GÜHRING

RT 100

INOX PRO

High-performance solid carbide drills
for stainless steels and titanium alloys

MAXIMUM PRODUCTIVITY IN STAINLESS STEELS

The drilling specialist for stainless steels

If you want to drill in stainless steels and titanium alloys, you will have to contend with high tool wear. Our new solid carbide drill RT 100 InoxPro is changing this: It delivers an exceptional performance thanks to its combination of carbide, geometry and coating specially tailored to this material group.

- **50 % higher feed rate compared to conventional stainless steel drills**
- **60 % longer tool lives compared to conventional stainless steel drills**
- **process-reliable even with deep holes up to 7xD**
- **optimum chip control and removal**

RT 100 INOXPRO


OPTIMISED SICKLE-SHAPED CUTTING EDGE
for optimum chip formation in stainless steel
ULTRA-SMOOTH PERROX COATING
increases wear protection
LENGTHS
3xD
5xD
7xD
PREMIUM SURFACES IN THE FLUTE
improve chip removal and prevent built-up edges
M
S
OPTIMISED CARBIDE
with improved combination of hardness and toughness prevents cutting edge chippings

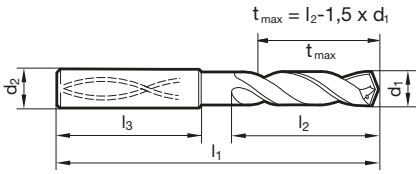
Ratio drills with coolant ducts

Article no. **8512**

VHM | X | INOX PRO | 3xD | DIN 6537K | 140° | m7 | R | HA

P	M	K	N	S	H
○	●			●	

web thinning ≥ Ø 3.000 • maximum performance • optimised cutting geometry • main cutting edge is slightly concave • exceptional hole quality



Article no. **8512**

d1 mm	inch	d2 h6 mm	l1 mm	l2 mm	l3 mm	Order no.
3.000		6.0	62.0	20.0	36.0	8512 3.000
3.100		6.0	62.0	20.0	36.0	8512 3.100
3.170	1/8	6.0	62.0	20.0	36.0	8512 3.170
3.200		6.0	62.0	20.0	36.0	8512 3.200
3.250		6.0	62.0	20.0	36.0	8512 3.250
3.300		6.0	62.0	20.0	36.0	8512 3.300
3.400		6.0	62.0	20.0	36.0	8512 3.400
3.500		6.0	62.0	20.0	36.0	8512 3.500
3.570	9/64	6.0	62.0	20.0	36.0	8512 3.570
3.600		6.0	62.0	20.0	36.0	8512 3.600
3.700		6.0	62.0	20.0	36.0	8512 3.700
3.800		6.0	66.0	24.0	36.0	8512 3.800
3.900		6.0	66.0	24.0	36.0	8512 3.900
3.970	5/32	6.0	66.0	24.0	36.0	8512 3.970
4.000		6.0	66.0	24.0	36.0	8512 4.000
4.040		6.0	66.0	24.0	36.0	8512 4.040
4.100		6.0	66.0	24.0	36.0	8512 4.100
4.200		6.0	66.0	24.0	36.0	8512 4.200
4.300		6.0	66.0	24.0	36.0	8512 4.300
4.370	11/64	6.0	66.0	24.0	36.0	8512 4.370
4.400		6.0	66.0	24.0	36.0	8512 4.400
4.500		6.0	66.0	24.0	36.0	8512 4.500
4.600		6.0	66.0	24.0	36.0	8512 4.600
4.650		6.0	66.0	24.0	36.0	8512 4.650
4.700		6.0	66.0	24.0	36.0	8512 4.700
4.760	3/16	6.0	66.0	28.0	36.0	8512 4.760
4.800		6.0	66.0	28.0	36.0	8512 4.800
4.900		6.0	66.0	28.0	36.0	8512 4.900
5.000		6.0	66.0	28.0	36.0	8512 5.000
5.100		6.0	66.0	28.0	36.0	8512 5.100
5.110		6.0	66.0	28.0	36.0	8512 5.110
5.160	13/64	6.0	66.0	28.0	36.0	8512 5.160
5.200		6.0	66.0	28.0	36.0	8512 5.200
5.300		6.0	66.0	28.0	36.0	8512 5.300
5.400		6.0	66.0	28.0	36.0	8512 5.400
5.410		6.0	66.0	28.0	36.0	8512 5.410
5.500		6.0	66.0	28.0	36.0	8512 5.500
5.550		6.0	66.0	28.0	36.0	8512 5.550
5.560	7/32	6.0	66.0	28.0	36.0	8512 5.560
5.600		6.0	66.0	28.0	36.0	8512 5.600
5.700		6.0	66.0	28.0	36.0	8512 5.700
5.800		6.0	66.0	28.0	36.0	8512 5.800
5.900		6.0	66.0	28.0	36.0	8512 5.900
5.950	15/64	6.0	66.0	28.0	36.0	8512 5.950
6.000		6.0	66.0	28.0	36.0	8512 6.000
6.100		8.0	79.0	34.0	36.0	8512 6.100
6.200		8.0	79.0	34.0	36.0	8512 6.200
6.300		8.0	79.0	34.0	36.0	8512 6.300
6.350	1/4	8.0	79.0	34.0	36.0	8512 6.350
6.400		8.0	79.0	34.0	36.0	8512 6.400
6.500		8.0	79.0	34.0	36.0	8512 6.500
6.530		8.0	79.0	34.0	36.0	8512 6.530
6.550		8.0	79.0	34.0	36.0	8512 6.550
6.600		8.0	79.0	34.0	36.0	8512 6.600
6.700		8.0	79.0	34.0	36.0	8512 6.700
6.750	17/64	8.0	79.0	34.0	36.0	8512 6.750
6.800		8.0	79.0	34.0	36.0	8512 6.800
6.900		8.0	79.0	34.0	36.0	8512 6.900
7.000		8.0	79.0	34.0	36.0	8512 7.000
7.100		8.0	79.0	41.0	36.0	8512 7.100
7.140	9/32	8.0	79.0	41.0	36.0	8512 7.140
7.200		8.0	79.0	41.0	36.0	8512 7.200
7.300		8.0	79.0	41.0	36.0	8512 7.300
7.400		8.0	79.0	41.0	36.0	8512 7.400
7.500		8.0	79.0	41.0	36.0	8512 7.500
7.540	19/64	8.0	79.0	41.0	36.0	8512 7.540

Article no. **8512**

d1 mm	inch	d2 h6 mm	l1 mm	l2 mm	l3 mm	Order no.
7.550		8.0	79.0	41.0	36.0	8512 7.550
7.600		8.0	79.0	41.0	36.0	8512 7.600
7.650		8.0	79.0	41.0	36.0	8512 7.650
7.700		8.0	79.0	41.0	36.0	8512 7.700
7.800		8.0	79.0	41.0	36.0	8512 7.800
7.900		8.0	79.0	41.0	36.0	8512 7.900
7.940	5/16	8.0	79.0	41.0	36.0	8512 7.940
8.000		8.0	79.0	41.0	36.0	8512 8.000
8.100		10.0	89.0	47.0	40.0	8512 8.100
8.200		10.0	89.0	47.0	40.0	8512 8.200
8.300		10.0	89.0	47.0	40.0	8512 8.300
8.330	21/64	10.0	89.0	47.0	40.0	8512 8.330
8.400		10.0	89.0	47.0	40.0	8512 8.400
8.500		10.0	89.0	47.0	40.0	8512 8.500
8.600		10.0	89.0	47.0	40.0	8512 8.600
8.700		10.0	89.0	47.0	40.0	8512 8.700
8.730	11/32	10.0	89.0	47.0	40.0	8512 8.730
8.800		10.0	89.0	47.0	40.0	8512 8.800
8.900		10.0	89.0	47.0	40.0	8512 8.900
9.000		10.0	89.0	47.0	40.0	8512 9.000
9.100		10.0	89.0	47.0	40.0	8512 9.100
9.130	23/64	10.0	89.0	47.0	40.0	8512 9.130
9.200		10.0	89.0	47.0	40.0	8512 9.200
9.250		10.0	89.0	47.0	40.0	8512 9.250
9.300		10.0	89.0	47.0	40.0	8512 9.300
9.340		10.0	89.0	47.0	40.0	8512 9.340
9.400		10.0	89.0	47.0	40.0	8512 9.400
9.500		10.0	89.0	47.0	40.0	8512 9.500
9.520	3/8	10.0	89.0	47.0	40.0	8512 9.520
9.550		10.0	89.0	47.0	40.0	8512 9.550
9.600		10.0	89.0	47.0	40.0	8512 9.600
9.700		10.0	89.0	47.0	40.0	8512 9.700
9.800		10.0	89.0	47.0	40.0	8512 9.800
9.900		10.0	89.0	47.0	40.0	8512 9.900
9.920	25/64	10.0	89.0	47.0	40.0	8512 9.920
10.000		10.0	89.0	47.0	40.0	8512 10.000
10.100		12.0	102.0	55.0	45.0	8512 10.100
10.200		12.0	102.0	55.0	45.0	8512 10.200
10.300		12.0	102.0	55.0	45.0	8512 10.300
10.320	13/32	12.0	102.0	55.0	45.0	8512 10.320
10.400		12.0	102.0	55.0	45.0	8512 10.400
10.500		12.0	102.0	55.0	45.0	8512 10.500
10.600		12.0	102.0	55.0	45.0	8512 10.600
10.700		12.0	102.0	55.0	45.0	8512 10.700
10.720	27/64	12.0	102.0	55.0	45.0	8512 10.720
10.800		12.0	102.0	55.0	45.0	8512 10.800
10.900		12.0	102.0	55.0	45.0	8512 10.900
11.000		12.0	102.0	55.0	45.0	8512 11.000
11.100		12.0	102.0	55.0	45.0	8512 11.100
11.110	7/16	12.0	102.0	55.0	45.0	8512 11.110
11.200		12.0	102.0	55.0	45.0	8512 11.200
11.300		12.0	102.0	55.0	45.0	8512 11.300
11.400		12.0	102.0	55.0	45.0	8512 11.400
11.500		12.0	102.0	55.0	45.0	8512 11.500
11.510	29/64	12.0	102.0	55.0	45.0	8512 11.510
11.550		12.0	102.0	55.0	45.0	8512 11.550
11.600		12.0	102.0	55.0	45.0	8512 11.600
11.700		12.0	102.0	55.0	45.0	8512 11.700
11.800		12.0	102.0	55.0	45.0	8512 11.800
11.900		12.0	102.0	55.0	45.0	8512 11.900
11.910	15/32	12.0	102.0	55.0	45.0	8512 11.910
12.000		12.0	102.0	55.0	45.0	8512 12.000
12.100		14.0	107.0	60.0	45.0	8512 12.100
12.200		14.0	107.0	60.0	45.0	8512 12.200
12.300	31/64	14.0	107.0	60.0	45.0	8512 12.300
12.400		14.0	107.0	60.0	45.0	8512 12.400

Article no.						8512
d1 mm	inch	d2 h6 mm	l1 mm	l2 mm	l3 mm	Order no.
12.500		14.0	107.0	60.0	45.0	8512 12.500
12.600		14.0	107.0	60.0	45.0	8512 12.600
12.700	1/2	14.0	107.0	60.0	45.0	8512 12.700
12.800		14.0	107.0	60.0	45.0	8512 12.800
12.900		14.0	107.0	60.0	45.0	8512 12.900
13.000		14.0	107.0	60.0	45.0	8512 13.000
13.100	33/64	14.0	107.0	60.0	45.0	8512 13.100
13.200		14.0	107.0	60.0	45.0	8512 13.200
13.300		14.0	107.0	60.0	45.0	8512 13.300
13.400		14.0	107.0	60.0	45.0	8512 13.400
13.490	17/32	14.0	107.0	60.0	45.0	8512 13.490
13.500		14.0	107.0	60.0	45.0	8512 13.500
13.600		14.0	107.0	60.0	45.0	8512 13.600
13.700		14.0	107.0	60.0	45.0	8512 13.700
13.800		14.0	107.0	60.0	45.0	8512 13.800
13.890	35/64	14.0	107.0	60.0	45.0	8512 13.890
13.900		14.0	107.0	60.0	45.0	8512 13.900
14.000		14.0	107.0	60.0	45.0	8512 14.000
14.100		16.0	115.0	65.0	48.0	8512 14.100
14.200		16.0	115.0	65.0	48.0	8512 14.200
14.290	9/16	16.0	115.0	65.0	48.0	8512 14.290
14.300		16.0	115.0	65.0	48.0	8512 14.300
14.400		16.0	115.0	65.0	48.0	8512 14.400
14.500		16.0	115.0	65.0	48.0	8512 14.500
14.600		16.0	115.0	65.0	48.0	8512 14.600
14.680	37/64	16.0	115.0	65.0	48.0	8512 14.680
14.700		16.0	115.0	65.0	48.0	8512 14.700
14.800		16.0	115.0	65.0	48.0	8512 14.800
14.900		16.0	115.0	65.0	48.0	8512 14.900
15.000		16.0	115.0	65.0	48.0	8512 15.000
15.080	19/32	16.0	115.0	65.0	48.0	8512 15.080
15.100		16.0	115.0	65.0	48.0	8512 15.100
15.200		16.0	115.0	65.0	48.0	8512 15.200
15.300		16.0	115.0	65.0	48.0	8512 15.300
15.400		16.0	115.0	65.0	48.0	8512 15.400
15.480	39/64	16.0	115.0	65.0	48.0	8512 15.480
15.500		16.0	115.0	65.0	48.0	8512 15.500
15.550		16.0	115.0	65.0	48.0	8512 15.550
15.600		16.0	115.0	65.0	48.0	8512 15.600
15.700		16.0	115.0	65.0	48.0	8512 15.700
15.800		16.0	115.0	65.0	48.0	8512 15.800
15.870	5/8	16.0	115.0	65.0	48.0	8512 15.870

Article no.						8512
d1 mm	inch	d2 h6 mm	l1 mm	l2 mm	l3 mm	Order no.
15.900		16.0	115.0	65.0	48.0	8512 15.900
16.000		16.0	115.0	65.0	48.0	8512 16.000
16.270	41/64	18.0	123.0	73.0	48.0	8512 16.270
16.300		18.0	123.0	73.0	48.0	8512 16.300
16.500		18.0	123.0	73.0	48.0	8512 16.500
16.670	21/32	18.0	123.0	73.0	48.0	8512 16.670
16.700		18.0	123.0	73.0	48.0	8512 16.700
16.900		18.0	123.0	73.0	48.0	8512 16.900
17.000		18.0	123.0	73.0	48.0	8512 17.000
17.070	43/64	18.0	123.0	73.0	48.0	8512 17.070
17.460	11/16	18.0	123.0	73.0	48.0	8512 17.460
17.500		18.0	123.0	73.0	48.0	8512 17.500
17.550		18.0	123.0	73.0	48.0	8512 17.550
17.700		18.0	123.0	73.0	48.0	8512 17.700
17.860	45/64	18.0	123.0	73.0	48.0	8512 17.860
18.000		18.0	123.0	73.0	48.0	8512 18.000
18.260	23/32	20.0	131.0	79.0	50.0	8512 18.260
18.500		20.0	131.0	79.0	50.0	8512 18.500
18.700		20.0	131.0	79.0	50.0	8512 18.700
18.900		20.0	131.0	79.0	50.0	8512 18.900
19.000		20.0	131.0	79.0	50.0	8512 19.000
19.050	3/4	20.0	131.0	79.0	50.0	8512 19.050
19.250		20.0	131.0	79.0	50.0	8512 19.250
19.300		20.0	131.0	79.0	50.0	8512 19.300
19.450	49/64	20.0	131.0	79.0	50.0	8512 19.450
19.500		20.0	131.0	79.0	50.0	8512 19.500
19.550		20.0	131.0	79.0	50.0	8512 19.550
19.700		20.0	131.0	79.0	50.0	8512 19.700
19.800		20.0	131.0	79.0	50.0	8512 19.800
19.840	25/32	20.0	131.0	79.0	50.0	8512 19.840
20.000		20.0	131.0	79.0	50.0	8512 20.000

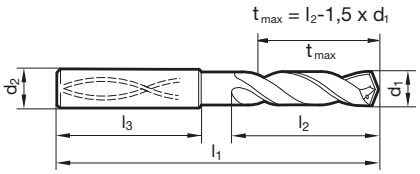
Ratio drills with coolant ducts

Article no. **8513**

VHM | X | INOX PRO | 5xD | DIN 6537 L | 140° | m7 | R | HA

P	M	K	N	S	H
○	●			●	

web thinning ≥ Ø 3.000 • maximum performance • optimised cutting geometry • main cutting edge is slightly concave • exceptional hole quality



Article no. **8513**

d1 mm	inch	d2 h6 mm	l1 mm	l2 mm	l3 mm	Order no.
3.000		6.0	66.0	28.0	36.0	8513 3.000
3.100		6.0	66.0	28.0	36.0	8513 3.100
3.170	1/8	6.0	66.0	28.0	36.0	8513 3.170
3.200		6.0	66.0	28.0	36.0	8513 3.200
3.250		6.0	66.0	28.0	36.0	8513 3.250
3.300		6.0	66.0	28.0	36.0	8513 3.300
3.400		6.0	66.0	28.0	36.0	8513 3.400
3.500		6.0	66.0	28.0	36.0	8513 3.500
3.570	9/64	6.0	66.0	28.0	36.0	8513 3.570
3.600		6.0	66.0	28.0	36.0	8513 3.600
3.700		6.0	66.0	28.0	36.0	8513 3.700
3.800		6.0	74.0	36.0	36.0	8513 3.800
3.900		6.0	74.0	36.0	36.0	8513 3.900
3.970	5/32	6.0	74.0	36.0	36.0	8513 3.970
4.000		6.0	74.0	36.0	36.0	8513 4.000
4.040		6.0	74.0	36.0	36.0	8513 4.040
4.100		6.0	74.0	36.0	36.0	8513 4.100
4.200		6.0	74.0	36.0	36.0	8513 4.200
4.300		6.0	74.0	36.0	36.0	8513 4.300
4.370	11/64	6.0	74.0	36.0	36.0	8513 4.370
4.400		6.0	74.0	36.0	36.0	8513 4.400
4.500		6.0	74.0	36.0	36.0	8513 4.500
4.600		6.0	74.0	36.0	36.0	8513 4.600
4.650		6.0	74.0	36.0	36.0	8513 4.650
4.700		6.0	74.0	36.0	36.0	8513 4.700
4.760	3/16	6.0	82.0	44.0	36.0	8513 4.760
4.800		6.0	82.0	44.0	36.0	8513 4.800
4.900		6.0	82.0	44.0	36.0	8513 4.900
5.000		6.0	82.0	44.0	36.0	8513 5.000
5.100		6.0	82.0	44.0	36.0	8513 5.100
5.110		6.0	82.0	44.0	36.0	8513 5.110
5.160	13/64	6.0	82.0	44.0	36.0	8513 5.160
5.200		6.0	82.0	44.0	36.0	8513 5.200
5.300		6.0	82.0	44.0	36.0	8513 5.300
5.400		6.0	82.0	44.0	36.0	8513 5.400
5.410		6.0	82.0	44.0	36.0	8513 5.410
5.500		6.0	82.0	44.0	36.0	8513 5.500
5.550		6.0	82.0	44.0	36.0	8513 5.550
5.560	7/32	6.0	82.0	44.0	36.0	8513 5.560
5.600		6.0	82.0	44.0	36.0	8513 5.600
5.700		6.0	82.0	44.0	36.0	8513 5.700
5.800		6.0	82.0	44.0	36.0	8513 5.800
5.900		6.0	82.0	44.0	36.0	8513 5.900
5.950	15/64	6.0	82.0	44.0	36.0	8513 5.950
6.000		6.0	82.0	44.0	36.0	8513 6.000
6.100		8.0	91.0	53.0	36.0	8513 6.100
6.200		8.0	91.0	53.0	36.0	8513 6.200
6.300		8.0	91.0	53.0	36.0	8513 6.300
6.350	1/4	8.0	91.0	53.0	36.0	8513 6.350
6.400		8.0	91.0	53.0	36.0	8513 6.400
6.500		8.0	91.0	53.0	36.0	8513 6.500
6.530		8.0	91.0	53.0	36.0	8513 6.530
6.550		8.0	91.0	53.0	36.0	8513 6.550
6.600		8.0	91.0	53.0	36.0	8513 6.600
6.700		8.0	91.0	53.0	36.0	8513 6.700
6.750	17/64	8.0	91.0	53.0	36.0	8513 6.750
6.800		8.0	91.0	53.0	36.0	8513 6.800
6.900		8.0	91.0	53.0	36.0	8513 6.900
7.000		8.0	91.0	53.0	36.0	8513 7.000
7.100		8.0	91.0	53.0	36.0	8513 7.100
7.140	9/32	8.0	91.0	53.0	36.0	8513 7.140
7.200		8.0	91.0	53.0	36.0	8513 7.200
7.300		8.0	91.0	53.0	36.0	8513 7.300
7.400		8.0	91.0	53.0	36.0	8513 7.400
7.500		8.0	91.0	53.0	36.0	8513 7.500
7.540	19/64	8.0	91.0	53.0	36.0	8513 7.540

Article no. **8513**

d1 mm	inch	d2 h6 mm	l1 mm	l2 mm	l3 mm	Order no.
7.550		8.0	91.0	53.0	36.0	8513 7.550
7.600		8.0	91.0	53.0	36.0	8513 7.600
7.650		8.0	91.0	53.0	36.0	8513 7.650
7.700		8.0	91.0	53.0	36.0	8513 7.700
7.800		8.0	91.0	53.0	36.0	8513 7.800
7.900		8.0	91.0	53.0	36.0	8513 7.900
7.940	5/16	8.0	91.0	53.0	36.0	8513 7.940
8.000		8.0	91.0	53.0	36.0	8513 8.000
8.100		10.0	103.0	61.0	40.0	8513 8.100
8.200		10.0	103.0	61.0	40.0	8513 8.200
8.300		10.0	103.0	61.0	40.0	8513 8.300
8.330	21/64	10.0	103.0	61.0	40.0	8513 8.330
8.400		10.0	103.0	61.0	40.0	8513 8.400
8.500		10.0	103.0	61.0	40.0	8513 8.500
8.600		10.0	103.0	61.0	40.0	8513 8.600
8.700		10.0	103.0	61.0	40.0	8513 8.700
8.730	11/32	10.0	103.0	61.0	40.0	8513 8.730
8.800		10.0	103.0	61.0	40.0	8513 8.800
8.900		10.0	103.0	61.0	40.0	8513 8.900
9.000		10.0	103.0	61.0	40.0	8513 9.000
9.100		10.0	103.0	61.0	40.0	8513 9.100
9.130	23/64	10.0	103.0	61.0	40.0	8513 9.130
9.200		10.0	103.0	61.0	40.0	8513 9.200
9.250		10.0	103.0	61.0	40.0	8513 9.250
9.300		10.0	103.0	61.0	40.0	8513 9.300
9.340		10.0	103.0	61.0	40.0	8513 9.340
9.400		10.0	103.0	61.0	40.0	8513 9.400
9.500		10.0	103.0	61.0	40.0	8513 9.500
9.520	3/8	10.0	103.0	61.0	40.0	8513 9.520
9.550		10.0	103.0	61.0	40.0	8513 9.550
9.600		10.0	103.0	61.0	40.0	8513 9.600
9.700		10.0	103.0	61.0	40.0	8513 9.700
9.800		10.0	103.0	61.0	40.0	8513 9.800
9.900		10.0	103.0	61.0	40.0	8513 9.900
9.920	25/64	10.0	103.0	61.0	40.0	8513 9.920
10.000		10.0	103.0	61.0	40.0	8513 10.000
10.100		12.0	118.0	71.0	45.0	8513 10.100
10.200		12.0	118.0	71.0	45.0	8513 10.200
10.300		12.0	118.0	71.0	45.0	8513 10.300
10.320	13/32	12.0	118.0	71.0	45.0	8513 10.320
10.400		12.0	118.0	71.0	45.0	8513 10.400
10.500		12.0	118.0	71.0	45.0	8513 10.500
10.600		12.0	118.0	71.0	45.0	8513 10.600
10.700		12.0	118.0	71.0	45.0	8513 10.700
10.720	27/64	12.0	118.0	71.0	45.0	8513 10.720
10.800		12.0	118.0	71.0	45.0	8513 10.800
10.900		12.0	118.0	71.0	45.0	8513 10.900
11.000		12.0	118.0	71.0	45.0	8513 11.000
11.100		12.0	118.0	71.0	45.0	8513 11.100
11.110	7/16	12.0	118.0	71.0	45.0	8513 11.110
11.200		12.0	118.0	71.0	45.0	8513 11.200
11.300		12.0	118.0	71.0	45.0	8513 11.300
11.400		12.0	118.0	71.0	45.0	8513 11.400
11.500		12.0	118.0	71.0	45.0	8513 11.500
11.510	29/64	12.0	118.0	71.0	45.0	8513 11.510
11.550		12.0	118.0	71.0	45.0	8513 11.550
11.600		12.0	118.0	71.0	45.0	8513 11.600
11.700		12.0	118.0	71.0	45.0	8513 11.700
11.800		12.0	118.0	71.0	45.0	8513 11.800
11.900		12.0	118.0	71.0	45.0	8513 11.900
11.910	15/32	12.0	118.0	71.0	45.0	8513 11.910
12.000		12.0	118.0	71.0	45.0	8513 12.000
12.100		14.0	124.0	77.0	45.0	8513 12.100
12.200		14.0	124.0	77.0	45.0	8513 12.200
12.300	31/64	14.0	124.0	77.0	45.0	8513 12.300
12.400		14.0	124.0	77.0	45.0	8513 12.400

						Article no.	8513
d1 mm	inch	d2 h6 mm	l1 mm	l2 mm	l3 mm	Order no.	
12.500		14.0	124.0	77.0	45.0	8513 12.500	
12.600		14.0	124.0	77.0	45.0	8513 12.600	
12.700	1/2	14.0	124.0	77.0	45.0	8513 12.700	
12.800		14.0	124.0	77.0	45.0	8513 12.800	
12.900		14.0	124.0	77.0	45.0	8513 12.900	
13.000		14.0	124.0	77.0	45.0	8513 13.000	
13.100	33/64	14.0	124.0	77.0	45.0	8513 13.100	
13.200		14.0	124.0	77.0	45.0	8513 13.200	
13.300		14.0	124.0	77.0	45.0	8513 13.300	
13.400		14.0	124.0	77.0	45.0	8513 13.400	
13.490	17/32	14.0	124.0	77.0	45.0	8513 13.490	
13.500		14.0	124.0	77.0	45.0	8513 13.500	
13.600		14.0	124.0	77.0	45.0	8513 13.600	
13.700		14.0	124.0	77.0	45.0	8513 13.700	
13.800		14.0	124.0	77.0	45.0	8513 13.800	
13.890	35/64	14.0	124.0	77.0	45.0	8513 13.890	
13.900		14.0	124.0	77.0	45.0	8513 13.900	
14.000		14.0	124.0	77.0	45.0	8513 14.000	
14.100		16.0	133.0	83.0	48.0	8513 14.100	
14.200		16.0	133.0	83.0	48.0	8513 14.200	
14.290	9/16	16.0	133.0	83.0	48.0	8513 14.290	
14.300		16.0	133.0	83.0	48.0	8513 14.300	
14.400		16.0	133.0	83.0	48.0	8513 14.400	
14.500		16.0	133.0	83.0	48.0	8513 14.500	
14.600		16.0	133.0	83.0	48.0	8513 14.600	
14.680	37/64	16.0	133.0	83.0	48.0	8513 14.680	
14.700		16.0	133.0	83.0	48.0	8513 14.700	
14.800		16.0	133.0	83.0	48.0	8513 14.800	
14.900		16.0	133.0	83.0	48.0	8513 14.900	
15.000		16.0	133.0	83.0	48.0	8513 15.000	
15.080	19/32	16.0	133.0	83.0	48.0	8513 15.080	
15.100		16.0	133.0	83.0	48.0	8513 15.100	
15.200		16.0	133.0	83.0	48.0	8513 15.200	
15.300		16.0	133.0	83.0	48.0	8513 15.300	
15.400		16.0	133.0	83.0	48.0	8513 15.400	
15.480	39/64	16.0	133.0	83.0	48.0	8513 15.480	
15.500		16.0	133.0	83.0	48.0	8513 15.500	
15.550		16.0	133.0	83.0	48.0	8513 15.550	
15.600		16.0	133.0	83.0	48.0	8513 15.600	
15.700		16.0	133.0	83.0	48.0	8513 15.700	
15.800		16.0	133.0	83.0	48.0	8513 15.800	
15.870	5/8	16.0	133.0	83.0	48.0	8513 15.870	

						Article no.	8513
d1 mm	inch	d2 h6 mm	l1 mm	l2 mm	l3 mm	Order no.	
15.900		16.0	133.0	83.0	48.0	8513 15.900	
16.000		16.0	133.0	83.0	48.0	8513 16.000	
16.270	41/64	18.0	143.0	93.0	48.0	8513 16.270	
16.300		18.0	143.0	93.0	48.0	8513 16.300	
16.500		18.0	143.0	93.0	48.0	8513 16.500	
16.670	21/32	18.0	143.0	93.0	48.0	8513 16.670	
16.700		18.0	143.0	93.0	48.0	8513 16.700	
16.900		18.0	143.0	93.0	48.0	8513 16.900	
17.000		18.0	143.0	93.0	48.0	8513 17.000	
17.070	43/64	18.0	143.0	93.0	48.0	8513 17.070	
17.460	11/16	18.0	143.0	93.0	48.0	8513 17.460	
17.500		18.0	143.0	93.0	48.0	8513 17.500	
17.550		18.0	143.0	93.0	48.0	8513 17.550	
17.700		18.0	143.0	93.0	48.0	8513 17.700	
17.860	45/64	18.0	143.0	93.0	48.0	8513 17.860	
18.000		18.0	143.0	93.0	48.0	8513 18.000	
18.260	23/32	20.0	153.0	101.0	50.0	8513 18.260	
18.500		20.0	153.0	101.0	50.0	8513 18.500	
18.700		20.0	153.0	101.0	50.0	8513 18.700	
18.900		20.0	153.0	101.0	50.0	8513 18.900	
19.000		20.0	153.0	101.0	50.0	8513 19.000	
19.050	3/4	20.0	153.0	101.0	50.0	8513 19.050	
19.250		20.0	153.0	101.0	50.0	8513 19.250	
19.300		20.0	153.0	101.0	50.0	8513 19.300	
19.450	49/64	20.0	153.0	101.0	50.0	8513 19.450	
19.500		20.0	153.0	101.0	50.0	8513 19.500	
19.550		20.0	153.0	101.0	50.0	8513 19.550	
19.700		20.0	153.0	101.0	50.0	8513 19.700	
19.800		20.0	153.0	101.0	50.0	8513 19.800	
19.840	25/32	20.0	153.0	101.0	50.0	8513 19.840	
20.000		20.0	153.0	101.0	50.0	8513 20.000	

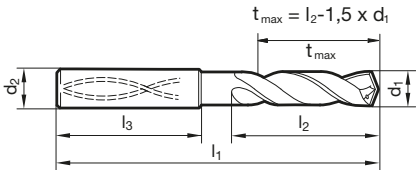
Ratio drills with coolant ducts

Article no. **8514**

VHM | X | INOX PRO | 7xD | WN | 140° | m7 | R | HA

P	M	K	N	S	H
○	●			●	

web thinning ≥ Ø 3.000 • maximum performance • optimised cutting geometry • main cutting edge is slightly concave • exceptional hole quality



Article no. **8514**

d1 mm	inch	d2 h6 mm	l1 mm	l2 mm	l3 mm	Order no.
3.000		6.0	70.0	30.0	36.0	8514 3.000
3.100		6.0	70.0	30.0	36.0	8514 3.100
3.170	1/8	6.0	70.0	30.0	36.0	8514 3.170
3.200		6.0	70.0	30.0	36.0	8514 3.200
3.250		6.0	70.0	30.0	36.0	8514 3.250
3.300		6.0	70.0	30.0	36.0	8514 3.300
3.400		6.0	75.0	35.5	36.0	8514 3.400
3.500		6.0	75.0	35.5	36.0	8514 3.500
3.570	9/64	6.0	75.0	35.5	36.0	8514 3.570
3.600		6.0	75.0	35.5	36.0	8514 3.600
3.700		6.0	75.0	35.5	36.0	8514 3.700
3.800		6.0	75.0	37.5	36.0	8514 3.800
3.900		6.0	75.0	37.5	36.0	8514 3.900
3.970	5/32	6.0	75.0	37.5	36.0	8514 3.970
4.000		6.0	75.0	37.5	36.0	8514 4.000
4.040		6.0	75.0	37.5	36.0	8514 4.040
4.100		6.0	75.0	37.5	36.0	8514 4.100
4.200		6.0	75.0	37.5	36.0	8514 4.200
4.300		6.0	85.0	45.0	36.0	8514 4.300
4.370	11/64	6.0	85.0	45.0	36.0	8514 4.370
4.400		6.0	85.0	45.0	36.0	8514 4.400
4.500		6.0	85.0	45.0	36.0	8514 4.500
4.600		6.0	85.0	45.0	36.0	8514 4.600
4.650		6.0	85.0	45.0	36.0	8514 4.650
4.700		6.0	85.0	45.0	36.0	8514 4.700
4.760	3/16	6.0	90.0	50.0	36.0	8514 4.760
4.800		6.0	90.0	50.0	36.0	8514 4.800
4.900		6.0	90.0	50.0	36.0	8514 4.900
5.000		6.0	90.0	50.0	36.0	8514 5.000
5.100		6.0	90.0	50.0	36.0	8514 5.100
5.110		6.0	90.0	50.0	36.0	8514 5.110
5.160	13/64	6.0	90.0	50.0	36.0	8514 5.160
5.200		6.0	90.0	50.0	36.0	8514 5.200
5.300		6.0	90.0	50.0	36.0	8514 5.300
5.400		6.0	97.0	57.0	36.0	8514 5.400
5.410		6.0	97.0	57.0	36.0	8514 5.410
5.500		6.0	97.0	57.0	36.0	8514 5.500
5.550		6.0	97.0	57.0	36.0	8514 5.550
5.560	7/32	6.0	97.0	57.0	36.0	8514 5.560
5.600		6.0	97.0	57.0	36.0	8514 5.600
5.700		6.0	97.0	57.0	36.0	8514 5.700
5.800		6.0	97.0	57.0	36.0	8514 5.800
5.900		6.0	97.0	57.0	36.0	8514 5.900
5.950	15/64	6.0	97.0	57.0	36.0	8514 5.950
6.000		6.0	97.0	57.0	36.0	8514 6.000
6.100		8.0	106.0	66.0	36.0	8514 6.100
6.200		8.0	106.0	66.0	36.0	8514 6.200
6.300		8.0	106.0	66.0	36.0	8514 6.300
6.350	1/4	8.0	106.0	66.0	36.0	8514 6.350
6.400		8.0	106.0	66.0	36.0	8514 6.400
6.500		8.0	106.0	66.0	36.0	8514 6.500
6.530		8.0	106.0	66.0	36.0	8514 6.530
6.550		8.0	106.0	66.0	36.0	8514 6.550
6.600		8.0	106.0	66.0	36.0	8514 6.600
6.700		8.0	106.0	66.0	36.0	8514 6.700
6.750	17/64	8.0	106.0	66.0	36.0	8514 6.750
6.800		8.0	106.0	66.0	36.0	8514 6.800
6.900		8.0	116.0	76.0	36.0	8514 6.900
7.000		8.0	116.0	76.0	36.0	8514 7.000
7.100		8.0	116.0	76.0	36.0	8514 7.100
7.140	9/32	8.0	116.0	76.0	36.0	8514 7.140
7.200		8.0	116.0	76.0	36.0	8514 7.200
7.300		8.0	116.0	76.0	36.0	8514 7.300
7.400		8.0	116.0	76.0	36.0	8514 7.400
7.500		8.0	116.0	76.0	36.0	8514 7.500
7.540	19/64	8.0	116.0	76.0	36.0	8514 7.540

Article no. **8514**

d1 mm	inch	d2 h6 mm	l1 mm	l2 mm	l3 mm	Order no.
7.550		8.0	116.0	76.0	36.0	8514 7.550
7.600		8.0	116.0	76.0	36.0	8514 7.600
7.650		8.0	116.0	76.0	36.0	8514 7.650
7.700		8.0	116.0	76.0	36.0	8514 7.700
7.800		8.0	116.0	76.0	36.0	8514 7.800
7.900		8.0	116.0	76.0	36.0	8514 7.900
7.940	5/16	8.0	116.0	76.0	36.0	8514 7.940
8.000		8.0	116.0	76.0	36.0	8514 8.000
8.100		10.0	131.0	87.0	40.0	8514 8.100
8.200		10.0	131.0	87.0	40.0	8514 8.200
8.300		10.0	131.0	87.0	40.0	8514 8.300
8.330	21/64	10.0	131.0	87.0	40.0	8514 8.330
8.400		10.0	131.0	87.0	40.0	8514 8.400
8.500		10.0	131.0	87.0	40.0	8514 8.500
8.600		10.0	131.0	87.0	40.0	8514 8.600
8.700		10.0	131.0	87.0	40.0	8514 8.700
8.730	11/32	10.0	131.0	87.0	40.0	8514 8.730
8.800		10.0	131.0	87.0	40.0	8514 8.800
8.900		10.0	131.0	87.0	40.0	8514 8.900
9.000		10.0	131.0	87.0	40.0	8514 9.000
9.100		10.0	139.0	95.0	40.0	8514 9.100
9.130	23/64	10.0	139.0	95.0	40.0	8514 9.130
9.200		10.0	139.0	95.0	40.0	8514 9.200
9.250		10.0	139.0	95.0	40.0	8514 9.250
9.300		10.0	139.0	95.0	40.0	8514 9.300
9.340		10.0	139.0	95.0	40.0	8514 9.340
9.400		10.0	139.0	95.0	40.0	8514 9.400
9.500		10.0	139.0	95.0	40.0	8514 9.500
9.520	3/8	10.0	139.0	95.0	40.0	8514 9.520
9.550		10.0	139.0	95.0	40.0	8514 9.550
9.600		10.0	139.0	95.0	40.0	8514 9.600
9.700		10.0	139.0	95.0	40.0	8514 9.700
9.800		10.0	139.0	95.0	40.0	8514 9.800
9.900		10.0	139.0	95.0	40.0	8514 9.900
9.920	25/64	10.0	139.0	95.0	40.0	8514 9.920
10.000		10.0	139.0	95.0	40.0	8514 10.000
10.100		12.0	155.0	106.0	45.0	8514 10.100
10.200		12.0	155.0	106.0	45.0	8514 10.200
10.300		12.0	155.0	106.0	45.0	8514 10.300
10.320	13/32	12.0	155.0	106.0	45.0	8514 10.320
10.400		12.0	155.0	106.0	45.0	8514 10.400
10.500		12.0	155.0	106.0	45.0	8514 10.500
10.600		12.0	155.0	106.0	45.0	8514 10.600
10.700		12.0	155.0	106.0	45.0	8514 10.700
10.720	27/64	12.0	155.0	106.0	45.0	8514 10.720
10.800		12.0	155.0	106.0	45.0	8514 10.800
10.900		12.0	155.0	106.0	45.0	8514 10.900
11.000		12.0	155.0	106.0	45.0	8514 11.000
11.100		12.0	163.0	114.0	45.0	8514 11.100
11.110	7/16	12.0	163.0	114.0	45.0	8514 11.110
11.200		12.0	163.0	114.0	45.0	8514 11.200
11.300		12.0	163.0	114.0	45.0	8514 11.300
11.400		12.0	163.0	114.0	45.0	8514 11.400
11.500		12.0	163.0	114.0	45.0	8514 11.500
11.510	29/64	12.0	163.0	114.0	45.0	8514 11.510
11.550		12.0	163.0	114.0	45.0	8514 11.550
11.600		12.0	163.0	114.0	45.0	8514 11.600
11.700		12.0	163.0	114.0	45.0	8514 11.700
11.800		12.0	163.0	114.0	45.0	8514 11.800
11.900		12.0	163.0	114.0	45.0	8514 11.900
11.910	15/32	12.0	163.0	114.0	45.0	8514 11.910
12.000		12.0	163.0	114.0	45.0	8514 12.000
12.100		14.0	182.0	133.0	45.0	8514 12.100
12.200		14.0	182.0	133.0	45.0	8514 12.200
12.300	31/64	14.0	182.0	133.0	45.0	8514 12.300
12.400		14.0	182.0	133.0	45.0	8514 12.400

Article no.						8514
d1 mm	inch	d2 h6 mm	l1 mm	l2 mm	l3 mm	Order no.
12.500		14.0	182.0	133.0	45.0	8514 12.500
12.600		14.0	182.0	133.0	45.0	8514 12.600
12.700	1/2	14.0	182.0	133.0	45.0	8514 12.700
12.800		14.0	182.0	133.0	45.0	8514 12.800
12.900		14.0	182.0	133.0	45.0	8514 12.900
13.000		14.0	182.0	133.0	45.0	8514 13.000
13.100	33/64	14.0	182.0	133.0	45.0	8514 13.100
13.200		14.0	182.0	133.0	45.0	8514 13.200
13.300		14.0	182.0	133.0	45.0	8514 13.300
13.400		14.0	182.0	133.0	45.0	8514 13.400
13.490	17/32	14.0	182.0	133.0	45.0	8514 13.490
13.500		14.0	182.0	133.0	45.0	8514 13.500
13.600		14.0	182.0	133.0	45.0	8514 13.600
13.700		14.0	182.0	133.0	45.0	8514 13.700
13.800		14.0	182.0	133.0	45.0	8514 13.800
13.890	35/64	14.0	182.0	133.0	45.0	8514 13.890
13.900		14.0	182.0	133.0	45.0	8514 13.900
14.000		14.0	182.0	133.0	45.0	8514 14.000
14.100		16.0	204.0	152.0	48.0	8514 14.100
14.200		16.0	204.0	152.0	48.0	8514 14.200
14.290	9/16	16.0	204.0	152.0	48.0	8514 14.290
14.300		16.0	204.0	152.0	48.0	8514 14.300
14.400		16.0	204.0	152.0	48.0	8514 14.400
14.500		16.0	204.0	152.0	48.0	8514 14.500
14.600		16.0	204.0	152.0	48.0	8514 14.600
14.680	37/64	16.0	204.0	152.0	48.0	8514 14.680
14.700		16.0	204.0	152.0	48.0	8514 14.700
14.800		16.0	204.0	152.0	48.0	8514 14.800
14.900		16.0	204.0	152.0	48.0	8514 14.900
15.000		16.0	204.0	152.0	48.0	8514 15.000
15.080	19/32	16.0	204.0	152.0	48.0	8514 15.080
15.100		16.0	204.0	152.0	48.0	8514 15.100
15.200		16.0	204.0	152.0	48.0	8514 15.200
15.300		16.0	204.0	152.0	48.0	8514 15.300
15.400		16.0	204.0	152.0	48.0	8514 15.400
15.480	39/64	16.0	204.0	152.0	48.0	8514 15.480
15.500		16.0	204.0	152.0	48.0	8514 15.500
15.550		16.0	204.0	152.0	48.0	8514 15.550
15.600		16.0	204.0	152.0	48.0	8514 15.600
15.700		16.0	204.0	152.0	48.0	8514 15.700
15.800		16.0	204.0	152.0	48.0	8514 15.800
15.870	5/8	16.0	204.0	152.0	48.0	8514 15.870

Article no.						8514
d1 mm	inch	d2 h6 mm	l1 mm	l2 mm	l3 mm	Order no.
15.900		16.0	204.0	152.0	48.0	8514 15.900
16.000		16.0	204.0	152.0	48.0	8514 16.000
16.270	41/64	18.0	223.0	171.0	48.0	8514 16.270
16.300		18.0	223.0	171.0	48.0	8514 16.300
16.500		18.0	223.0	171.0	48.0	8514 16.500
16.670	21/32	18.0	223.0	171.0	48.0	8514 16.670
16.700		18.0	223.0	171.0	48.0	8514 16.700
16.900		18.0	223.0	171.0	48.0	8514 16.900
17.000		18.0	223.0	171.0	48.0	8514 17.000
17.070	43/64	18.0	223.0	171.0	48.0	8514 17.070
17.460	11/16	18.0	223.0	171.0	48.0	8514 17.460
17.500		18.0	223.0	171.0	48.0	8514 17.500
17.550		18.0	223.0	171.0	48.0	8514 17.550
17.700		18.0	223.0	171.0	48.0	8514 17.700
17.860	45/64	18.0	223.0	171.0	48.0	8514 17.860
18.000		18.0	223.0	171.0	48.0	8514 18.000
18.260	23/32	20.0	244.0	190.0	50.0	8514 18.260
18.500		20.0	244.0	190.0	50.0	8514 18.500
18.700		20.0	244.0	190.0	50.0	8514 18.700
18.900		20.0	244.0	190.0	50.0	8514 18.900
19.000		20.0	244.0	190.0	50.0	8514 19.000
19.050	3/4	20.0	244.0	190.0	50.0	8514 19.050
19.250		20.0	244.0	190.0	50.0	8514 19.250
19.300		20.0	244.0	190.0	50.0	8514 19.300
19.450	49/64	20.0	244.0	190.0	50.0	8514 19.450
19.500		20.0	244.0	190.0	50.0	8514 19.500
19.550		20.0	244.0	190.0	50.0	8514 19.550
19.700		20.0	244.0	190.0	50.0	8514 19.700
19.800		20.0	244.0	190.0	50.0	8514 19.800
19.840	25/32	20.0	244.0	190.0	50.0	8514 19.840
20.000		20.0	244.0	190.0	50.0	8514 20.000

Ratio drills with coolant ducts, RT 100 InoxPro, 3xD and 5xD

Machining group		f (mm/U) with nom. Ø								
	v_c (m/min)	3	4	6	8	10	12	14	16	20
P1.1.1 Unalloyed steel, annealed, 0.15 % C, Rm 420 N/mm², 125 HB	140	0.155	0.190	0.260	0.325	0.385	0.440	0.495	0.550	0.650
P1.1.2 Unalloyed steel, heat-treated, 0.15 % C, Rm 420 N/mm², 125 HB	125	0.140	0.170	0.235	0.290	0.345	0.395	0.445	0.495	0.585
P1.1.3 Unalloyed steel, annealed, 0.45 % C, Rm 640 N/mm², 190 HB	125	0.140	0.170	0.235	0.290	0.345	0.395	0.445	0.495	0.585
P1.1.4 Unalloyed steel, heat-treated, 0.45 % C, Rm 640 N/mm², 190 HB	120	0.130	0.165	0.220	0.275	0.325	0.375	0.420	0.465	0.555
P1.1.5 Unalloyed steel, heat-treated, 0.45 % C, Rm 850 N/mm², 250 HB	120	0.130	0.165	0.220	0.275	0.325	0.375	0.420	0.465	0.555
P1.1.6 Unalloyed steel, annealed, 0.75 % C, Rm 915 N/mm², 270 HB	110	0.125	0.155	0.210	0.260	0.305	0.355	0.395	0.440	0.520
P1.1.7 Unalloyed steel, heat-treated, 0.75 % C, Rm 1020 N/mm², 300 HB	105	0.115	0.145	0.195	0.245	0.290	0.330	0.370	0.410	0.490
P2.1.1 Low-alloy steel, annealed, Rm 610 N/mm², 180 HB	115	0.125	0.155	0.210	0.260	0.305	0.355	0.395	0.440	0.520
P2.1.2 Low-alloy steel, heat-treated, Rm 930 N/mm², 275 HB	115	0.125	0.155	0.210	0.260	0.305	0.355	0.395	0.440	0.520
P2.1.3 Low-alloy steel, heat-treated, Rm 1020 N/mm², 300 HB	100	0.105	0.130	0.175	0.220	0.260	0.300	0.335	0.375	0.440
P2.1.4 Low-alloy steel, heat-treated, Rm 1190 N/mm², 350 HB	85	0.090	0.115	0.155	0.195	0.230	0.265	0.295	0.330	0.390
P3.1.1 High-alloy steel and tool steel, annealed, Rm 680 N/mm², 200 HB	75	0.095	0.120	0.165	0.205	0.240	0.275	0.310	0.345	0.405
P3.1.2 High-alloy steel and tool steel, hardened and tempered, Rm 1100 N/mm², 325 HB	65	0.080	0.100	0.140	0.170	0.205	0.235	0.265	0.290	0.345
M1.1.1 Stainless steel, ferritic/martensitic, with machining additives	105	0.095	0.120	0.165	0.205	0.240	0.275	0.310	0.345	0.405
M1.1.2 Stainless steel, ferritic/martensitic, annealed, Rm 680 N/mm², 200 HB	95	0.085	0.110	0.145	0.180	0.215	0.250	0.280	0.310	0.365
M1.1.3 Stainless steel, ferritic/martensitic, heat-treated, Rm 810 N/mm², 240 HB	90	0.080	0.100	0.140	0.170	0.205	0.235	0.265	0.290	0.345
M2.1.1 Stainless steel, austenitic, quenched, 180 HB	85	0.075	0.095	0.130	0.160	0.190	0.220	0.250	0.275	0.325
M2.2.1 Duplex steel, high-strength stainless steels	70	0.065	0.080	0.110	0.140	0.165	0.185	0.210	0.235	0.275
K1.1.1 Grey cast iron, pearlitic/ferritic, 180 HB										
K1.1.2 Grey cast iron, pearlitic/martensitic, 260 HB										
K1.2.1 Cast iron with spheroidal graphite, ferritic, 160 HB										
K1.2.2 Cast iron with spheroidal graphite, pearlitic, 250 HB										
K1.3.1 Malleable cast iron, ferritic, 130 HB										
K1.3.2 Malleable cast iron, pearlitic, 230 HB										
K2.1.1 Vermicular graphite cast iron (GJV)										
K2.2.1 Austenitic-ferritic spheroidal graphite cast iron (ADI)										
N1.1.1 Wrought aluminium alloys, non-hardened, 60 HB										
N1.1.2 Wrought aluminium alloys, hardened, 100 HB										
N2.1.1 Aluminium casting alloys, non-hardened, ≤ 12 % Si, 75 HB										
N2.1.2 Aluminium casting alloys, hardened, ≤ 12 % Si, 90 HB										
N2.1.3 Aluminium casting alloys, non-hardened, > 12 % Si, 130 HB										
N3.1.1 Copper and copper alloys: Free-machining alloy, Pb > 1 %										
N3.1.2 Copper and copper alloys: CuZn, CuSnZn										
N3.1.3 Copper and copper alloys: CuSn, lead-free copper and copper electrolyte										
N4.1.1 Non-metallic materials: Duroplastics, fibre-reinforced plastics										
N4.1.2 Non-metallic materials: Hard rubber, wood, etc.										
N4.1.3 Non-metallic materials: Graphite										
S1.1.1 Heat-resistant alloys, Fe-based, annealed, 200 HB	60	0.060	0.075	0.105	0.130	0.155	0.175	0.200	0.220	0.260
S1.1.2 Heat-resistant alloys, Fe-based, hardened, 280 HB	50	0.050	0.060	0.085	0.105	0.120	0.140	0.160	0.175	0.205
S1.1.3 Heat-resistant alloys, Ni- or Co-based, annealed, 250 HB	50	0.060	0.075	0.105	0.130	0.155	0.175	0.200	0.220	0.260
S1.1.4 Heat-resistant alloys, Ni- or Co-based, hardened, 350 HB	35	0.045	0.055	0.075	0.090	0.105	0.125	0.140	0.155	0.180
S1.1.5 Heat-resistant alloys, Ni- or Co-based, cast, 320 HB	35	0.045	0.055	0.075	0.090	0.105	0.125	0.140	0.155	0.180
S2.1.1 Titanium alloys, pure titanium, Rm 400 N/mm²	60	0.060	0.075	0.105	0.130	0.155	0.175	0.200	0.220	0.260
S2.1.2 Titanium alloys, Alpha and Beta alloys, hardened, Rm 1050 N/mm²	45	0.050	0.060	0.085	0.105	0.120	0.140	0.160	0.175	0.205
H1.1.1 Hardened steel, hardened and tempered, < 55 HRC										
H1.1.2 Hardened steel, hardened and tempered, < 60 HRC										
H1.1.3 Hardened steel, hardened and tempered, > 60 HRC										
H2.1.1 Chilled cast iron, 400 HB										
H2.1.2 Chilled cast iron, hardened and tempered, < 55 HRC										

All the values stated are guide values. You can find detailed cutting values online in our Gühring Navigator at navigator.guehring.de.

Ratio drills with coolant ducts, RT 100 InoxPro, 7xD

Machining group		f (mm/U) with nom. Ø								
	v_c (m/min)	3	4	6	8	10	12	14	16	20
P1.1.1 Unalloyed steel, annealed, 0.15 % C, Rm 420 N/mm², 125 HB	140	0.125	0.155	0.210	0.260	0.305	0.355	0.395	0.440	0.520
P1.1.2 Unalloyed steel, heat-treated, 0.15 % C, Rm 420 N/mm², 125 HB	125	0.110	0.140	0.185	0.235	0.275	0.315	0.355	0.395	0.470
P1.1.3 Unalloyed steel, annealed, 0.45 % C, Rm 640 N/mm², 190 HB	125	0.110	0.140	0.185	0.235	0.275	0.315	0.355	0.395	0.470
P1.1.4 Unalloyed steel, heat-treated, 0.45 % C, Rm 640 N/mm², 190 HB	120	0.105	0.130	0.175	0.220	0.260	0.300	0.335	0.375	0.440
P1.1.5 Unalloyed steel, heat-treated, 0.45 % C, Rm 850 N/mm², 250 HB	120	0.105	0.130	0.175	0.220	0.260	0.300	0.335	0.375	0.440
P1.1.6 Unalloyed steel, annealed, 0.75 % C, Rm 915 N/mm², 270 HB	110	0.100	0.120	0.165	0.205	0.245	0.280	0.315	0.350	0.415
P1.1.7 Unalloyed steel, heat-treated, 0.75 % C, Rm 1020 N/mm², 300 HB	105	0.090	0.115	0.155	0.195	0.230	0.265	0.295	0.330	0.390
P2.1.1 Low-alloy steel, annealed, Rm 610 N/mm², 180 HB	115	0.095	0.120	0.165	0.205	0.240	0.275	0.310	0.345	0.405
P2.1.2 Low-alloy steel, heat-treated, Rm 930 N/mm², 275 HB	115	0.095	0.120	0.165	0.205	0.240	0.275	0.310	0.345	0.405
P2.1.3 Low-alloy steel, heat-treated, Rm 1020 N/mm², 300 HB	100	0.080	0.100	0.140	0.170	0.205	0.235	0.265	0.290	0.345
P2.1.4 Low-alloy steel, heat-treated, Rm 1190 N/mm², 350 HB	85	0.070	0.090	0.120	0.150	0.180	0.205	0.230	0.255	0.305
P3.1.1 High-alloy steel and tool steel, annealed, Rm 680 N/mm², 200 HB	75	0.075	0.095	0.130	0.160	0.190	0.220	0.250	0.275	0.325
P3.1.2 High-alloy steel and tool steel, hardened and tempered, Rm 1100 N/mm², 325 HB	65	0.065	0.080	0.110	0.140	0.165	0.185	0.210	0.235	0.275
M1.1.1 Stainless steel, ferritic/martensitic, with machining additives	100	0.075	0.095	0.130	0.160	0.190	0.220	0.250	0.275	0.325
M1.1.2 Stainless steel, ferritic/martensitic, annealed, Rm 680 N/mm², 200 HB	90	0.070	0.085	0.115	0.145	0.175	0.200	0.225	0.245	0.295
M1.1.3 Stainless steel, ferritic/martensitic, heat-treated, Rm 810 N/mm², 240 HB	85	0.065	0.080	0.110	0.140	0.165	0.185	0.210	0.235	0.275
M2.1.1 Stainless steel, austenitic, quenched, 180 HB	80	0.060	0.075	0.105	0.130	0.155	0.175	0.200	0.220	0.260
M2.2.1 Duplex steel, high-strength stainless steels	70	0.050	0.065	0.090	0.110	0.130	0.150	0.170	0.185	0.220
K1.1.1 Grey cast iron, pearlitic/ferritic, 180 HB										
K1.1.2 Grey cast iron, pearlitic/martensitic, 260 HB										
K1.2.1 Cast iron with spheroidal graphite, ferritic, 160 HB										
K1.2.2 Cast iron with spheroidal graphite, pearlitic, 250 HB										
K1.3.1 Malleable cast iron, ferritic, 130 HB										
K1.3.2 Malleable cast iron, pearlitic, 230 HB										
K2.1.1 Vermicular graphite cast iron (GJV)										
K2.2.1 Austenitic-ferritic spheroidal graphite cast iron (ADI)										
N1.1.1 Wrought aluminium alloys, non-hardened, 60 HB										
N1.1.2 Wrought aluminium alloys, hardened, 100 HB										
N2.1.1 Aluminium casting alloys, non-hardened, ≤ 12 % Si, 75 HB										
N2.1.2 Aluminium casting alloys, hardened, ≤ 12 % Si, 90 HB										
N2.1.3 Aluminium casting alloys, non-hardened, > 12 % Si, 130 HB										
N3.1.1 Copper and copper alloys: Free-machining alloy, Pb > 1 %										
N3.1.2 Copper and copper alloys: CuZn, CuSnZn										
N3.1.3 Copper and copper alloys: CuSn, lead-free copper and copper electrolyte										
N4.1.1 Non-metallic materials: Duroplastics, fibre-reinforced plastics										
N4.1.2 Non-metallic materials: Hard rubber, wood, etc.										
N4.1.3 Non-metallic materials: Graphite										
S1.1.1 Heat-resistant alloys, Fe-based, annealed, 200 HB	45	0.050	0.060	0.080	0.100	0.120	0.140	0.155	0.175	0.205
S1.1.2 Heat-resistant alloys, Fe-based, hardened, 280 HB	35	0.040	0.050	0.065	0.080	0.095	0.110	0.125	0.140	0.165
S1.1.3 Heat-resistant alloys, Ni- or Co-based, annealed, 250 HB	40	0.050	0.060	0.080	0.100	0.120	0.140	0.155	0.175	0.205
S1.1.4 Heat-resistant alloys, Ni- or Co-based, hardened, 350 HB	25	0.035	0.040	0.055	0.070	0.085	0.095	0.110	0.120	0.145
S1.1.5 Heat-resistant alloys, Ni- or Co-based, cast, 320 HB	25	0.035	0.040	0.055	0.070	0.085	0.095	0.110	0.120	0.145
S2.1.1 Titanium alloys, pure titanium, Rm 400 N/mm²	45	0.050	0.060	0.080	0.100	0.120	0.140	0.155	0.175	0.205
S2.1.2 Titanium alloys, Alpha and Beta alloys, hardened, Rm 1050 N/mm²	35	0.040	0.050	0.065	0.080	0.095	0.110	0.125	0.140	0.165
H1.1.1 Hardened steel, hardened and tempered, < 55 HRC										
H1.1.2 Hardened steel, hardened and tempered, < 60 HRC										
H1.1.3 Hardened steel, hardened and tempered, > 60 HRC										
H2.1.1 Chilled cast iron, 400 HB										
H2.1.2 Chilled cast iron, hardened and tempered, < 55 HRC										

All the values stated are guide values. You can find detailed cutting values online in our Gühring Navigator at navigator.guehring.de.

Solid carbide drill RT 100 InoxPro

186 075/23029-VIII-09 | Printed in Germany | 2023

GÜHRING

Gühring KG | P.O. Box 100247 | 72423 Albstadt | Germany
Gühring KG | Herderstrasse 50–54 | 72458 Albstadt | Germany
Telephone: +49 74 31 17-0 | info@guehring.de | www.guehring.com