

FRESAL CATALOGUE  
• SOLID CARBIDE DRILLS •

FRESAL

UTENSILI



























CATALOGUE A019.01 GB  
**SOLID CARBIDE DRILLS**

**FRESAL**

**UTENSILI**

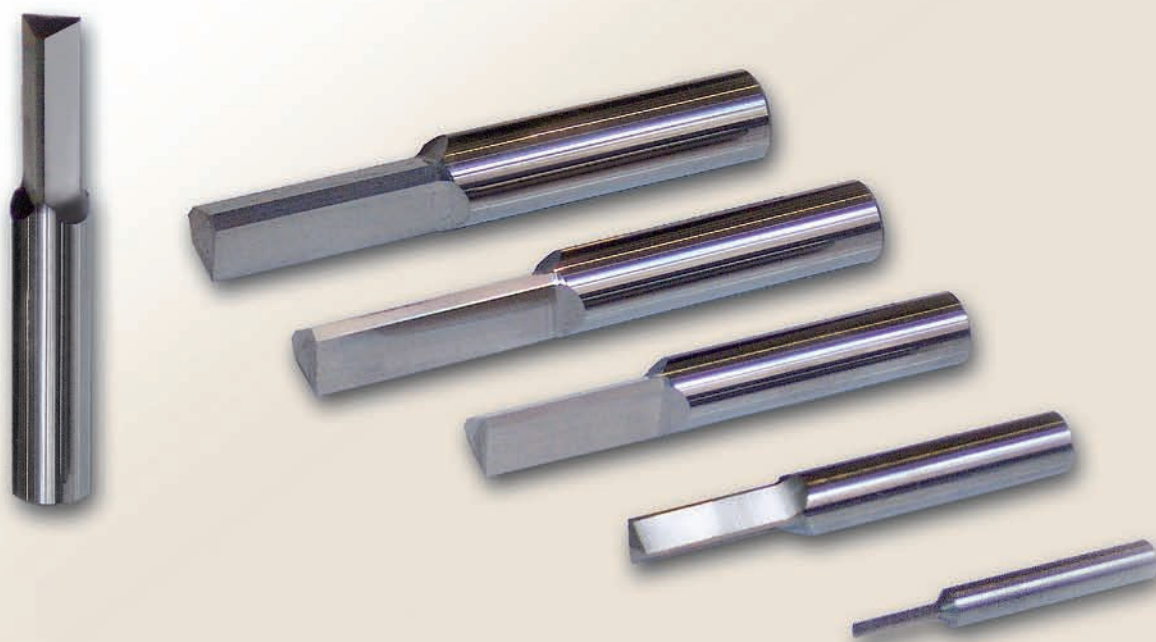
[www.fresal.com](http://www.fresal.com)



TWO FLUTES DRILLS		CODE	PAGE
		HMP300	008
		HMP500	010
		HMPF300	012
		HMPF500	014
		HMPF800	016
		HMPF1200	018
		HMPM90	020
		HMPMF90	021
		HMPC90	022
		HMPC120	022
		HMPC140	022
TAP DESTROYER		CODE	PAGE
		HMTD3	023
		HMTD4	024
WELDON SHANK AND WHISTLE NOTCH		CODE	PAGE
		HMW	025
		HMWN	026

TECHNICAL DATASHEETS PAGE

027

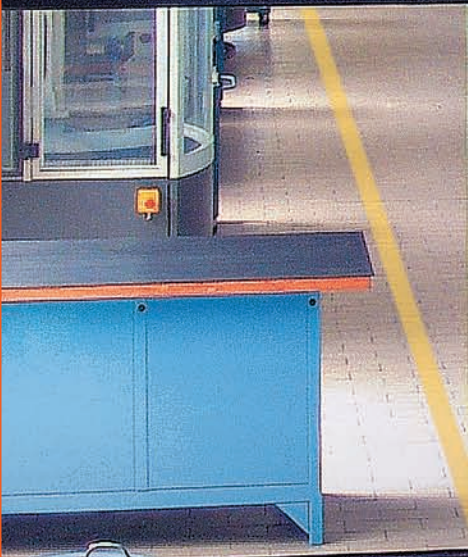
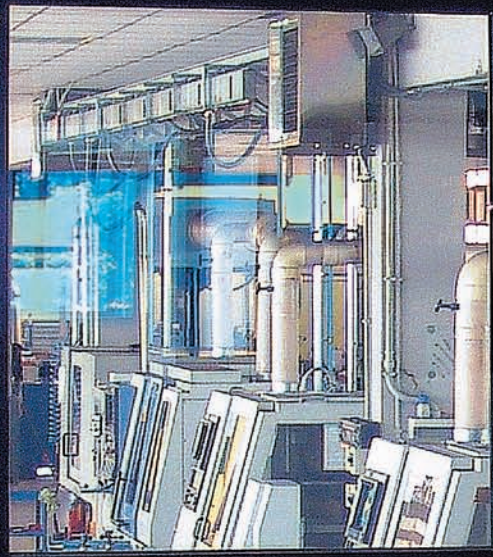
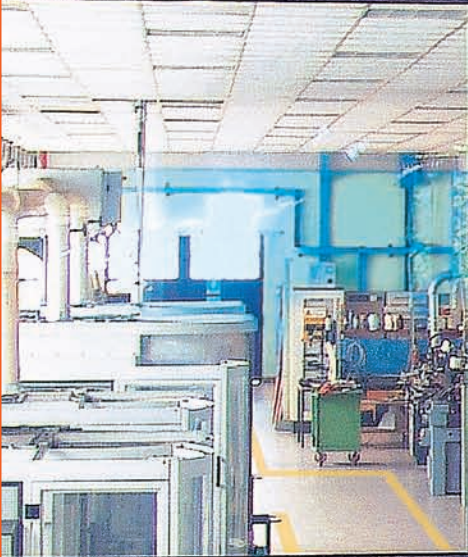






# FRESAL

UTENSILI







**We produce  
reliable and  
innovative tools  
through  
the use of high  
technology.  
With commitment  
and passion.**

The range of tools  
in this catalog is the result  
of our experience  
and listening to the needs  
of our customers.

Many of the items  
that are now part of our  
standard production  
are the result of  
specific solutions.

Because it is  
important for us  
to realize excellent tools  
and offer the best service  
in a logic of wider  
collaboration.



Key  
to quickly find  
information

Type of tools. Short description. Helix angle. Lateral view with dimensions. Norms icons. Drill length.

**HMP300**  
With self-centering sharpening "S" form.

**DIN 6537**

**3xD**

**30°**

**HM HARD METAL**

**140°**

**maxTop**  
is a new generation M/TM coating. The "Top" post-treatment makes it ideal for drilling applications. Available in stock.

**XT multi Top**

The constructive geometry of these drills allows its use in a wide range of materials.

FRESAL				FRESAL			
Ø	inches	MAXTop	CODES	Ø	inches	MAXTop	CODES
3.0	-	-	HMP3000030	3.0	20	62	6 36 9.0
3.1	-	-	HMP3000031	3.1	20	62	6 36 9.1
3.2	-	-	HMP3000032	3.2	20	62	6 36 9.2
3.3	-	-	HMP3000033	3.3	20	62	6 36 9.3
3.4	-	-	HMP3000034	3.4	20	62	6 36 9.4
3.5	-	-	HMP3000035	3.5	20	62	6 36 9.5
3.6	-	-	HMP3000036	3.6	20	62	6 36 9.6
3.7	-	-	HMP3000037	3.7	20	62	6 36 9.7
3.8	-	-	HMP3000038	3.8	24	66	6 36 9.8
3.9	-	-	HMP3000039	3.9	24	66	6 36 9.9
4.0	-	-	HMP3000040	4.0	24	66	6 36 10.0
4.1	-	-	HMP3000041	4.1	24	66	6 36 10.1
4.2	-	-	HMP3000042	4.2	24	66	6 36 10.2
4.3	-	-	HMP3000043	4.3	24	66	6 36 10.3
4.4	-	-	HMP3000044	4.4	24	66	6 36 10.4
4.5	-	-	HMP3000045	4.5	24	66	6 36 10.5
4.6	-	-	HMP3000046	4.6	24	66	6 36 10.6
4.7	-	-	HMP3000047	4.7	24	66	6 36 10.7
4.8	-	-	HMP3000048	4.8	28	66	6 36 10.8
4.9	-	-	HMP3000049	4.9	28	66	6 36 10.9
5.0	-	-	HMP3000050	5.0	28	66	6 36 11.0
5.1	-	-	HMP3000051	5.1	28	66	6 36 11.1
5.2	-	-	HMP3000052	5.2	28	66	6 36 11.2
5.3	-	-	HMP3000053	5.3	28	66	6 36 11.3
5.4	-	-	HMP3000054	5.4	28	66	6 36 11.4
5.5	-	-	HMP3000055	5.5	28	66	6 36 11.5
5.6	-	-	HMP3000056	5.6	28	66	6 36 11.6
5.7	-	-	HMP3000057	5.7	28	66	6 36 11.7
5.8	-	-	HMP3000058	5.8	28	66	6 36 11.8
5.9	-	-	HMP3000059	5.9	28	66	6 36 11.9
6.0	-	-	HMP3000060	6.0	28	66	6 36 12.0
6.1	-	-	HMP3000061	6.1	34	79	8 36 12.2
6.2	-	-	HMP3000062	6.2	34	79	8 36 12.5
6.3	-	-	HMP3000063	6.3	34	79	8 36 12.8
6.4	-	-	HMP3000064	6.4	34	79	8 36 13.0
6.5	-	-	HMP3000065	6.5	34	79	8 36 13.2
6.6	-	-	HMP3000066	6.6	34	79	8 36 13.5
6.7	-	-	HMP3000067	6.7	34	79	8 36 13.8
6.8	-	-	HMP3000068	6.8	34	79	8 36 14.0
6.9	-	-	HMP3000069	6.9	34	79	8 36 14.2
7.0	-	-	HMP3000070	7.0	34	79	8 36 14.5
7.1	-	-	HMP3000071	7.1	41	79	8 36 14.8
7.2	-	-	HMP3000072	7.2	41	79	8 36 15.0
7.3	-	-	HMP3000073	7.3	41	79	8 36 15.2
7.4	-	-	HMP3000074	7.4	41	79	8 36 15.5
7.5	-	-	HMP3000075	7.5	41	79	8 36 16.0
7.6	-	-	HMP3000076	7.6	41	79	8 36 16.5
7.7	-	-	HMP3000077	7.7	41	79	8 36 16.8
7.8	-	-	HMP3000078	7.8	41	79	8 36 17.0
7.9	-	-	HMP3000079	7.9	41	79	8 36 17.5
8.0	-	-	HMP3000080	8.0	41	79	8 36 17.8
8.1	-	-	HMP3000081	8.1	47	89	10 40 18.0
8.2	-	-	HMP3000082	8.2	47	89	10 40 18.5
8.3	-	-	HMP3000083	8.3	47	89	10 40 18.8
8.4	-	-	HMP3000084	8.4	47	89	10 40 19.0
8.5	-	-	HMP3000085	8.5	47	89	10 40 19.5
8.6	-	-	HMP3000086	8.6	47	89	10 40 19.8
8.7	-	-	HMP3000087	8.7	47	89	10 40 20.0
8.8	-	-	HMP3000088	8.8	47	89	10 40
8.9	-	-	HMP3000089	8.9	47	89	10 40

Fresal Code. Coatings and delivery time. Material and indication of use. Peculiarities. Fresal Code.

# FRESAL

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DRILLS  
with and  
without  
coolant  
holes



# DRILLS 3xD

# FRESAL UTENSILI

**HMP300**  
With self-centering sharpening  
"S" form.



**DIN 6537**

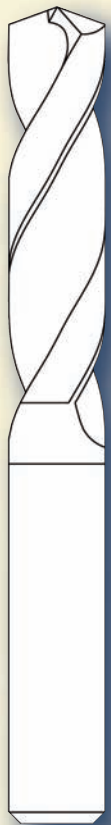
**30°**

**3xD**

**HM HARD METAL**

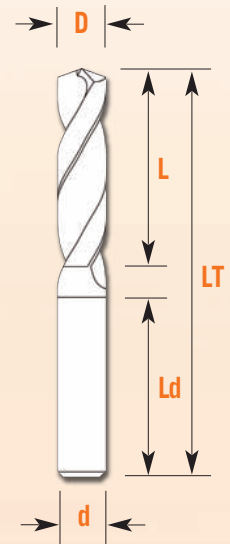
**140°**

**HB HE DIN 6535**



**XT MAXTOP**

**MAXTOP** is a new generation AlTiN coating. The "Top" post-treatment makes it ideal for drilling applications.  
*Available in stock.*



The constructive geometry of these drills allows its use in a wide range of materials



FRESAL				D	L	LT	d	Ld
Ø	UNCOATED	MAXTOP	CODES	m7			h6	
3,0	-	●	HMP300D030	3,0	20	62	6	36
3,1	-	●	HMP300D031	3,1	20	62	6	36
3,2	-	●	HMP300D032	3,2	20	62	6	36
3,3	-	●	HMP300D033	3,3	20	62	6	36
3,4	-	●	HMP300D034	3,4	20	62	6	36
3,5	-	●	HMP300D035	3,5	20	62	6	36
3,6	-	●	HMP300D036	3,6	20	62	6	36
3,7	-	●	HMP300D037	3,7	20	62	6	36
3,8	-	●	HMP300D038	3,8	24	66	6	36
3,9	-	●	HMP300D039	3,9	24	66	6	36
4,0	-	●	HMP300D040	4,0	24	66	6	36
4,1	-	●	HMP300D041	4,1	24	66	6	36
4,2	-	●	HMP300D042	4,2	24	66	6	36
4,3	-	●	HMP300D043	4,3	24	66	6	36
4,4	-	●	HMP300D044	4,4	24	66	6	36
4,5	-	●	HMP300D045	4,5	24	66	6	36
4,6	-	●	HMP300D046	4,6	24	66	6	36
4,7	-	●	HMP300D047	4,7	24	66	6	36
4,8	-	●	HMP300D048	4,8	28	66	6	36
4,9	-	●	HMP300D049	4,9	28	66	6	36
5,0	-	●	HMP300D050	5,0	28	66	6	36
5,1	-	●	HMP300D051	5,1	28	66	6	36
5,2	-	●	HMP300D052	5,2	28	66	6	36
5,3	-	●	HMP300D053	5,3	28	66	6	36
5,4	-	●	HMP300D054	5,4	28	66	6	36
5,5	-	●	HMP300D055	5,5	28	66	6	36
5,6	-	●	HMP300D056	5,6	28	66	6	36
5,7	-	●	HMP300D057	5,7	28	66	6	36
5,8	-	●	HMP300D058	5,8	28	66	6	36
5,9	-	●	HMP300D059	5,9	28	66	6	36
6,0	-	●	HMP300D060	6,0	28	66	6	36
6,1	-	●	HMP300D061	6,1	34	79	8	36
6,2	-	●	HMP300D062	6,2	34	79	8	36
6,3	-	●	HMP300D063	6,3	34	79	8	36
6,4	-	●	HMP300D064	6,4	34	79	8	36
6,5	-	●	HMP300D065	6,5	34	79	8	36
6,6	-	●	HMP300D066	6,6	34	79	8	36
6,7	-	●	HMP300D067	6,7	34	79	8	36
6,8	-	●	HMP300D068	6,8	34	79	8	36
6,9	-	●	HMP300D069	6,9	34	79	8	36
7,0	-	●	HMP300D070	7,0	34	79	8	36
7,1	-	●	HMP300D071	7,1	41	79	8	36
7,2	-	●	HMP300D072	7,2	41	79	8	36
7,3	-	●	HMP300D073	7,3	41	79	8	36
7,4	-	●	HMP300D074	7,4	41	79	8	36
7,5	-	●	HMP300D075	7,5	41	79	8	36
7,6	-	●	HMP300D076	7,6	41	79	8	36
7,7	-	●	HMP300D077	7,7	41	79	8	36
7,8	-	●	HMP300D078	7,8	41	79	8	36
7,9	-	●	HMP300D079	7,9	41	79	8	36
8,0	-	●	HMP300D080	8,0	41	79	8	36
8,1	-	●	HMP300D081	8,1	47	89	10	40
8,2	-	●	HMP300D082	8,2	47	89	10	40
8,3	-	●	HMP300D083	8,3	47	89	10	40
8,4	-	●	HMP300D084	8,4	47	89	10	40
8,5	-	●	HMP300D085	8,5	47	89	10	40
8,6	-	●	HMP300D086	8,6	47	89	10	40
8,7	-	●	HMP300D087	8,7	47	89	10	40
8,8	-	●	HMP300D088	8,8	47	89	10	40
8,9	-	●	HMP300D089	8,9	47	89	10	40

FRESAL				D	L	LT	d	Ld
Ø	UNCOATED	MAXTOP	CODES	m7			h6	
9,0	-	●	HMP300D090	9,0	47	89	10	40
9,1	-	●	HMP300D091	9,1	47	89	10	40
9,2	-	●	HMP300D092	9,2	47	89	10	40
9,3	-	●	HMP300D093	9,3	47	89	10	40
9,4	-	●	HMP300D094	9,4	47	89	10	40
9,5	-	●	HMP300D095	9,5	47	89	10	40
9,6	-	●	HMP300D096	9,6	47	89	10	40
9,7	-	●	HMP300D097	9,7	47	89	10	40
9,8	-	●	HMP300D098	9,8	47	89	10	40
9,9	-	●	HMP300D099	9,9	47	89	10	40
10,0	-	●	HMP300D100	10,0	47	89	10	40
10,1	-	●	HMP300D101	10,1	55	102	12	45
10,2	-	●	HMP300D102	10,2	55	102	12	45
10,3	-	●	HMP300D103	10,3	55	102	12	45
10,4	-	●	HMP300D104	10,4	55	102	12	45
10,5	-	●	HMP300D105	10,5	55	102	12	45
10,6	-	●	HMP300D106	10,6	55	102	12	45
10,7	-	●	HMP300D107	10,7	55	102	12	45
10,8	-	●	HMP300D108	10,8	55	102	12	45
10,9	-	●	HMP300D109	10,9	55	102	12	45
11,0	-	●	HMP300D110	11,0	55	102	12	45
11,1	-	●	HMP300D111	11,1	55	102	12	45
11,2	-	●	HMP300D112	11,2	55	102	12	45
11,3	-	●	HMP300D113	11,3	55	102	12	45
11,4	-	●	HMP300D114	11,4	55	102	12	45
11,5	-	●	HMP300D115	11,5	55	102	12	45
11,6	-	●	HMP300D116	11,6	55	102	12	45
11,7	-	●	HMP300D117	11,7	55	102	12	45
11,8	-	●	HMP300D118	11,8	55	102	12	45
11,9	-	●	HMP300D119	11,9	55	102	12	45
12,0	-	●	HMP300D120	12,0	55	102	12	45
12,2	-	●	HMP300D122	12,2	60	107	14	45
12,5	-	●	HMP300D125	12,5	60	107	14	45
12,8	-	●	HMP300D128	12,8	60	107	14	45
13,0	-	●	HMP300D130	13,0	60	107	14	45
13,2	-	●	HMP300D132	13,2	60	107	14	45
13,5	-	●	HMP300D135	13,5	60	107	14	45
13,8	-	●	HMP300D138	13,8	60	107	14	45
14,0	-	●	HMP300D140	14,0	60	107	14	45
14,2	-	●	HMP300D142	14,2	65	115	16	48
14,5	-	●	HMP300D145	14,5	65	115	16	48
14,8	-	●	HMP300D148	14,8	65	115	16	48
15,0	-	●	HMP300D150	15,0	65	115	16	48
15,2	-	●	HMP300D152	15,2	65	115	16	48
15,5	-	●	HMP300D155	15,5	65	115	16	48
16,0	-	●	HMP300D160	16,0	65	115	16	48
16,5	-	●	HMP300D165	16,5	73	123	18	48
16,8	-	●	HMP300D168	16,8	73	123	18	48
17,0	-	●	HMP300D170	17,0	73	123	18	48
17,5	-	●	HMP300D175	17,5	73	123	18	48
17,8	-	●	HMP300D178	17,8	73	123	18	48
18,0	-	●	HMP300D180	18,0	73	123	18	48
18,5	-	●	HMP300D185	18,5	79	131	20	50
18,8	-	●	HMP300D188	18,8	79	131	20	50
19,0	-	●	HMP300D190	19,0	79	131	20	50
19,5	-	●	HMP300D195	19,5	79	131	20	50
19,8	-	●	HMP300D198	19,8	79	131	20	50
20,0	-	●	HMP300D200	20,0	79	131	20	50

# DRILLS 5xD

**HMP500**  
With self-centering sharpening  
"S" form.



**DIN 6537**

**30°**

**5xD**

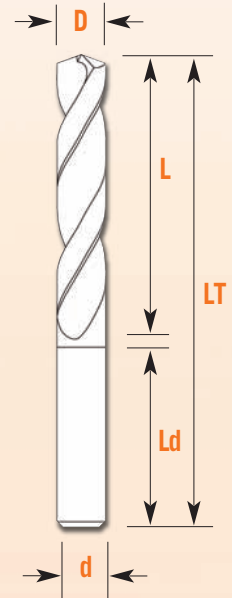
**HM HARD METAL**

**140°**

**HB HE DIN 6535**

**XT MAXTOP**

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*Available in stock.*



The constructive geometry of these drills allows its use in a wide range of materials

FRESAL				D	L	LT	d	Ld
Ø	UNCOATED	MAXTOP	CODES	m7			h6	
3,0	-	●	HMP500D030	3,0	28	66	6	36
3,1	-	●	HMP500D031	3,1	28	66	6	36
3,2	-	●	HMP500D032	3,2	28	66	6	36
3,3	-	●	HMP500D033	3,3	28	66	6	36
3,4	-	●	HMP500D034	3,4	28	66	6	36
3,5	-	●	HMP500D035	3,5	28	66	6	36
3,6	-	●	HMP500D036	3,6	28	66	6	36
3,7	-	●	HMP500D037	3,7	28	66	6	36
3,8	-	●	HMP500D038	3,8	36	74	6	36
3,9	-	●	HMP500D039	3,9	36	74	6	36
4,0	-	●	HMP500D040	4,0	36	74	6	36
4,1	-	●	HMP500D041	4,1	36	74	6	36
4,2	-	●	HMP500D042	4,2	36	74	6	36
4,3	-	●	HMP500D043	4,3	36	74	6	36
4,4	-	●	HMP500D044	4,4	36	74	6	36
4,5	-	●	HMP500D045	4,5	36	74	6	36
4,6	-	●	HMP500D046	4,6	36	74	6	36
4,7	-	●	HMP500D047	4,7	36	74	6	36
4,8	-	●	HMP500D048	4,8	44	82	6	36
4,9	-	●	HMP500D049	4,9	44	82	6	36
5,0	-	●	HMP500D050	5,0	44	82	6	36
5,1	-	●	HMP500D051	5,1	44	82	6	36
5,2	-	●	HMP500D052	5,2	44	82	6	36
5,3	-	●	HMP500D053	5,3	44	82	6	36
5,4	-	●	HMP500D054	5,4	44	82	6	36
5,5	-	●	HMP500D055	5,5	44	82	6	36
5,6	-	●	HMP500D056	5,6	44	82	6	36
5,7	-	●	HMP500D057	5,7	44	82	6	36
5,8	-	●	HMP500D058	5,8	44	82	6	36
5,9	-	●	HMP500D059	5,9	44	82	6	36
6,0	-	●	HMP500D060	6,0	44	82	6	36
6,1	-	●	HMP500D061	6,1	53	91	8	36
6,2	-	●	HMP500D062	6,2	53	91	8	36
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6,9	-	●	HMP500D069	6,9	53	91	8	36
7,0	-	●	HMP500D070	7,0	53	91	8	36
7,1	-	●	HMP500D071	7,1	53	91	8	36
7,2	-	●	HMP500D072	7,2	53	91	8	36
7,3	-	●	HMP500D073	7,3	53	91	8	36
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7,5	-	●	HMP500D075	7,5	53	91	8	36
7,6	-	●	HMP500D076	7,6	53	91	8	36
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7,8	-	●	HMP500D078	7,8	53	91	8	36
7,9	-	●	HMP500D079	7,9	53	91	8	36
8,0	-	●	HMP500D080	8,0	53	91	8	36
8,1	-	●	HMP500D081	8,1	61	103	10	40
8,2	-	●	HMP500D082	8,2	61	103	10	40
8,3	-	●	HMP500D083	8,3	61	103	10	40
8,4	-	●	HMP500D084	8,4	61	103	10	40
8,5	-	●	HMP500D085	8,5	61	103	10	40
8,6	-	●	HMP500D086	8,6	61	103	10	40
8,7	-	●	HMP500D087	8,7	61	103	10	40
8,8	-	●	HMP500D088	8,8	61	103	10	40
8,9	-	●	HMP500D089	8,9	61	103	10	40

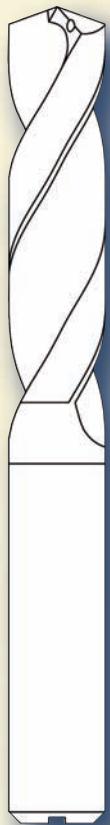
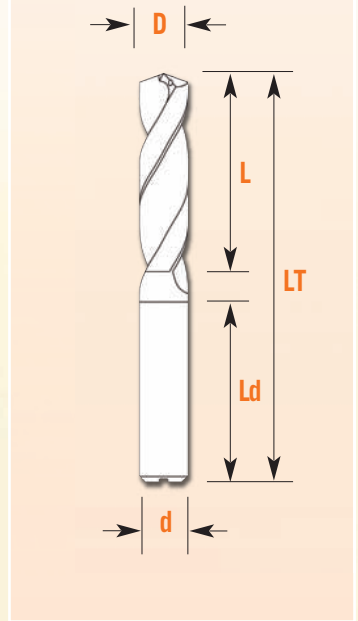
FRESAL				D	L	LT	d	Ld
Ø	UNCOATED	MAXTOP	CODES	m7			h6	
9,0	-	●	HMP500D090	9,0	61	103	10	40
9,1	-	●	HMP500D091	9,1	61	103	10	40
9,2	-	●	HMP500D092	9,2	61	103	10	40
9,3	-	●	HMP500D093	9,3	61	103	10	40
9,4	-	●	HMP500D094	9,4	61	103	10	40
9,5	-	●	HMP500D095	9,5	61	103	10	40
9,6	-	●	HMP500D096	9,6	61	103	10	40
9,7	-	●	HMP500D097	9,7	61	103	10	40
9,8	-	●	HMP500D098	9,8	61	103	10	40
9,9	-	●	HMP500D099	9,9	61	103	10	40
10,0	-	●	HMP500D100	10,0	61	103	10	40
10,1	-	●	HMP500D101	10,1	71	118	12	45
10,2	-	●	HMP500D102	10,2	71	118	12	45
10,3	-	●	HMP500D103	10,3	71	118	12	45
10,4	-	●	HMP500D104	10,4	71	118	12	45
10,5	-	●	HMP500D105	10,5	71	118	12	45
10,6	-	●	HMP500D106	10,6	71	118	12	45
10,7	-	●	HMP500D107	10,7	71	118	12	45
10,8	-	●	HMP500D108	10,8	71	118	12	45
10,9	-	●	HMP500D109	10,9	71	118	12	45
11,0	-	●	HMP500D110	11,0	71	118	12	45
11,1	-	●	HMP500D111	11,1	71	118	12	45
11,2	-	●	HMP500D112	11,2	71	118	12	45
11,3	-	●	HMP500D113	11,3	71	118	12	45
11,4	-	●	HMP500D114	11,4	71	118	12	45
11,5	-	●	HMP500D115	11,5	71	118	12	45
11,6	-	●	HMP500D116	11,6	71	118	12	45
11,7	-	●	HMP500D117	11,7	71	118	12	45
11,8	-	●	HMP500D118	11,8	71	118	12	45
11,9	-	●	HMP500D119	11,9	71	118	12	45
12,0	-	●	HMP500D120	12,0	71	118	12	45
12,5	-	●	HMP500D125	12,5	77	124	14	45
12,8	-	●	HMP500D128	12,8	77	124	14	45
13,0	-	●	HMP500D130	13,0	77	124	14	45
13,5	-	●	HMP500D135	13,5	77	124	14	45
13,8	-	●	HMP500D138	13,8	77	124	14	45
14,0	-	●	HMP500D140	14,0	77	124	14	45
14,5	-	●	HMP500D145	14,5	83	133	16	48
14,8	-	●	HMP500D148	14,8	83	133	16	48
15,0	-	●	HMP500D150	15,0	83	133	16	48
15,5	-	●	HMP500D155	15,5	83	133	16	48
16,0	-	●	HMP500D160	16,0	83	133	16	48
16,5	-	●	HMP500D165	16,5	93	143	18	48
17,0	-	●	HMP500D170	17,0	93	143	18	48
18,0	-	●	HMP500D180	18,0	93	143	18	48
18,5	-	●	HMP500D185	18,5	101	153	20	50
19,0	-	●	HMP500D190	19,0	101	153	20	50
20,0	-	●	HMP500D200	20,0	101	153	20	50

**DRILLS 3xD**  
with coolant  
holes

**HMPF300**  
With self-centering sharpening  
"S" form.



DIN 6537	30°	3xD 
HM HARD METAL		140°



**XT  
MAXTOP**  
MAXTOP is a new generation  
AlTiN coating.  
The "Top" post-treatment  
makes it ideal for  
drilling applications.  
*Available in stock.*

The constructive  
geometry of these drills  
allows its use in a wide  
range of materials



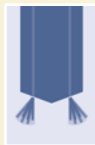
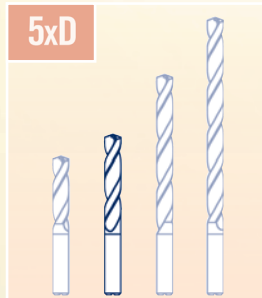
FRESAL				D	L	LT	d	Ld
Ø	UNCOATED	MAXTOP	CODES	m7			h6	
3,0	-	●	HMPF300D030	3,0	20	62	6	36
3,1	-	●	HMPF300D031	3,1	20	62	6	36
3,2	-	●	HMPF300D032	3,2	20	62	6	36
3,3	-	●	HMPF300D033	3,3	20	62	6	36
3,4	-	●	HMPF300D034	3,4	20	62	6	36
3,5	-	●	HMPF300D035	3,5	20	62	6	36
3,6	-	●	HMPF300D036	3,6	20	62	6	36
3,7	-	●	HMPF300D037	3,7	20	62	6	36
3,8	-	●	HMPF300D038	3,8	24	66	6	36
3,9	-	●	HMPF300D039	3,9	24	66	6	36
4,0	-	●	HMPF300D040	4,0	24	66	6	36
4,1	-	●	HMPF300D041	4,1	24	66	6	36
4,2	-	●	HMPF300D042	4,2	24	66	6	36
4,3	-	●	HMPF300D043	4,3	24	66	6	36
4,4	-	●	HMPF300D044	4,4	24	66	6	36
4,5	-	●	HMPF300D045	4,5	24	66	6	36
4,6	-	●	HMPF300D046	4,6	24	66	6	36
4,7	-	●	HMPF300D047	4,7	24	66	6	36
4,8	-	●	HMPF300D048	4,8	28	66	6	36
4,9	-	●	HMPF300D049	4,9	28	66	6	36
5,0	-	●	HMPF300D050	5,0	28	66	6	36
5,1	-	●	HMPF300D051	5,1	28	66	6	36
5,2	-	●	HMPF300D052	5,2	28	66	6	36
5,3	-	●	HMPF300D053	5,3	28	66	6	36
5,4	-	●	HMPF300D054	5,4	28	66	6	36
5,5	-	●	HMPF300D055	5,5	28	66	6	36
5,6	-	●	HMPF300D056	5,6	28	66	6	36
5,7	-	●	HMPF300D057	5,7	28	66	6	36
5,8	-	●	HMPF300D058	5,8	28	66	6	36
5,9	-	●	HMPF300D059	5,9	28	66	6	36
6,0	-	●	HMPF300D060	6,0	28	66	6	36
6,1	-	●	HMPF300D061	6,1	34	79	8	36
6,2	-	●	HMPF300D062	6,2	34	79	8	36
6,3	-	●	HMPF300D063	6,3	34	79	8	36
6,4	-	●	HMPF300D064	6,4	34	79	8	36
6,5	-	●	HMPF300D065	6,5	34	79	8	36
6,6	-	●	HMPF300D066	6,6	34	79	8	36
6,7	-	●	HMPF300D067	6,7	34	79	8	36
6,8	-	●	HMPF300D068	6,8	34	79	8	36
6,9	-	●	HMPF300D069	6,9	34	79	8	36
7,0	-	●	HMPF300D070	7,0	34	79	8	36
7,1	-	●	HMPF300D071	7,1	41	79	8	36
7,2	-	●	HMPF300D072	7,2	41	79	8	36
7,3	-	●	HMPF300D073	7,3	41	79	8	36
7,4	-	●	HMPF300D074	7,4	41	79	8	36
7,5	-	●	HMPF300D075	7,5	41	79	8	36
7,6	-	●	HMPF300D076	7,6	41	79	8	36
7,7	-	●	HMPF300D077	7,7	41	79	8	36
7,8	-	●	HMPF300D078	7,8	41	79	8	36
7,9	-	●	HMPF300D079	7,9	41	79	8	36
8,0	-	●	HMPF300D080	8,0	41	79	8	36
8,1	-	●	HMPF300D081	8,1	47	89	10	40
8,2	-	●	HMPF300D082	8,2	47	89	10	40
8,3	-	●	HMPF300D083	8,3	47	89	10	40
8,4	-	●	HMPF300D084	8,4	47	89	10	40
8,5	-	●	HMPF300D085	8,5	47	89	10	40
8,6	-	●	HMPF300D086	8,6	47	89	10	40
8,7	-	●	HMPF300D087	8,7	47	89	10	40
8,8	-	●	HMPF300D088	8,8	47	89	10	40
8,9	-	●	HMPF300D089	8,9	47	89	10	40

FRESAL				D	L	LT	d	Ld
Ø	UNCOATED	MAXTOP	CODES	m7			h6	
9,0	-	●	HMPF300D090	9,0	47	89	10	40
9,1	-	●	HMPF300D091	9,1	47	89	10	40
9,2	-	●	HMPF300D092	9,2	47	89	10	40
9,3	-	●	HMPF300D093	9,3	47	89	10	40
9,4	-	●	HMPF300D094	9,4	47	89	10	40
9,5	-	●	HMPF300D095	9,5	47	89	10	40
9,6	-	●	HMPF300D096	9,6	47	89	10	40
9,7	-	●	HMPF300D097	9,7	47	89	10	40
9,8	-	●	HMPF300D098	9,8	47	89	10	40
9,9	-	●	HMPF300D099	9,9	47	89	10	40
10,0	-	●	HMPF300D100	10,0	47	89	10	40
10,1	-	●	HMPF300D101	10,1	55	102	12	45
10,2	-	●	HMPF300D102	10,2	55	102	12	45
10,3	-	●	HMPF300D103	10,3	55	102	12	45
10,4	-	●	HMPF300D104	10,4	55	102	12	45
10,5	-	●	HMPF300D105	10,5	55	102	12	45
10,6	-	●	HMPF300D106	10,6	55	102	12	45
10,7	-	●	HMPF300D107	10,7	55	102	12	45
10,8	-	●	HMPF300D108	10,8	55	102	12	45
10,9	-	●	HMPF300D109	10,9	55	102	12	45
11,0	-	●	HMPF300D110	11,0	55	102	12	45
11,1	-	●	HMPF300D111	11,1	55	102	12	45
11,2	-	●	HMPF300D112	11,2	55	102	12	45
11,3	-	●	HMPF300D113	11,3	55	102	12	45
11,4	-	●	HMPF300D114	11,4	55	102	12	45
11,5	-	●	HMPF300D115	11,5	55	102	12	45
11,6	-	●	HMPF300D116	11,6	55	102	12	45
11,7	-	●	HMPF300D117	11,7	55	102	12	45
11,8	-	●	HMPF300D118	11,8	55	102	12	45
11,9	-	●	HMPF300D119	11,9	55	102	12	45
12,0	-	●	HMPF300D120	12,0	55	102	12	45
12,5	-	●	HMPF300D125	12,5	60	107	14	45
12,8	-	●	HMPF300D128	12,8	60	107	14	45
13,0	-	●	HMPF300D130	13,0	60	107	14	45
13,5	-	●	HMPF300D135	13,5	60	107	14	45
14,0	-	●	HMPF300D140	14,0	60	107	14	45
14,5	-	●	HMPF300D145	14,5	65	115	16	48
14,8	-	●	HMPF300D148	14,8	65	115	16	48
15,0	-	●	HMPF300D150	15,0	65	115	16	48
15,5	-	●	HMPF300D155	15,5	65	115	16	48
15,8	-	●	HMPF300D158	15,8	65	115	16	48
16,0	-	●	HMPF300D160	16,0	65	115	16	48
16,5	-	●	HMPF300D165	16,5	73	123	18	48
17,0	-	●	HMPF300D170	17,0	73	123	18	48
17,5	-	●	HMPF300D175	17,5	73	123	18	48
18,0	-	●	HMPF300D180	18,0	73	123	18	48
18,5	-	●	HMPF300D185	18,5	79	131	20	50
19,0	-	●	HMPF300D190	19,0	79	131	20	50
19,5	-	●	HMPF300D195	19,5	79	131	20	50
20,0	-	●	HMPF300D200	20,0	79	131	20	50

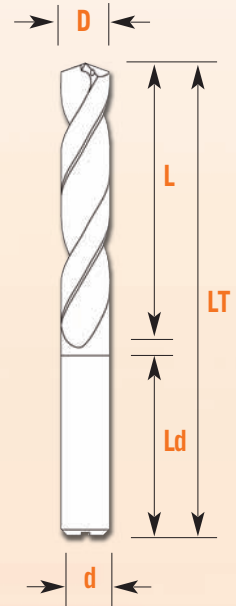
**DRILLS 5xD**  
with coolant  
holes

**HMPF500**

With self-centering sharpening  
"S" form.



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range of materials


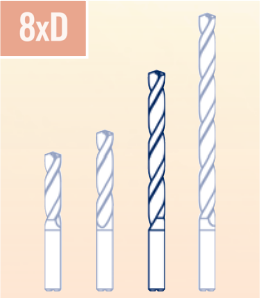

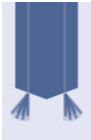

FRESAL				D	L	LT	d	Ld
Ø	UNCOATED	MAXTOP	CODES	m7			h6	
3,0	-	●	HMPF500D030	3,0	28	66	6	36
3,1	-	●	HMPF500D031	3,1	28	66	6	36
3,2	-	●	HMPF500D032	3,2	28	66	6	36
3,3	-	●	HMPF500D033	3,3	28	66	6	36
3,4	-	●	HMPF500D034	3,4	28	66	6	36
3,5	-	●	HMPF500D035	3,5	28	66	6	36
3,6	-	●	HMPF500D036	3,6	28	66	6	36
3,7	-	●	HMPF500D037	3,7	28	66	6	36
3,8	-	●	HMPF500D038	3,8	36	74	6	36
3,9	-	●	HMPF500D039	3,9	36	74	6	36
4,0	-	●	HMPF500D040	4,0	36	74	6	36
4,1	-	●	HMPF500D041	4,1	36	74	6	36
4,2	-	●	HMPF500D042	4,2	36	74	6	36
4,3	-	●	HMPF500D043	4,3	36	74	6	36
4,4	-	●	HMPF500D044	4,4	36	74	6	36
4,5	-	●	HMPF500D045	4,5	36	74	6	36
4,6	-	●	HMPF500D046	4,6	36	74	6	36
4,7	-	●	HMPF500D047	4,7	36	74	6	36
4,8	-	●	HMPF500D048	4,8	44	82	6	36
4,9	-	●	HMPF500D049	4,9	44	82	6	36
5,0	-	●	HMPF500D050	5,0	44	82	6	36
5,1	-	●	HMPF500D051	5,1	44	82	6	36
5,2	-	●	HMPF500D052	5,2	44	82	6	36
5,3	-	●	HMPF500D053	5,3	44	82	6	36
5,4	-	●	HMPF500D054	5,4	44	82	6	36
5,5	-	●	HMPF500D055	5,5	44	82	6	36
5,6	-	●	HMPF500D056	5,6	44	82	6	36
5,7	-	●	HMPF500D057	5,7	44	82	6	36
5,8	-	●	HMPF500D058	5,8	44	82	6	36
5,9	-	●	HMPF500D059	5,9	44	82	6	36
6,0	-	●	HMPF500D060	6,0	44	82	6	36
6,1	-	●	HMPF500D061	6,1	53	91	8	36
6,2	-	●	HMPF500D062	6,2	53	91	8	36
6,3	-	●	HMPF500D063	6,3	53	91	8	36
6,4	-	●	HMPF500D064	6,4	53	91	8	36
6,5	-	●	HMPF500D065	6,5	53	91	8	36
6,6	-	●	HMPF500D066	6,6	53	91	8	36
6,7	-	●	HMPF500D067	6,7	53	91	8	36
6,8	-	●	HMPF500D068	6,8	53	91	8	36
6,9	-	●	HMPF500D069	6,9	53	91	8	36
7,0	-	●	HMPF500D070	7,0	53	91	8	36
7,1	-	●	HMPF500D071	7,1	53	91	8	36
7,2	-	●	HMPF500D072	7,2	53	91	8	36
7,3	-	●	HMPF500D073	7,3	53	91	8	36
7,4	-	●	HMPF500D074	7,4	53	91	8	36
7,5	-	●	HMPF500D075	7,5	53	91	8	36
7,6	-	●	HMPF500D076	7,6	53	91	8	36
7,7	-	●	HMPF500D077	7,7	53	91	8	36
7,8	-	●	HMPF500D078	7,8	53	91	8	36
7,9	-	●	HMPF500D079	7,9	53	91	8	36
8,0	-	●	HMPF500D080	8,0	53	91	8	36
8,1	-	●	HMPF500D081	8,1	61	103	10	40
8,2	-	●	HMPF500D082	8,2	61	103	10	40
8,3	-	●	HMPF500D083	8,3	61	103	10	40
8,4	-	●	HMPF500D084	8,4	61	103	10	40
8,5	-	●	HMPF500D085	8,5	61	103	10	40
8,6	-	●	HMPF500D086	8,6	61	103	10	40
8,7	-	●	HMPF500D087	8,7	61	103	10	40
8,8	-	●	HMPF500D088	8,8	61	103	10	40
8,9	-	●	HMPF500D089	8,9	61	103	10	40

FRESAL				D	L	LT	d	Ld
Ø	UNCOATED	MAXTOP	CODES	m7			h6	
9,0	-	●	HMPF500D090	9,0	61	103	10	40
9,1	-	●	HMPF500D091	9,1	61	103	10	40
9,2	-	●	HMPF500D092	9,2	61	103	10	40
9,3	-	●	HMPF500D093	9,3	61	103	10	40
9,4	-	●	HMPF500D094	9,4	61	103	10	40
9,5	-	●	HMPF500D095	9,5	61	103	10	40
9,6	-	●	HMPF500D096	9,6	61	103	10	40
9,7	-	●	HMPF500D097	9,7	61	103	10	40
9,8	-	●	HMPF500D098	9,8	61	103	10	40
9,9	-	●	HMPF500D099	9,9	61	103	10	40
10,0	-	●	HMPF500D100	10,0	61	103	10	40
10,1	-	●	HMPF500D101	10,1	71	118	12	45
10,2	-	●	HMPF500D102	10,2	71	118	12	45
10,3	-	●	HMPF500D103	10,3	71	118	12	45
10,4	-	●	HMPF500D104	10,4	71	118	12	45
10,5	-	●	HMPF500D105	10,5	71	118	12	45
10,6	-	●	HMPF500D106	10,6	71	118	12	45
10,7	-	●	HMPF500D107	10,7	71	118	12	45
10,8	-	●	HMPF500D108	10,8	71	118	12	45
10,9	-	●	HMPF500D109	10,9	71	118	12	45
11,0	-	●	HMPF500D110	11,0	71	118	12	45
11,1	-	●	HMPF500D111	11,1	71	118	12	45
11,2	-	●	HMPF500D112	11,2	71	118	12	45
11,3	-	●	HMPF500D113	11,3	71	118	12	45
11,4	-	●	HMPF500D114	11,4	71	118	12	45
11,5	-	●	HMPF500D115	11,5	71	118	12	45
11,6	-	●	HMPF500D116	11,6	71	118	12	45
11,7	-	●	HMPF500D117	11,7	71	118	12	45
11,8	-	●	HMPF500D118	11,8	71	118	12	45
11,9	-	●	HMPF500D119	11,9	71	118	12	45
12,0	-	●	HMPF500D120	12,0	71	118	12	45
12,5	-	●	HMPF500D125	12,5	77	124	14	45
12,8	-	●	HMPF500D128	12,8	77	124	14	45
13,0	-	●	HMPF500D130	13,0	77	124	14	45
13,5	-	●	HMPF500D135	13,5	77	124	14	45
13,8	-	●	HMPF500D138	13,8	77	124	14	45
14,0	-	●	HMPF500D140	14,0	77	124	14	45
14,5	-	●	HMPF500D145	14,5	83	133	16	48
14,8	-	●	HMPF500D148	14,8	83	133	16	48
15,0	-	●	HMPF500D150	15,0	83	133	16	48
15,5	-	●	HMPF500D155	15,5	83	133	16	48
15,8	-	●	HMPF500D158	15,8	83	133	16	48
16,0	-	●	HMPF500D160	16,0	83	133	16	48
16,5	-	●	HMPF500D165	16,5	93	143	18	48
16,8	-	●	HMPF500D168	16,8	93	143	18	48
17,0	-	●	HMPF500D170	17,0	93	143	18	48
17,5	-	●	HMPF500D175	17,5	93	143	18	48
17,8	-	●	HMPF500D178	17,8	93	143	18	48
18,0	-	●	HMPF500D180	18,0	93	143	18	48
18,5	-	●	HMPF500D185	18,5	101	153	20	50
18,8	-	●	HMPF500D188	18,8	101	153	20	50
19,0	-	●	HMPF500D190	19,0	101	153	20	50
19,5	-	●	HMPF500D195	19,5	101	153	20	50
19,8	-	●	HMPF500D198	19,8	101	153	20	50
20,0	-	●	HMPF500D200	20,0	101	153	20	50

**DRILLS 8xD**  
with coolant  
holes

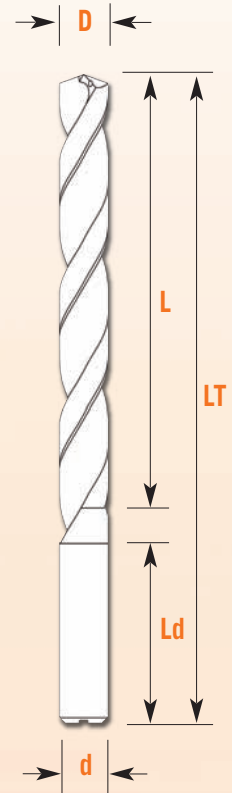
**HMPF800**  
With self-centering sharpening  
"S" form.



<b>DIN</b> 6537	 <b>30°</b>	<b>8xD</b> 		
<b>HM</b> HARD METAL		<b>140°</b>		

**XT**  
MAXTOP

**MAXTOP** is a new generation AlTiN coating. The "Top" post-treatment makes it ideal for drilling applications.  
*Available in stock.*



The constructive geometry of these drills allows its use in a wide range of materials

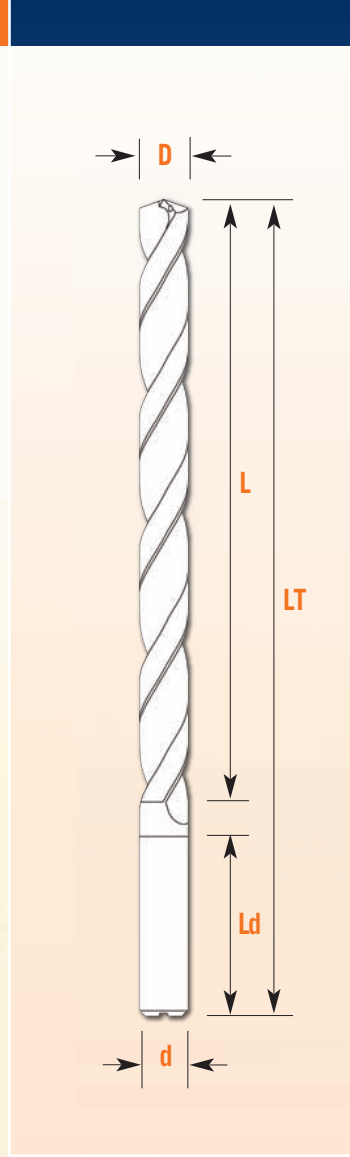


FRESAL				D	L	LT	d	Ld
Ø	UNCOATED	MAXTOP	CODES	m7			h6	
3,0	-	●	HMPF800D030	3,0	34	72	6	36
3,1	-	●	HMPF800D031	3,1	34	72	6	36
3,2	-	●	HMPF800D032	3,2	34	72	6	36
3,3	-	●	HMPF800D033	3,3	34	72	6	36
3,4	-	●	HMPF800D034	3,4	34	72	6	36
3,5	-	●	HMPF800D035	3,5	34	72	6	36
3,6	-	●	HMPF800D036	3,6	34	72	6	36
3,7	-	●	HMPF800D037	3,7	34	72	6	36
3,8	-	●	HMPF800D038	3,8	43	81	6	36
3,9	-	●	HMPF800D039	3,9	43	81	6	36
4,0	-	●	HMPF800D040	4,0	43	81	6	36
4,1	-	●	HMPF800D041	4,1	43	81	6	36
4,2	-	●	HMPF800D042	4,2	43	81	6	36
4,3	-	●	HMPF800D043	4,3	43	81	6	36
4,4	-	●	HMPF800D044	4,4	43	81	6	36
4,5	-	●	HMPF800D045	4,5	43	81	6	36
4,6	-	●	HMPF800D046	4,6	43	81	6	36
4,7	-	●	HMPF800D047	4,7	43	81	6	36
4,8	-	●	HMPF800D048	4,8	57	95	6	36
4,9	-	●	HMPF800D049	4,9	57	95	6	36
5,0	-	●	HMPF800D050	5,0	57	95	6	36
5,1	-	●	HMPF800D051	5,1	57	95	6	36
5,2	-	●	HMPF800D052	5,2	57	95	6	36
5,3	-	●	HMPF800D053	5,3	57	95	6	36
5,4	-	●	HMPF800D054	5,4	57	95	6	36
5,5	-	●	HMPF800D055	5,5	57	95	6	36
5,6	-	●	HMPF800D056	5,6	57	95	6	36
5,7	-	●	HMPF800D057	5,7	57	95	6	36
5,8	-	●	HMPF800D058	5,8	57	95	6	36
5,9	-	●	HMPF800D059	5,9	57	95	6	36
6,0	-	●	HMPF800D060	6,0	57	95	6	36
6,1	-	●	HMPF800D061	6,1	76	114	8	36
6,2	-	●	HMPF800D062	6,2	76	114	8	36
6,3	-	●	HMPF800D063	6,3	76	114	8	36
6,4	-	●	HMPF800D064	6,4	76	114	8	36
6,5	-	●	HMPF800D065	6,5	76	114	8	36
6,6	-	●	HMPF800D066	6,6	76	114	8	36
6,7	-	●	HMPF800D067	6,7	76	114	8	36
6,8	-	●	HMPF800D068	6,8	76	114	8	36
6,9	-	●	HMPF800D069	6,9	76	114	8	36
7,0	-	●	HMPF800D070	7,0	76	114	8	36
7,1	-	●	HMPF800D071	7,1	76	114	8	36
7,2	-	●	HMPF800D072	7,2	76	114	8	36
7,3	-	●	HMPF800D073	7,3	76	114	8	36
7,4	-	●	HMPF800D074	7,4	76	114	8	36
7,5	-	●	HMPF800D075	7,5	76	114	8	36
7,6	-	●	HMPF800D076	7,6	76	114	8	36
7,7	-	●	HMPF800D077	7,7	76	114	8	36
7,8	-	●	HMPF800D078	7,8	76	114	8	36
7,9	-	●	HMPF800D079	7,9	76	114	8	36
8,0	-	●	HMPF800D080	8,0	76	114	8	36
8,1	-	●	HMPF800D081	8,1	95	142	10	40
8,2	-	●	HMPF800D082	8,2	95	142	10	40
8,3	-	●	HMPF800D083	8,3	95	142	10	40
8,4	-	●	HMPF800D084	8,4	95	142	10	40
8,5	-	●	HMPF800D085	8,5	95	142	10	40
8,6	-	●	HMPF800D086	8,6	95	142	10	40
8,7	-	●	HMPF800D087	8,7	95	142	10	40
8,8	-	●	HMPF800D088	8,8	95	142	10	40
8,9	-	●	HMPF800D089	8,9	95	142	10	40

FRESAL				D	L	LT	d	Ld
Ø	UNCOATED	MAXTOP	CODES	m7			h6	
9,0	-	●	HMPF800D090	9,0	95	142	10	40
9,1	-	●	HMPF800D091	9,1	95	142	10	40
9,2	-	●	HMPF800D092	9,2	95	142	10	40
9,3	-	●	HMPF800D093	9,3	95	142	10	40
9,4	-	●	HMPF800D094	9,4	95	142	10	40
9,5	-	●	HMPF800D095	9,5	95	142	10	40
9,6	-	●	HMPF800D096	9,6	95	142	10	40
9,7	-	●	HMPF800D097	9,7	95	142	10	40
9,8	-	●	HMPF800D098	9,8	95	142	10	40
9,9	-	●	HMPF800D099	9,9	95	142	10	40
10,0	-	●	HMPF800D100	10,0	95	142	10	40
10,1	-	●	HMPF800D101	10,1	114	162	12	45
10,2	-	●	HMPF800D102	10,2	114	162	12	45
10,3	-	●	HMPF800D103	10,3	114	162	12	45
10,4	-	●	HMPF800D104	10,4	114	162	12	45
10,5	-	●	HMPF800D105	10,5	114	162	12	45
10,6	-	●	HMPF800D106	10,6	114	162	12	45
10,7	-	●	HMPF800D107	10,7	114	162	12	45
10,8	-	●	HMPF800D108	10,8	114	162	12	45
10,9	-	●	HMPF800D109	10,9	114	162	12	45
11,0	-	●	HMPF800D110	11,0	114	162	12	45
11,1	-	●	HMPF800D111	11,1	114	162	12	45
11,2	-	●	HMPF800D112	11,2	114	162	12	45
11,3	-	●	HMPF800D113	11,3	114	162	12	45
11,4	-	●	HMPF800D114	11,4	114	162	12	45
11,5	-	●	HMPF800D115	11,5	114	162	12	45
11,6	-	●	HMPF800D116	11,6	114	162	12	45
11,7	-	●	HMPF800D117	11,7	114	162	12	45
11,8	-	●	HMPF800D118	11,8	114	162	12	45
11,9	-	●	HMPF800D119	11,9	114	162	12	45
12,0	-	●	HMPF800D120	12,0	114	162	12	45
12,5	-	●	HMPF800D125	12,5	133	178	14	45
12,8	-	●	HMPF800D128	12,8	133	178	14	45
13,0	-	●	HMPF800D130	13,0	133	178	14	45
13,5	-	●	HMPF800D135	13,5	133	178	14	45
13,8	-	●	HMPF800D138	13,8	133	178	14	45
14,0	-	●	HMPF800D140	14,0	133	178	14	45
14,5	-	●	HMPF800D145	14,5	152	203	16	48
14,8	-	●	HMPF800D148	14,8	152	203	16	48
15,0	-	●	HMPF800D150	15,0	152	203	16	48
15,5	-	●	HMPF800D155	15,5	152	203	16	48
15,8	-	●	HMPF800D158	15,8	152	203	16	48
16,0	-	●	HMPF800D160	16,0	152	203	16	48

**DRILLS 12xD**  
with coolant  
holes

**HMPF1200**  
With self-centering sharpening  
"S" form.

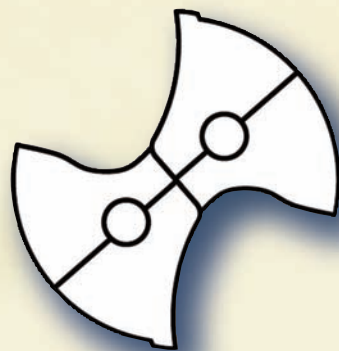


DIN 6537	 <b>30°</b>	<b>12xD</b> 
<b>HM</b> HARD METAL		<b>140°</b>
		 HB HE DIN 6535

**XT**  
MAXTOP

MAXTOP is a new generation AlTiN coating. The "Top" post-treatment makes it ideal for drilling applications.  
*Available in stock.*

The constructive geometry of these drills allows its use in a wide range of materials



FRESAL				D	L	LT	d	Ld
Ø	UNCOATED	MAXTOP	CODES	m7			h6	
3,0	-	●	HMPF1200D030	3,0	54	92	6	36
3,1	-	●	HMPF1200D031	3,1	54	92	6	36
3,2	-	●	HMPF1200D032	3,2	54	92	6	36
3,3	-	●	HMPF1200D033	3,3	54	92	6	36
3,4	-	●	HMPF1200D034	3,4	54	92	6	36
3,5	-	●	HMPF1200D035	3,5	54	92	6	36
3,6	-	●	HMPF1200D036	3,6	54	92	6	36
3,7	-	●	HMPF1200D037	3,7	54	92	6	36
3,8	-	●	HMPF1200D038	3,8	64	102	6	36
3,9	-	●	HMPF1200D039	3,9	64	102	6	36
4,0	-	●	HMPF1200D040	4,0	64	102	6	36
4,1	-	●	HMPF1200D041	4,1	64	102	6	36
4,2	-	●	HMPF1200D042	4,2	64	102	6	36
4,3	-	●	HMPF1200D043	4,3	64	102	6	36
4,4	-	●	HMPF1200D044	4,4	64	102	6	36
4,5	-	●	HMPF1200D045	4,5	64	102	6	36
4,6	-	●	HMPF1200D046	4,6	64	102	6	36
4,7	-	●	HMPF1200D047	4,7	64	102	6	36
4,8	-	●	HMPF1200D048	4,8	78	116	6	36
4,9	-	●	HMPF1200D049	4,9	78	116	6	36
5,0	-	●	HMPF1200D050	5,0	78	116	6	36
5,1	-	●	HMPF1200D051	5,1	78	116	6	36
5,2	-	●	HMPF1200D052	5,2	78	116	6	36
5,3	-	●	HMPF1200D053	5,3	78	116	6	36
5,4	-	●	HMPF1200D054	5,4	78	116	6	36
5,5	-	●	HMPF1200D055	5,5	78	116	6	36
5,6	-	●	HMPF1200D056	5,6	78	116	6	36
5,7	-	●	HMPF1200D057	5,7	78	116	6	36
5,8	-	●	HMPF1200D058	5,8	78	116	6	36
5,9	-	●	HMPF1200D059	5,9	78	116	6	36
6,0	-	●	HMPF1200D060	6,0	78	116	6	36
6,1	-	●	HMPF1200D061	6,1	108	146	8	36
6,2	-	●	HMPF1200D062	6,2	108	146	8	36
6,3	-	●	HMPF1200D063	6,3	108	146	8	36
6,4	-	●	HMPF1200D064	6,4	108	146	8	36
6,5	-	●	HMPF1200D065	6,5	108	146	8	36
6,6	-	●	HMPF1200D066	6,6	108	146	8	36
6,7	-	●	HMPF1200D067	6,7	108	146	8	36
6,8	-	●	HMPF1200D068	6,8	108	146	8	36
6,9	-	●	HMPF1200D069	6,9	108	146	8	36
7,0	-	●	HMPF1200D070	7,0	108	146	8	36
7,1	-	●	HMPF1200D071	7,1	108	146	8	36
7,2	-	●	HMPF1200D072	7,2	108	146	8	36
7,3	-	●	HMPF1200D073	7,3	108	146	8	36
7,4	-	●	HMPF1200D074	7,4	108	146	8	36
7,5	-	●	HMPF1200D075	7,5	108	146	8	36
7,6	-	●	HMPF1200D076	7,6	108	146	8	36
7,7	-	●	HMPF1200D077	7,7	108	146	8	36
7,8	-	●	HMPF1200D078	7,8	108	146	8	36
7,9	-	●	HMPF1200D079	7,9	108	146	8	36
8,0	-	●	HMPF1200D080	8,0	108	146	8	36
8,1	-	●	HMPF1200D081	8,1	120	162	10	40
8,2	-	●	HMPF1200D082	8,2	120	162	10	40
8,3	-	●	HMPF1200D083	8,3	120	162	10	40
8,4	-	●	HMPF1200D084	8,4	120	162	10	40
8,5	-	●	HMPF1200D085	8,5	120	162	10	40
8,6	-	●	HMPF1200D086	8,6	120	162	10	40
8,7	-	●	HMPF1200D087	8,7	120	162	10	40
8,8	-	●	HMPF1200D088	8,8	120	162	10	40
8,9	-	●	HMPF1200D089	8,9	120	162	10	40

FRESAL				D	L	LT	d	Ld
Ø	UNCOATED	MAXTOP	CODES	m7			h6	
9,0	-	●	HMPF1200D090	9,0	120	162	10	40
9,1	-	●	HMPF1200D091	9,1	120	162	10	40
9,2	-	●	HMPF1200D092	9,2	120	162	10	40
9,3	-	●	HMPF1200D093	9,3	120	162	10	40
9,4	-	●	HMPF1200D094	9,4	120	162	10	40
9,5	-	●	HMPF1200D095	9,5	120	162	10	40
9,6	-	●	HMPF1200D096	9,6	120	162	10	40
9,7	-	●	HMPF1200D097	9,7	120	162	10	40
9,8	-	●	HMPF1200D098	9,8	120	162	10	40
9,9	-	●	HMPF1200D099	9,9	120	162	10	40
10,0	-	●	HMPF1200D100	10,0	120	162	10	40
10,1	-	●	HMPF1200D101	10,1	156	204	12	45
10,2	-	●	HMPF1200D102	10,2	156	204	12	45
10,3	-	●	HMPF1200D103	10,3	156	204	12	45
10,4	-	●	HMPF1200D104	10,4	156	204	12	45
10,5	-	●	HMPF1200D105	10,5	156	204	12	45
10,6	-	●	HMPF1200D106	10,6	156	204	12	45
10,7	-	●	HMPF1200D107	10,7	156	204	12	45
10,8	-	●	HMPF1200D108	10,8	156	204	12	45
10,9	-	●	HMPF1200D109	10,9	156	204	12	45
11,0	-	●	HMPF1200D110	11,0	156	204	12	45
11,1	-	●	HMPF1200D111	11,1	156	204	12	45
11,2	-	●	HMPF1200D112	11,2	156	204	12	45
11,3	-	●	HMPF1200D113	11,3	156	204	12	45
11,4	-	●	HMPF1200D114	11,4	156	204	12	45
11,5	-	●	HMPF1200D115	11,5	156	204	12	45
11,6	-	●	HMPF1200D116	11,6	156	204	12	45
11,7	-	●	HMPF1200D117	11,7	156	204	12	45
11,8	-	●	HMPF1200D118	11,8	156	204	12	45
11,9	-	●	HMPF1200D119	11,9	156	204	12	45
12,0	-	●	HMPF1200D120	12,0	156	204	12	45
12,5	-	●	HMPF1200D125	12,5	182	230	14	45
12,8	-	●	HMPF1200D128	12,8	182	230	14	45
13,0	-	●	HMPF1200D130	13,0	182	230	14	45
13,5	-	●	HMPF1200D135	13,5	182	230	14	45
13,8	-	●	HMPF1200D138	13,8	182	230	14	45
14,0	-	●	HMPF1200D140	14,0	182	230	14	45

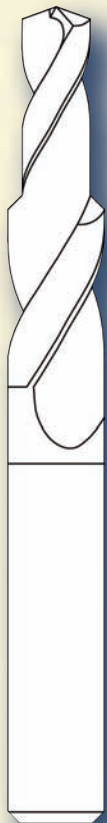
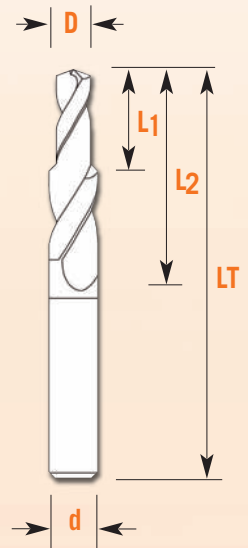
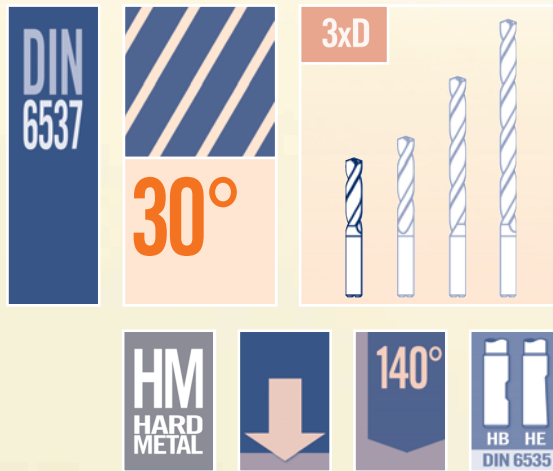
# DRILLS 3xD for tapping operations

# FRESAL

UTENSILI

## HMPM90

With self-centering sharpening "S" form allows the creation of 90° chamfers for tapping holes.



FRESAL				D	L <sub>1</sub>	L <sub>2</sub>	LT	d
Ø	UNCOATED	MAXTOP	CODES	m7				h6
M3	-	●	HMPM90M03	2,5	9	28	66	6
M4	-	●	HMPM90M04	3,3	11,4	28	66	6
M5	-	●	HMPM90M05	4,2	13,6	28	66	6
M6	-	●	HMPM90M06	5,0	16,5	34	79	8
M8	-	●	HMPM90M08	6,8	21,0	47	89	10
M10	-	●	HMPM90M10	8,5	25,5	55	102	12
M12	-	●	HMPM90M12	10,2	30,0	60	107	14
M14	-	●	HMPM90M14	12,0	34,5	65	115	16
M16	-	●	HMPM90M16	14,0	38,5	73	123	18

The constructive geometry of these drills allows its use in a wide range of materials

**XT**  
MAXTOP

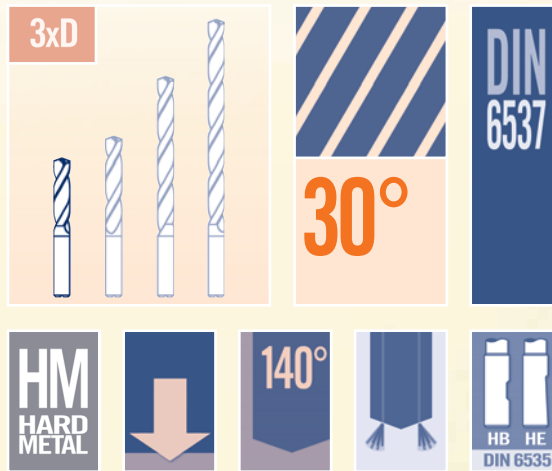
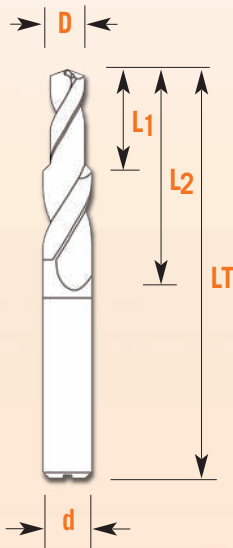
MAXTOP is a new generation AITIN coating. The "Top" post-treatment makes it ideal for drilling applications.  
*Available in stock.*



**DRILLS 3xD**  
for tapping  
operations with  
coolant holes

## HMPMF90

With self-centering sharpening "S" form allows the creation of 90° chamfers for tapping holes.



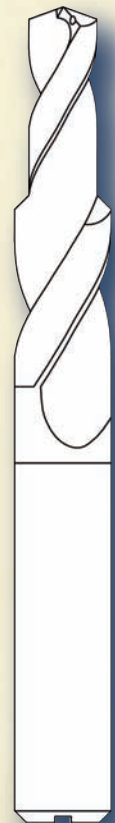
The constructive geometry of these drills allows its use in a wide range of materials

FRESAL				D	L <sub>1</sub>	L <sub>2</sub>	LT	d
Ø	UNCOATED	MAXTOP	CODES	m7				h6
M4	-	●	HMPMF90M04	3,3	11,4	28	66	6
M5	-	●	HMPMF90M05	4,2	13,6	28	66	6
M6	-	●	HMPMF90M06	5,0	16,5	34	79	8
M8	-	●	HMPMF90M08	6,8	21,0	47	89	10
M10	-	●	HMPMF90M10	8,5	25,5	55	102	12
M12	-	●	HMPMF90M12	10,2	30,0	60	107	14
M14	-	●	HMPMF90M14	12,0	34,5	65	115	16
M16	-	●	HMPMF90M16	14,0	38,5	73	123	18

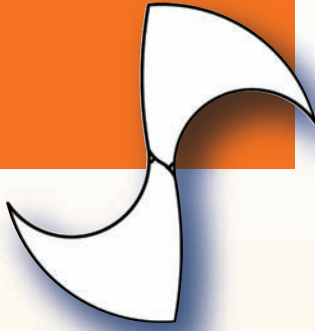
### MAXTOP

is a new generation  
AlTiN coating.  
The "Top" post-treatment  
makes it ideal for  
drilling applications.

*Available in stock.*



# CENTER DRILLS



# FRESAL

UTENSILI

**HMPC90**  
allows centering  
at 90°, 120° and 140°.

The constructive geometry of these drills allows its use in a wide range of materials

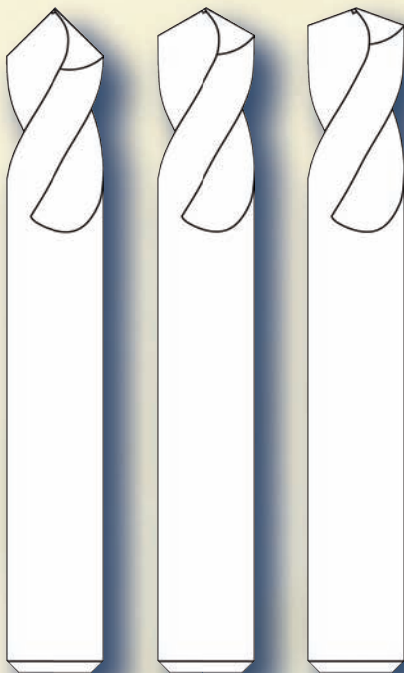
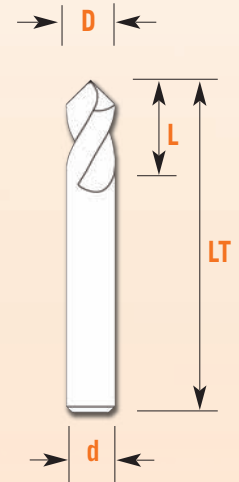


**MAXTOP**

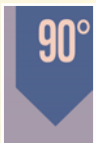
is a new generation AlTiN coating.

The "Top" post-treatment makes it ideal for drilling applications.

*Available in 3 days.*



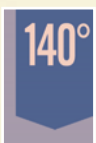
FRESAL					D	L	LT	d
Ø	UNCOATED	MAXTOP	CODES	XT	h6			h6
4,0	⊙	⊙	HMPC90D04 ...XT		4,0	8	50	4
5,0	⊙	⊙	HMPC90D05 ...XT		5,0	10	50	5
6,0	⊙	⊙	HMPC90D06 ...XT		6,0	16	57	6
8,0	⊙	⊙	HMPC90D08 ...XT		8,0	19	63	8
10,0	⊙	⊙	HMPC90D10 ...XT		10,0	22	72	10
12,0	⊙	⊙	HMPC90D12 ...XT		12,0	26	83	12
16,0	⊙	⊙	HMPC90D16 ...XT		16,0	32	92	16
20,0	⊙	⊙	HMPC90D20 ...XT		20,0	38	100	20



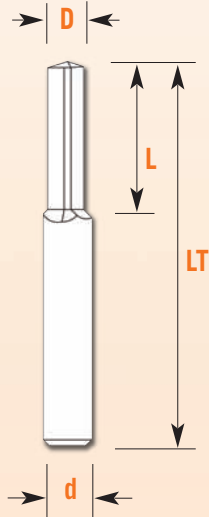
FRESAL					D	L	LT	d
Ø	UNCOATED	MAXTOP	CODES	XT	h6			h6
4,0	⊙	⊙	HMPC120D04 ...XT		4,0	8	50	4
5,0	⊙	⊙	HMPC120D05 ...XT		5,0	10	50	5
6,0	⊙	⊙	HMPC120D06 ...XT		6,0	16	57	6
8,0	⊙	⊙	HMPC120D08 ...XT		8,0	19	63	8
10,0	⊙	⊙	HMPC120D10 ...XT		10,0	22	72	10
12,0	⊙	⊙	HMPC120D12 ...XT		12,0	26	83	12
16,0	⊙	⊙	HMPC120D16 ...XT		16,0	32	92	16
20,0	⊙	⊙	HMPC120D20 ...XT		20,0	38	100	20



FRESAL					D	L	LT	d
Ø	UNCOATED	MAXTOP	CODES	XT	h6			h6
4,0	⊙	⊙	HMPC140D04 ...XT		4,0	8	50	4
5,0	⊙	⊙	HMPC140D05 ...XT		5,0	10	50	5
6,0	⊙	⊙	HMPC140D06 ...XT		6,0	16	57	6
8,0	⊙	⊙	HMPC140D08 ...XT		8,0	19	63	8
10,0	⊙	⊙	HMPC140D10 ...XT		10,0	22	72	10
12,0	⊙	⊙	HMPC140D12 ...XT		12,0	26	83	12
16,0	⊙	⊙	HMPC140D16 ...XT		16,0	32	92	16
20,0	⊙	⊙	HMPC140D20 ...XT		20,0	38	100	20



**HMTD3**  
is recommended for broken  
tap removal.



FRESAL				D	L	LT	d
FILETTO	UNCOATED	MAXTOP	CODES	e9			h6
M3	⊙	-	HMTD3M03	2,5	12	50	6
M4	⊙	-	HMTD3M04	3,3	15	50	6
M5	⊙	-	HMTD3M05	4,2	15	50	6
M6	⊙	-	HMTD3M06	5,0	15	50	6
M8	⊙	-	HMTD3M08	6,8	20	63	8
M10	⊙	-	HMTD3M10	8,5	25	72	10
M12	⊙	-	HMTD3M12	10,2	30	83	12
M14	⊙	-	HMTD3M14	12,0	30	83	12
M16	⊙	-	HMTD3M16	14,0	40	100	14
M18	⊙	-	HMTD3M18	15,5	40	100	16
M20	⊙	-	HMTD3M20	17,5	50	100	18

The very negative  
constructive geometry  
can be used for the  
broken tap removal and  
to drill difficult  
materials.





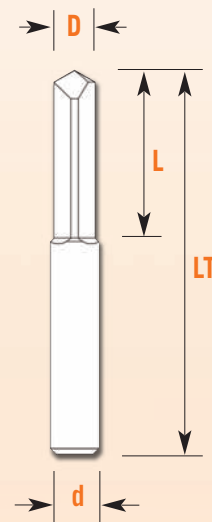
# TAP DESTROYER 4 sides



# FRESAL

UTENSILI

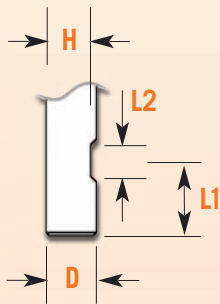
**HMTD4**  
is recommended for broken  
tap removal.



FRESAL				D	L	LT	d
FILETTO	UNCOATED	MAXTOP	CODES	e9			h6
M3	⊙	-	HMTD4M03	2,5	12	50	6
M4	⊙	-	HMTD4M04	3,3	15	50	6
M5	⊙	-	HMTD4M05	4,2	15	50	6
M6	⊙	-	HMTD4M06	5,0	15	50	6
M8	⊙	-	HMTD4M08	6,8	20	63	8
M10	⊙	-	HMTD4M10	8,5	25	72	10
M12	⊙	-	HMTD4M12	10,2	30	83	12
M14	⊙	-	HMTD4M14	12,0	30	83	12
M16	⊙	-	HMTD4M16	14,0	40	100	14
M18	⊙	-	HMTD4M18	15,5	40	100	16
M20	⊙	-	HMTD4M20	17,5	50	100	18

The very negative  
constructive geometry  
can be used for the  
broken tap removal and  
to drill difficult  
materials.

**HMW**  
are lateral attack plans made on the  
cylindrical shank according  
to DIN6535 – Form HB.



FRESAL				D	L1	L2	H
∅	WELDON	CODES	h6	+0,0 -1,0	+0,05 -0	h11	h11
6	⊙	HMWD06	6	18	4,2	4,8	
8	⊙	HMWD08	8	18	5,5	6,6	
10	⊙	HMWD10	10	20	7	8,4	
12	⊙	HMWD12	12	22,5	8	10,2	
14	⊙	HMWD14	14	24	10	14,2	
16	⊙	HMWD16	16	24	10	14,2	
18	⊙	HMWD18	18	25	11	18,2	
20	⊙	HMWD20	20	25	11	18,2	

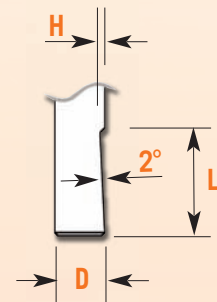
The Weldon attachment  
is an economical solution  
for heavy duty drilling,  
in cases where there are  
no specific needs  
in terms of run-out  
of the tool.



# WHISTLE NOTCH SHANK

## HMWN

are lateral attack plans made on the cylindrical shank according to DIN6535 – Form HE.



FRESAL			D	L	H
∅	WHISTLE NOTCH	CODES	h6	+0,05 -0	h11
6	⊙	HMWND06	6	28	1,2
8	⊙	HMWND08	8	28	1,2
10	⊙	HMWND10	10	28	1,2
12	⊙	HMWND12	12	35	1,5
14	⊙	HMWND14	14	35	1,5
16	⊙	HMWND16	16	35	1,5
18	⊙	HMWND18	18	43	1,75
20	⊙	HMWND20	20	43	1,75

The Whistle Notch attachment is an economical solution to hold the drill.





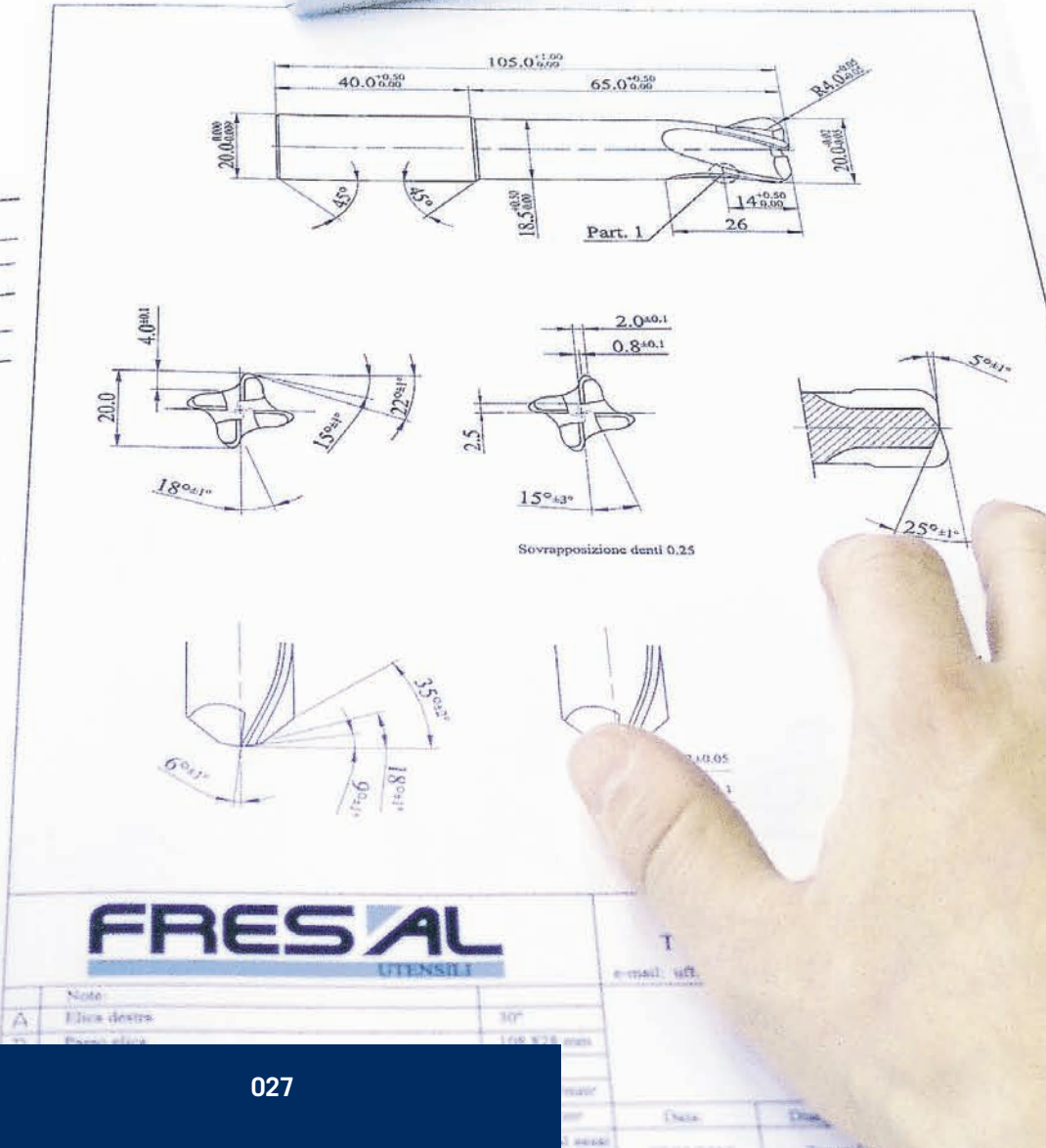
# FRESAL

## UTENSILI

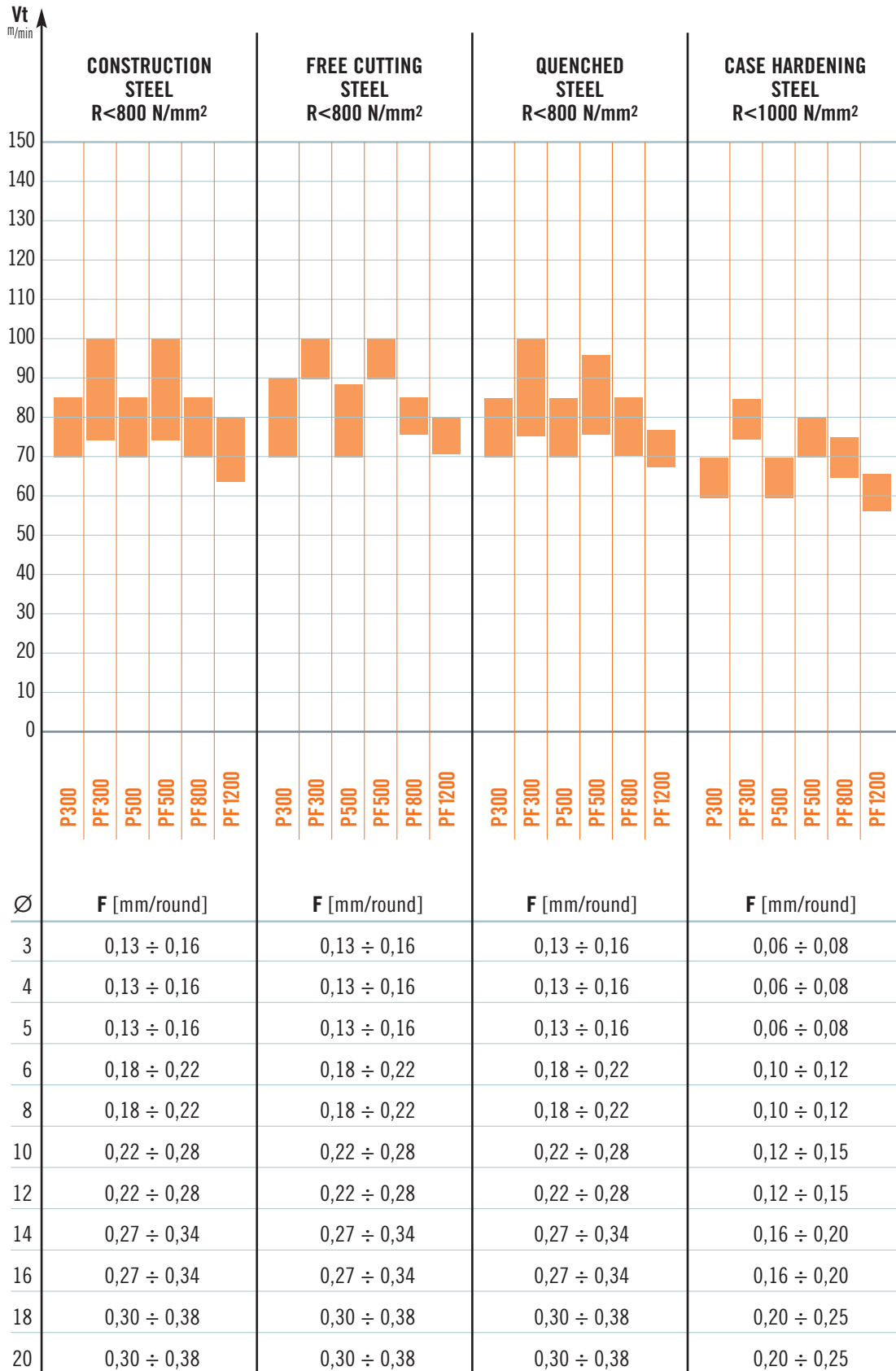
### TECHNICAL TABLES

The technical tables provide indicative machining parameters.

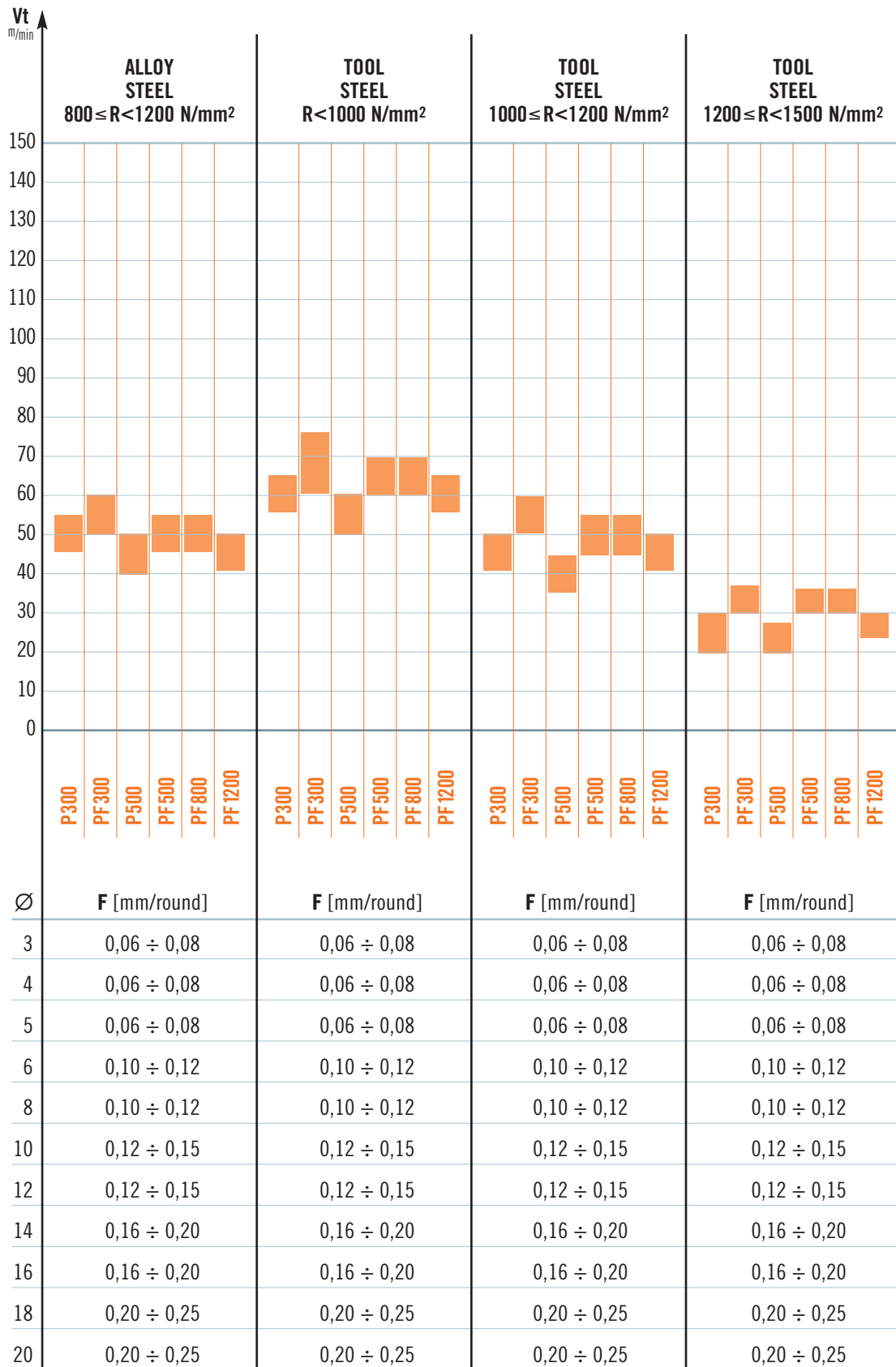
According to the machined material and the operation that has to be carried out, in order to optimize energy, time and tool performance.



## Machining parameters for steel. Drills coated MAXTOP.

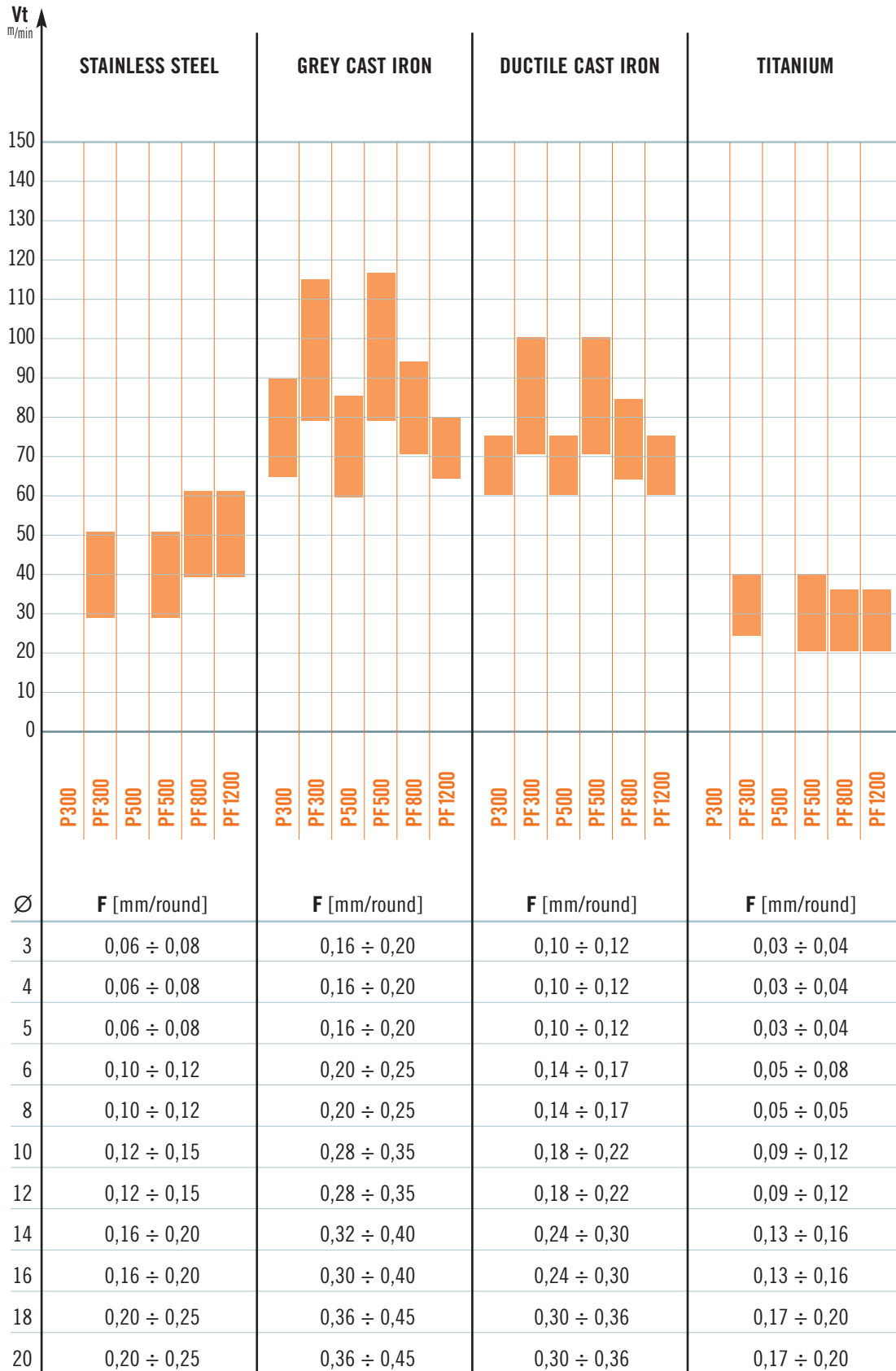


## Machining parameters for steel. Drills coated MAXTOP.





Machining parameters for stainless steel,  
grey cast iron, ductile cast iron, titanium.  
Drills coated MAXTop.



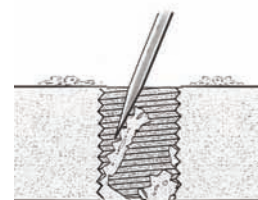
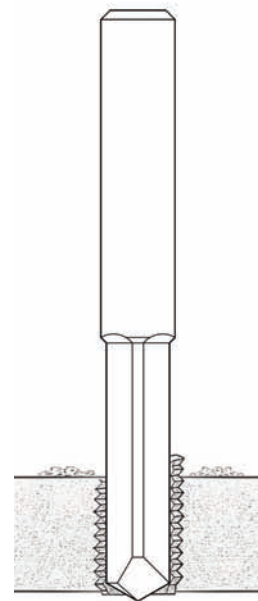
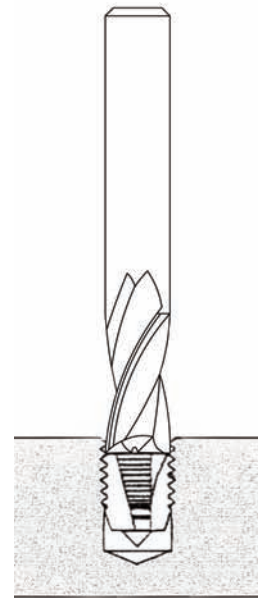
Our tap-destroyer, thanks to the very negative constructive geometry can be used for the broken tap removal and to drill difficult materials.

## INSTRUCTIONS FOR BROKEN TAP REMOVAL

When the tap brakes it is necessary to flatten it with a solid carbide endmill to facilitate the centering of the chosen tool (tap destroyer).

Start drilling the tap with high cutting speeds ( $80 \div 100$  m/min) and low feeds ( $0,03 \div 0,05$  mm/round).

When the destruction of the core of the broken tap is completed, it will be necessary to eliminate the steel residues on the walls of the thread using a pointed tool.



**ASK FOR THE CATALOGUE**

**FRESAL — SOLID CARBIDE END MILLS**

**FRESAL — STEEL END MILLS**

**FRESAL — REAMERS**









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