











TOOLS FOR THREADING



**Professional
Cutting Tools**

Threads and corresponding pre-tap drill bit sizes for thread cutting taps (not for roll forming taps)

M 			MF 			MF 			UNC 			PG 		
mm			mm			mm			mm			mm		
M 1,1	x 0,25	0,75	M 3	x 0,35	2,65	M 25	x 1	24	No. 1 - 64	1,5		PG 7	11,4	
M 1,1	x 0,25	0,85	M 3,5	x 0,35	3,15	M 25	x 1,5	23,5	No. 2 - 56	1,8		PG 9	14	
M 1,2	x 0,3	0,95	M 4	x 0,35	3,65	M 26	x 1	25	No. 3 - 48	2,1		PG 11	17,25	
M 1,4	x 0,35	1,1	M 4	x 0,5	3,5	M 26	x 1,5	24,5	No. 4 - 40	2,3		PG 13,5	19	
M 1,6	x 0,35	1,25	M 5	x 0,5	4,5	M 27	x 1	26	No. 5 - 40	2,6		PG 16	21,25	
M (1,7)	x 0,4	1,3	M 6	x 0,5	5,5	M 27	x 1,5	25,5	No. 6 - 32	2,85		PG 21	26,75	
M 1,8	x 0,45	1,45	M 6	x 0,75	5,2	M 27	x 2	25	No. 8 - 32	3,5		PG 29	35,5	
M 2	x 0,4	1,6	M 7	x 0,75	6,2	M 28	x 1,5	26,5	No. 10 - 24	3,9		PG 36	45,5	
M 2,2	x 0,45	1,75	M 8	x 0,5	7,5	M 28	x 2	26	No. 12 - 24	4,5		PG 42	52,5	
M (2,3)	x 0,4	1,9	M 8	x 0,75	7,2	M 30	x 1	29	1/4 - 20	5,2		PG 48	58	
M 2,5	x 0,45	2,05	M 8	x 1	7	M 30	x 1,5	28,5	5/16 - 18	6,6				
M (2,6)	x 0,45	2,1	M 9	x 1	8	M 30	x 2	28	3/8 - 16	8				
M 3	x 0,5	2,5	M 10	x 0,5	9,5	M 32	x 1,5	30,5	7/16 - 14	9,4				
M 3,5	x 0,6	2,9	M 10	x 0,75	9,2	M 33	x 1,5	31,5	1/2 - 13	10,8				
M 4	x 0,7	3,3	M 10	x 1	9	M 33	x 2	31	9/16 - 12	12,2				
M 4,5	x 0,75	3,7	M 10	x 1,25	8,8	M 34	x 1,5	32,5	5/8 - 11	13,5				
M 5	x 0,8	4,2	M 11	x 1	10	M 35	x 1,5	33,5	3/4 - 10	16,5				
M 6	x 1	5	M 12	x 0,75	10,2	M 36	x 1,5	34,5	7/8 - 9	19,5				
M 7	x 1	6	M 12	x 1	11	M 36	x 2	34	1 - 8	22,25				
M 8	x 1,25	6,8	M 12	x 1,25	10,8	M 36	x 3	33	1.1/8 - 7	25				
M 9	x 1,25	7,8	M 12	x 1,5	10,5	M 38	x 1,5	36,5	1.1/4 - 7	28,25				
M 10	x 1,5	8,5	M 13	x 1	12	M 39	x 1,5	37,5	1.3/8 - 6	30,75				
M 11	x 1,5	9,5	M 13	x 1,5	11,5	M 39	x 2	37	1.1/2 - 6	34				
M 12	x 1,75	10,2	M 13	x 1,75	11,2	M 39	x 3	36	1.3/4 - 5	39,5				
M 14	x 2	12	M 14	x 1	13	M 40	x 1,5	38,5	2 - 4½	45				
M 16	x 2	14	M 14	x 1,25	12,8	M 40	x 2	38	2.1/4 - 4½	51,5				
M 18	x 2,5	15,5	M 14	x 1,5	12,5	M 40	x 3	37	2.1/2 - 4	57,25				
M 20	x 2,5	17,5	M 15	x 1	14	M 42	x 1,5	40,5	2.3/4 - 4	63,5				
M 22	x 2,5	19,5	M 15	x 1,5	13,5	M 42	x 2	40	3/ - 4	70				
M 24	x 3	21	M 15	x 2	13	M 42	x 3	39	3.1/4 - 4	76,2				
M 27	x 3	24	M 16	x 1	15	M 45	x 1,5	43,5	3.1/2 - 4	82,6				
M 30	x 3,5	26,5	M 16	x 1,5	14,5	M 45	x 2	43						
M 33	x 3,5	29,5	M 18	x 1	17	M 45	x 3	42						
M 36	x 4	32	M 18	x 1,5	16,5	M 48	x 1,5	46,5						
M 39	x 4	35	M 18	x 2	16	M 48	x 2	46						
M 42	x 4,5	37,5	M 20	x 1	19	M 48	x 3	45						
M 45	x 4,5	40,5	M 20	x 1,5	18,5	M 50	x 1,5	48,5						
M 48	x 5	43	M 20	x 2	18	M 50	x 2	48						
M 52	x 5	47	M 22	x 1	21	M 50	x 3	47						
			M 22	x 1,5	20,5	M 52	x 1,5	50,5						
			M 22	x 2	20	M 52	x 2	50						
			M 24	x 1	23	M 52	x 3	49						
			M 24	x 1,5	22,5									
			M 24	x 2	22									
BSW 			BSF 			BSP (G) 			UNF 			NPT 		
mm			mm			mm			mm			mm		
W 3/32 - 48	1,8		BSF 1/4 - 26	5,2		G 1/8 - 28	8,8		No. 0 - 80	1,3		1/16 - 27	6,3	
W 1/8 - 40	2,6		BSF 5/16 - 22	6,6		G 1/4 - 19	1,8		No. 1 - 72	1,6		1/8 - 27	8,5	
W 5/32 - 32	3,1		BSF 3/8 - 20	8,1		G 3/8 - 19	15,25		No. 2 - 64	1,9		1/4 - 18	11,2	
W 3/16 - 24	3,6		BSF 7/16 - 18	9,5		G 1/2 - 14	19		No. 3 - 56	2,1		3/8 - 18	14,5	
W 7/32 - 24	4,4		BSF 1/2 - 16	11		G 5/8 - 14	21		No. 4 - 48	2,4		1/2 - 14	18	
W 1/4 - 20	5,1		BSF 5/8 - 14	14		G 3/4 - 14	24,5		No. 5 - 44	2,7		3/4 - 14	23	
W 5/16 - 18	6,5		BSF 3/4 - 12	16,5		G 7/8 - 14	28,25		No. 6 - 40	3		1 - 11.5	29	
W 3/8 - 16	7,9		BSF 7/8 - 11	19,5		G 1 - 11	30,75		No. 8 - 36	3,5		1.1/4 - 11½	38	
W 7/16 - 14	9,3		BSF 1 - 10	22,5		G 1.1/8 - 11	35,3		No. 10 - 32	4,1		1.1/2 - 11½	44	
W 1/2 - 12	10,5					G 1.1/4 - 11	39,3		No. 12 - 28	4,7		2 - 11½	56	
W 9/16 - 12	12					G 1.3/8 - 11	41,7		1/4 - 28	5,5		2.1/2 - 8	67	
W 5/8 - 11	13,5					G 1.1/2 - 11	45,2		5/16 - 24	6,9		3/ - 8	83	
W 3/4 - 10	16,5					G 1.3/4 - 11	51,1		3/8 - 24	8,5				
W 7/8 - 9	19,25					G 2 - 11	57		7/16 - 20	9,9				
W 1 - 8	22					G 2.1/4 - 11	63,1		1/2 - 20	11,5				
W 1.1/8 - 7	24,75					G 2.1/2 - 11	72,6		9/16 - 18	12,9				
W 1.1/4 - 7	27,75					G 2.3/4 - 11	78,9		5/8 - 18	14,5				
W 1.3/8 - 6	30,2					G 3/ - 11	85,3		3/4 - 16	17,5				
W 1.1/2 - 6	33,5								7/8 - 14	20,25				
W 1.3/4 - 5	38,5								1 - 12	23,25				
W 2 - 4½	44,5								1.1/8 - 12	26,5				
									1.1/4 - 12	29,5				
									1.3/8 - 12	32,5				
									1.1/2 - 12	36				

DIMENSIONS



Geometry of trapezoidal thread.



Dimensions of hand taps in sets of 3 taps.



Dimensions of machine nut taps for metric threads.



Dimensions of machine taps with reinforced shank for metric (fine) threads.



Dimensions of machine taps for metric fine threads.



Dimensions of machine taps for metric coarse threads.



Dimensions of hexagonal die nuts.



Dimensions of short machine and hand taps.



Dimensions of hand taps in sets of 2 taps.



Dimensions of machine taps for BSP (G) threads from G 1/16 - G 2.



Dimensions of hand taps for BSP (G) thread in sets of 2 taps.



Dimensions of hand and machine-operated round thread dies and hand-operated die stocks.



Dimensions of hand and machine-operated round thread dies for taper pipe threads (R-series).



Dimensions of hand and machine-operated round thread dies for parallel pipe threads (G-series).



Dimensions of machine taps for PG threads (steel conduit threads)



Dimensions of hand taps for PG thread (steel conduit thread) in sets of 2 taps.

MATERIALS



High speed steel.



High-speed steel alloy with an extra element to increase material properties.



High-speed steel alloy with cobalt for increased toughness and durability.

GEOMETRIES / THREADS



ISO Metric (coarse) 60°



ISO Metric Fine 60°



British Standard Whitworth, 55°



British Standard Fine, 55°



British Standard Pipe parallel, 55°



British Standard Pipe Tapered, 55°



Unified National Coarse thread, 60°



Unified National Fine thread, 60°



National Pipe Taper thread, 60° Taper 1:16



Panzerrohr-Gewinde thread, 80°



Trapezoid (Trapez) thread, 30°, according to DIN 103



G-Serie thread, 55° Identical to BSP (parallel) thread.



Taps for through holes. Downwards chip-evacuation.



Taps for blind holes. Upwards chip-evacuation.

SHANKS & DRIVES



Hexagon shank 1/4" (6.3mm).



Hexagon shank 1/4" (6.3mm) according to DIN 3126 shape C.



Hexagon shank 1/4" (6.3mm) according to DIN 3126 shape E.



Taps for left-hand threads.

COATINGS



Steam tempered or oxidized. This surface treatment avoids rusting of the tool and has porous properties allowing a very good adhesion of metal cutting lubricants.



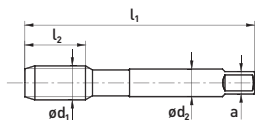
Coating based on Titanium-Nitride, reduced coefficient of friction due to smooth surface. Improves tool life and allows higher cutting speeds.



Coating based on Titanium-Carbon-Nitride. Very hard and yet tough coating. Low coefficient of friction protects against cold welding. Ideal for tapping and thread forming.

HSS Hand tap sets, metric [M]

Execution: HSS hand tap sets according to DIN 352, metric thread, sets of 3 taps.



ød ₁	P	l ₁	l ₂	ød ₂	a
M2	0,4	36	8	2,8	2,1
M3	0,5	40	11	3,5	2,7
M3,5	0,6	45	13	4,0	3,0
M4	0,7	45	13	4,5	3,4
M4,5	0,75	50	16	6,0	4,9
M5	0,8	50	16	6,0	4,9
M6	1,0	50	19	6,0	4,9
M7	1,0	50	19	6,0	4,9
M8	1,25	56	22	6,0	4,9
M9	1,25	63	22	7,0	5,5
M10	1,5	70	24	7,0	5,5
M11	1,5	70	24	8,0	6,2
M12	1,75	75	29	9,0	7,0
M14	2,0	80	30	11,0	9,0

ød ₁	P	l ₁	l ₂	ød ₂	a
M16	2,0	80	32	12,0	9,0
M18	2,5	95	40	14,0	11,0
M20	2,5	95	40	16,0	12,0
M22	2,5	100	40	18,0	14,5
M24	3,0	110	50	18,0	14,5
M27	3,0	110	50	20,0	16,0
M30	3,5	125	56	22,0	18,0
M33	3,5	125	56	25,0	20,0
M36	4,0	150	63	28,0	22,0
M39	4,0	150	63	32,0	24,0
M42	4,5	150	63	32,0	24,0
M45	4,5	160	70	36,0	29,0
M48	5,0	180	75	36,0	29,0
M52	5,0	180	75	40,0	32,0

HSS Hand tap sets, metric [M], in cassette

Execution: HSS hand tap sets acc. to DIN 352, metric [M], incl. matching pre-tap HSS drill bit.



Description	Content
29 piece hand tap and drill bit set	Hand tap sets: 1x M3, M4, M5, M6, M8, M10 and M12 HSS drill bit 1x ø2,5 / 3,3 / 4,2 / 5,0 / 6,8 / 8,5 / 10,2 mm 1x Tapping wrench Nr. 1.5 In metal cassette

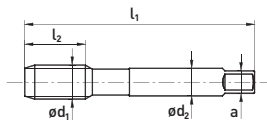
HSS Hand tap sets, metric [M], in metal case



Description	Content
33 piece hand tap and die set	<p>Hand tap sets: 1x M3, M4, M5, M6, M8, M10 and M12</p> <p>Thread dies: 1x M3, M4, M5, M6, M8, M10 and M12</p> <p>1x Ratcheting tap wrench, size Nr. 1 1x Die stock, size ø25x9 1x Tap wrench, size Nr. 1.5 1x Thread gauge (metric) 1x Screw driver for die stock</p> <p>In metal cassette</p>
45 piece hand tap, die and drill bit set	<p>Hand tap sets: 1x M3, M4, M5, M6, M8, M10 and M12</p> <p>Thread dies: 1x M3, M4, M5, M6, M8, M10 and M12</p> <p>HSS Jobber drill bits (pre-tap sizes) 1x ø2.5, ø3.3, ø4.2, ø5.0, ø6.8, ø8.5 and ø10.2mm</p> <p>1x Die stock, size ø20x5, ø20x7, ø25x9, ø30x11 and ø38x14 1x Tap wrench, size Nr. 1 and 2 1x Thread gauge (metric) 1x Ratcheting tap wrench, size Nr. 1</p> <p>In metal cassette.</p>
55 piece hand tap and die set	<p>Hand tap sets: 1x M3, M4, M5, M6, M8, M10, M12, M14, M16, M18, M20</p> <p>Thread dies: 1x M3, M4, M5, M6, M8, M10, M12, M14, M16, M18, M20</p> <p>1x Tap wrench, size Nr. 1 and 3 1x Ratcheting tap wrench, size Nr. 1 and 2 1x Die stock ø20x5, ø20x7, ø25x9, ø30x11, ø38x14, ø45x18 1x Thread gauge (metric)</p> <p>In metal cassette</p>
61 piece hand tap and die set	<p>Hand tap sets: 1x M3, M4, M5, M6, M8, M10, M12, M14, M16, M18, M20, M22, M24</p> <p>Thread dies: 1x M3, M4, M5, M6, M8, M10, M12, M14, M16, M18, M20, M22, M24</p> <p>1x Tap wrench, size Nr. 1 and 4 1x Ratcheting tap wrench, size Nr. 1 1x Die stock ø20x5, ø20x7, ø25x9, ø30x11, ø38x14, ø45x18, ø55x22 1x Thread gauge (metric)</p> <p>In metal cassette</p>

HSS Hand tap sets, metric fine [MF]

Execution: HSS hand tap sets according to DIN 2181, metric fine thread, sets of 2 taps.

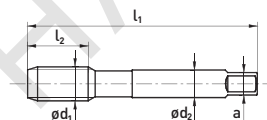


ød ₁	P	l ₁	l ₂	ød ₂	a
M3	0,35	40	9	3,5	2,7
M4	0,35	45	10	4,5	3,4
M4	0,5	45	10	4,5	3,4
M5	0,5	50	12	6,0	4,9
M6	0,5	50	14	6,0	4,9
M6	0,75	50	14	6,0	4,9
M8	0,5	50	19	6,0	4,9
M8	0,75	50	19	6,0	4,9
M8	1,0	56	22	6,0	4,9
M10	0,75	63	20	7,0	5,5
M10	1,0	63	20	7,0	5,5
M10	1,25	70	24	7,0	5,5
M12	0,75	70	22	9,0	7,0
M12	1,0	70	22	9,0	7,0
M12	1,25	70	22	9,0	7,0
M12	1,5	70	22	9,0	7,0
M14	1,0	70	22	11,0	9,0
M14	1,25	70	22	11,0	9,0

ød ₁	P	l ₁	l ₂	ød ₂	a
M14	1,5	70	22	11,0	9,0
M16	1,0	70	22	12,0	9,0
M16	1,5	70	22	12,0	9,0
M18	1,0	80	22	14,0	11,0
M18	1,5	80	22	14,0	11,0
M18	2,0	80	22	14,0	11,0
M20	1,0	80	22	16,0	12,0
M20	1,5	80	22	16,0	12,0
M20	2,0	80	22	16,0	12,0
M22	1,5	80	22	18,0	14,5
M22	2,0	80	22	18,0	14,5
M24	1,5	90	22	18,0	14,5
M24	2,0	90	22	18,0	14,5
M25	1,5	90	22	18,0	14,5
M27	1,5	90	22	20,0	16,0
M27	2,0	90	22	20,0	16,0
M30	1,5	90	22	22,0	18,0
M30	2,0	90	22	22,0	18,0

HSS Hand tap sets, Whitworth [BSW]

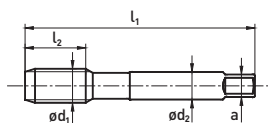
Execution: HSS hand tap sets according to DIN 352, BSW thread, sets of 3 taps.



ød ₁	P	l ₁	l ₂	ød ₂	a
3/32	48	36	10	2,8	2,1
1/8	40	40	12	3,5	2,7
5/32	32	45	14	4,5	3,4
3/16	24	50	18	6,0	4,9
7/32	24	50	18	6,0	4,9
1/4	20	50	19	6,0	4,9
5/16	18	56	22	6,0	4,9
3/8	16	70	24	7,0	5,5

ød ₁	P	l ₁	l ₂	ød ₂	a
7/16	14	70	24	8,0	6,2
1/2	12	75	29	9,0	7,0
9/16	12	80	30	11,0	9,0
5/8	11	80	32	12,0	9,0
3/4	10	95	40	14,0	11,0
7/8	9	100	40	18,0	14,5
1	8	110	50	18,0	14,5

HSS Hand tap sets, British Standard Fine [BSF]

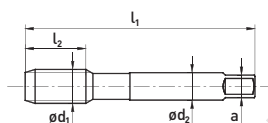


Execution: HSS hand tap sets according to DIN 2181, BSF thread, sets of 2 taps.

ød ₁	TPI	l ₁	l ₂	ød ₂	a
3/16	32	50	14	6,0	4,9
1/4	26	50	18	6,0	4,9
5/16	22	56	22	6,0	4,9
3/8	20	63	22	7,0	5,5
7/16	18	63	22	8,0	6,2
1/2	16	75	24	9,0	7,0

ød ₁	TPI	l ₁	l ₂	ød ₂	a
9/16	15	80	28	11,0	9,0
5/8	14	80	28	12,0	9,0
3/4	12	95	32	14,0	11,0
7/8	11	100	36	18,0	14,5
1	10	110	40	18,0	14,5

HSS Hand tap sets, Unified National Coarse [UNC]

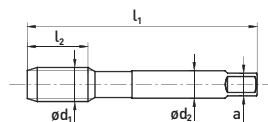


Execution: HSS hand tap sets according to DIN 352, UNC thread, sets of 3 taps.

ød ₁	TPI	l ₁	l ₂	ød ₂	a
1/4	20	50	19	6,0	4,9
5/16	18	56	22	6,0	4,9
3/8	16	70	24	7,0	5,5
7/16	14	70	24	8,0	6,2
1/2	13	75	29	9,0	7,0
9/16	12	80	30	11,0	9,0

ød ₁	TPI	l ₁	l ₂	ød ₂	a
5/8	11	80	32	12,0	9,0
3/4	10	195	40	14,0	11,0
7/8	9	100	40	18,0	14,5
1	8	110	50	18,0	14,5
1.1/4	7	132	56	22,0	18,0

HSS Hand tap sets, Unified National Fine [UNF]



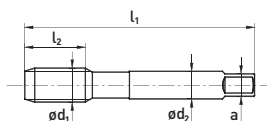
Execution: HSS hand tap sets according to DIN 2181, UNF thread, sets of 2 taps.

ød ₁	TPI	l ₁	l ₂	ød ₂	a
1/4	28	50	18	6,0	4,9
5/16	24	56	22	6,0	4,9
3/8	24	63	22	7,0	5,5
7/16	20	63	22	8,0	6,2
1/2	20	75	24	9,0	7,0

ød ₁	TPI	l ₁	l ₂	ød ₂	a
9/16	18	80	28	11,0	9,0
5/8	18	80	28	12,0	9,0
3/4	16	95	32	14,0	11,0
7/8	14	100	36	18,0	14,5
1	12	110	40	18,0	14,5

HSS Hand tap sets, British Standard Pipe [BSP] (Gas)

Execution: HSS hand tap sets according to DIN 5157, BSP thread, sets of 2 taps.

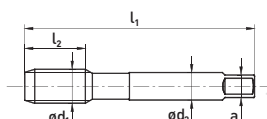


ød ₁	TPI	l ₁	l ₂	ød ₂	a
1/8	28	63	20	7,0	5,5
1/4	19	70	22	11,0	9,0
3/8	19	70	22	12,0	9,0
1/2	14	80	22	16,0	12,0
5/8	14	80	22	18,0	14,5
3/4	14	90	22	20,0	16,0
7/8	14	90	22	22,0	18,0

ød ₁	TPI	l ₁	l ₂	ød ₂	a
1	11	100	25	25,0	20,0
1.1/8	11	125	40	28,0	22,0
1.1/4	11	125	40	32,0	24,0
1.1/2	11	140	40	36,0	29,0
1.3/4	11	140	40	40,0	32,0
2	11	160	40	45,0	35,0

HSS Hand tap sets, National Pipe Taper [NPT]

Execution: HSS hand tap sets, NPT thread, sets of 2 taps.

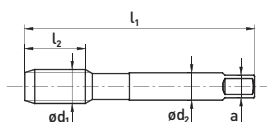


ød ₁	TPI	l ₁	l ₂	ød ₂	a
1/16	27	52	14	5,6	4,5
1/8	27	59	15	8	6,3
1/4	18	67	19	10	8
3/8	18	75	21	12,5	10

ød ₁	TPI	l ₁	l ₂	ød ₂	a
1/2	14	87	26	16	12,5
3/4	14	96	28	20	16
1	11,5	109	33	25	20

HSS Hand tap sets, Panzerrohrgewinde [PG]

Execution: HSS hand tap sets according to DIN 40432, PG-thread, sets of 2 taps.



ød ₁	TPI	l ₁	l ₂	ød ₂	a
PG 7	20	70	22	9,0	7,0
PG 9	18	70	22	12,0	9,0
PG 11	18	80	22	14,0	11,0
PG 13,5	18	80	22	16,0	12,0

ød ₁	TPI	l ₁	l ₂	ød ₂	a
PG 16	18	80	22	18,0	14,5
PG 21	16	90	22	22,0	18,0
PG 29	16	100	25	28,0	22,0
PG 36	16	140	40	36,0	29,0

HSS-G Tapping bits 1/4"-bit shank, metric [M]



Execution: HSS-G tapping bits for metric thread, 1/4" hexagonal shank according to DIN 3126-C6.3.

Application: Threading operations in plastics and (non-ferrous) metals. For use in (cordless) portable power tools.

ød ₁	P	l ₁	l ₂
M3	0,5	33	11
M4	0,7	35	12
M5	0,8	36	15
M6	1,0	39	18
M8	1,25	40	19
M10	1,5	41	21

HSS-G Tapping bits 1/4"-bit shank, metric [M], in cassette



Execution: HSS-G tapping bits for metric thread, 1/4" hexagonal shank according to DIN 3126-C6.3.

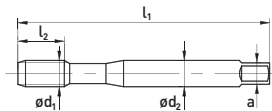
Description	Type	Content
6 piece tap bit set	"317"	1x M3, M4, M5, M6, M8 and M10



Execution: HSS-G pre-tap drill bits and tap bits with 1/4"-hexagonal shank. In plastic cassette.

Description	Content
12 piece drill & tap bit set	<p>HSS Tap bits: 1x M3, M4, M5, M6, M8 and M10</p> <p>HSS Drill bits (pre-tap sizes) 1x ø2.5, ø3.3, ø4.3, ø5.0, ø6.8 and ø8.5mm</p>

HSS-Co 800 Machine taps, metric, DIN 371, gun



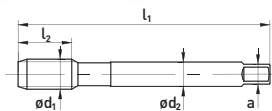
ød ₁	P	l ₁	l ₂	ød ₂	a
M 2	0,4	45	8	2,8	2,1
M2,5	0,45	50	9	2,8	2,1
M3	0,5	56	10	3,5	2,7
M3,5	0,6	56	12	4,0	4,0
M4	0,7	63	12	4,5	3,4

Execution: HSS-Co machine taps according to DIN 371, for metric thread in through holes, ISO 2 (6H), form B lead chamfer, bright finish.

Application: For tapping (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
M5	0,8	70	14	6,0	4,9
M6	1,0	80	18	6,0	4,9
M8	1,25	90	20	8,0	6,2
M10	1,5	100	20	10,0	8,0

HSS-Co 800 Machine taps, metric, DIN 376, gun



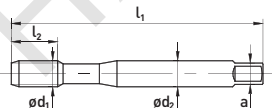
ød ₁	P	l ₁	l ₂	ød ₂	a
M4	0,7	63	13	2,8	2,1
M5	0,8	70	16	3,5	2,7
M6	1,0	80	19	4,5	3,4
M8	1,25	90	22	6	4,9
M10	1,5	100	24	7	5,5
M12	1,75	110	29	9,0	7,0
M14	2,0	110	30	11,0	9,0

Execution: HSS-Co machine taps according to DIN 376, for metric thread in through holes, ISO 2 (6H), form B lead chamfer, bright finish.

Application: For tapping (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
M16	2,0	110	32	12,0	9,0
M18	2,5	125	34	14,0	11,0
M20	2,5	140	34	16,0	12,0
M22	2,5	140	34	18,0	14,5
M24	3,0	160	38	18,0	14,5
M27	3,0	160	38	20,0	16,0
M30	3,5	180	45	22,0	18,0

HSS-Co 800 Machine taps, metric, DIN 371, spiral



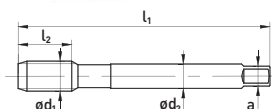
ød ₁	P	l ₁	l ₂	ød ₂	a
M 2	0,4	45	6	2,5	2,1
M3	0,5	56	5	3,5	2,7
M4	0,7	63	7	4,5	3,4
M5	0,8	70	8	6,0	4,9

Execution: HSS-Co machine taps according to DIN 371, for metric thread in blind holes, ISO 2 (6H), 40° spiral helix, form C lead chamfer, bright finish.

Application: For tapping (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
M6	1,0	80	10	6,0	4,9
M8	1,25	90	13	8,0	6,2
M10	1,5	100	15	10,0	8,0

HSS-Co 800 Machine taps, metric, DIN 376, spiral



ød ₁	P	l ₁	l ₂	ød ₂	a
M12	1,75	110	18	9,0	7,0
M14	2,0	110	20	11,0	9,0
M16	2,0	110	20	12,0	9,0
M18	2,5	125	25	14,0	11,0
M20	2,5	140	25	16,0	12,0

Execution: HSS-Co machine taps according to DIN 376, for metric thread in blind holes, ISO 2 (6H), 40° spiral helix, form C lead chamfer, bright finish.

Application: For tapping (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
M22	2,5	140	25	18,0	14,5
M24	3,0	160	30	18,0	14,5
M27	3,0	160	30	20,0	16,0
M30	3,5	180	45	22,0	18,0

HSS-Co 800 Machine taps, metric left, DIN 371, gun



ød ₁	P	l ₁	l ₂	ød ₂	a
M3	0,5	56	11	3,5	2,7
M4	0,7	63	13	4,5	3,4
M5	0,8	70	16	6,0	4,9

Execution: HSS-Co machine taps according to DIN 371, for left handed metric thread in through holes, ISO 2 (6H), form B lead chamfer, bright finish

Application: For tapping (alloyed) steels with tensile strength < 800 N/mm²

ød ₁	P	l ₁	l ₂	ød ₂	a
M6	1,0	80	19	6,0	4,9
M8	1,25	90	22	8,0	6,2
M10	1,5	100	24	10,0	8,0

HSS-Co 800 Machine taps, metric left, DIN 376, gun



ød ₁	P	l ₁	l ₂	ød ₂	a
M12	1,75	110	29	9,0	7,0
M14	2,0	110	30	11,0	9,0
M16	2,0	110	32	12,0	9,0

Execution: HSS-Co machine taps according to DIN 376, for left handed metric thread in through holes, ISO 2 (6H), form B lead chamfer, bright finish.

Application: For tapping (alloyed) steels with tensile strength < 800 N/mm²

ød ₁	P	l ₁	l ₂	ød ₂	a
M18	2,5	125	34	14,0	11,0
M20	2,5	140	34	16,0	12,0

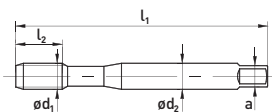
HSS-Co 800 Machine taps, metric, gun, in metal cassette



Execution: HSS-Co Machine taps DIN 371/376, metric
HSS-Co drill bits DIN 338

Description	Content
7+7 piece machine tap and drill bit set, for through holes	DIN 371 : 1x M3, M4, M5, M6, M8 and M10 DIN 376 : 1x M12 DIN 338 : 1x ø2.5, 3.3, 4.2, 5, 6.8, 8.5 and 10.2mm

HSS-Co 1000 Machine taps, metric, DIN 371, gun



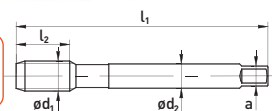
ød ₁	P	l ₁	l ₂	ød ₂	a
M3	0,5	56	10	3,5	2,7
M4	0,7	63	12	4,5	3,4
M5	0,8	70	14	6,0	4,9

Execution: High performance HSS-Co blue-ring machine taps according to DIN 371, for metric thread in through holes, ISO 2 (6H), form B lead chamfer, steam tempered (oxidized).

Application: For tapping of stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm²

ød ₁	P	l ₁	l ₂	ød ₂	a
M6	1,0	80	18	6,0	4,9
M8	1,25	90	20	8,0	6,2
M10	1,5	100	20	10,0	8,0

HSS-Co 1000 Machine taps, metric, DIN 376, gun



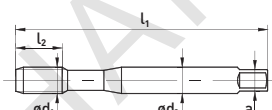
ød ₁	P	l ₁	l ₂	ød ₂	a
M8	1,25	90	14	6,0	4,9
M10	1,5	100	16	7,0	5,5
M12	1,75	110	29	9,0	7,0
M16	2,0	110	32	12,0	9,0

Execution: High performance HSS-Co blue-ring machine taps according to DIN 376, for metric thread in through holes, ISO 2 (6H), form B lead chamfer, steam tempered (oxidized).

Application: For tapping of stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm²

ød ₁	P	l ₁	l ₂	ød ₂	a
M18	2,5	125	34	14,0	11,0
M20	2,5	140	34	16,0	12,0
M24	3,0	160	38	18,0	14,5

HSS-Co 1000 Machine taps, metric, DIN 371, spiral



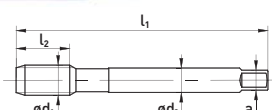
ød ₁	P	l ₁	l ₂	ød ₂	a
M3	0,5	56	5	3,5	2,7
M4	0,7	63	7	4,5	3,4
M5	0,8	70	8	6,0	4,9

Execution: High performance HSS-Co blue-ring machine taps according to DIN 371, for metric thread in blind holes, ISO 2 (6H), 40° spiral helix, form C lead chamfer, steam tempered (oxidized).

Application: For tapping of stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm²

ød ₁	P	l ₁	l ₂	ød ₂	a
M6	1,0	80	10	6,0	4,9
M8	1,25	90	13	8,0	6,2
M10	1,5	100	15	10,0	8,0

HSS-Co 1000 Machine taps, metric, DIN 376, spiral



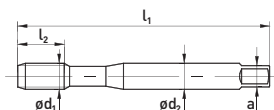
ød ₁	P	l ₁	l ₂	ød ₂	a
M12	1,75	110	18	9,0	7,0
M16	2,0	110	20	12,0	9,0
M18	2,5	125	25	14,0	11,0

Execution: High performance HSS-Co blue-ring machine taps according to DIN 376, for metric thread in blind holes, ISO 2 (6H), 40° spiral helix, form C lead chamfer, steam tempered (oxidized).

Application: For tapping of stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm²

ød ₁	P	l ₁	l ₂	ød ₂	a
M20	2,5	140	25	16,0	12,0
M24	3,0	160	30	18,0	14,5

HSS-Co ALU Machine taps, metric, DIN 371, gun



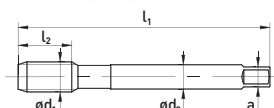
ød ₁	P	l ₁	l ₂	ød ₂	a
M3	0,5	56	10	3,5	2,7
M4	0,7	63	12	4,5	3,4
M5	0,8	70	14	6,0	4,9

Execution: High performance HSS-Co machine taps according to DIN 371, for metric thread in through holes, ISO 2 (6H), form B lead chamfer, bright finish.

Application: For tapping in aluminium.

ød ₁	P	l ₁	l ₂	ød ₂	a
M6	1,0	80	18	6,0	4,9
M8	1,25	90	20	8,0	6,2
M10	1,5	100	20	10,0	5,4

HSS-Co ALU Machine taps, metric, DIN 376, gun



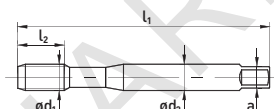
ød ₁	P	l ₁	l ₂	ød ₂	a
M12	1,75	110	24	9,0	7,0
M14	2,0	110	28	11,0	9,0

Execution: High performance HSS-Co machine taps according to DIN 376, for metric thread in through holes, ISO 2 (6H), form B lead chamfer, bright finish.

Application: For tapping in aluminium.

ød ₁	P	l ₁	l ₂	ød ₂	a
M16	2,0	110	28	12,0	9,0

HSS-Co ALU Machine taps, metric, DIN 371, spiral



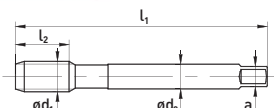
ød ₁	P	l ₁	l ₂	ød ₂	a
M3	0,5	56	5	3,5	2,7
M4	0,7	63	7	4,5	3,4
M5	0,8	70	8	6,0	4,9

Execution: High performance HSS-Co machine taps according to DIN 371, for metric thread in blind holes, ISO 2 (6H), 45° spiral helix, form C lead chamfer, bright finish.

Application: For tapping in aluminium.

ød ₁	P	l ₁	l ₂	ød ₂	a
M6	1,0	80	10	6,0	4,9
M8	1,25	90	13	8	6,2
M10	1,5	100	15	10,0	5,4

HSS-Co ALU Machine taps, metric, DIN 376, spiral



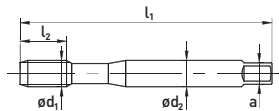
ød ₁	P	l ₁	l ₂	ød ₂	a
M12	1,75	110	22	9,0	7,0
M14	2,0	110	28	11,0	9,0

Execution: High performance HSS-Co machine taps according to DIN 376, for metric thread in blind holes, ISO 2 (6H), 45° spiral helix, form C lead chamfer, bright finish.

Application: For tapping in aluminium.

ød ₁	P	l ₁	l ₂	ød ₂	a
M16	2,0	110	28	12,0	9,0

HSS-E UNI Machine taps, metric, DIN 371, gun



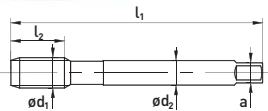
ϕd_1	P	l_1	l_2	ϕd_2	a
M3	0,5	56	10	3,15	2,5
M4	0,7	63	12	4,5	3,4
M5	0,8	70	14	6,0	4,9

Execution: HSS-E machine taps according to DIN 371, for metric thread in through holes, form B lead chamfer, bright finish.

Application: For tapping in mild steel (<800 N/mm²), aluminium, brass and bronze.

ϕd_1	P	l_1	l_2	ϕd_2	a
M6	1,0	80	18	6,0	4,9
M8	1,25	90	20	8,0	6,2
M10	1,5	100	20	10,0	8,0

HSS-E UNI Machine taps, metric, DIN 376, gun



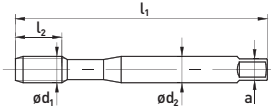
ϕd_1	P	l_1	l_2	ϕd_2	a
M12	1,75	110	29	9,0	7,0
M14	2,0	110	30	11,0	9,0
M16	2,0	110	32	12,0	9,0

Execution: HSS-E machine taps according to DIN 376, for metric thread in through holes, form B lead chamfer, bright finish.

Application: For tapping of mild steel (<800 N/mm²), aluminium, brass and bronze.

ϕd_1	P	l_1	l_2	ϕd_2	a
M18	2,5	125	34	14,0	11,0
M20	2,5	140	34	16,0	12,0

HSS Machine taps, metric, extra long



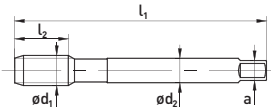
ød ₁	P	l ₁	l ₂	ød ₂	a
M3	0,5	100	10	3,5	2,7
M4	0,7	125	12	4,5	3,0
M5	0,8	140	14	6,0	4,9
M6	1,0	160	18	6,0	4,9

Execution: Extra long HSS machine taps according to DIN 371-EL (up to M6) and DIN 376-EL (M8 and up), metric thread, ISO2 (6H), form B lead chamfer, uncoated.

Application: For tapping of through holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
M8	1,25	180	20	6,0	4,9
M 10	1,5	180	22	7,0	5,5
M 12	1,75	220	29	9,0	10,2

HSS Machine taps, metric, long



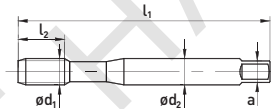
ød ₁	P	l ₁	l ₂	ød ₂	a
M3	0,5	71	10	2,24	1,8
M4	0,7	90	14	2,8	2,2
M5	0,8	110	16	3,5	2,8
M6	1,0	120	20	4,5	3,5
M8	1,25	140	25	6,3	5,0
M10	1,5	160	30	8,0	6,3

Execution: Long HSS machine taps according to DIN 357, metric thread, ISO2 (6H), form A lead chamfer, uncoated.

Application: For tapping of through holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
M12	1,75	180	36	9,0	7,1
M14	2,0	180	40	10,0	8,0
M16	2,0	200	40	12,5	10,0
M20	2,5	220	50	16,0	12,5
M24	3,0	250	60	18,0	14,0

HSS-E Machine taps, metric, short



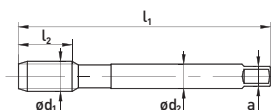
ød ₁	P	l ₁	l ₂	ød ₂	a
M3	0,5	48	11	3,15	2,5
M4	0,7	53	13	4,0	3,15
M5	0,8	58	16	5,0	4,0
M6	1,0	66	19	6,3	5,0

Execution: Short HSS-E machine taps according to ISO 529, metric thread, form B lead chamfer, bright finish.

Application: For tapping of through holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
M8	1,25	72	22	8,0	6,3
M10	1,5	80	24	10,0	8,0
M12	1,75	89	29	9,0	7,1

HSS-E Machine taps, metric, extra short



ød ₁	P	l ₁	l ₂	ød ₂	a
M3	0,5	40	11	3,5	2,7
M4	0,7	40	13	4,5	3,4
M5	0,8	48	16	6,0	4,9
M6	1,0	50	19	6,0	4,9

Execution: Short HSS-E machine taps according to DIN 352, metric thread, form B lead chamfer, bright finish.

Application: For tapping of through holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
M8	1,25	56	22	6,0	4,9
M10	1,5	70	24	7,0	5,5
M12	1,75	75	29	9,0	7,0

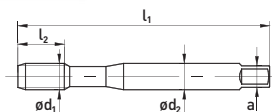
HSS-Co 800 Machine taps, metric fine, DIN 371, gun



MF

HSSE
Co

DIN
371



ød ₁	P	l ₁	l ₂	ød ₂	a
M4	0,5	63	10	4,5	3,4
M5	0,5	70	12	6	4,9
M6	0,75	80	14	6	4,9
M7	0,75	80	18	5,5	4,9

Execution: HSS-Co machine taps according to DIN 371, metric fine thread, ISO2 (6H), form B lead chamfer, uncoated.

Application: For tapping of through holes in [alloyed] steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
M8	0,75	80	18	8	6,2
M8	1,0	90	20	8	6,2
M10	1,0	90	20	10	8
M10	1,25	100	20	10	8

HSS-Co 800 Machine taps, metric fine, DIN 374, gun



MF

HSSE
Co

DIN
374



ød ₁	P	l ₁	l ₂	ød ₂	a
M5	0,75	70	12	3,5	2,7
M6	0,5	80	14	4,5	3,4
M9	1,0	90	20	8,0	6,2
M10	0,75	90	20	7,0	5,5
M12	1,0	100	20	9,0	7,0
M12	1,25	100	20	9,0	7,0
M12	1,5	100	20	9,0	7,0
M13	1,0	100	20	11,0	9,0
M13	1,5	100	20	11,0	9,0
M14	1,0	100	20	11,0	9,0
M14	1,25	100	20	11,0	9,0
M14	1,5	100	20	11,0	9,0
M15	1,0	100	20	12,0	9,0
M15	1,5	100	20	12,0	9,0
M16	1,0	100	20	12,0	9,0
M16	1,25	100	22	12,0	9,0
M16	1,5	100	20	12,0	9,0
M18	1,0	110	24	14,0	11,0
M18	1,25	110	24	14,0	11,0
M18	1,5	110	24	14,0	11,0
M18	2,0	125	24	14,0	11,0
M20	1,5	125	24	16,0	12,0

Execution: HSS-Co machine taps according to DIN 374, metric fine thread, ISO2 (6H), form B lead chamfer, uncoated.

Application: For tapping of through holes in [alloyed] steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
M20	2,0	125	24	16,0	12,0
M22	1,0	125	25	18,0	14,5
M22	1,5	125	24	18,0	14,5
M22	2,0	125	24	18,0	14,5
M24	1,0	140	27	18,0	14,5
M24	1,5	140	27	18,0	14,5
M24	2,0	140	28	18,0	14,5
M25	1,5	140	27	18,0	14,5
M26	1,5	140	27	18,0	14,5
M27	1,5	140	27	20,0	16,0
M27	2,0	140	27	20,0	16,0
M30	1,0	150	27	22,0	18,0
M30	1,5	150	27	22,0	18,0
M30	2,0	150	28	22,0	18,0
M32	1,5	150	27	22,0	18,0
M33	1,5	160	30	25,0	20,0
M36	1,5	170	30	28,0	22,0
M36	2,0	170	30	28,0	22,0
M38	1,5	170	24	28,0	22,0
M40	1,5	170	25	32,0	24,0
M50	1,5	190	27	36,0	29,0
M63	1,5	275	40	50,0	39,0

HSS-Co 800 Machine taps, metric fine, DIN 374, spiral



MF

HSSE
Co

DIN
374



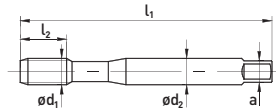
ød ₁	P	l ₁	l ₂	ød ₂	a
M6	0,75	80	8	6,0	4,9
M8	0,75	80	8	8,0	4,9
M8	1,0	90	10	6,0	4,9
M10	1,0	90	10	7,0	5,5
M10	1,25	100	12,5	7,0	5,5
M12	1,0	100	10	9,0	7,0
M12	1,25	100	12,5	9,0	7,0

Execution: HSS-Co machine taps according to DIN 374, metric fine thread, ISO2 (6H), 40° spiral helix, form C lead chamfer, uncoated.

Application: For tapping of blind holes in [alloyed] steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
M12	1,5	100	15	9,0	7,0
M14	1,5	100	15	11,0	9,0
M16	1,5	100	15	12,0	9,0
M20	1,5	125	15	16,0	12,0
M22	1,5	125	17	18,0	14,5
M24	1,5	140	22	18,0	14,5

HSS-Co 1000 Machine taps, metric fine, DIN 371, gun



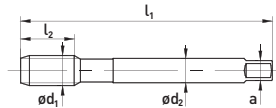
ød ₁	P	l ₁	l ₂	ød ₂	a
M5	0,5	70	12	6,0	4,9
M6	0,75	80	14	6,0	4,9
M8	0,75	80	18	8,0	6,2

Execution: HSS-Co machine taps according to DIN 371, metric fine thread, ISO2 (6H), form B lead chamfer, uncoated.

Application: For tapping of through holes in stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
M8	1,0	90	20	8,0	6,2
M10	1,0	90	20	10,0	8,0
M10	1,25	100	20	10,0	8,0

HSS-Co 1000 Machine taps, metric fine, DIN 374, gun



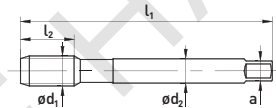
ød ₁	P	l ₁	l ₂	ød ₂	a
M12	1,0	100	20	9,0	7,0
M12	1,25	100	20	9,0	7,0
M12	1,5	100	20	9,0	7,0
M14	1,0	100	20	11,0	9,0
M14	1,25	100	20	11,0	9,0
M14	1,5	100	20	11,0	9,0
M16	1,25	100	22	12,0	9,0

Execution: HSS-Co machine taps according to DIN 374, for metric fine thread in through holes, ISO2 (6H), form B lead chamfer, uncoated.

Application: For tapping of through holes in stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
M16	1,5	100	20	12,0	9,0
M18	1,0	110	24	14,0	11,0
M18	1,5	110	24	14,0	11,0
M20	1,5	125	24	16,0	12,0
M22	1,5	125	24	18,0	14,5
M24	1,5	140	27	18,0	14,5
M25	1,5	140	27	18,0	14,5

HSS-Co 1000 Machine taps, metric fine, DIN 374, spiral



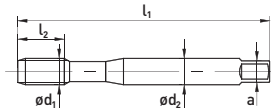
ød ₁	P	l ₁	l ₂	ød ₂	a
M8	1,0	90	10	6,0	4,9
M10	1,0	90	10	7,0	5,5
M12	1,5	100	15	9,0	7,0
M14	1,5	100	15	11,0	9,0

Execution: HSS-Co machine taps according to DIN 374, metric fine thread, ISO2 (6H), 40° spiral helix, form C lead chamfer, uncoated.

Application: For tapping of blind holes in stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
M16	1,5	100	15	12,0	9,0
M20	1,5	125	15	16,0	12,0
M24	1,5	140	22	18,0	14,5

HSS-Co 800 Machine taps, BSW (Whitworth), DIN 371, gun



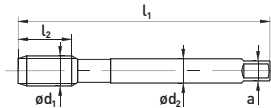
ød ₁	P	l ₁	l ₂	ød ₂	a
1/8	40	56	11	3,5	2,7
5/32	32	63	13	4,5	3,4
3/16	24	70	15	6,0	4,9
1/4	20	80	17	7,0	5,5

Execution: HSS-Co machine taps according to DIN 371, BSW (Whitworth) thread, form B lead chamfer, uncoated.

Application: For tapping of through holes in [alloyed] steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
5/16	18	90	20	8,0	6,2
3/8	16	100	22	9,0	7,0
7/16	14	100	22	11,0	9,0
1/2	12	110	25	12,0	9,0

HSS-Co 800 Machine taps, BSW (Whitworth), DIN 376, gun



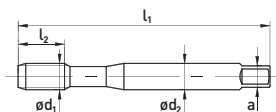
ød ₁	P	l ₁	l ₂	ød ₂	a
9/16	12	110	26	11,0	9,0
5/8	11	110	27	12,0	9,0
3/4	10	125	30	14,0	11,0

Execution: HSS-Co machine taps according to DIN 376, BSW (Whitworth) thread, form B lead chamfer, uncoated.

Application: For tapping of through holes in [alloyed] steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
7/8	9	140	32	18,0	14,5
1	8	160	36	20,0	16,0

HSS-Co 800 Machine taps, UNC, DIN 371, gun



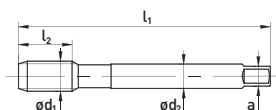
ød ₁	P	l ₁	l ₂	ød ₂	a
Nr. 4	40	50	10	3,5	2,7
Nr. 5	40	56	10	3,5	2,7
Nr. 6	32	56	12	4,0	3,0
Nr. 8	32	63	12	4,5	3,4
Nr. 10	24	70	14	6,0	4,9

Execution: HSS-Co machine taps according to DIN 371, UNC thread, ISO2 (6H), form B lead chamfer, uncoated.

Application: For tapping of through holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
Nr. 12	24	80	18	6,0	4,9
1/4	20	80	18	7,0	5,5
5/16	18	90	20	8,0	6,2
3/8	16	100	21	10,0	8,0

HSS-Co 800 Machine taps, UNC, DIN 376, gun



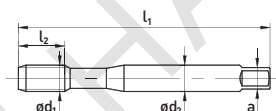
ød ₁	P	l ₁	l ₂	ød ₂	a
7/16	14	100	20	8,0	6,2
1/2	13	110	24	9,0	7,0
9/16	12	110	28	11,0	9,0
5/8	11	110	30	12,0	9,0

Execution: HSS-Co machine taps according to DIN 376, UNC thread, ISO2 (6H), form B lead chamfer, uncoated.

Application: For tapping of through holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
3/4	10	125	32	14,0	11,0
7/8	9	140	32	18,0	14,5
1	8	160	36	18,0	14,5
1.1/4	7	180	40	22,0	18,0

HSS-Co 800 Machine taps, UNC, DIN 371, spiral



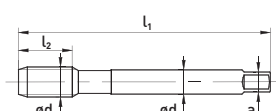
ød ₁	P	l ₁	l ₂	ød ₂	a
1/4	20	80	18	7,0	5,5
5/16	18	90	20	8,0	6,2

Execution: HSS-Co machine taps according to DIN 371, 40° spiral helix, UNC thread, ISO2 (6H), form C lead chamfer, uncoated.

Application: For tapping of blind holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
3/8	16	100	21	10,0	8,0

HSS-Co 800 Machine taps, UNC, DIN 376, spiral



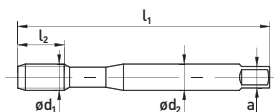
ød ₁	P	l ₁	l ₂	ød ₂	a
7/16	14	100	20	8,0	6,2
1/2	13	110	24	9,0	7,0
9/16	12	110	28	11,0	9,0
5/8	11	110	30	12,0	9,0

Execution: HSS-Co machine taps according to DIN 376, 40° spiral helix, UNC thread, ISO2 (6H), form C lead chamfer, uncoated.

Application: For tapping of blind holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
3/4	10	125	32	14,0	11,0
7/8	9	140	32	18,0	14,5
1	8	160	36	18,0	14,5
1.1/4	7	180	40	22,0	18,0

HSS-Co 1000 Machine taps, UNC, DIN 371, gun

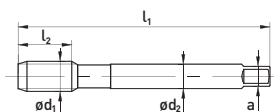


Execution: HSS-Co machine taps according to DIN 371, UNC thread, ISO2 (6H), form B lead chamfer, uncoated.

Application: For tapping of through holes in stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
1/4	20	80	18	7,0	5,5
5/16	18	90	20	8,0	6,2
3/8	16	100	21	10,0	8,0

HSS-Co 1000 Machine taps, UNC, DIN 376, gun

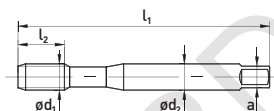


Execution: HSS-Co machine taps according to DIN 376, UNC thread, ISO2 (6H), form B lead chamfer, uncoated.

Application: For tapping of through holes in stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
7/16	14	100	20	8,0	6,2
1/2	13	110	24	9,0	7,0
5/8	11	110	30	12,0	9,0

HSS-Co 1000 Machine taps, UNC, DIN 371, spiral

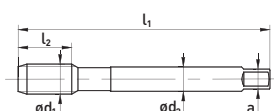


Execution: HSS-Co machine taps according to DIN 371, 40° spiral helix, UNC thread, ISO2 (6H), form C lead chamfer, uncoated.

Application: For tapping of blind holes in stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
1/4	20	80	18	7,0	5,5
5/16	18	90	20	8,0	6,2
3/8	16	100	21	10,0	8,0

HSS-Co 1000 Machine taps, UNC, DIN 376, spiral

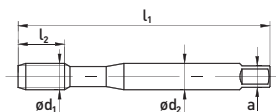


Execution: HSS-Co machine taps according to DIN 376, 40° spiral helix, UNC thread, ISO2 (6H), form C lead chamfer, uncoated.

Application: For tapping of blind holes in stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
7/16	14	100	20	8,0	6,2
1/2	13	110	24	9,0	7,0
5/8	11	110	30	12,0	9,0

HSS-Co 800 Machine taps, UNF, DIN 371, gun



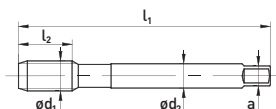
ød ₁	P	l ₁	l ₂	ød ₂	a
Nr. 4	48	50	10	3,5	2,7
Nr. 6	40	56	10	4,0	3,0
Nr. 8	36	63	12	4,5	3,4
Nr. 10	32	70	14	6,0	4,9

Execution: HSS-Co machine taps according to DIN 371, UNF thread, ISO2 (6H), form B lead chamfer, uncoated.

Application: For tapping of through holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
1/4	28	80	18	7,0	5,5
5/16	24	90	20	8,0	6,2
3/8	24	100	21	10,0	8,0

HSS-Co 800 Machine taps, UNF, DIN 376, gun



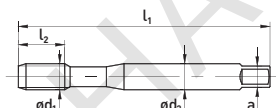
ød ₁	P	l ₁	l ₂	ød ₂	a
7/16	20	100	20	8,0	6,2
1/2	20	100	20	9,0	7,0
9/16	18	100	20	11,0	9,0
5/8	18	100	20	12,0	9,0

Execution: HSS-Co machine taps according to DIN 376, UNF thread, ISO2 (6H), form B lead chamfer, uncoated.

Application: For tapping of through holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
3/4	16	110	25	14,0	11,0
7/8	14	140	26	18,0	14,5
1	12	150	28	20,0	16,0

HSS-Co 800 Machine taps, UNF, DIN 371, spiral



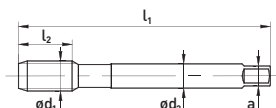
ød ₁	P	l ₁	l ₂	ød ₂	a
Nr. 10	32	70	14	6,0	4,9
1/4	28	80	18	7,0	5,5

Execution: HSS-Co machine taps according to DIN 371, 40° spiral helix, UNF thread, ISO2 (6H), form C lead chamfer, uncoated.

Application: For tapping of blind holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
5/16	24	90	20	8,0	6,2
3/8	24	100	21	10,0	8,0

HSS-Co 800 Machine taps, UNF, DIN 376, spiral



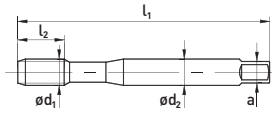
ød ₁	P	l ₁	l ₂	ød ₂	a
7/16	20	100	20	8,0	6,2
1/2	20	100	20	9,0	7,0
9/16	18	100	20	11,0	9,0

Execution: HSS-Co machine taps according to DIN 376, 40° spiral helix, UNF thread, ISO2 (6H), form C lead chamfer, uncoated.

Application: For tapping of blind holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
3/4	16	110	25	14,0	11,0
7/8	14	140	26	18,0	14,5
1	12	150	28	20,0	16,0

HSS-Co 1000 Machine taps, UNF, DIN 371, gun

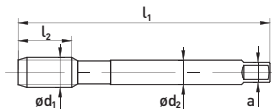


Execution: HSS-Co machine taps according to DIN 371, UNF thread, ISO2 (6H), form B lead chamfer, uncoated.

Application: For tapping of through holes in stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
1/4	28	80	18	7,0	5,5
5/16	24	90	20	8,0	6,2
3/8	24	100	21	10,0	8,0

HSS-Co 1000 Machine taps, UNF, DIN 376, gun

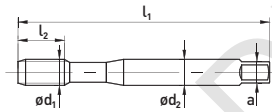


Execution: HSS-Co machine taps according to DIN 376, UNF thread, ISO2 (6H), form B lead chamfer, uncoated.

Application: For tapping of through holes in stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
1/2	20	100	20	9,0	7,0
5/8	18	100	20	12,0	9,0

HSS-Co 1000 Machine taps, UNF, DIN 371, spiral

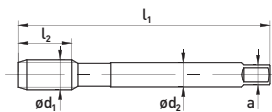


Execution: HSS-Co machine taps according to DIN 371, 40° spiral helix, UNF thread, ISO2 (6H), form C lead chamfer, uncoated

Application: For tapping of blind holes in stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
1/4	28	80	18	7,0	5,5
5/16	24	90	20	8,0	6,2
3/8	24	100	21	10,0	8,0

HSS-Co 1000 Machine taps, UNF, DIN 376, spiral



Execution: HSS-Co machine taps according to DIN 376, 40° spiral helix, UNF thread, ISO2 (6H), form C lead chamfer, uncoated

Application: For tapping of blind holes in stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
1/2	20	100	20	9,0	7,0

HSS-Co 800 Machine taps, BSP, gun

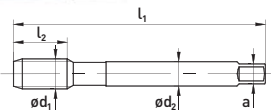


BSP

G

HSSE
Co

DIN
5156



ød ₁	P	l ₁	l ₂	ød ₂	a
1/8	28	90	18	7,0	5,5
1/4	19	100	22	11,0	9,0
3/8	19	100	22	12,0	9,0
1/2	14	125	25	16,0	12,0
5/8	14	125	25	18,0	14,5
3/4	14	140	28	20,0	16,0

Execution: HSS-Co machine taps according to DIN 5156, BSP thread, ISO2 (6H), form B lead chamfer, uncoated

Application: For tapping of through holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
7/8	14	150	28	22,0	18,0
1	11	160	30	25,0	20,0
1.1/4	11	170	25	32,0	24,0
1.1/2	11	190	32	36,0	29,0
2	11	220	40	45,0	35,0

HSS-Co 800 Machine taps, BSP, spiral

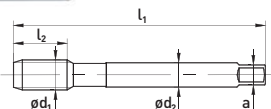


BSP

G

HSSE
Co

DIN
5156



ød ₁	P	l ₁	l ₂	ød ₂	a
1/8	28	90	10	7,0	5,5
1/4	19	100	14	11,0	9,0
3/8	19	100	15	12,0	9,0
1/2	14	125	17	16,0	12,0
5/8	14	125	17	18,0	14,5
3/4	14	140	20	20,0	16,0

Execution: HSS-Co machine taps according to DIN 5156, 40° spiral helix, BSP thread, ISO2 (6H), form C lead chamfer, uncoated.

Application: For tapping of blind holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
7/8	14	150	22	22,0	18,0
1	11	160	24	25,0	20,0
1.1/4	11	170	25	32,0	24,0
1.1/2	11	190	27	36,0	29,0
2	11	220	40	45,0	35,0

HSS-Co 1000 Machine taps, BSP, gun



BSP

G

HSSE
Co

DIN
5156



Execution: HSS-Co machine taps according to DIN 5156, BSP thread, ISO2 (6H), form B lead chamfer, uncoated.

Application: For tapping of through holes in stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
1/8	28	90	18	7,0	5,5
1/4	19	100	22	11,0	9,0
3/8	19	100	22	12,0	9,0
1/2	14	125	25	16,0	12,0
3/4	14	140	28	20,0	16,0
1	11	160	30	25,0	20,0

HSS-Co 1000 Machine taps, BSP, spiral

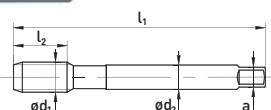


BSP

G

HSSE
Co

DIN
5156

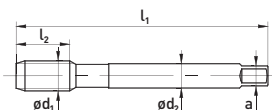


Execution: HSS-Co machine taps according to DIN 5156, 40° spiral helix, BSP thread, ISO2 (6H), form C lead chamfer, uncoated.

Application: For tapping of blind holes in stainless steels or (alloyed) steels with tensile strength < 1.000 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
1/8	28	90	10	7,0	5,5
1/4	19	100	14	11,0	9,0
3/8	19	100	15	12,0	9,0
1/2	14	125	17	16,0	12,0
3/4	14	140	20	20,0	16,0
1	11	160	24	25,0	20,0

HSS-E Machine taps, BSPT, gun



ød ₁	P	l ₁	l ₂	ød ₂	a
1/8	28	90	20	7,0	5,5
1/4	19	100	22	11,0	9,0
3/8	19	100	22	12,0	9,0

Execution: HSS-E machine taps, BSPT thread, form C lead chamfer, uncoated. Suitable for both blind and through holes. Taper 1:16

Application: For tapping of through and blind (<1.5xD) holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
1/2	14	125	28	16,0	12,0
3/4	14	140	28	20,0	16,0
1	11	160	38	25,0	20,0

HSS-E Machine taps, NPT, gun



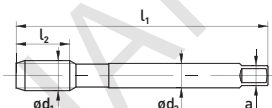
ød ₁	P	l ₁	l ₂	ød ₂	a
1/16	27	90	20	6,0	4,9
1/8	27	90	20	7,0	5,5
1/4	18	100	22	11,0	9,0
3/8	18	100	22	12,0	9,0

Execution: HSS-E machine taps, NPT thread, form C lead chamfer, uncoated. Suitable for both blind and through holes.

Application: For tapping of through and blind (<1.5xD) holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
1/2	14	125	28	16,0	12,0
3/4	14	140	28	20,0	16,0
1	11,5	160	38	25,0	20,0

HSS-E Machine taps, PG, gun



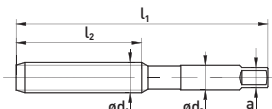
ød ₁	P	l ₁	l ₂	ød ₂	a
PG. 7	20	70	22	9,0	7,0
PG. 9	18	70	22	12,0	9,0
PG.11	18	80	22	14,0	11,0
PG.13,5	18	80	22	16,0	12,0

Execution: HSS-E machine taps, PG thread, form C lead chamfer, uncoated. Suitable for both blind and through holes.

Application: For tapping of through and blind (<1.5xD) holes in (alloyed) steels with tensile strength < 800 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
PG.16	18	80	22	18,0	14,5
PG.21	16	90	22	22,0	18,0
PG.29	16	100	25	28,0	22,0
PG.36	16	140	40	36,0	29,0

HSS-G Machine taps, Trapezium (TR), gun



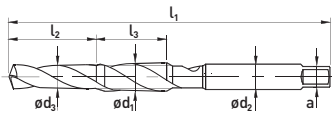
ød ₁	P	l ₁	l ₂	ød ₂	a
TR12	3	165	111	8	6,2
TR14	3	140	85	10	8
TR16	4	180	116	11	9
TR18	4	190	120	12	9

Execution: HSS-G machine taps, for trapezium threads up to 1xD, long 20-24 threads lead chamfer, uncoated. For threads with 7H tolerance, large clearance threads. For through holes only.

Application: For tapping of (alloyed) steels with tensile strength < 700 N/mm².

ød ₁	P	l ₁	l ₂	ød ₂	a
TR20	4	200	124	14	11
TR22	5	235	155	16	12
TR24	5	245	160	18	14,5

HSS-E Combi-drill-tap-bits, metric



ød ₁	P	l ₁	l ₂	ød ₂	a	ød ₃
M3	0,5	56	16/11	3,0	2,5	2,4
M4	0,7	63	18/14	4,0	3,3	3
M5	0,8	70	20/18	5,0	4,2	3,8
M6	1,0	80	22/22	6,0	5	4,9

Execution: HSS-E combi tap drill bits for quick and easy drilling a hole and tapping a thread in one operation. Cylindrical shanks with square according to DIN 371 (machine tap shanks)

Application: For through holes.

ød ₁	P	l ₁	l ₂	ød ₂	a	ød ₃
M8	1,25	90	26/25	8,0	6,8	6,2
M10	1,5	100	30/31	10,0	8,5	8
M12	1,75	115	32/35	12,0	10,2	9

HSS-G Combi-drill-tap-bits 1/4"-bit shank, metric



Thread	Pitch	Overall length	Drill diameter
M3	0,5	36	2,5
M4	0,7	39	3,3
M5	0,8	41	4,2
M6	1,0	44	5,0
M8	1,25	50	6,8
M10	1,5	59	8,5

Execution: HSS-G combi tap drill bits for quickly drilling a hole, tapping a thread and deburring in one operation. The 1/4" hexagonal shanks (according to DIN 3126-C6.3) can also be used in drill chucks.

Application: For use on plastics, non-ferrous metals and steels. Ideal for portable (cordless) power tools.

HSS-G Combi-drill-tap-bits 1/4"-bit shank, metric, in cassette



Execution: Set with HSS-G combi tap drill bits with 1/4" hexagonal shank according to DIN 3126-C6.3. Can also be used in drill chucks. Ideal for portable (cordless) power tools. In plastic cassette.

Description	Content
7 piece combi tap and drill bit set	1x M3, M4, M5, M6, M8 and M10 1x Hexagonal bit socket holder.

HSS Round dies, metric



Execution: HSS round thread cutting dies, according to DIN EN 22568, for metric threads.

Application: For tapping of (alloyed) steels with tensile strength < 800 N/mm².

Thread	Pitch	Diameter	Height
M2	0,4	16	5
M2,5	0,45	16	5
M3	0,5	20	5
M3,5	0,6	20	5
M4	0,7	20	5
M4,5	0,75	20	7
M5	0,8	20	7
M6	1,0	20	7
M7	1,0	25	9
M8	1,25	25	9
M9	1,25	25	9
M10	1,5	30	11
M11	1,5	30	11

Thread	Pitch	Diameter	Height
M12	1,75	38	14
M14	2,0	38	14
M16	2,0	45	18
M18	2,5	45	18
M20	2,5	45	18
M22	2,5	55	22
M24	3,0	55	22
M27	3,0	65	25
M30	3,5	65	25
M33	3,5	65	25
M36	4,0	65	25
M39	4,0	65	25
M42	4,5	75	30

HSS Round dies, metric, in metal cassette



Execution: HSS round thread cutting dies, according to DIN EN 22568, for metric threads.

Application: For tapping of (alloyed) steels with tensile strength < 800 N/mm².

Description	Content
12 piece thread die set	<p>HSS Dies: 1x M3, M4, M5, M6, M8, M10 and M12 (type 360)</p> <p>Die stocks: 1x ø20x5, ø20x7, ø25x9, ø30x11 and ø38x14</p> <p>In metal cassette</p>
7 piece thread die set	<p>HSS Dies: 1x die M3, M4, M5, M6, M8, M10 and M12 (type 360)</p> <p>In metal cassette.</p>

HSS Round dies, metric left



Execution: HSS round thread cutting dies, according to DIN EN 22568, for left-handed metric threads.

Application: For tapping of (alloyed) steels with tensile strength < 800 N/mm².

Thread	Pitch	Diameter	Height
M3	0,5	20	5
M4	0,7	20	5
M5	0,8	20	7
M6	1,0	20	7
M8	1,25	25	9

Thread	Pitch	Diameter	Height
M10	1,5	30	11
M12	1,75	38	14
M16	2,0	45	18
M20	2,5	45	18

HSS-E INOX Round dies, metric



Execution: HSS-E round thread cutting dies, according to DIN EN 22568, for metric threads.

Application: For tapping of stainless steel and (alloyed) steels with tensile strength < 800 N/mm².

Thread	Pitch	Diameter	Height
M3	0,5	20	5
M4	0,7	20	5
M5	0,8	20	7
M6	1,0	20	7
M8	1,25	25	9
M10	1,5	30	11
M12	1,75	38	14
M14	2,0	38	14

Thread	Pitch	Diameter	Height
M16	2,0	45	18
M18	2,5	45	18
M20	2,5	45	18
M22	2,5	55	22
M24	3,0	55	22
M27	3,0	65	25
M30	3,5	65	25

HSS Round dies, metric fine



Execution: HSS round thread cutting dies, according to DIN EN 22568, for metric fine threads.

Application: For tapping of (alloyed) steels with tensile strength < 800 N/mm².

Thread	Pitch	Diameter	Height
M3	0,35	20	5
M4	0,5	20	5
M5	0,5	20	5
M6	0,5	20	5
M6	0,75	20	7
M7	0,75	25	9
M8	0,50	25	9
M8	0,75	25	9
M8	1,0	25	9
M9	1,0	25	9
M10	0,50	30	11
M10	0,75	30	11
M10	1,0	30	11
M10	1,25	30	11
M12	0,50	38	10
M12	0,75	38	10
M12	1,0	38	10
M12	1,25	38	10
M12	1,5	38	10
M13	1,0	38	10
M13	1,5	38	10
M14	1,0	38	10
M14	1,25	38	10
M14	1,5	38	10
M15	1,0	38	10
M15	1,5	38	10
M16	1,0	45	14
M16	1,5	45	14

Thread	Pitch	Diameter	Height
M17	1,0	45	14
M18	1,0	45	14
M18	1,25	45	14
M18	1,5	45	14
M18	2,0	45	14
M20	1,0	45	14
M20	1,5	45	14
M20	2,0	45	14
M22	1,0	55	16
M22	1,5	55	16
M22	2,0	55	16
M24	1,0	55	16
M24	1,5	55	16
M24	2,0	55	16
M25	1,5	55	16
M26	1,5	55	16
M27	1,0	65	18
M27	1,5	65	18
M27	2,0	65	18
M30	1,0	65	18
M30	1,5	65	18
M30	2,0	65	18
M32	1,5	65	18
M32	2,0	65	18
M33	1,5	65	18
M36	1,5	65	18
M42	2,0	75	20
M50	1,5	90	22

HSS Round dies, UNC



Execution: HSS round thread cutting dies, according to DIN EN 22568, for UNC threads.

Application: For tapping of (alloyed) steels with tensile strength < 800 N/mm².

Thread	Pitch	Diameter	Height
1/4	20	20	7
5/16	18	25	9
3/8	16	30	11
7/16	14	30	11
1/2	13	38	14

Thread	Pitch	Diameter	Height
9/16	12	38	14
5/8	11	45	18
3/4	10	45	18
7/8	9	55	22
1	8	55	22

HSS Round dies, UNF



Thread	Pitch	Diameter	Height
1/4	28	20	7
5/16	24	25	9
3/8	24	30	11
7/16	20	30	11
1/2	20	38	10

Execution: HSS round thread cutting dies, according to DIN EN 22568, for UNF threads.

Application: For tapping of (alloyed) steels with tensile strength < 800 N/mm².

Thread	Pitch	Diameter	Height
9/16	18	38	10
5/8	18	45	14
3/4	16	45	14
7/8	14	55	16
1	12	55	16

HSS Round dies, BSP "G"



Thread	Pitch	Diameter	Height
1/8	28	30	11
1/4	19	38	10
3/8	19	45	14
1/2	14	45	14

Execution: HSS round thread cutting dies, according to DIN EN 24231, for BSP threads.

Application: For tapping of (alloyed) steels with tensile strength < 800 N/mm².

Thread	Pitch	Diameter	Height
5/8	14	55	16
3/4	14	55	16
7/8	14	65	18
1	11	65	18

HSS Round dies, NPT



Thread	Pitch	Diameter	Height
1/16	27	25	9
1/8	27	30	11
1/4	18	38	14
3/8	18	45	14

Execution: HSS round thread cutting dies, according to DIN EN 24230, for NPT threads.

Application: For tapping of (alloyed) steels with tensile strength < 800 N/mm².

Thread	Pitch	Diameter	Height
1/2	14	45	18
3/4	14	55	22
1	11,5	65	25

HSS Hexagon die nuts, metric



Execution: HSS hexagonal die nuts, according to DIN 382, for metric threads.

Application: For cleaning up damaged threads. Die nuts cannot be used for cutting new threads. (W.A.F. = "Width Across Flats")

Thread	Pitch	W.A.F.	Height
M3	0,5	19	5
M4	0,7	19	5
M5	0,8	19	7
M6	1,0	19	7
M7	1,0	22	9
M8	1,25	22	9
M10	1,5	27	11
M12	1,75	36	14

Thread	Pitch	W.A.F.	Height
M14	2,0	36	14
M16	2,0	41	18
M18	2,5	41	18
M20	2,5	41	18
M22	2,5	50	22
M24	3,0	50	22
M27	3,0	60	25
M30	3,5	60	25

HSS Hexagon die nuts, metric, in metal cassette



Execution: HSS hexagonal die nuts, according to DIN 382, for metric threads.

Application: For cleaning up damaged threads. Die nuts cannot be used for cutting new threads. (W.A.F. = "Width Across Flats")

Description	Content
7 piece die nut set	HSS Die nuts: 1x M3, M4, M5, M6, M8, M10 and M12 (type 370). In metal cassette.

HSS Hexagon die nuts, metric fine



Execution: HSS hexagonal die nuts, according to DIN 382, for metric fine threads.

Application: For cleaning up damaged threads. Die nuts cannot be used for cutting new threads. (W.A.F. = "Width Across Flats")

Thread	Pitch	W.A.F.	Height
M3	0,35	19	5
M4	0,5	19	5
M5	0,5	19	7
M6	0,75	19	7
M8	0,75	22	9
M8	1,0	22	9
M10	1,0	27	11
M10	1,25	27	11
M12	1,0	36	10
M12	1,25	36	10
M12	1,5	36	14
M14	1,25	36	10
M14	1,5	36	14
M15	1,0	36	10
M16	1,0	41	14
M16	1,5	41	14
M18	1,0	41	14
M18	1,25	41	14

Thread	Pitch	W.A.F.	Height
M18	1,5	41	14
M20	1,0	41	14
M20	1,5	41	14
M20	2,0	41	14
M22	1,5	41	14
M24	1,0	50	16
M24	1,5	50	16
M24	2,0	50	16
M25	1,5	50	16
M26	1,5	50	16
M27	1,5	60	18
M27	2,0	60	18
M28	1,5	60	18
M30	1,5	60	18
M30	2,0	60	18
M32	1,5	60	18
M32	2,0	60	18

HSS Hexagon die nuts, UNC



Execution: HSS hexagonal die nuts, according to DIN 382, for UNC threads.

Application: For cleaning up damaged threads. Die nuts cannot be used for cutting new threads. (W.A.F. = "Width Across Flats")

Thread	Pitch	W.A.F.	Height
1/4	20	19	7
5/16	18	22	9
3/8	16	27	11
7/16	14	27	11
1/2	13	36	14

Thread	Pitch	W.A.F.	Height
9/16	12	36	14
5/8	11	41	18
3/4	10	41	18
7/8	9	50	22
1	8	50	22

HSS Hexagon die nuts, UNF



Execution: HSS hexagonal die nuts, according to DIN 382, for UNF threads.

Application: For cleaning up damaged threads. Die nuts cannot be used for cutting new threads. (W.A.F. = "Width Across Flats")

Thread	Pitch	W.A.F.	Height
1/4	28	19	7
5/16	24	22	9
3/8	24	27	11
7/16	20	27	11
1/2	20	36	14

Thread	Pitch	W.A.F.	Height
9/16	18	36	14
5/8	18	41	18
3/4	16	41	18
7/8	14	50	22
1	12	50	22

HSS Hexagon die nuts, BSP "G"



Execution: HSS hexagonal die nuts, according to DIN 382, for BSP threads.

Application: For cleaning up damaged threads. Die nuts cannot be used for cutting new threads. (W.A.F. = "Width Across Flats")

Thread	Pitch	W.A.F.	Height
1/8	28	36	10
1/4	19	36	10
3/8	19	41	14
1/2	14	41	14
5/8	14	50	16

Thread	Pitch	W.A.F.	Height
3/4	14	50	16
1	11	60	18
1.1/4	11	70	20
1.1/2	11	85	22

Tapwrench rachets



Execution: Ratcheting tap wrenches for hand taps, for both left and right handed operations. Standard (short) and long executions.

Application: For hand tapping operations where space is limited and ordinary tap wrenches can't be used.

No.	Range	Square	Length
1	M3 - M10	2,4 - 5,5	85
2	M5 - M12	4,5 - 8,0	100
10	M3 - M10	2,4 - 5,5	250
20	M5 - M12	4,5 - 7,0	300

Adjustable tapwrenches, aluminium



Execution: Adjustable tap wrenches according to DIN 1814, made of aluminium-zinc alloy, steel jaws, for hand taps.

No.	Range	Square	Length
0	M1 - M 8	2,0 - 5,0	130
1	M1 - M10	2,0 - 6,3	176
1½	M1 - M12	2,1 - 8,0	176
2	M4 - M12	3,0 - 9,0	280
3	M5 - M20	4,9 - 12,0	380
4	M11 - M27	5,5 - 16,0	505
5L	M13 - M32	7,0 - 20,0	700

Adjustable tapwrenches, steel



Execution: Adjustable tap wrenches according to DIN 1814, made of steel, steel jaws, for hand taps.

No.	Range	Square	Length
0	M1 - M 8	2,0 - 5,0	130
1	M1 - M10	2,0 - 6,3	176
1½	M1 - M12	2,1 - 8,0	176
2	M4 - M12	3,0 - 9,0	280
3	M5 - M20	4,9 - 12,0	380
4	M11 - M27	5,5 - 16,0	505
5	M13 - M32	7,0 - 20,0	700
6	M18 - M42	11,0 - 24,0	1.000
7	M25 - M52	16,0 - 32,0	1.250
8	M25 - M64	16,0 - 40,0	1.250

Die stocks



Execution: Die stocks according to DIN 225, made of aluminium-zinc alloy, steel screws, for threading dies according to DIN EN 22568.

Size	Range	Length
16 x 5	M1 - 2,6	160
20 x 5	M3 - 4	200
20 x 7	M4,5 - 6	200
25 x 9	M7 - 9	224
30 x 11	M10 - 11	280
38 x 10	MF12 - 14	315
38 x 14	M12 - 14	315
45 x 14	MF16 - 20	450
45 x 18	M16 - 20	450
55 x 16	MF22 - 24	560
55 x 22	M22 - 24	560
65 x 18	MF27 - 36	630
65 x 25	M27 - 36	630

Tap extensions



Execution: Tap extensions according to DIN 377, with squares according to DIN 10, cylindrical shank, tempered and precision ground.

Application: Increase reach length of (machine) taps.

Square	Length
2,1	60
2,7	80
3,0	90
3,4	95
3,8	100
4,3	105
4,9	110
5,5	115
6,2	120
7,0	125
8,0	125
9,0	130
10,0	140
12,0	155
14,5	175

Extractor sets

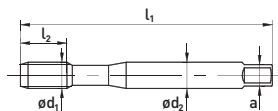


Execution: Spiral screw extractors, in sets, tempered steel, for use on broken screws and bolts with a right-handed thread.

Application: Drill locked screw out to proper diameter. Insert extractor and turn anti-clockwise using tap wrench. Keep on turning so the extractor digs itself into the screw until enough torque can be applied to remove the screw.

Description	No.	Range	Content
5 piece extractor set	1 - 5	M3 - M18	No. 1, 2, 3, 4 and 5 / 1 piece each
6 piece extractor set	1 - 6	M3 - M24	No. 1, 2, 3, 4, 5 and 6 / 1 piece each
8 piece extractor set	1 - 8	M3 - M50	No. 1, 2, 3, 4, 5, 6, 7 and 8 / 1 piece each

V-Coil HSS-E Machine taps, metric

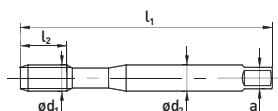


Execution: V-Coil HSS-E machine taps for thread inserts, form B lead chamfer (6 threads) with spiral point.

Application: For tapping threads in non-ferrous metals that are the correct size for the corresponding V-Coil thread inserts.

d ₁	P	l ₁	l ₂	d ₂	a	ø
M3	0,5	53	13	4,0	3,15	3,2
M4	0,7	58	16	5,0	4,0	4,2
M5	0,8	66	19	6,3	5,0	5,2
M6	1,0	72	19	8,0	6,3	6,3
M8	1,25	80	24	10,0	8,0	8,3
M10	1,5	89	29	9,0	7,1	10,4
M12	1,75	95	30	11,2	9,0	12,4

V-Coil HSS-E Machine taps, UNC

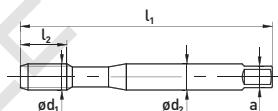


Execution: V-Coil HSS-E machine taps for thread inserts, form B lead chamfer (6 threads) with spiral point.

Application: For tapping threads in non-ferrous metals that are the correct size for the corresponding V-Coil thread inserts.

d ₁	G/inch	l ₁	l ₂	d ₂	a	ø
1/4	20	72	22	8	6,3	6,7
5/16	18	80	24	10	8	8,3
3/8	16	85	25	8	6,3	9,9
7/16	14	95	30	11,2	9	11,6
1/2	13	102	32	12,5	10	13
5/8	11	112	37	14	11,2	16,5

V-Coil HSS-E Machine taps, BSP (Gas)



Execution: V-Coil HSS-E machine taps for thread inserts, form B lead chamfer (6 threads) with spiral point.

Application: For tapping threads in non-ferrous metals that are the correct size for the corresponding V-Coil thread inserts.

d ₁	G/inch	l ₁	l ₂	d ₂	a	ø
1/8	28	59	15	8	6,3	10
1/4	19	67	19	11,2	9	13,6
3/8	19	75	21	14	11,2	17,1
1/2	14	87	26	16	12,5	21,5
5/8	14	91	26	18	14	23,4
3/4	14	96	28	20	16	27
7/8	14	102	29	22,4	18	30,6
1	11	109	33	25	20	33,7

V-Coil Thread inserts, metric, 1xD



Execution: V-Coil thread inserts, made from high-grade CrNi-steel, temperature and corrosion resistant. Upon request also available in MF, UNC, UNF and BSP threads.

Application: Used to repair a stripped threaded hole or to provide a durable threaded hole in soft materials like aluminium and magnesium alloys. Applied in automotive, machine building, medical engineering as well as space and aviation technologies.

d ₁	P	l ₁	P.U.
M3	0,5	1,0xD	100
M4	0,7	1,0xD	100
M5	0,8	1,0xD	100
M6	1,0	1,0xD	100
M8	1,25	1,0xD	100
M8	1,0	1,0xD	100
M10	1,5	1,0xD	100

d ₁	P	l ₁	P.U.
M10	1,25	1,0xD	100
M10	1,0	1,0xD	100
M12	1,75	1,0xD	100
M12	1,5	1,0xD	100
M12	1,25	1,0xD	100
M12	1,0	1,0xD	100

V-Coil Thread inserts, metric, 1.5xD



Execution: V-Coil thread inserts, made from high-grade CrNi-steel, temperature and corrosion resistant. Upon request also available in MF, UNC, UNF and BSP threads.

Application: Used to repair a stripped threaded hole or to provide a durable threaded hole in soft materials like aluminium and magnesium alloys. Applied in automotive, machine building, medical engineering as well as space and aviation technologies.

d ₁	P	l ₁	P.U.
M3	0,5	1,5xD	100
M4	0,7	1,5xD	100
M5	0,8	1,5xD	100
M6	1,0	1,5xD	100
M8	1,25	1,5xD	100
M8	1,0	1,5xD	100
M10	1,5	1,5xD	100

d ₁	P	l ₁	P.U.
M10	1,25	1,5xD	100
M10	1,0	1,5xD	100
M12	1,75	1,5xD	100
M12	1,5	1,5xD	100
M12	1,25	1,5xD	100
M12	1,0	1,5xD	100

V-Coil Thread inserts, metric, 2xD



Execution: V-Coil thread inserts, made from high-grade CrNi-steel, temperature and corrosion resistant. Upon request also available in MF, UNC, UNF and BSP threads.

Application: Used to repair a stripped threaded hole or to provide a durable threaded hole in soft materials like aluminium and magnesium alloys. Applied in automotive, machine building, medical engineering as well as space and aviation technologies.

d ₁	P	l ₁	P.U.
M3	0,5	2,0xD	100
M4	0,7	2,0xD	100
M5	0,8	2,0xD	100
M6	1,0	2,0xD	100
M8	1,25	2,0xD	100
M8	1,0	2,0xD	100

d ₁	P	l ₁	P.U.
M10	1,25	2,0xD	100
M10	1,25	2,0xD	100
M10	1,0	2,0xD	100
M12	1,5	2,0xD	100
M12	1,25	2,0xD	100
M12	1,0	2,0xD	100

V-Coil Thread repair sets, UNF, 1.5xD



Execution:
 1x Drill bit (up to ½"x20)
 1x V-Coil Nr. 3 bottom tap
 1x Insertion spindle
 1x Tang punch (to break the tang) (up to ½"x20)
 1x set of matching V-Coils (qty as specified in table)

Application: To repair a stripped threaded hole. The precise tolerance of the V-Coil system assures a better and stronger joint compared to the one with the original thread. V-Coils are also used in new assemblies for stronger joints.

UNF

d ₁	G/inch	V-Coil (pc)
1/4	28	20
5/16	24	20
3/8	24	15
7/16	20	10
1/2	20	10

d ₁	G/inch	V-Coil (pc)
9/16	18	10
5/8	18	10
3/4	16	5
7/8	14	5
1	12	4

V-Coil Thread repair sets, BSW, 1.5xD



Execution:
 1x Drill bit (up to ½"x12)
 1x V-Coil Nr. 3 bottom tap
 1x Insertion spindle
 1x Tang punch (to break the tang) (up to ½"x12)
 1x set of matching V-Coils (qty as specified in table)

Application: To repair a stripped threaded hole. The precise tolerance of the V-Coil system assures a better and stronger joint compared to the one with the original thread. V-Coils are also used in new assemblies for stronger joints.

BSW

d ₁	G/inch	V-Coil (pc)
1/8	40	20
3/16	24	20
1/4	20	20
5/16	18	20
3/8	16	15
7/16	14	10

d ₁	G/inch	V-Coil (pc)
1/2	12	10
9/16	12	10
5/8	11	10
3/4	10	5
7/8	9	5
1	8	4

V-Coil Thread repair sets, BSP "G", 1.5xD



Execution:
 1x V-Coil Nr. 2 center tap
 1x V-Coil Nr. 3 bottom tap
 1x Insertion spindle with hexagon drive
 1x set of matching V-Coils (qty as specified in table)

Application: To repair a stripped threaded hole. The precise tolerance of the V-Coil system assures a better and stronger joint compared to the one with the original thread. V-Coils are also used in new assemblies for stronger joints.

BSP

d ₁	G/inch	V-Coil (pc)
1/8	28	10
1/4	19	10
3/8	19	10
1/2	14	10

d ₁	G/inch	V-Coil (pc)
5/8	14	10
3/4	14	10
7/8	14	10
1	11	10