



M Metric coarse thread ISO DIN 13

Machine Taps

Form B for through holes

Machine Tap

UNITAP for universal use



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

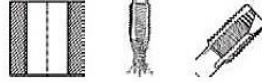


material: HSSE-TiAIN
ISO2/6H
to 1200 N/mm²
38 HRC



4-5 threads
outside cooling and lubrication

Machine Tap
for general use



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



material: HSSE
ISO2/6H
to 900 N/mm²
27.1 HRC



4-5 threads
outside cooling and lubrication

Machine Tap
for general use
Left-hand thread



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

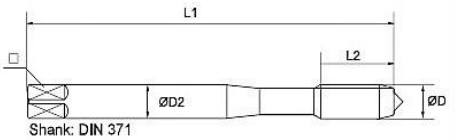


material: HSSE
ISO2/6H
to 900 N/mm²
27.1 HRC

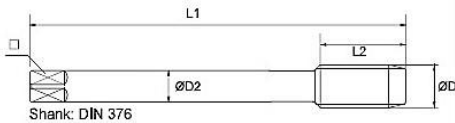


4-5 threads
outside cooling and lubrication

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



Shank: DIN 371



Shank: DIN 376



M D1 D2 L1 L2 □

No. € No. € No. €

DIN 371							No.	€	No.	€	No.	€
M 2 x 0,4	2,0	2,8	45	8	2,1	1,60	110403001	25,90	110401001	8,31		
M 2,2 x 0,45	2,2	2,8	45	8	2,1	1,75	110403002	28,78				
M 2,5 x 0,45	2,5	2,8	50	9	2,1	2,05	110403003	21,99	110401002	8,31		
M 3 x 0,5	3,0	3,5	56	11	2,7	2,50	110403004	16,80	110401003	6,53	110402001	12,25
M 3,5 x 0,6	3,5	4,0	56	13	3,0	2,90	110403005	19,90	110401004	7,20		
M 4 x 0,7	4,0	4,5	63	13	3,4	3,30	110403006	16,17	110401005	6,53	110402002	12,25
M 5 x 0,8	5,0	6,0	70	16	4,9	4,20	110403007	16,80	110401006	6,98	110402003	12,80
M 6 x 1,0	6,0	6,0	80	19	4,9	5,00	110403008	17,33	110401007	6,98	110402004	12,80
M 7 x 1,0	7,0	7,0	80	19	5,5	6,00			110401008	9,98	110402005	16,60
M 8 x 1,25	8,0	8,0	90	22	6,2	6,80	110403009	20,20	110401009	8,65	110402006	15,59
M 10 x 1,5	10,0	10,0	100	24	8,0	8,50	110403010	24,75	110401010	10,86	110402007	17,60
DIN 376							No.	€	No.	€	No.	€
M 3 x 0,5	3,0	2,2	56	11	-	2,50			110401011	7,09	110402008	12,25
M 4 x 0,7	4,0	2,8	63	13	2,1	3,30			110401012	7,09	110402009	12,25
M 5 x 0,8	5,0	3,5	70	16	2,7	4,20			110401013	7,64	110402010	12,80
M 6 x 1,0	6,0	4,5	80	19	3,4	5,00			110401014	7,64	110402011	12,80
M 8 x 1,25	8,0	6,0	90	22	4,9	6,80			110401015	9,42	110402012	15,59
M 10 x 1,5	10,0	7,0	100	24	5,5	8,50			110401016	11,30	110402013	17,60
M 12 x 1,75	12,0	9,0	110	29	7,0	10,20	110403011	30,00	110401017	13,08	110402014	22,17
M 14 x 2,0	14,0	11,0	110	30	9,0	12,00	110403012	43,42	110401018	16,62	110402015	28,07
M 16 x 2,0	16,0	12,0	110	32	9,0	14,00	110403013	54,42	110401019	18,84	110402016	32,52
M 18 x 2,5	18,0	14,0	125	34	11,0	15,50	110403014	71,39	110401020	26,60	110402017	44,22
M 20 x 2,5	20,0	16,0	140	34	12,0	17,50	110403015	84,86	110401021	35,46	110402018	62,59
M 22 x 2,5	22,0	18,0	140	34	14,5	19,50	110403016	109,32	110401022	41,00	110402019	69,05
M 24 x 3,0	24,0	18,0	160	38	14,5	21,00	110403017	115,33	110401023	43,21	110402020	74,63
M 27 x 3,0	27,0	20,0	160	38	16,0	24,00	110403018	184,02	110401024	72,03	110402021	122,52
M 30 x 3,5	30,0	22,0	180	45	18,0	26,50	110403019	222,78	110401025	74,24	110402022	128,08
M 33 x 3,5	33,0	25,0	180	50	20,0	29,50			110401026	104,16	110402023	173,75
M 36 x 4,0	36,0	28,0	200	56	22,0	32,00			110401027	169,54	110402024	290,68
M 39 x 4,0	39,0	32,0	200	60	24,0	35,00			110401028	218,31	110402025	365,32
M 42 x 4,5	42,0	32,0	200	60	24,0	37,50			110401029	254,88	110402026	434,36
M 45 x 4,5	45,0	36,0	220	65	29,0	40,50			110401030	288,13	110402027	478,89
M 48 x 5,0	48,0	36,0	250	70	29,0	43,00			110401031	315,81	110402028	529,02
M 52 x 5,0	52,0	40,0	250	70	32,0	47,00			110401032	385,64	110402029	625,94

MACHO PARA FUROS PASSANTES - SP

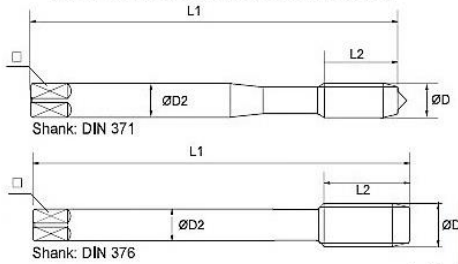
HSSE-TiN 1300N

HSSE INOX 27.1N

HSSE INOX 1400N

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

material: HSSE-TiN ISO2/6H to 1300 N/mm² 41 HRC

4-5 threads outside cooling and lubrication

DIN 376 from M 12
DIN 371 up to M 10

Machine Tap
ECO for stainless steels
with high tool life time

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

4-5 threads outside cooling and lubrication

DIN 376 from M 12
DIN 371 up to M 10

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

material: HSSE-PM TiAlN ISO2/6H to 1400 N/mm² 44 HRC

4-5 threads outside cooling and lubrication

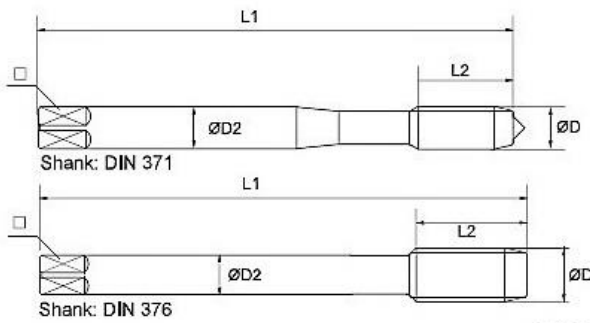
DIN 376 from M 12
DIN 371 up to M 10

M	D1	D2	L1	L2	□	🔩	No.	€	No.	€	No.	€
M 2 x 0,4	2,0	2,8	45	8	2,1	1,60	110404001	13,51	110405001	*	110406001	*
M 2,5 x 0,45	2,5	2,8	50	9	2,1	2,05	110404002	13,51	110405002	*	110406002	*
M 3 x 0,5	3,0	3,5	56	11	2,7	2,50	110404003	10,45	110405003	10,69	110406003	21,92
M 3,5 x 0,6	3,5	4,0	56	13	3,0	2,90	110404004	*				
M 4 x 0,7	4,0	4,5	63	13	3,4	3,30	110404005	10,45	110405004	10,69	110406004	21,92
M 5 x 0,8	5,0	6,0	70	16	4,9	4,20	110404006	10,92	110405005	11,68	110406005	23,14
M 6 x 1,0	6,0	6,0	80	19	4,9	5,00	110404007	11,68	110405006	11,68	110406006	25,58
M 7 x 1,0	7,0	7,0	80	19	5,5	6,00	110404008	16,74				
M 8 x 1,25	8,0	8,0	90	22	6,2	6,80	110404009	14,43	110405007	13,89	110406007	30,45
M 9 x 1,25	9,0	9,0	90	18	6,2	7,80	110404010	*				
M 10 x 1,5	10,0	10,0	100	24	8,0	8,50	110404011	18,89	110405008	19,62	110406008	37,70
M 12 x 1,75	12,0	9,0	110	29	7,0	10,20	110404012	25,23	110405009	24,80	110406009	44,10
M 14 x 2,0	14,0	11,0	110	30	9,0	12,00	110404013	30,47	110405010	28,11	110406010	57,33
M 16 x 2,0	16,0	12,0	110	32	9,0	14,00	110404014	33,74	110405011	30,32	110406011	63,50
M 18 x 2,5	18,0	14,0	125	34	11,0	15,50	110404015	46,65	110405012	40,79	110406012	*
M 20 x 2,5	20,0	16,0	140	34	12,0	17,50	110404016	56,27	110405013	57,36	110406013	*
M 22 x 2,5	22,0	18,0	140	34	14,5	19,50	110404017	*	110405014	86,31	110406014	*
M 24 x 3,0	24,0	18,0	160	38	14,5	21,00	110404018	*	110405015	93,77	110406015	*
M 27 x 3,0	27,0	20,0	160	38	16,0	24,00	110404019	*			* on request	
M 30 x 3,5	30,0	22,0	180	45	18,0	26,50	110404020	*				

MACHO PARA FUROS PASSANTES - SP

HSSE-TiAlN 700N (Alumino)

HSSE 1200N (Inconel)



Machine Tap
for aluminum

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

DIN 376 from M 12
DIN 371 up to M 10

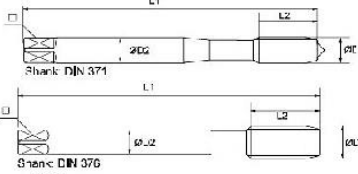
Machine Tap
for special alloys
(Inconel, Hastelloy etc.)

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

DIN 376 from M 12
DIN 371 up to M 10

M	D1	D2	L1	L2	□	🔩	No.	€	No.	€
M 2 x 0,4	2,0	2,8	45	8	2,1	1,60			110412001	57,24
M 2,5 x 0,45	2,5	2,8	50	9	2,1	2,05			110412002	54,50
M 3 x 0,5	3,0	3,5	56	11	2,7	2,50	110407001	33,80	110412003	51,59
M 4 x 0,7	4,0	4,5	63	13	3,4	3,30	110407002	33,80	110412004	51,59
M 5 x 0,8	5,0	6,0	70	16	4,9	4,20	110407003	34,57	110412005	51,59
M 6 x 1,0	6,0	6,0	80	19	4,9	5,00	110407004	34,57	110412006	51,59
M 8 x 1,25	8,0	8,0	90	22	6,2	6,80	110407005	43,75	110412007	63,93
M 10 x 1,5	10,0	10,0	100	24	8,0	8,50	110407006	52,59	110412008	78,67
M 12 x 1,75	12,0	9,0	110	29	7,0	10,20	110407007	61,82	110412009	100,60
M 14 x 2,0	14,0	11,0	110	30	9,0	12,00	110407008	69,41	110412010	133,17
M 16 x 2,0	16,0	12,0	110	32	9,0	14,00	110407009	80,67	110412011	149,62
M 18 x 2,5	18,0	14,0	125	34	11,0	15,50			110412012	200,52
M 20 x 2,5	20,0	16,0	140	34	12,0	17,50			110412013	257,59
M 24 x 3,0	24,0	18,0	160	38	14,5	21,00			110412014	366,08
M 27 x 3,0	27,0	20,0	160	38	16,0	24,00			110412015	400,87
M 30 x 3,5	30,0	22,0	180	45	18,0	26,50			110412016	461,03

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



Machine Tap for general use

material: HSSE ISO2/6H to 900 N/mm² 27.1 HRC



Machine Tap for general use Left-hand thread

material: HSSE ISO2/6H to 900 N/mm² 27.1 HRC



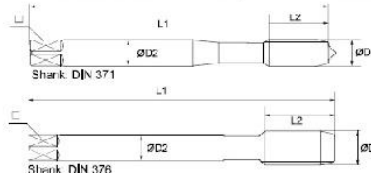
Machine Tap with longer tool life time

material: HSSE TiN ISO2/6H to 900 N/mm² 27.1 HRC



M	D1	D2	L1	L2	□	No.	€	No.	€	No.	€	
DIN 371												
M 2 x 0,4	2,0	2,8	45	8	2,1	1,60	110501001	7,75		110504001	25,33	
M 2,2 x 0,45	2,2	2,8	45	8	2,1	1,75				110504002	27,70	
M 2,3 x 0,4	2,3	2,8	45	9	2,1	1,90	110501002	7,75		110504003	30,45	
M 2,5 x 0,45	2,5	2,8	50	9	2,1	2,05	110501003	7,75		110504004	22,00	
M 2,6 x 0,45	2,6	2,8	50	9	2,1	2,10	110501004	7,75		110504005	21,20	
M 3 x 0,5	3,0	3,5	56	11	2,7	2,50	110501005	6,20	110502001	10,80	110504006	16,32
M 3,5 x 0,6	3,5	4,0	56	13	3,0	2,90	110501006	6,98			110504007	20,79
M 4 x 0,7	4,0	4,5	63	13	3,4	3,30	110501007	6,20	110502002	10,80	110504008	16,52
M 5 x 0,8	5,0	6,0	70	16	4,9	4,20	110501008	6,65	110502003	11,25	110504009	17,96
M 6 x 1,0	6,0	6,0	80	19	4,9	5,00	110501009	6,65	110502004	11,25	110504010	19,51
M 7 x 1,0	7,0	7,0	80	19	5,5	6,00	110501010	9,19			110504011	23,28
M 8 x 1,25	8,0	8,0	90	22	6,2	6,80	110501011	8,32	110502005	13,48	110504012	27,04
M 9 x 1,25	9,0	9,0	90	18	6,2	7,80					110504013	31,37
M 10 x 1,5	10,0	10,0	100	24	8,0	8,50	110501012	10,31	110502006	15,37	110504014	32,54
DIN 376												
M 3 x 0,5	3,0	2,2	56	11	-	2,50	110501013	6,87				
M 4 x 0,7	4,0	2,8	63	13	2,1	3,30	110501014	6,87				
M 5 x 0,8	5,0	3,5	70	16	2,7	4,20	110501015	7,20				
M 6 x 1,0	6,0	4,5	80	19	3,4	5,00	110501016	7,20				
M 8 x 1,25	8,0	6,0	90	22	4,9	6,80	110501017	8,64				
M 10 x 1,5	10,0	7,0	100	24	5,5	8,50	110501018	10,86				
M 11 x 1,5	11,0	8,0	100	22	6,2	9,50					110504015	40,99
M 12 x 1,75	12,0	9,0	110	29	7,0	10,20	110501019	12,19	110502007	18,26	110504016	40,16
M 14 x 2,0	14,0	11,0	110	30	9,0	12,00	110501020	16,07	110502008	27,06	110504017	49,35
M 16 x 2,0	16,0	12,0	110	32	9,0	14,00	110501021	17,73	110502009	30,62	110504018	57,33
M 18 x 2,5	18,0	14,0	125	34	11,0	15,50	110501022	25,49	110502010	41,77	110504019	76,47
M 20 x 2,5	20,0	16,0	140	34	12,0	17,50	110501023	35,46	110502011	59,03	110504020	85,47
M 22 x 2,5	22,0	18,0	140	34	14,5	19,50	110501024	38,78	110502012	61,59	110504021	114,14
M 24 x 3,0	24,0	18,0	160	38	14,5	21,00	110501025	42,10	110502013	64,05	110504022	118,31
M 27 x 3,0	27,0	20,0	160	38	16,0	24,00	110501026	66,49			110504023	149,88
M 30 x 3,5	30,0	22,0	180	45	18,0	26,50	110501027	70,92			110504024	177,62
M 33 x 3,5	33,0	25,0	180	50	20,0	29,50	110501028	99,73			110504025	251,46
M 36 x 4,0	36,0	28,0	200	56	22,0	32,00	110501029	161,79			110504026	337,98
M 39 x 4,0	39,0	32,0	200	60	24,0	35,00	110501030	205,00				
M 42 x 4,5	42,0	32,0	200	60	24,0	37,50	110501031	240,45				
M 45 x 4,5	45,0	36,0	220	65	29,0	40,50	110501032	277,05				
M 48 x 5,0	48,0	36,0	250	70	29,0	43,00	110501033	299,20				
M 52 x 5,0	52,0	40,0	250	70	32,0	47,00	110501034	365,70				

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



Machine Tap for cast materials

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



Machine Tap for titanium and titanium alloys

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



Machine Tap for brass (short-chipping)

material: HSSE TiN ISO2/6H to 600 N/mm²



M	D1	D2	L1	L2	□	No.	€	No.	€	No.	€	
M 2 x 0,4	2,0	2,8	45	8	2,1	1,60		110511001	44,73			
M 2,5 x 0,45	2,5	2,8	50	9	2,1	2,05		110511002	44,73			
M 3 x 0,5	3,0	3,5	56	11	2,7	2,50	110510001	17,09	110511003	43,36	110509001	10,80
M 3,5 x 0,6	3,5	4,0	56	13	3,0	2,90	110510002	25,21				
M 4 x 0,7	4,0	4,5	63	13	3,4	3,30	110510003	17,29	110511004	46,10	110509002	10,80
M 5 x 0,8	5,0	6,0	70	16	4,9	4,20	110510004	18,85	110511005	46,79	110509003	11,81
M 6 x 1,0	6,0	6,0	80	19	4,9	5,00	110510005	19,64	110511006	47,30	110509004	11,81
M 7 x 1,0	7,0	7,0	80	19	5,5	6,00	110510006	33,75				
M 8 x 1,25	8,0	8,0	90	22	6,2	6,80	110510007	23,63	110511007	55,02	110509005	13,81
M 9 x 1,25	9,0	9,0	90	18	6,2	7,80	110510008	40,73				
M 10 x 1,5	10,0	10,0	100	24	8,0	8,50	110510009	31,23	110511008	65,81	110509006	18,93
M 11 x 1,5	11,0	8,0	100	22	6,2	9,50	110510010	50,24				
M 12 x 1,75	12,0	9,0	110	29	7,0	10,20	110510011	43,22	110511009	94,26	110509007	24,50
M 14 x 2,0	14,0	11,0	110	30	9,0	12,00	110510012	56,72	110511010	119,97	110509008	27,85
M 16 x 2,0	16,0	12,0	110	32	9,0	14,00	110510013	61,68	110511011	135,57	110509009	30,07
M 18 x 2,5	18,0	14,0	125	34	11,0	15,50	110510014	81,42	110511012	193,15		
M 20 x 2,5	20,0	16,0	140	34	12,0	17,50	110510015	89,50	110511013	213,89		
M 22 x 2,5	22,0	18,0	140	34	14,5	19,50	110510016	151,38				
M 24 x 3,0	24,0	18,0	160	38	14,5	21,00	110510017	126,00				
M 27 x 3,0	27,0	20,0	160	38	16,0	24,00	110510018	220,73				
M 30 x 3,5	30,0	22,0	180	45	18,0	26,50	110510019	285,90				
M 33 x 3,5	33,0	25,0	180	50	20,0	29,50	110510020	439,74				

MACHO PARA FUROS CEGOS - SF

HSSE-TiAIN 1200N

HSSE Direitos

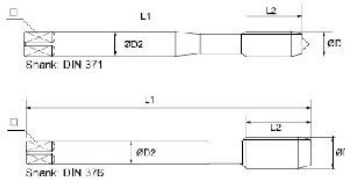
HSSE Esquerdos

Machine Taps - Form C

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

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

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



M	D1	D2	L1	L2	No.	€	No.	€	No.	€
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DIN 371											
M 2 x 0,4	2,0	2,8	45	6	2,1	1,60	110603001	26,24	110601001	9,09	
M 2,2 x 0,45	2,2	2,8	45	6	2,1	1,75	110603002	29,07			
M 2,5 x 0,45	2,5	2,8	50	6	2,1	2,05	110603003	22,09	110601002	9,09	
M 3 x 0,5	3,0	3,5	56	6	2,7	2,50	110603004	17,33	110601003	7,86	110602001 14,37
M 3,5 x 0,6	3,5	4,0	56	13	3,0	2,90	110603005	20,16	110601004	8,64	
M 4 x 0,7	4,0	4,5	63	7	3,4	3,30	110603006	17,64	110601005	7,86	110602002 14,37
M 5 x 0,8	5,0	6,0	70	8	4,9	4,20	110603007	17,85	110601006	8,65	110602003 15,37
M 6 x 1,0	6,0	6,0	80	10	4,9	5,00	110603008	18,63	110601007	8,65	110602004 15,37
M 7 x 1,0	7,0	7,0	80	19	5,5	6,00			110601008	11,97	
M 8 x 1,25	8,0	8,0	90	14	6,2	6,80	110603009	21,95	110601009	10,42	110602005 18,38
M 10 x 1,5	10,0	10,0	100	16	8,0	8,50	110603010	26,57	110601010	13,08	110602006 20,94

DIN 376											
M 3 x 0,5	3,0	2,2	56	6	-	2,50			110601011	8,64	110602007 14,37
M 4 x 0,7	4,0	2,8	63	7	2,1	3,30			110601012	8,64	110602008 14,37
M 5 x 0,8	5,0	3,5	70	8	2,7	4,20			110601013	9,08	110602009 15,37
M 6 x 1,0	6,0	4,5	80	10	3,4	5,00			110601014	9,08	110602010 15,37
M 8 x 1,25	8,0	6,0	90	14	4,9	6,80			110601015	11,08	110602011 18,38
M 10 x 1,5	10,0	7,0	100	16	5,5	8,50			110601016	13,30	110602012 20,94
M 12 x 1,75	12,0	9,0	110	18	7,0	10,20	110603011	33,60	110601017	15,51	110602013 23,84
M 14 x 2,0	14,0	11,0	110	20	9,0	12,00	110603012	43,00	110601018	19,94	110602014 30,40
M 16 x 2,0	16,0	12,0	110	22	9,0	14,00	110603013	54,12	110601019	22,16	110602015 35,08
M 18 x 2,5	18,0	14,0	125	25	11,0	15,50	110603014	73,59	110601020	32,68	110602016 46,78
M 20 x 2,5	20,0	16,0	140	25	12,0	17,50	110603015	88,22	110601021	43,22	110602017 66,83
M 22 x 2,5	22,0	18,0	140	27	14,5	19,50	110603016	111,49	110601022	50,97	110602018 74,85
M 24 x 3,0	24,0	18,0	160	30	14,5	21,00	110603017	117,81	110601023	53,19	110602019 77,19
M 27 x 3,0	27,0	20,0	160	30	16,0	24,00	110603018	188,87	110601024	86,43	110602020 132,54
M 30 x 3,5	30,0	22,0	180	35	18,0	26,50	110603019	230,55	110601025	90,86	110602021 136,99
M 33 x 3,5	33,0	25,0	180	35	20,0	29,50			110601026	129,65	110602022 190,46
M 36 x 4,0	36,0	28,0	200	40	22,0	32,00			110601027	205,00	110602023 320,76
M 39 x 4,0	39,0	32,0	200	40	24,0	35,00			110601028	260,42	110602024 394,28
M 42 x 4,5	42,0	32,0	200	45	24,0	37,50			110601029	310,28	110602025 459,99
M 45 x 4,5	45,0	36,0	220	45	29,0	40,50			110601030	349,07	110602026 522,36
M 48 x 5,0	48,0	36,0	250	50	29,0	43,00			110601031	382,30	110602027 570,22
M 52 x 5,0	52,0	40,0	250	50	32,0	47,00			110601032	454,33	110602028 666,04

MACHO PARA FUROS CEGOS - SF

HSSE-TiN 1300N

HSSE Direitos INOX

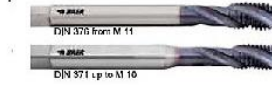
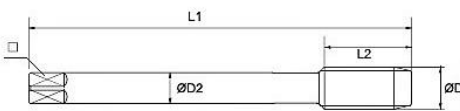
HSSE Esq. INOX

Machine Taps - Form C

Machine Tap
for high-alloyed steels
and longer tool life time
blind holes up to 2.5 x D
Chip removal (like picture)
Form C 35° spiral flute
material: HSSE-TiN ISO2/6H to 1300 N/mm² 41 HRC

Machine Tap
ECO for stainless steels
with high tool life time
blind holes up to 2.5 x D
Chip removal (like picture)
Form C 35° spiral flute
material: HSSE steam tempered ISO2/6H to 900 N/mm² 27.1 HRC

Machine Tap
for high alloyed stainless steels
and high-tensile materials
blind holes up to 2 x D
Chip removal (like picture)
Form C 15° spiral flute
material: HSSE-PM TiAIN ISO2/6H to 1400 N/mm² 44 HRC

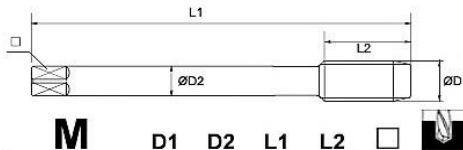


M	D1	D2	L1	L2	No.	€	No.	€	No.	€
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M 2 x 0,4	2,0	2,8	45	6	2,1	1,60	110604001	13,38			110606001 *
M 2,5 x 0,45	2,5	2,8	50	6	2,1	2,05	110604002	13,38			110606002 *
M 3 x 0,5	3,0	3,5	56	6	2,7	2,50	110604003	11,98	110605001	12,92	110606003 23,75
M 3,5 x 0,6	3,5	4,0	56	13	3,0	2,90	110604004	*			
M 4 x 0,7	4,0	4,5	63	7	3,4	3,30	110604005	11,98	110605002	12,92	110606004 23,75
M 5 x 0,8	5,0	6,0	70	8	4,9	4,20	110604006	12,80	110605003	14,15	110606005 25,58
M 6 x 1,0	6,0	6,0	80	10	4,9	5,00	110604007	13,50	110605004	14,15	110606006 28,62
M 7 x 1,0	7,0	7,0	80	19	5,5	6,00	110604008	18,64			
M 8 x 1,25	8,0	8,0	90	14	6,2	6,80	110604009	16,55	110605005	16,82	110606007 35,32
M 9 x 1,25	9,0	9,0	90	15	7,0	7,80	110604010	*			
M 10 x 1,5	10,0	10,0	100	16	8,0	8,50	110604011	21,48	110605006	23,83	110606008 44,46
M 11 x 1,5	11,0	8,0	100	18	6,2	9,50	110604012	*			
M 12 x 1,75	12,0	9,0	110	18	7,0	10,20	110604013	28,05	110605007	30,08	110606009 62,73
M 14 x 2,0	14,0	11,0	110	20	9,0	12,00	110604014	34,23	110605008	34,08	110606010 97,44
M 16 x 2,0	16,0	12,0	110	22	9,0	14,00	110604015	38,05	110605009	36,75	110606011 111,45
M 18 x 2,5	18,0	14,0	125	25	11,0	15,50	110604016	52,84	110605010	49,45	110606012 *
M 20 x 2,5	20,0	16,0	140	25	12,0	17,50	110604017	63,91	110605011	69,50	110606013 *
M 22 x 2,5	22,0	18,0	140	27	14,5	19,50	110604018	*	110605012	84,99	110606014 *
M 24 x 3,0	24,0	18,0	160	30	14,5	21,00	110604019	*	110605013	91,88	110606015 *
M 27 x 3,0	27,0	20,0	160	30	16,0	24,00	110604020	*			
M 30 x 3,5	30,0	22,0	180	35	18,0	26,50	110604021	*			

* on request

**Machine Taps - Form C
for blind holes**



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

blind holes up to 3 x D material: HSSE
Chip removal (like picture) ISO2/6H
Form C 40° spiral flute to 350 N/mm²



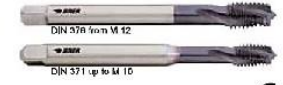
**Machine Tap
for long-chipping materials**

blind holes up to 3 x D material: HSSE
Chip removal (like picture) ISO2/6H
Form C 15° spiral flute to 900 N/mm² 27.1 HRC



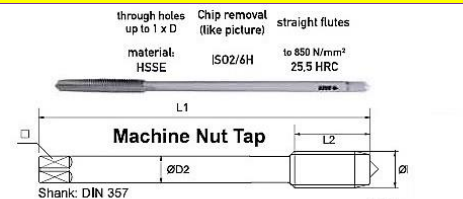
**Machine Tap
for special alloys
(Inconel, Hastelloy etc.)**

blind holes up to 2 x D material: HSSE-PM TiAlN
Chip removal (like picture) ISO2/6H
Form C 15° spiral flute to 1000 N/mm² 32 HRC



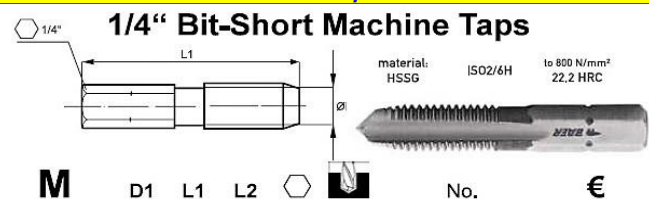
M	D1	D2	L1	L2	□	No.	€	No.	€	No.	€	
DIN 371												
M 3 x 0,5	3,0	3,5	56	6	2,7	2,50	110607001	11,92	110608001	9,80	110612001	52,27
M 3,5 x 0,6	3,5	4,0	56	13	3,0	2,90			110608002	10,14		
M 4 x 0,7	4,0	4,5	63	7	3,4	3,30	110607002	11,92	110608003	9,80	110612002	54,67
M 5 x 0,8	5,0	6,0	70	8	4,9	4,20	110607003	13,03	110608004	10,47	110612003	56,90
M 6 x 1,0	6,0	6,0	80	10	4,9	5,00	110607004	13,03	110608005	10,47	110612004	58,44
M 7 x 1,0	7,0	7,0	80	19	5,5	6,00			110608006	13,26		
M 8 x 1,25	8,0	8,0	90	14	6,2	6,80	110607005	15,04	110608007	12,92	110612005	66,67
M 10 x 1,5	10,0	10,0	100	16	8,0	8,50	110607006	22,28	110608008	14,93	110612006	76,78
DIN 376												
M 3 x 0,5	3,0	2,2	56	11	-	2,50			110608009	9,80		
M 4 x 0,7	4,0	2,8	63	13	2,1	3,30			110608010	9,80		
M 5 x 0,8	5,0	3,5	70	16	2,7	4,20			110608011	10,46		
M 6 x 1,0	6,0	4,5	80	19	3,4	5,00			110608012	10,46		
M 8 x 1,25	8,0	6,0	90	22	4,9	6,80			110608013	12,92		
M 10 x 1,5	10,0	7,0	100	24	5,5	8,50			110608014	14,93		
M 12 x 1,75	12,0	9,0	110	18	7,0	10,20	110607007	28,95	110608015	17,82	110612007	98,38
M 14 x 2,0	14,0	11,0	110	20	9,0	12,00	110607008	31,19	110608016	23,95	110612008	120,31
M 16 x 2,0	16,0	12,0	110	22	9,0	14,00	110607009	34,53	110608017	25,96	110612009	135,22
M 18 x 2,5	18,0	14,0	125	25	11,0	15,50			110608018	37,31	110612010	177,90
M 20 x 2,5	20,0	16,0	140	25	12,0	17,50			110608019	48,45	110612011	197,44
M 22 x 2,5	22,0	18,0	140	27	14,5	19,50			110608020	55,69		
M 24 x 3,0	24,0	18,0	160	30	14,5	21,00			110608021	59,03		

MACHO PARA PORCAS HSSE



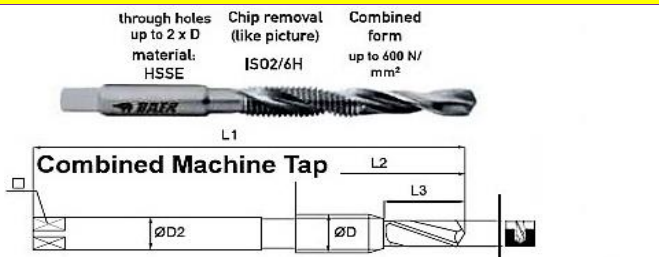
M	D1	D2	L1	L2	□	No.	€
M 3 x 0,5	3,0	2,2	70	22	-	110901001	15,89
M 4 x 0,7	4,0	2,8	90	25	2,1	110901002	15,89
M 5 x 0,8	5,0	3,5	100	28	2,7	110901003	17,05
M 6 x 1,0	6,0	4,5	110	32	3,4	110901004	17,05
M 8 x 1,25	8,0	6,0	125	40	4,9	110901005	19,49
M 10 x 1,5	10,0	7,0	140	45	5,5	110901006	25,52
M 12 x 1,75	12,0	9,0	180	50	7,0	110901007	35,96
M 14 x 2,0	14,0	11,0	200	56	9,0	110901008	45,01
M 16 x 2,0	16,0	12,0	200	63	9,0	110901009	54,87
M 18 x 2,5	18,0	14,0	220	63	11,0	110901010	62,06
M 20 x 2,5	20,0	16,0	250	70	12,0	110901011	68,21
M 22 x 2,5	22,0	18,0	280	80	14,5	110901012	81,66
M 24 x 3,0	24,0	18,0	280	80	14,5	110901013	91,64

MACHO-BIT 1/4 HSSE



M	D1	L1	L2	□	No.	€
M 3 x 0,5	3,0	33	11	1/4"	111201001	3,79
M 3,5 x 0,6	3,5	34	10	1/4"	111201002	5,12
M 4 x 0,7	4,0	35	12	1/4"	111201003	3,79
M 4,5 x 0,75	4,5	35	12	1/4"	111201004	5,12
M 5 x 0,8	5,0	36	15	1/4"	111201005	4,79
M 5,5 x 0,9	5,5	35	15	1/4"	111201006	5,79
M 6 x 1,0	6,0	39	18	1/4"	111201007	4,79
M 7 x 1,0	7,0	38	16	1/4"	111201008	6,35
M 8 x 1,25	8,0	40	19	1/4"	111201009	6,79
M 9 x 1,25	9,0	41	18	1/4"	111201010	9,80
M 10 x 1,5	10,0	41	21	1/4"	111201011	8,01

MACHO-BROCA HSSE



D2	L1	L2	L3	□	No.	€
3,0	56	22	11	2,4	111001001	18,79
4,0	63	28	14	3,0	111001002	18,79
5,0	71	36	18	3,8	111001003	18,79
6,0	80	44	22	4,9	111001004	20,88
8,0	95	50	25	6,2	111001005	23,90
10,0	106	62	31	8,0	111001006	26,22
12,0	115	70	35	9,0	111001007	30,74

MACHO-BROCA-BIT 1/4 HSS



M	D1	D2	L1	□	No.	€
M 3 x 0,5	3,0	2,5	36	1/4"	111301001	7,13
M 4 x 0,7	4,0	3,3	39	1/4"	111301002	7,13
M 5 x 0,8	5,0	4,2	41	1/4"	111301003	7,13
M 6 x 1,0	6,0	5,0	44	1/4"	111301004	7,13
M 8 x 1,25	8,0	6,8	50	1/4"	111301005	9,80
M 10 x 1,5	10,0	8,5	59	1/4"	111301006	11,81

UNiForm Machine Forming Taps

M Metric coarse thread
ISO DIN 13

Machine Forming Taps have following advantages:

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

Machine Forming Taps for universal use



through holes & blind holes up to 2,5 x D
Threading with no chips
with oil grooves

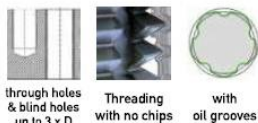


material: HSSE TiN ISO2/6HX to 850 N/mm² 25,5 HRC



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

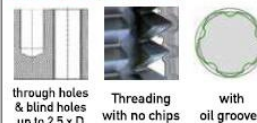


material: HSSE-PM TiN ISO2/6HX to 1200 N/mm² 37,1 HRC



2-3 threads outside cooling and lubrication

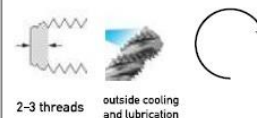
Machine Forming Taps for universal use oversized (diameter)



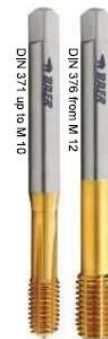
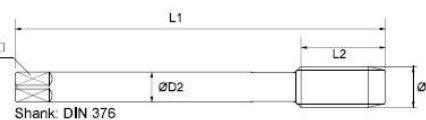
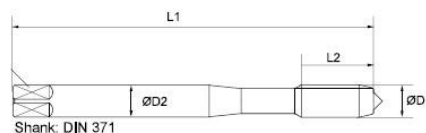
through holes & blind holes up to 2,5 x D
Threading with no chips
with oil grooves



material: HSSE TiN ISO3/6GX to 850 N/mm² 25,5 HRC



2-3 threads outside cooling and lubrication



M D1 D2 L1 L2 □

No. € No. € No. €

M	D1	D2	L1	L2	□	Tol. 6HX: standard tolerance		Tol. 6HX: standard tolerance		Tol. 6GX: threads with large clearance		
						No.	€	No.	€	No.	€	
M 2 x 0,4	2,0	2,8	45	8	2,1	1,85	111101001	47,23	111104001	61,70	11117001	49,87
M 2,2 x 0,45	2,2	2,8	45	8	2,1	2,03	111101002	51,93				
M 2,3 x 0,4	2,3	2,8	45	8	2,1	2,15	111101003	40,73				
M 2,5 x 0,45	2,5	2,8	50	9	2,1	2,33	111101004	40,73	111104002	58,79	11117002	47,82
M 2,6 x 0,45	2,6	2,8	50	9	2,1	2,43	111101005	38,94				
M 3 x 0,5	3,0	3,5	56	11	2,7	2,80	111101006	13,90	111104003	55,70	11117003	45,07
M 3,5 x 0,6	3,5	4,0	56	13	3,0	3,25	111101007	38,05	111104004	55,70	11117004	45,07
M 4 x 0,7	4,0	4,5	63	13	3,4	3,70	111101008	15,90	111104005	58,96	11117005	48,16
M 4,5 x 0,75	4,5	6,0	70	14	4,9	4,20	111101009	35,36				
M 5 x 0,8	5,0	6,0	70	16	4,9	4,65	111101010	17,16	111104006	58,96	11117006	48,16
M 6 x 1,0	6,0	6,0	80	19	4,9	5,10	111101011	17,79	111104007	58,96	11117007	48,16
M 8 x 1,25	8,0	8,0	90	22	6,2	7,45	111101012	21,68	111104008	73,70	11117008	59,99
M 10 x 1,5	10,0	10,0	100	24	8,0	9,35	111101013	26,42	111104009	89,98	11117009	73,01
M 12 x 1,75	12,0	9,0	110	29	7,0	11,25	111101014	35,47	111104010	117,40	11117010	95,29
M 14 x 2,0	14,0	11,0	110	30	9,0	13,10	111101015	53,68	111104011	159,56	11117011	131,45
M 16 x 2,0	16,0	12,0	110	32	9,0	15,10	111101016	63,16	111104012	202,75	11117012	167,10
M 18 x 2,5	18,0	14,0	125	34	11,0	16,85	111101017	164,06	111104013	285,87		
M 20 x 2,5	20,0	16,0	140	34	12,0	18,85	111101018	214,86	111104014	399,50		

PREÇOS DE REFERENCIA A 2019 – FACTOR PARA 2021 X 1.1

OUTRAS CONFIGURAÇÕES - FAVOR CONSULTAR

ON REQUEST ANY OTHER EXECUTION