50	50,0	220	80	39,0	56,50
BSW 2.3/4 x 3,5	69,85	50,0	240	80	39,0	62,00
BSW 3" x 3,5	76,20	50,0	260	80	39,0	68,00

BSW

British standard BS 84 whitworth coarse thread

Tap for machine use in through hole and blind hole.



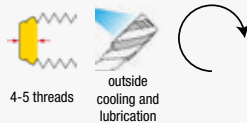
Machine Tap for general use in through hole



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



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



4-5 threads
outside cooling and lubrication



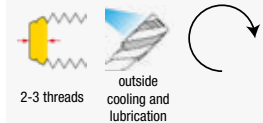
Machine Tap for general use in blind hole



blind holes up to 3 x D
Chip removal (like picture)
Form C 35° spiral flute



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



2-3 threads
outside cooling and lubrication



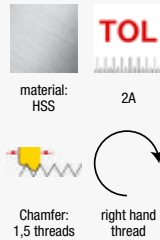
BSW

	D1	D2	L1	L2	<input type="checkbox"/>	
DIN 371						
BSW 1/8 x 40	3,18	3,5	56	11	2,7	2,60
BSW 5/32 x 32	3,97	4,5	63	13	3,4	3,20
BSW 3/16 x 24	4,76	6,0	70	15	4,9	3,80
BSW 1/4 x 20	6,35	7,0	80	17	5,5	5,10
BSW 5/16 x 18	7,94	8,0	90	20	6,2	6,50
BSW 3/8 x 16	9,53	9,0	100	22	7,0	7,90
BSW 7/16 x 14	11,11	11,0	100	22	9,0	9,30
BSW 1/2 x 12	12,70	12,0	110	25	9,0	10,50
DIN 376						
BSW 1/4 x 20	6,35	4,5	80	17	3,4	5,10
BSW 5/16 x 18	7,94	6,0	90	20	4,9	6,50
BSW 3/8 x 16	9,53	7,0	100	22	5,5	7,90
BSW 7/16 x 14	11,11	8,0	100	22	6,2	9,30
BSW 1/2 x 12	12,70	9,0	110	25	7,0	10,50
BSW 9/16 x 12	14,29	11,0	110	26	9,0	12,00
BSW 5/8 x 11	15,88	12,0	110	27	9,0	13,50
BSW 3/4 x 10	19,05	14,0	125	30	11,0	16,50
BSW 7/8 x 9	22,23	18,0	140	32	14,5	19,50
BSW 1" x 8	25,40	20,0	160	36	16,0	22,00
BSW 1.1/4 x 7	31,75	22,0	180	40	18,0	28,00
BSW 1.3/8 x 6	34,93	28,0	200	50	22,0	30,50
BSW 1.1/2 x 6	38,10	32,0	200	50	24,0	33,50

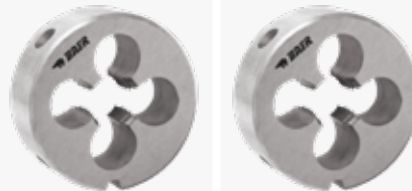
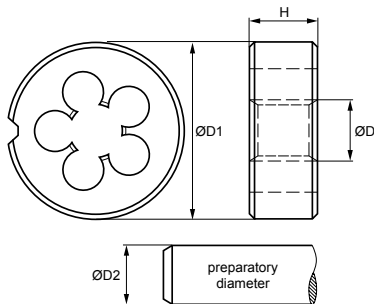
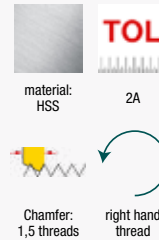
D1 D2 L1 L2

	D1	D2	L1	L2	<input type="checkbox"/>
DIN 371					
	3,18	3,5	56	7	2,7
	3,97	4,5	63	7	3,4
	4,76	6,0	70	10	4,9
	6,35	7,0	80	13	5,5
	7,94	8,0	90	14	6,2
	9,53	9,0	100	16	7,0
	11,11	11,0	100	17	9,0
	12,70	12,0	110	20	9,0
DIN 376					
	6,35	4,5	80	13	3,4
	7,94	6,0	90	14	4,9
	9,53	7,0	100	16	5,5
	11,11	8,0	100	17	6,2
	12,70	9,0	110	20	7,0
	14,29	11,0	110	20	9,0
	15,88	12,0	110	22	9,0
	19,05	14,0	125	25	11,0
	22,23	18,0	140	27	14,5
	25,40	20,0	160	30	16,0
	31,75	22,0	180	35	18,0
	34,93	28,0	200	40	22,0
	38,10	32,0	200	40	24,0

Round Dies for general use



Round Dies for general use Left Hand



BSW

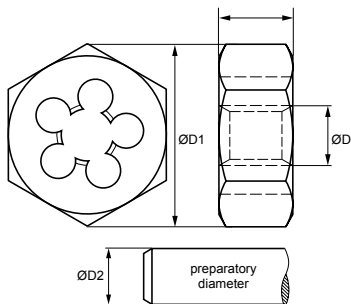
	D	D1	H	D2
BSW 1/16 x 60	1,59	16	5	1,51
BSW 3/32 x 48	2,38	16	5	2,3
BSW 1/8 x 40	3,18	20	5	3,09
BSW 5/32 x 32	3,97	20	5	3,88
BSW 3/16 x 24	4,76	20	7	4,66
BSW 7/32 x 24	5,56	20	7	5,46
BSW 1/4 x 20	6,35	20	7	6,24
BSW 5/16 x 18	7,94	25	9	7,82
BSW 3/8 x 16	9,53	30	11	9,4
BSW 7/16 x 14	11,11	30	11	10,98
BSW 1/2 x 12	12,7	38	14	12,56
BSW 9/16 x 12	14,29	38	14	14,14
BSW 5/8 x 11	15,88	45	18	15,72
BSW 3/4 x 10	19,05	45	18	18,89
BSW 7/8 x 9	22,23	55	22	22,1
BSW 1" x 8	25,4	55	22	25,27
BSW 1.1/8 x 7	28,58	65	25	28,44
BSW 1.1/4 x 7	31,75	65	25	31,61
BSW 1.3/8 x 6	34,93	65	25	34,77
BSW 1.1/2 x 6	38,1	65	25	37,95
BSW 1.1/2 x 6	38,1	75	30	37,95
BSW 1.5/8 x 5	41,28	75	30	41,11
BSW 1.3/4 x 5	44,45	90	36	44,28
BSW 1.7/8 x 4,5	47,63	90	36	47,46
BSW 2" x 4,5	50,8	90	36	50,63
BSW 2.1/4 x 4	57,15	105	36	56,98
BSW 2.1/2 x 4	63,5	105	36	63,34
BSW 2.3/4 x 3,5	69,85	120	36	69,68
BSW 3" x 3,5	76,2	120	36	76,03

Hexagon Die Nuts for general use


 material:
HSS

2A


 Chamfer:
1,5 threads

 right hand
thread

BSW

	D	D1	H	D2
BSW 1/8 x 40	3,18	20	5	3,09
BSW 3/16 x 24	4,76	20	7	4,66
BSW 1/4 x 20	6,35	20	7	6,24
BSW 5/16 x 18	7,94	25	9	7,82
BSW 3/8 x 16	9,53	30	11	9,40
BSW 7/16 x 14	11,11	30	11	10,98
BSW 1/2 x 12	12,70	38	14	12,56
BSW 9/16 x 12	14,29	38	14	14,14
BSW 5/8 x 11	15,88	45	18	15,72
BSW 3/4 x 10	19,05	45	18	18,89
BSW 7/8 x 9	22,23	55	22	22,10
BSW 1" x 8	25,40	55	22	25,27
BSW 1.1/8 x 7	28,58	65	25	28,44
BSW 1.1/4 x 7	31,75	65	25	31,61
BSW 1.3/8 x 6	34,93	65	25	34,77
BSW 1.1/2 x 6	38,10	65	25	37,95
BSW 2" x 4,5	50,80	90	36	50,63
BSW 2.1/4 x 4	57,15	105	36	56,98
BSW 2.1/2 x 4	63,50	105	36	63,34
BSW 2.3/4 x 3,5	69,85	120	36	69,68
BSW 3" x 3,5	76,20	120	36	76,03

BSF

British standard BS 84 whitworth coarse 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

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

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 | BSF 1" x 10

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 | 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 BSW 1/4 | BSW 5/16 | BSW 3/8 | BSW 7/16 | BSW 1/2 | BSW 5/8 | BSW 3/4

BAER HSSG Hand Tap Sets (2 parts) UNF BSF 1/4 | BSF 5/16 | BSF 3/8 | BSF 7/16 | BSF 1/2 | BSF 5/8 | BSF 3/4

BAER HSS Round Dies UNC BSW 1/4 | BSW 5/16 | BSW 3/8 | BSW 7/16 | BSW 1/2 | BSW 5/8 | BSW 3/4

BAER HSS Round Dies UNF 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

BSF

British standard BS 84 whitworth coarse thread

BAER Short Machine Taps and 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

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

BSF

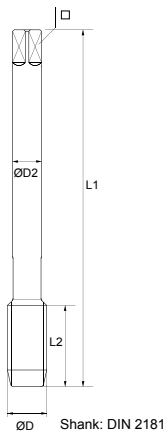
British standard BS 84 whitworth coarse thread

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



BSF

	D1	D2	L1	L2		
BSF 3/16 x 32	4,76	6,0	50	14	4,9	3,90
BSF 1/4 x 26	6,35	6,0	50	18	4,9	5,30
BSF 5/16 x 22	7,94	6,0	56	22	4,9	6,80
BSF 3/8 x 20*	9,53	7,0	63	22	5,5	8,30
BSF 7/16 x 18	11,11	8,0	63	22	6,2	9,70
BSF 1/2 x 16	12,70	9,0	75	24	7,0	11,10
BSF 9/16 x 16	14,29	11,0	80	28	9,0	12,70
BSF 5/8 x 14	15,88	12,0	80	28	9,0	14,00
BSF 3/4 x 12	19,05	14,0	95	32	11,0	16,80
BSF 7/8 x 11	22,23	18,0	100	36	14,5	19,70
BSF 1" x 10	25,40	18,0	110	40	14,5	22,70

* BSF 3/8 = Fisher thread

Short Machine Taps

Form D 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 medium to 900 N/mm² 27,1 HRC

3-4 threads

outside cooling and lubrication

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

3-4 threads

outside cooling and lubrication

BSF

British standard BS 84 whitworth coarse thread

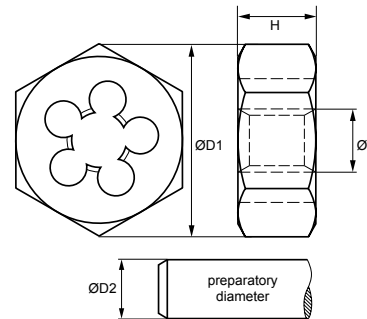
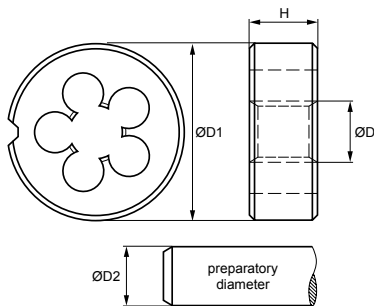
Round Dies for general use



material: HSS 2A



Chamfer: 1,5 threads right hand thread



Hexagon Die Nuts for general use



material: HSS medium



Chamfer: 1,5 threads right hand thread

BSF

	D	D1	H	D2
BSF 3/16 x 32	4,76	20	7	4,67
BSF 1/4 x 26	6,35	20	7	6,25
BSF 5/16 x 22	7,94	25	9	7,83
BSF 3/8 x 20	9,53	30	11	9,41
BSF 7/16 x 18	11,11	30	11	10,99
BSF 1/2 x 16	12,70	38	10	12,57
BSF 9/16 x 16	14,29	38	10	14,12
BSF 5/8 x 14	15,88	45	14	15,73
BSF 3/4 x 12	19,05	45	14	18,89
BSF 7/8 x 11	22,23	55	22	22,11
BSF 1" x 10	25,40	55	22	25,28

BSF

	D	D1	H	D2
BSF 3/16 x 32	4,76	19	7	4,67
BSF 1/4 x 26	6,35	19	7	6,25
BSF 5/16 x 22	7,94	22	9	7,83
BSF 3/8 x 20	9,53	27	11	9,41
BSF 7/16 x 18	11,11	27	11	10,99
BSF 1/2 x 16	12,70	36	10	12,57
BSF 9/16 x 16	14,29	36	10	14,12
BSF 5/8 x 14	15,88	41	14	15,73
BSF 3/4 x 12	19,05	41	14	18,89
BSF 7/8 x 11	22,23	50	16	22,11
BSF 1" x 10	25,40	50	16	25,28




TR

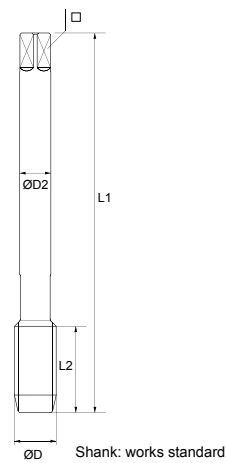
Trapezoidal thread / DIN 103

Efficient internal thread cutting.

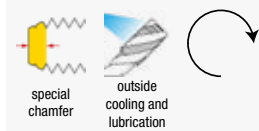
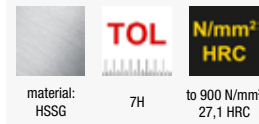
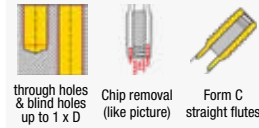
The short structural type makes that tap usable by hand. The Short-Machine-Tap is also usable by machine.

A Hand-Tap-Set includes 3 taps:

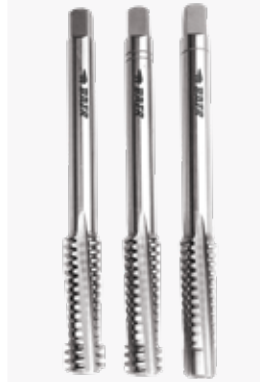
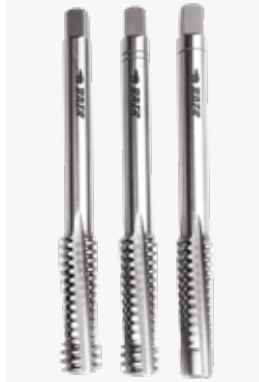
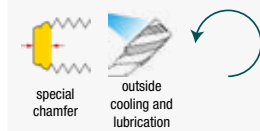
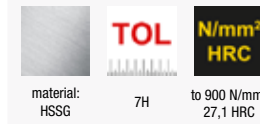
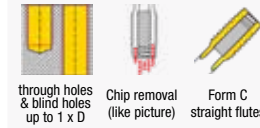
-  Taper Tap
-  Intermediate Tap
-  Finish Tap




Hand Tap Sets for general use



Hand Tap Sets for general use Left Hand



TR	D2	L1	L2	□	
TR 9 x 1,5	7,0	100,0	22	5,5	7,60
TR 10 x 1,5	7,0	100,0	22	5,5	8,60
TR 10 x 2	7,0	90,0	34	5,5	8,20
TR 10 x 3	7,0	100,0	40	5,5	7,60
TR 11 x 2	8,0	100,0	22	6,2	9,20
TR 12 x 2	9,0	110,0	25	7,0	10,20
TR 12 x 3	8,0	110,0	40	6,2	9,25
TR 14 x 2	11,0	110,0	26	9,0	12,20
TR 14 x 3	10,0	130,0	45	8,0	11,25
TR 14 x 4	10,0	130,0	55	8,0	10,70
TR 16 x 2	12,0	110,0	27	9,0	14,20
TR 16 x 4	11,0	140,0	55	9,0	12,25
TR 18 x 2	14,0	125,0	27	11,0	16,20
TR 18 x 4	12,0	150,0	55	9,0	14,25
TR 20 x 2	16,0	140,0	27	12,0	18,20
TR 20 x 4	14,0	160,0	55	11,0	16,25
TR 22 x 3	18,0	160,0	34	14,5	19,25
TR 22 x 5	16,0	175,0	65	12,0	17,30
TR 24 x 3	18,0	160,0	36	14,5	21,25
TR 24 x 5	18,0	190,0	65	14,5	19,30
TR 26 x 3	20,0	160,0	36	16,0	23,25
TR 26 x 5	20,0	210,0	70	16,0	21,30
TR 28 x 3	22,0	180,0	40	18,0	25,25
TR 28 x 5	22,0	220,0	70	18,0	23,30
TR 30 x 3	22,0	180,0	40	18,0	27,25
TR 30 x 6	22,0	240,0	80	18,0	24,30
TR 32 x 6	25,0	255,0	80	20,0	26,30

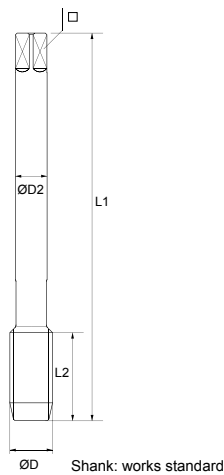
TR

Trapezoidal thread / DIN 103

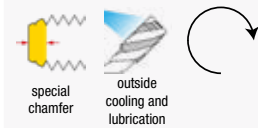
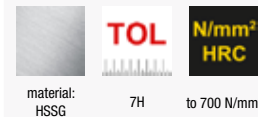
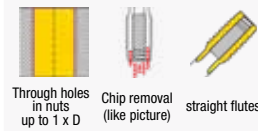
Machine Nut Tap with long shank for cutting Nuts.

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.

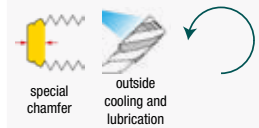
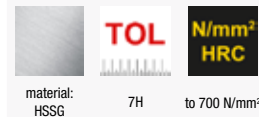
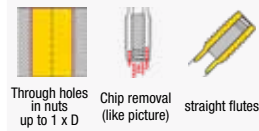


Machine Nut Taps for general use



Machine Nut Taps for general use

Left Hand



TR	D2	L1	L2	□	
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
TR 10 x 3	7,0	125,0	75	5,5	7,60
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
TR 14 x 2	10,0	150	90	8,0	12,20
TR 14 x 3	10,0	140	85	8,0	11,25
TR 14 x 4	10,0	170	112	8,0	10,70
TR 16 x 2	12,0	160	90	9,0	14,20
TR 16 x 4	11,0	180	116	9,0	12,25
TR 18 x 2	14,0	175	90	11,0	16,20
TR 18 x 4	12,0	190	120	9,0	14,25
TR 20 x 2	16,0	185	105	12,0	18,20
TR 20 x 4	14,0	200	124	11,0	16,25
TR 22 x 3	16,0	220	125	12,0	19,25
TR 22 x 4	16,0	210	130	12,0	18,25
TR 22 x 5	16,0	235	155	12,0	17,30
TR 24 x 3	18,0	220	130	14,5	21,25
TR 24 x 5	18,0	245	160	14,5	19,30
TR 26 x 3	20,0	235	130	16,0	23,25
TR 26 x 5	20,0	255	165	16,0	21,30
TR 28 x 3	22,0	245	140	18,0	25,25
TR 28 x 5	22,0	265	170	18,0	23,30
TR 30 x 3	22,0	250	140	18,0	27,25
TR 30 x 6	22,0	290	185	18,0	24,30
TR 32 x 6	25,0	300	191	20,0	26,30
TR 36 x 6	28,0	310	200	22,0	30,50

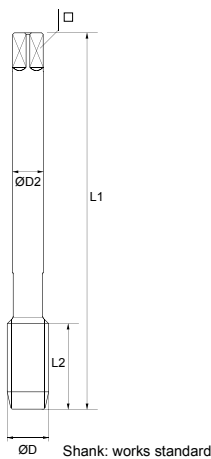
TR

Trapezoidal thread / DIN 103

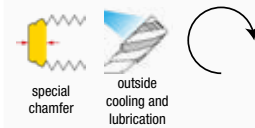
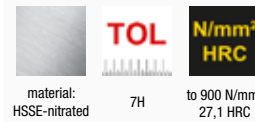
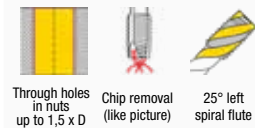
Machine Nut Tap with long shank for cutting Nuts.

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.

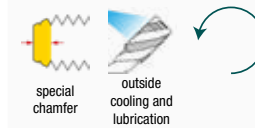
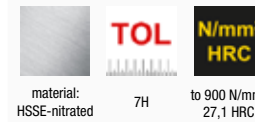
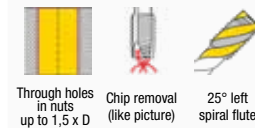



Machine Nut Taps for stainless steels



Machine Nut Taps for stainless steels

Left Hand

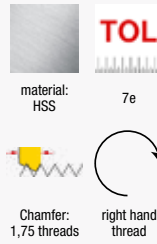


TR	D2	L1	L2	□	
TR 8 x 1,5	6,0	90,0	55	4,9	6,70
TR 9 x 2	7,0	110,0	63	5,5	7,20
TR 10 x 2	7,0	110,0	63	5,5	8,20
TR 10 x 3	7,0	125,0	75	5,5	7,60
TR 12 x 2	9,0	135,0	75	7,0	10,20
TR 12 x 3	8,0	165,0	111	6,2	9,25
TR 14 x 2	10,0	150,0	90	8,0	12,20
TR 14 x 3	10,0	140,0	85	8,0	11,25
TR 14 x 4	10,0	170,0	112	8,0	10,70
TR 16 x 2	12,0	160,0	90	9,0	14,20
TR 16 x 4	11,0	180,0	116	9,0	12,25
TR 18 x 2	14,0	175,0	90	11,0	16,20
TR 18 x 4	12,0	190,0	120	9,0	14,25
TR 20 x 2	16,0	185,0	105	12,0	18,20
TR 20 x 4	14,0	200,0	124	11,0	16,25
TR 22 x 3	16,0	220,0	125	12,0	19,25
TR 22 x 4	16,0	210,0	130	12,0	18,25
TR 22 x 5	16,0	235,0	155	12,0	17,30
TR 24 x 3	18,0	220,0	130	14,5	21,25
TR 24 x 5	18,0	245,0	160	14,5	19,30
TR 26 x 3	20,0	235,0	130	16,0	23,25
TR 26 x 5	20,0	255,0	165	16,0	21,30
TR 28 x 3	22,0	245,0	140	18,0	25,25
TR 28 x 5	22,0	265,0	170	18,0	23,30
TR 30 x 3	22,0	250,0	140	18,0	27,25
TR 30 x 6	22,0	290,0	185	18,0	24,30
TR 32 x 6	25,0	300,0	191	20,0	26,30

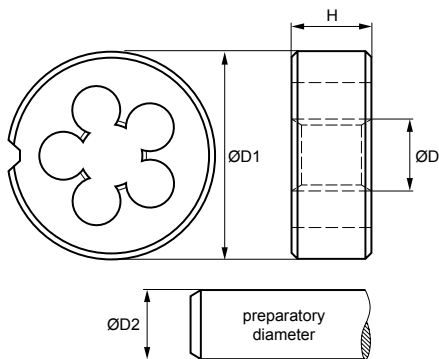
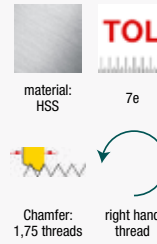
TR

Trapezoidal thread / DIN 103

Round Dies for general use



Round Dies for general use Left Hand



TR

	D1	H	D2
TR 10 x 2	38,0	14	9,91
TR 10 x 3	38,0	14	9,88
TR 12 x 2	38,0	14	11,91
TR 12 x 3	38,0	14	11,88
TR 14 x 2	38,0	14	13,91
TR 14 x 3	45,0	18	13,88
TR 14 x 4	45,0	18	13,85
TR 16 x 2	45,0	18	15,91
TR 16 x 4	45,0	18	15,85
TR 18 x 2	45,0	18	17,91
TR 18 x 4	45,0	18	17,85
TR 20 x 2	45,0	18	19,91
TR 20 x 4	55,0	22	19,85
TR 22 x 5	55,0	22	21,84
TR 24 x 5	65,0	25	23,84
TR 26 x 5	65,0	25	25,84
TR 28 x 5	65,0	25	27,84
TR 30 x 6	65,0	25	29,82



NPT

National standard taper 1:16 pipe thread ANSI B 1.20.1

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



NPT

	D1	D2	L1	L2	□	
NPT 1/16 x 27	7,90	19,0	65	19	5,5	6,00
NPT 1/8 x 27	10,24	19,0	65	19	5,5	8,25
NPT 1/4 x 18	13,62	25,0	70	25	9,0	10,70
NPT 3/8 x 18	17,06	26,0	75	26	9,0	14,10
NPT 1/2 x 14	21,22	31,0	80	31	12,0	17,40
NPT 3/4 x 14	26,57	33,0	100	33	16,0	22,60
NPT 1" x 11,5	33,23	38,0	110	38	20,0	28,50
NPT 1.1/4 x 11,5	41,99	41,0	125	41	24,0	37,00
NPT 1.1/2 x 11,5	48,05	42,0	140	42	29,0	43,50
NPT 2" x 11,5	60,09	44,0	160	44	29,0	55,00

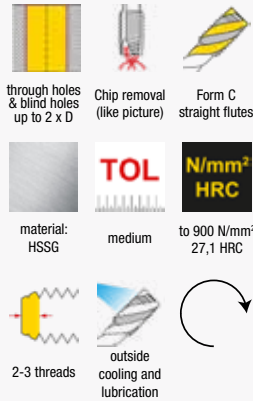
NPTF

	D1	D2	L1	L2	□	
NPTF 1/16 x 27	7,87	19,0	65	19	5,5	6,00
NPTF 1/8 x 27	10,22	19,0	65	19	5,5	8,25
NPTF 1/4 x 18	13,58	25,0	70	25	9,0	10,70
NPTF 3/8 x 18	17,02	26,0	75	26	9,0	14,10
NPTF 1/2 x 14	21,21	31,0	80	31	12,0	17,40
NPTF 3/4 x 14	26,57	33,0	100	33	16,0	22,60
NPTF 1" x 11,5	33,20	38,0	110	38	20,0	28,50
NPTF 1.1/4 x 11,5	41,95	41,0	125	41	24,0	37,00
NPTF 1.1/2 x 11,5	48,02	42,0	140	42	29,0	43,50
NPTF 2" x 11,5	60,06	44,0	160	44	29,0	55,00

NPTF

National standard taper 1:16 pipe thread ANSI B 1.20.3

Short Machine Taps Form D for through holes and blind holes



NPT

National standard taper 1:16 pipe thread ANSI B 1.20.1

Round Dies for general use

TOL

material: HSS medium

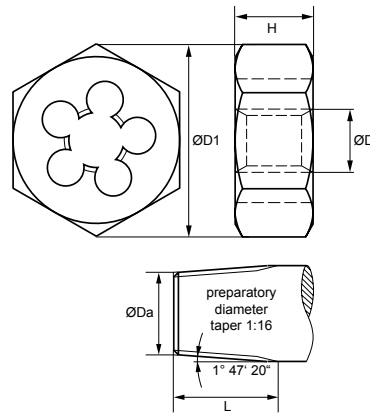
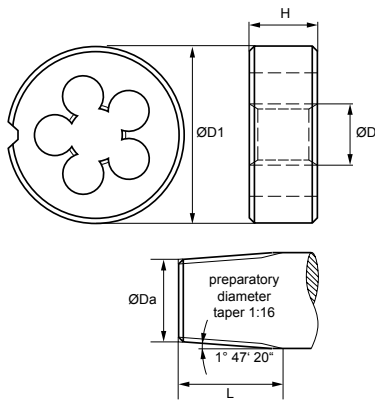
Chamfer: 1,5 threads
right hand thread

Hexagon Die Nuts for general use

TOL

material: HSS medium

Chamfer: 1,5 threads
right hand thread



NPT	D	D1	H	Da x L
NPT 1/16 x 27	7,90	25	9	7,58 x 8,4
NPT 1/8 x 27	10,24	30	11	9,93 x 8,5
NPT 1/4 x 18	13,62	38	14	13,18 x 12,7
NPT 3/8 x 18	17,06	45	14	16,60 x 12,9
NPT 1/2 x 14	21,22	45	18	20,63 x 16,8
NPT 5/8 x 14	23,90	55	22	
NPT 3/4 x 14	26,57	55	22	25,95 x 17,1
NPT 7/8 x 14	29,90	65	25	
NPT 1" x 11,5	33,23	65	25	32,51 x 21,3
NPT 1.1/4 x 11,5	41,99	75	26	41,23 x 21,9
NPT 1.1/2 x 11,5	48,05	90	27	47,30 x 22,3
NPT 2" x 11,5	60,09	105	28	59,31 x 23,1

NPT	D	D1	H	Da x L
NPT 1/16 x 27	7,90	22	9	7,58 x 8,4
NPT 1/8 x 27	10,24	27	11	9,93 x 8,5
NPT 1/4 x 18	13,62	36	14	13,18 x 12,7
NPT 3/8 x 18	17,06	41	14	16,60 x 12,9
NPT 1/2 x 14	21,22	41	14	20,63 x 16,8
NPT 3/4 x 14	26,57	50	22	25,95 x 17,1
NPT 1" x 11,5	33,23	60	25	32,51 x 21,3
NPT 1.1/4 x 11,5	41,99	70	25	41,23 x 21,9
NPT 1.1/2 x 11,5	48,05	85	28	47,30 x 22,3
NPT 2" x 11,5	60,09	100	28	59,31 x 23,1

NPS

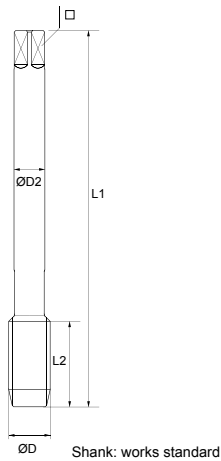
National standard straight pipe thread

Efficient internal thread cutting.

The short structural type makes that tap usable by machine and hand.

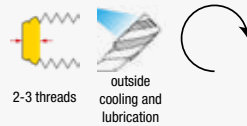
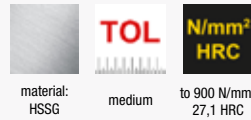
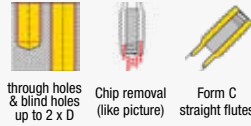
Application:

- ⚙️ non abrasive material up to 900 N/mm²
- ⚙️ unalloyed and low alloyed steel



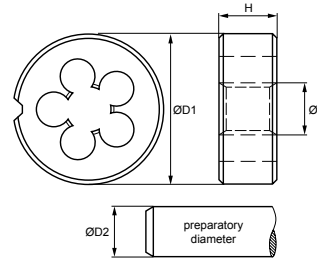
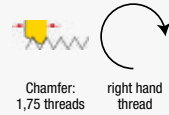
Short Machine Taps

Form C for through holes and blind holes



Round Dies

for general use



NPS

	D1	D2	L1	L2	□	⚙️
NPS 1/16 x 27	7,90	8,0	54	18	6,0	6,40
NPS 1/8 x 27	10,24	8,0	55	19	6,0	8,90
NPS 1/4 x 18	13,62	11,0	62	28	9,0	11,50
NPS 3/8 x 18	17,06	14,0	65	28	11,0	15,00
NPS 1/2 x 14	21,22	18,0	80	35	14,0	18,50
NPS 3/4 x 14	26,57	23,0	85	35	17,0	23,80
NPS 1" x 11,5	33,23	26,0	95	45	21,0	29,90
NPS 1,1/4 x 11,5	41,99	32,0	105	45	26,0	38,60
NPS 1,1/2 x 11,5	48,05	38,0	110	45	29,0	44,70
NPS 2" x 11,5	60,09	46,0	120	50	35,0	56,70

NPSM

	D	D1	H	D2
NPSM 1/8 x 27	10,24	30	11	9,99
NPSM 1/4 x 18	13,62	38	10	13,25
NPSM 3/8 x 18	17,06	45	14	16,70
NPSM 1/2 x 14	21,22	45	14	20,78
NPSM 3/4 x 14	26,57	55	16	26,14
NPSM 1" x 11,5	33,23	65	18	32,69
NPSM 1.1/4 x 11,5	41,99	75	20	41,45

RC (BSPT)

Whitworth tapered pipe thread / DIN 2999

RP (BSPP)

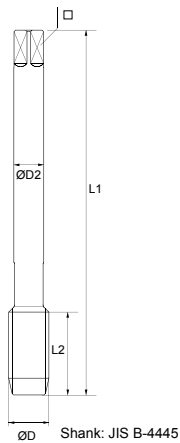
British standard whitworth pipe thread / ISO 7-1

Efficient internal thread cutting.

The short structural type makes that tap usable by machine and hand.

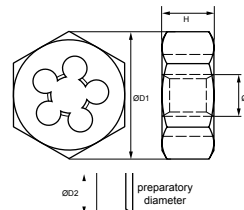
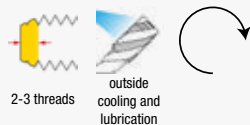
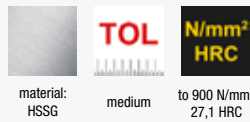
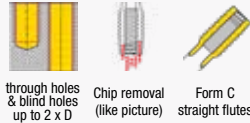
Application:

- ⚙ 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	□	⚙
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
RC 1/4 x 19	13,16	11,0	62	28	9,0	11,10
RC 3/8 x 19	16,66	14,0	65	28	11,0	14,50
RC 1/2 x 14	20,95	18,0	80	35	14,0	18,10
RC 3/4 x 14	26,44	23,0	85	35	17,0	23,50
RC 1" x 11	33,25	26,0	95	45	21,0	29,50
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

R (BSPT)	D	D1	H
R 1/8 x 28	9,73	27	11
R 1/4 x 19	13,16	36	14
R 3/8 x 19	16,66	41	15
R 1/2 x 14	20,95	50	19
R 3/4 x 14	26,44	60	20
R 1" x 11	33,25	60	25
R 1.1/4 x 11	41,91	85	26
R 1.1/2 x 11	47,80	85	26
R 2" x 11	59,61	100	31




RP (BSPP)	D1	D2	L1	L2	□	⚙
RP 1/16 x 28	7,72	8,0	55	18	6,0	6,55
RP 1/8 x 28	9,73	8,0	55	19	6,0	8,60
RP 1/4 x 19	13,16	11,0	62	28	9,0	11,50
RP 3/8 x 19	16,66	14,0	65	28	11,0	15,00
RP 1/2 x 14	20,95	18,0	80	35	14,0	18,50
RP 3/4 x 14	26,44	23,0	85	35	17,0	24,00
RP 1" x 11	33,25	26,0	95	45	21,0	30,25
RP 1.1/4 x 11	41,91	32,0	105	45	26,0	38,75
RP 1.1/2 x 11	47,80	38,0	110	45	29,0	44,75
RP 2" x 11	59,61	46,0	120	50	35,0	56,50

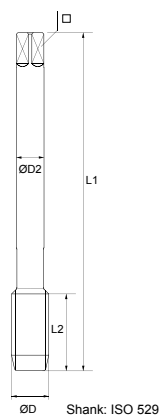
BA British Association thread / BS 93


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:

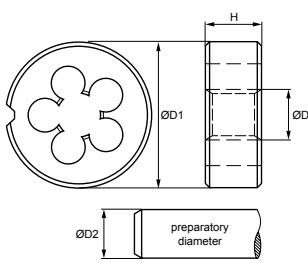
-  Taper Tap
-  Intermediate Tap
-  Finish Tap



BA	D1	D2	L1	L2	□	
BA 0	6,00	6,3	66	19,0	5,0	5,10
BA 1	5,30	5,6	62	17,0	4,5	4,50
BA 2	4,70	5,0	58	16,0	4,0	4,00
BA 3	4,10	4,5	53	13,0	3,6	3,40
BA 4	3,60	3,6	50	13,0	2,8	3,00
BA 5	3,20	3,2	48	11,0	2,5	2,65
BA 6	2,80	2,8	45	9,5	2,2	2,30

Hand Tap Sets for general use

Round Dies for general use



BA	D	D1	H	D2
BA 0	6,00	20,6	6,35	5,90
BA 1	5,30	20,6	6,35	5,21
BA 2	4,70	20,6	6,35	4,61
BA 3	4,10	20,6	6,35	4,02
BA 4	3,60	20,6	6,35	3,52
BA 5	3,20	20,6	6,35	3,14
BA 6	2,80	20,6	6,35	2,74
BA 7	2,50	20,6	6,35	2,44
BA 8	2,20	20,6	6,35	2,15
BA 10	1,70	20,6	6,35	1,66




W

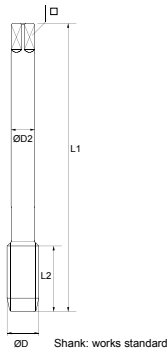
Tapered whitworth DIN 477 for screw sockets taper 3:25

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



W

	D1	D2	L1	L2		
W 19,8 x 14 conical	19,80	16,0	90	32	12,0	14,70
W 28,8 x 14 conical	28,80	22,0	100	40	18,0	22,70
W 31,3 x 14 conical	31,30	22,0	110	40	18,0	25,20
W 21,8 x 14 cyl. - right	21,80	18,0	80	22	14,5	19,75
W 21,8 x 14 cyl. - left	21,80	18,0	80	22	14,5	19,75
W 24,32 x 14 cylindrical	24,32	18,0	90	22	14,5	22,25

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 medium to 900 N/mm² 27,1 HRC



2-3 threads outside cooling and lubrication



Round Dies

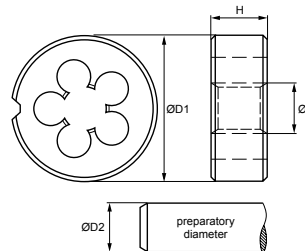
for general use



material: HSS medium



Chamfer: 1,75 threads right hand thread



W

	D	D1	H	D2
W 19,8 x 14 conical	19,80	45	25	17,34
W 28,8 x 14 conical	28,80	65	30	25,74
W 21,8 x 14 cyl. - right	21,80	55	16	21,58
W 21,8 x 14 cyl. - left	21,80	55	16	21,58
W 24,32 x 14 cylindrical	24,32	55	16	24,10



PG

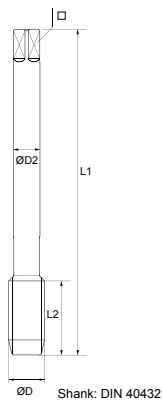
Steel Conduit Thread / DIN 40430

Efficient internal thread cutting.

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

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

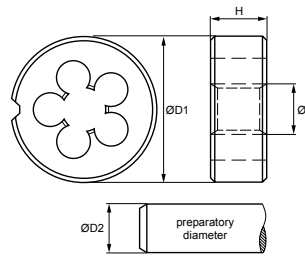


Round Dies
for general use


material: HSS medium

Chamfer: 1,75 threads

right hand thread



PG

PG	D1	D2	L1	L2	□	
PG 7 x 20	12,50	9,0	70	22	7,0	11,35
PG 9 x 18	15,20	12,0	70	22	9,0	13,95
PG 11 x 18	18,60	14,0	80	22	11,0	17,35
PG 13,5 x 18	20,40	16,0	80	22	12,0	19,15
PG 16 x 18	22,50	18,0	80	22	14,5	21,25
PG 21 x 16	28,30	22,0	90	22	18,0	26,90
PG 29 x 16	37,00	28,0	100	25	22,0	35,60
PG 36 x 16	47,00	36,0	140	40	29,0	45,60
PG 42 x 16	54,00	40,0	140	40	32,0	52,60
PG 48 x 16	59,30	45,0	160	40	35,0	57,90

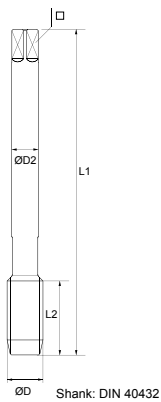
PG

PG	D	D1	H	D2
PG 7 x 20	12,50	38	10	12,50
PG 9 x 18	15,20	45	14	15,20
PG 11 x 18	18,60	45	14	18,60
PG 13,5 x 18	20,40	45	14	20,40
PG 16 x 18	22,50	55	16	22,50
PG 21 x 16	28,30	65	18	28,30
PG 29 x 16	37,00	65	18	37,00
PG 36 x 16	47,00	90	22	47,00
PG 42 x 16	54,00	105	22	54,00
PG 48 x 16	59,30	105	22	59,30

FG Bicycle thread / DIN 79012

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	□	□
FG 6,35 x 26	6,35	7,0	80	14	5,5	5,50
FG 7,9 x 26	7,90	8,0	90	16	6,2	7,00
FG 9,5 x 26	9,50	7,0	90	16	5,5	8,60
FG 14,3 x 20 right	14,30	11,0	100	22	9,0	13,10
FG 14,3 x 20 left	14,30	11,0	100	22	9,0	13,10
FG 25,4 x 24	25,40	14,0	110	22	11,0	24,50

BSC

BSC 1/4 x 26	6,35	6,0	56	14	4,9	5,55
BSC 5/16 x 26	7,94	6,0	63	16	4,9	7,10
BSC 3/8 x 26	9,53	7,0	63	16	5,5	8,65
BSC 9/16 x 20 right	14,29	11,0	70	22	9,0	13,15
BSC 9/16 x 20 left	14,29	11,0	70	22	9,0	13,15
BSC 1" x 24	25,40	14,0	70	22	11,0	24,50

BSC British bicycle thread / RS 811

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: HSSE medium to 900 N/mm² 27,1 HRC



2-3 threads outside cooling and lubrication



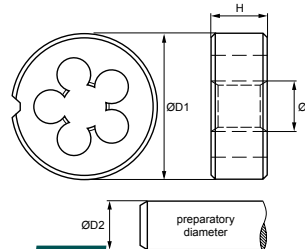
Round Dies
for general use



material: HSS medium



Chamfer: 1,75 threads right hand thread



FG	D	D1	H	D2
FG 6,35 x 26	6,35	20	7	6,24
FG 7,9 x 26	7,90	25	9	7,82
FG 9,5 x 26	9,50	30	11	9,40
FG 14,3 x 20 right	14,30	38	10	14,40
FG 14,3 x 20 left	14,30	38	10	14,40
FG 25,4 x 24	25,40	55	16	25,25

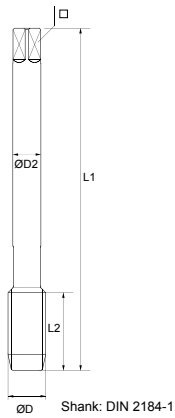
BSC

BSC 1/4 x 26	6,35	20,6	6,35	6,24
BSC 5/16 x 26	7,94	25,4	9,5	7,82
BSC 3/8 x 26	9,53	25,4	9,5	9,40
BSC 7/16 x 26	11,11	25,4	9,5	10,98
BSC 9/16 x 20 right	14,29	38,1	12,7	14,14
BSC 9/16 x 20 left	14,29	38,1	12,7	14,14
BSC 1" x 24	25,40	55	16	25,25

RD knuckle thread / DIN 405

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.



RD	D1	D2	L1	L2	□	
Rd 8 x 1/10	8,25	6,0	90	26	4,9	5,71
Rd 9 x 1/10	9,25	7,0	90	26	5,5	6,71
Rd 10 x 1/10	10,25	7,0	100	28	5,5	7,71
Rd 11 x 1/10	11,25	8,0	100	28	6,2	8,71
Rd 12 x 1/10	12,25	9,0	110	28	7,0	9,71
Rd 14 x 1/8	14,32	11,0	110	32	9,0	11,14
Rd 16 x 1/8	16,32	12,0	110	32	9,0	13,14
Rd 18 x 1/8	18,32	14,0	125	32	11,0	15,14
Rd 20 x 1/8	20,32	16,0	140	32	12,0	17,14
Rd 22 x 1/8	22,32	18,0	140	32	14,5	19,14
Rd 24 x 1/8	24,32	18,0	160	34	14,5	21,14
Rd 26 x 1/8	26,32	20,0	160	36	16,0	23,14
Rd 28 x 1/8	28,32	20,0	160	36	16,0	25,14
Rd 30 x 1/8	30,32	22,0	180	36	18,0	27,14
Rd 32 x 1/8	32,82	25,0	180	36	20,0	29,14
Rd 34 x 1/8	34,32	28,0	200	36	22,0	31,14
Rd 36 x 1/8	36,32	28,0	200	36	22,0	33,14
Rd 38 x 1/8	38,32	28,0	200	38	22,0	35,14
Rd 40 x 1/6	40,42	32,0	200	50	24,0	36,19

RMS	D1	D2	L1	L2	□	
W 0,8 x 36	20,35	16,0	80	18	12,0	19,45

RMS Royal Microscopical Society / DIN 58888

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: HSSE medium to 800 N/mm²

2-3 threads

outside cooling and lubrication

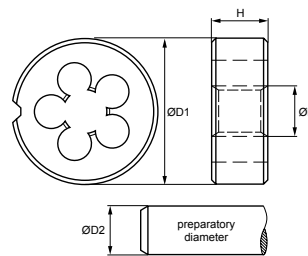
Round Dies

for general use

material: HSS medium

Chamfer: 1,75 threads

right hand thread



RD	D	D1	H	D2
Rd 10 x 1/10	10,25	38	14	9,84
Rd 11 x 1/10	11,25	38	14	10,84
Rd 12 x 1/10	12,25	38	14	11,84
Rd 14 x 1/8	14,32	45	18	13,82
Rd 16 x 1/8	16,32	45	18	15,82
Rd 18 x 1/8	18,32	45	18	17,82
Rd 20 x 1/8	20,32	55	22	19,82
Rd 22 x 1/8	22,32	55	22	21,82
Rd 24 x 1/8	24,32	55	22	23,82
Rd 26 x 1/8	26,32	65	25	25,82
Rd 28 x 1/8	28,32	65	25	27,82
Rd 30 x 1/8	30,32	65	25	29,82
Rd 32 x 1/8	32,82	65	25	31,82

RMS	D	D1	H	D2
W 0,8 x 36	20,35	45	14	20,00

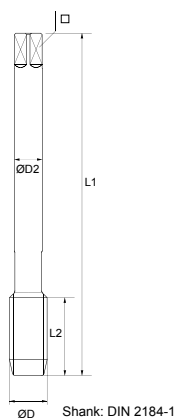
MINI

Metric Mini-thread and Nono-thread

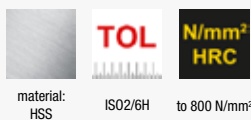
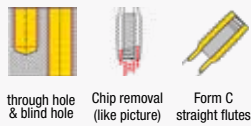
Efficient internal thread cutting in clock and watch industry as well as apparatus construction and fine mechanics.

For through and blind holes. Very break-proof.

Suitable for automatic lathe and tapping machine.



Machine Tap for general use



MINI

	D1	D2	L1	L2			packing unit [PU]
M 0,3 x 0,08	0,3	1,0	22	2	0,2	0,24	10 pieces
M 0,35 x 0,09	0,4	1,0	22	2	0,3	0,28	10 pieces
M 0,4 x 0,1	0,4	1,0	22	2,5	0,3	0,32	10 pieces
M 0,5 x 0,125	0,5	1,0	22	3	0,4	0,40	10 pieces
M 0,6 x 0,15	0,6	1,0	22	3,5	0,5	0,49	10 pieces
M 0,7 x 0,175	0,7	1,5	25	4,5	0,6	0,57	10 pieces
M 0,8 x 0,2	0,8	1,5	25	5	0,7	0,65	10 pieces
M 0,9 x 0,225	0,9	1,5	25	5,5	0,8	0,73	10 pieces
M 1 x 0,15	1,0	1,5	25	6	0,9	0,89	10 pieces
M 1 x 0,2	1,0	1,5	25	6	0,9	0,85	10 pieces
M 1 x 0,25	1,0	1,5	25	6	0,8	0,81	10 pieces
M 1,1 x 0,25	1,1	1,5	25	7	0,9	0,91	10 pieces
M 1,2 x 0,15	1,2	1,5	25	7	1,1	1,09	10 pieces
M 1,2 x 0,2	1,2	1,5	25	7	1,1	1,05	10 pieces
M 1,2 x 0,25	1,2	1,5	25	7	1,0	1,01	10 pieces
M 1,3 x 0,3	1,3	1,5	25	8	1,1	1,07	10 pieces
M 1,4 x 0,2	1,4	2,0	30	9	1,3	1,25	10 pieces
M 1,4 x 0,25	1,4	2,0	30	9	1,2	1,21	10 pieces
M 1,4 x 0,3	1,4	2,0	30	8,5	1,2	1,17	10 pieces
M 1,5 x 0,3	1,5	2,0	30	10	1,3	1,27	10 pieces
M 1,6 x 0,2	1,6	2,0	30	10	1,5	1,45	10 pieces
M 1,6 x 0,25	1,6	2,0	30	10	1,4	1,41	10 pieces
M 1,6 x 0,35	1,6	2,0	30	10	1,3	1,30	10 pieces
M 1,7 x 0,35	1,7	2,0	30	10	1,4	1,40	10 pieces
M 1,8 x 0,2	1,8	2,0	30	10	1,7	1,65	10 pieces
M 1,8 x 0,25	1,8	2,0	30	10	1,6	1,61	10 pieces
M 1,8 x 0,35	1,8	2,0	30	10	1,5	1,50	10 pieces
M 2 x 0,2	2,0	3,0	35	13	1,9	1,85	10 pieces
M 2 x 0,25	2,0	3,0	35	13	1,8	1,81	10 pieces
M 2 x 0,4	2,0	3,0	35	13	1,7	1,65	10 pieces
M 2,2 x 0,45	2,2	3,0	35	13	1,8	1,80	10 pieces
M 2,3 x 0,4	2,3	3,0	35	13	2,0	1,95	10 pieces
M 2,4 x 0,45	2,4	3,0	40	15	2,0	2,00	10 pieces
M 2,5 x 0,45	2,5	3,0	40	15	2,1	2,10	10 pieces
M 2,6 x 0,45	2,6	3,0	40	15	2,2	2,20	10 pieces

Camera-Tripod

Camera tripod & C-Mount thread / DIN 4503

Efficient internal thread cutting.

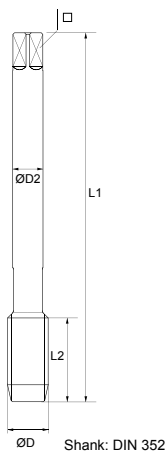
The short structural type makes that tap usable by hand.

The Short-Machine-Tap is also usable by machine.

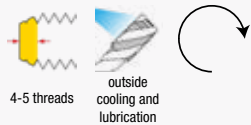
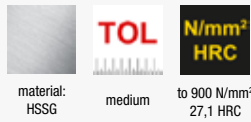
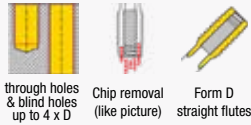
A Hand-Tap-Set includes 2 taps:

⚙️ Taper Tap

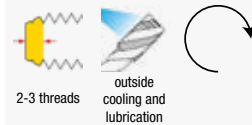
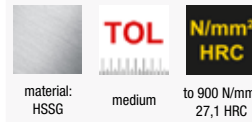
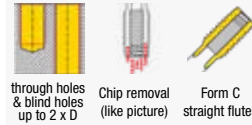
⚙️ Finish Tap



Short Machine Taps Form D for through holes and blind holes



Hand Tap Sets for general use



Camera

	D1	D2	L1	L2	□	
Cam.-Tripod 1/4"	6,35	6,0	50	19	4,9	5,20
Cam.-Tripod 3/8"	9,53	7,0	70	24	5,5	8,00
C-Mount 1" x 32	25,40	18,0	130	45	14,0	23,75
S-Mount 12 x 0,5	12,00	9,0	70	22	7,0	11,50

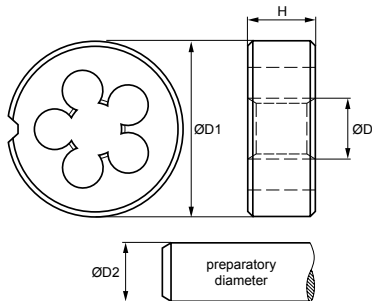
Round Dies
for general use



material: HSS medium



Chamfer: 1,75 threads right hand thread



Camera

	D	D1	H	D2
Camera-Tripod 1/4"	6,35	20	7	6,22
Camera-Tripod 3/8"	9,53	20	7	9,37
C-Mount 1" x 32	25,40	55	16	25,25
S-Mount 12 x 0,5	12,00	38	10	11,92

VG Valve thread / DIN 7756

Efficient internal thread cutting.

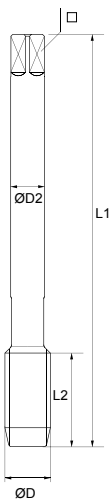
The short structural type makes that tap usable by hand.

The Short-Machine-Tap is also usable by machine.

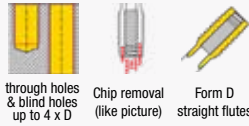
A Hand-Tap-Set includes 2 taps:

Taper Tap

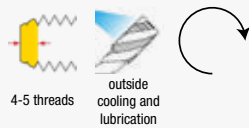
Finish Tap



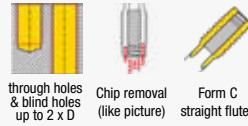
Short Machine Taps
Form D for through holes and blind holes



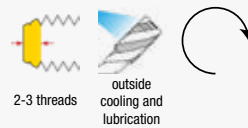
material: HSSG **TOL** **N/mm² HRC** medium to 900 N/mm² 27,1 HRC



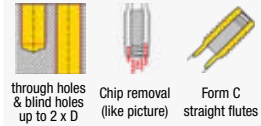
Hand Tap Sets
for general use



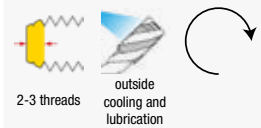
material: HSSG **TOL** **N/mm² HRC** medium to 900 N/mm² 27,1 HRC



Short Machine Taps
Form C for through holes and blind holes



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



VG

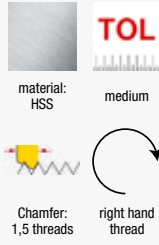
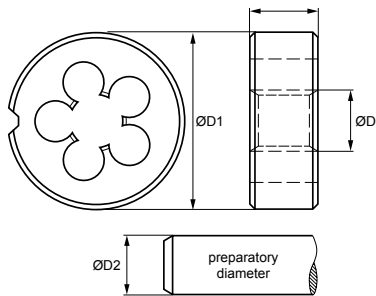
	D1	D2	L1	L2		
DIN 2181						
VG 5 x 36	5,15	6,0	50	12	4,9	4,65
VG 5,2 x 24	5,23	6,0	56	17	4,9	4,25
VG 6 x 32	5,98	6,0	56	14	4,9	5,35
VG 8 x 32	7,68	7,0	56	16	5,5	6,90
VG 10 x 28	10,27	8,0	63	18	6,2	9,35
VG 12 x 26	12,17	9,0	70	22	7,0	11,15
DIN 374						
VG 5 x 36	5,15	6,0	70	12	4,9	4,65
VG 5,2 x 24	5,23	6,0	80	17	4,9	4,25
VG 6 x 32	5,98	7,0	80	14	5,5	5,35
VG 8 x 32	7,68	8,0	80	16	6,2	6,90
VG 10 x 28	10,27	8,0	90	18	6,2	9,35
VG 12 x 26	12,17	9,0	100	22	7,0	11,15

Round Dies
for general use

TOL

material: HSS medium

Chamfer: 1,5 threads right hand thread

VG	D	D1	H	D2
VG 5 x 36	5,15	20	7	5,15
VG 5,2 x 24	5,23	20	7	5,23
VG 6 x 32	5,98	20	7	5,98
VG 8 x 32	7,68	25	9	9,60
VG 10 x 28	10,27	30	11	10,27
VG 12 x 26	12,17	30	11	12,17

BAER Tap holders with ratchet



for taps

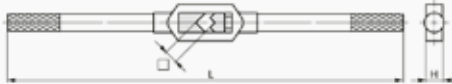
size	metric	inch-sizes	<input type="checkbox"/>	L1
1	M 3 - M 10	1/8 - 3/8	2,4 - 5,5	85
2	M 5 - M 12	7/32 - 1/2	4,5 - 8,0	100
10	M 3 - M 10	1/8 - 3/8	2,4 - 5,5	250
20	M 5 - M 12	7/32 - 1/2	4,5 - 8,0	300



Adjustable Pro Tap Wrenches - Premium zinc die cast

for taps

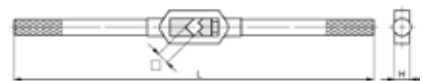
size	metric	inch-sizes	pipe-threads	<input type="checkbox"/>	L1
0	M 1 - M 8	1/16 - 1/4		2,0 - 5,0	130
1	M 1 - M 10	1/16 - 3/8	G 1/8	2,0 - 6,3	176
1.1/2	M 1 - M 12	1/16 - 1/2	G 1/8	2,1 - 8,0	176
2	M 4 - M 12	5/32 - 1/2	G 1/8	3,0 - 9,0	280
3	M 5 - M 20	7/32 - 3/4	G 1/8 - G 1/2	4,9 - 12	380
4	M 11 - M 27	7/16 - 1"	G 1/4 - G 3/4	5,5 - 16	505
5	M 13 - M 32	1/2 - 1.1/4	G 1/4 - G 1"	7,0 - 20	700
6	M 18 - M 42	3/4 - 1.1/2	G 1/2 - 1.1/4"	11,0 - 24	1000



Adjustable Tap Wrenches - steel

for taps

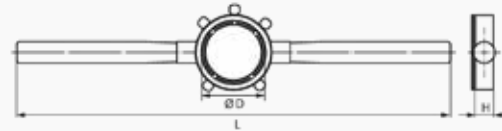
	metric	inch-sizes	pipe-threads	<input type="checkbox"/>	L1
0	M 1 - M 8	1/16 - 1/4		2,0 - 5,0	130
1	M 1 - M 10	1/16 - 3/8		2,0 - 6,3	180
1.1/2	M 1 - M 12	1/16 - 1/2	G 1/8	2,1 - 8,0	205
2	M 4 - M 12	5/32 - 1/2	G 1/8	3,0 - 9,0	280
3	M 5 - M 20	7/32 - 3/4	G 1/8 - G 1/2	4,9 - 12	380
4	M 11 - M 27	7/16 - 1"	G 1/4 - G 3/4	5,5 - 16	500
5	M 13 - M 32	1/2 - 1.1/4	G 1/4 - G 1"	7,0 - 20	700
6	M 18 - M 42	3/4 - 1.1/2	G 1/2 - G 1.1/4	11 - 24	1000
7	M 27 - M 52	1.1/8 - 2"	G 3/4 - G 1.3/4	16 - 32	1250
8	M 27 - M 64	1.1/8 - 3"	G 3/4 - G 3"	16 - 40	1250



**Die Stocks Pro -
Premium zinc die cast**

For Round Dies

∅ D x H	metric	inch-sizes	L1
16 x 5	M 1 - M 2,6	BSW 1/16 - BSW 3/32	160
20 x 5	M 3 - M 4	BSW 1/8 - BSW 5/32	200
20 x 7	M 4.5 - M 6	BSW 3/16 - BSW 1/4	200
25 x 9	M 7 - M 9	BSW 5/16	224
30 x 11	M 10 - M 11	BSW 3/8 - BSW 7/16	280
38 x 10	MF 12 - MF 15	G 1/4	315
38 x 14	M 12 - M 14	BSW 1/2 - BSW 9/16	315
45 x 14	MF 16 - MF 20	G 3/8-1/2	450
45 x 18	M 16 - M 20	BSW 5/8 - BSW 13/16	450
55 x 16	MF 22 - MF 26	G 5/8 - G 3/4	560
55 x 22	M 22 - M 24	BSW 7/8 - BSW 1"	560
65 x 18	MF 27 - MF 36	G 7/8 - G 1"	630
65 x 25	M 27 - M 36	BSW 1.1/8 - BSW 1.3/8	630

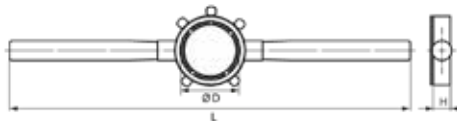


**Die Stocks -
zinc die cast**

For Round Dies



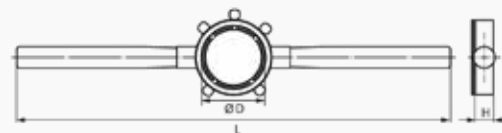
∅ D in inch	∅ D (mm) x H (mm)	∅ D (inch) x H (inch)	L1
13/16"	20,6 x 6,35	13/16 x 1/4	200
1"	25,4 x 9,5	1" x 3/8	224
1.5/16"	33,4 x 11,1	1.5/16 x 7/16	270
1.1/2"	38,1 x 12,7	1.1/2 x 1/2	315
2"	50,8 x 15,9	2" x 5/8	560
2.1/4"	57,1 x 17,5	2.1/4 x 11/16	560
2.1/2"	63,5 x 19,0	2.1/2 x 3/4	630
3"	76,2 x 22,2	3" x 7/8	900
3.1/2"	88,9 x 25,4	3.1/2" x 1"	900
4"	101,6 x 25,4	4" x 1"	1000



**Die Stocks -
steel**

For Round Dies

∅ D x H	metric	inch-sizes	L1
45 x 18	M 16 - M 20	BSW 5/8 - BSW 13/16	450
55 x 22	M 22 - M 24	BSW 7/8 - BSW 1"	560
65 x 25	M 27 - M 36	BSW 1.1/8 - BSW 1.3/8	630
75 x 20	MF 38 - MF 42	G 1.1/8 - G 1.1/4	800
75 x 30	M 38 - M 42	BSW 1.1/2 - BSW 1.5/8	800
90 x 22	MF 45 - MF 52	G 1.3/8 - G 1.5/8	900
90 x 36	M 45 - M 52	BSW 1.3/4 - BSW 2"	900
105 x 22	MF 54 - MF 63	G 1.3/4 - G 2"	975
105 x 36	M 54 - M 63	BSW 2.1/4	975
120 x 22	MF 64 - MF 71	G 2.1/4 - G 2.3/4	956
120 x 36	M 64 - M 71	BSW 2.1/2 - BSW 2.3/4	956
130 x 25		G 3"	966
130 x 36			966
140 x 22			976
150 x 25		G 3.1/2"	986
160 x 25		G 4"	996



Extension sleeves for taps

	for taps	
□	L1	metric acc. to DIN 352
2,1	60	M 1 - M 2,6
2,4	70	
2,7	80	M 3
3,0	90	M 3,5
3,4	95	M 4
3,8	100	
4,3	105	
4,9	110	M 4,5 - M 8
5,5	115	M 9 - M 10
6,2	120	M 11
7,0	125	M 12
8,0	125	
9,0	130	M 14 - M 16
10,0	140	
11,0	150	M 18
12,0	155	M 20
13,0	165	
14,5	175	M 22 - M 24
16,0	180	M 27
18,0	200	M 30
20,0	220	M 33
22,0	220	M 36
24,0	235	M 39 - M 42
26,0	250	
29,0	265	M 45 - M 48
32,0	285	M 52



Pro 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:

- ✓ made of free-cutting steel with an oxidized surface
- ✓ 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





100 ml

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

Application:

- ⚙ 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.

BAER Countersink

**HSSG 90°
Countersink**
for general use



**HSSE-VAP 90°
Countersink**
for stainless
steels



**HSSG-Bit 90°
Countersink**
for electric screw
drivers



dimension

6,3 mm (M 3)

8,3 mm (M 4)

10,4 mm (M 5)

12,4 mm (M 6)

16,5 mm (M 8)

20,5 mm (M 10)

25,0 mm (M 12)

31,0 mm (M 16)

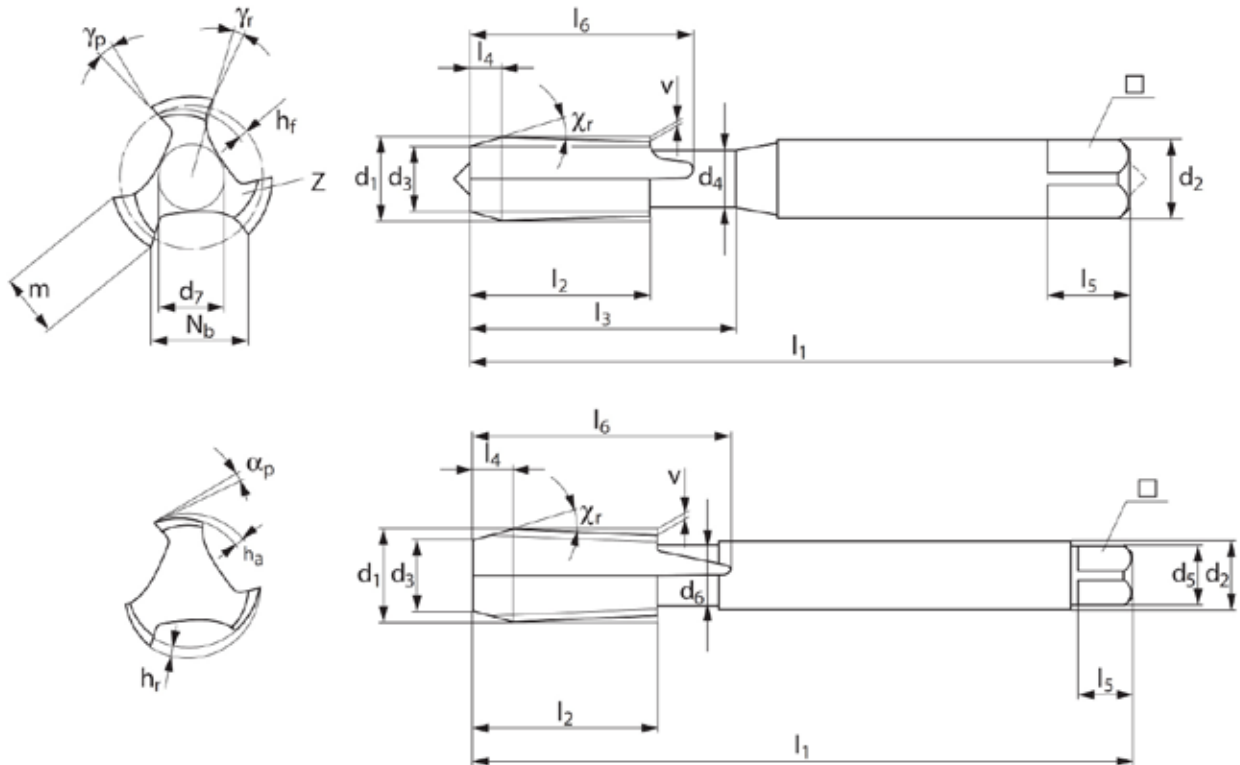
Set 6,3 | 8,3 | 10,4 | 12,4 | 16,5 | 20,5 mm*

Set 6,3 | 10,4 | 16,5 | 20,5 | 25,0 mm*



* picture of sets

Tap Geometries

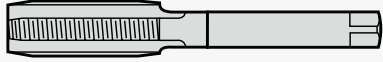
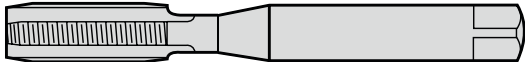
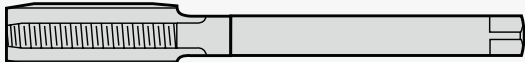




d1	Thread diameter	Z	Number of flutes
d2	Shank diameter	v	Back taper (axial relief)
d3	Chamfer diameter	xr	Chamfer angle
d4	Neck diameter	Nb	Width of flute
d5	Recessed square diameter	m	Width of land
d6	Neck diameter	ha	Chamfer relief
d7	Web diameter	hf	Relief on flanks
l1	Total length	hr	Chamfer relief
l2	Thread length	alpha_p	Relief angle
l3	Useful length	gamma_p	Rake angle
l4	Chamfer lead length		
l5	Square length		
l6	Flute length		
<input type="checkbox"/>	Square dimension		

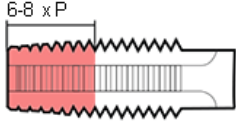
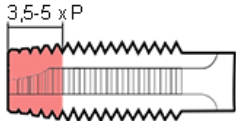
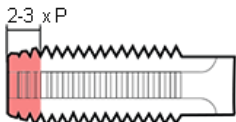
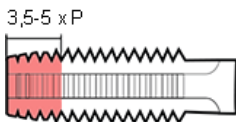
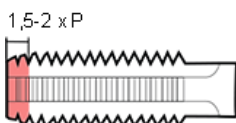
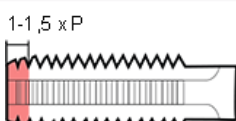
Tap Centering



Tap Construction dimensions

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

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)

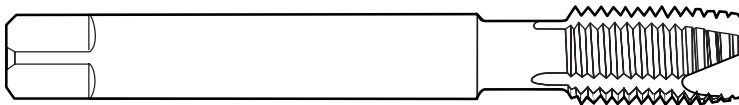
Long chamfers increase the required torque.

Tap flutes



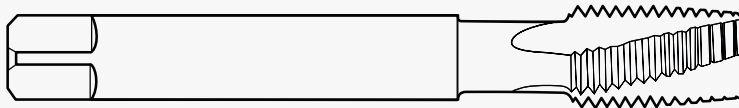
Form A, C, E
 straight-fluted
 for through and blind holes

The flutes can hold a part of the chips. Chips get only partially 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.



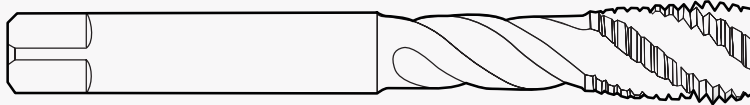
Form C, D
 8 - 15° left-hand spiral flutes
 for through holes

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.

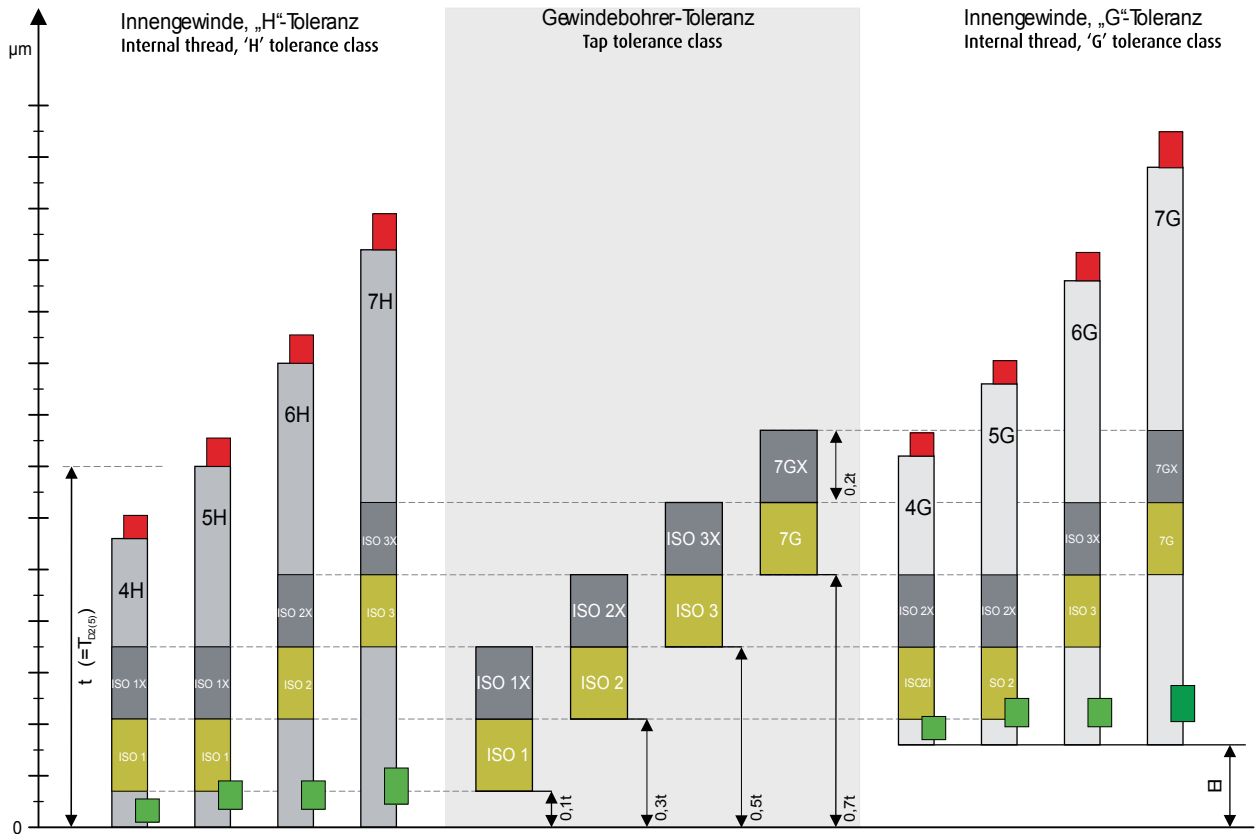


Form C, E
 35 - 50° right-hand spiral flutes
 for blind holes

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



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 Gutlehdorns nach DIN ISO 1502
Pitch diameter tolerance of the go thread plug gauge acc. DIN ISO 1502

EI = 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

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.

Tapping undersized threads	<ul style="list-style-type: none"> Pitch error Too small tolerance Geometry of the tap is not suitable for the material
Tapping oversized threads	<ul style="list-style-type: none"> Cutting speed is too high Bad running accuracy Chip jammings in flutes Incorrect positioning of workpiece or tap Inconsistent feed of tap Too high tolerance
Poor thread surface	<ul style="list-style-type: none"> Cutting speed not suitable Cooling is not suitable or not existing Geometry of the tap is not suitable for the material Core hole too small
Thread break of the thread to be cut	<ul style="list-style-type: none"> Geometry of the tap is not suitable for the material Core hole too small Core hole not deep enough Chip jammings in flutes Bad running accuracy Incorrect positioning of workpiece or tap Inconsistent feed of tap
Low tap lifetime	<ul style="list-style-type: none"> Cutting speed not suitable Cooling is not suitable or not existing Geometry of the tap is not suitable for the material Surface treatment/ coating for tap needed Core hole too small Geometry of the tap is not suitable for the material Core hole too small Core hole not deep enough Chip jammings in flutes
Tool outbreaks	<ul style="list-style-type: none"> Bad running accuracy Incorrect positioning of workpiece or tap Inconsistent feed of tap Worn tap
Cold welding on the tap	<ul style="list-style-type: none"> Cutting speed not suitable Increase coolant supply

Tap Cutting speeds

The cutting speeds for taps depend on following parameters:

- ✔ material of the workpiece
- ✔ tap geometries
- ✔ lubrication
- ✔ and more.

You can find the cutting speed in the product descriptions 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 description.

Lubrication and cooling

It is recommended to use one of the following coolings or lubrications to improve the thread results and tool 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

Formula

Description	Symbol	Unit	Formula	Example
Rotation speed	n	min ⁻¹		
Angular speed	ω	s ⁻¹	$\omega = \frac{2 \cdot \pi \cdot n}{60}$	n = 400 min ⁻¹ $\omega = \frac{2 \cdot \pi \cdot 400}{60}$ $\omega = 41,89 \text{ s}^{-1}$
Cutting speed	v _c	m/min	$v_c = \frac{d \cdot \omega}{33,5}$ $v_c = \frac{d \cdot \pi \cdot n}{1000}$	n = 400 min ⁻¹ , d = 20 mm $v_c = \frac{20 \cdot \pi \cdot 400}{1000}$ v _c = 25,133 m/min
Feed per revolution	f	mm		
Feed speed	v _f	mm/min	v _f = f · n	n = 400 min ⁻¹ f = 0,800 mm v _f = 0,800 · 400 v _f = 320 mm/min
Force	F	N	F = k _c · A	
Torque	M	Nm	$M = \frac{F \cdot d}{2000}$	F = 200 N, d = 20 mm $M = \frac{200 \cdot 20}{2000}$ M = 2 Nm
Mechanical work	W	J	W = F · U	F = 200 N, d = 20 mm $U = \frac{d \cdot \pi}{1000} = 0,063 \text{ m}$ W = 200 · 0,063 = 12,6 J
Performance	P	W	$P = \frac{F \cdot v_c}{60}$ P = M · ω	F = 200 N, v _c = 25,133 m/min P = 83,78 W M = 2 Nm, ω = 41,89 s ⁻¹ P = 83,78 W
Efficiency	η	-	$\eta = \frac{P_{ab}}{P_{an}}$ η < 1	P _{ab} = 58,65, P _{an} = 83,78 W $\eta = \frac{58,65}{83,78} = 0,7$

π = 3,141592654

d = Diameter in mm

U = circumference in m

1 kW = 1,36 PS

1 PS = 0,736 kW

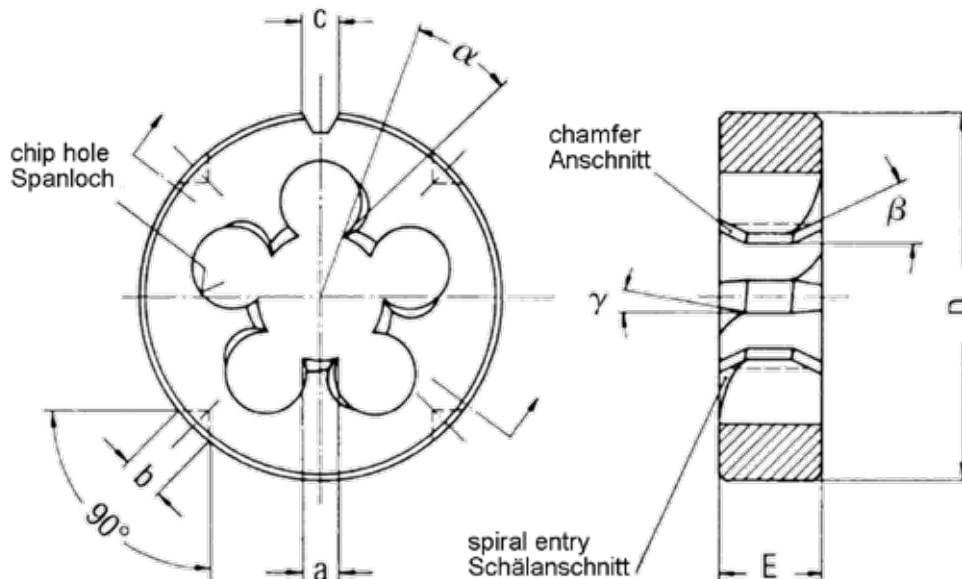
$1 \frac{\text{m}}{\text{s}} = 60 \frac{\text{m}}{\text{min}}$

1/s = 60/min = 1 Hz

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

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

Round Dies Geometries



D outside diameter
E thickness
a width of tooth
c width of notch

b diameter of hole for fixing screw
α rake angle
β chamfer angle
γ spiral angle

Preparation of workpiece:

- ☑ concentric 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“

Cutting speeds for Machine Forming Taps

materials	tensile strength	forming speed in m/min	recommended lubrication
construction steels, free-machining steels, cold-extrusion steels etc.	< 600 N/mm ²	20 - 80	Cutting oil/ Emulsion
construction steels, heat-treatable steels, cast steels etc.	< 800 N/mm ²	20 - 60	Cutting oil/ Emulsion
heat-treatable steels, cold-extrusion steels, nitriding steels etc.	< 1000 N/mm ²	10 - 40	Cutting oil
corrosion and acid proof steels ferritic, martensitic	< 950 N/mm ²	10 - 25 (with emulsion just limitedly applicable)	Cutting oil
corrosion and acid proof steels austenitic	< 950 N/mm ²	10 - 25 (with emulsion just limitedly applicable)	Cutting oil
aluminium wrought alloys	< 550 N/mm ²	15 - 40	Cutting oil/ Emulsion
aluminium cast alloys	Si < 12%	15 - 40	Cutting oil/ Emulsion
pure copper	< 400 N/mm ²	20 - 40	Cutting oil/ Emulsion
copper-zinc alloys (brass long-chipping)	< 550 N/mm ²	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.



INTENSE s.r.l.
Via Novara 1 - 20060 Cernusco Sul Naviglio (MI)
Tel. +39 02 921815.1 - Fax +39 02 92104594
www.intense.it - info@intense.it

