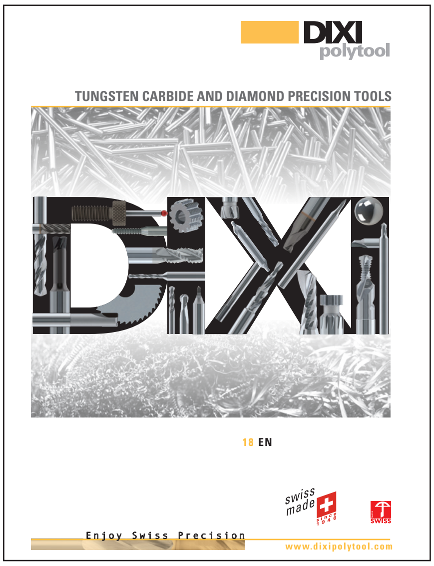
DIXI polytool

PRECISION TOOLS FOR HIGH-TECH MATERIALS

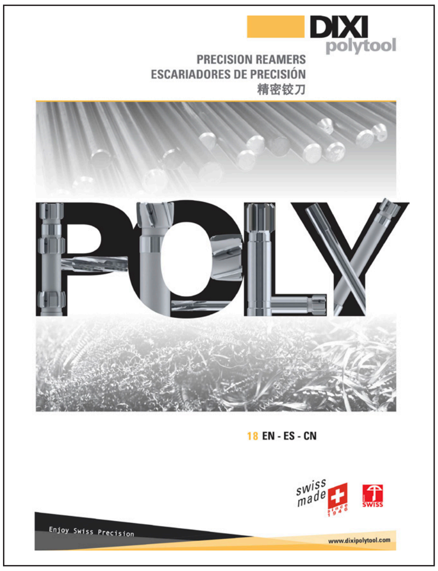
www.dixipolytool.com

Documentations available

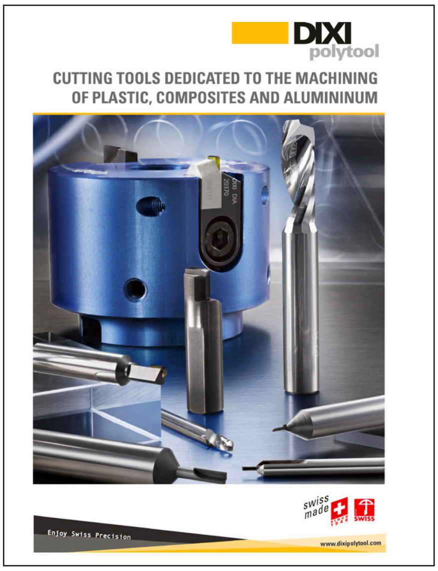
Tungsten carbide and diamond precision tools



Precision reamers

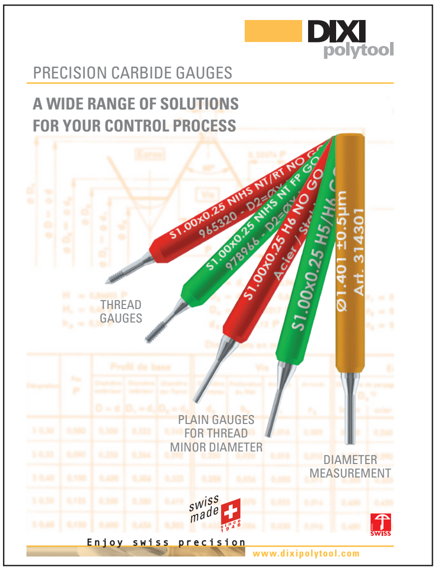


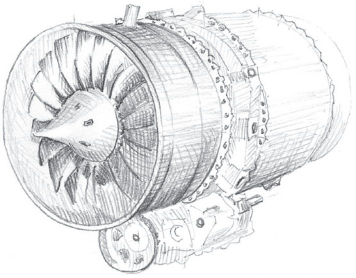
Cutting tools dedicated to the machining of plastic, composites and aluminium



PCD and diamond tools

Thread gauges

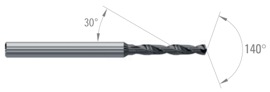


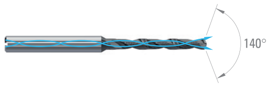
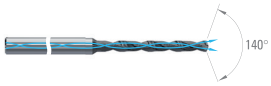
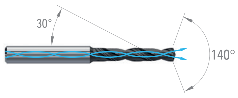
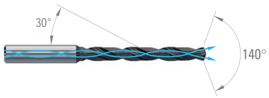
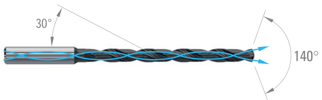


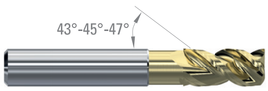
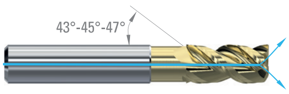
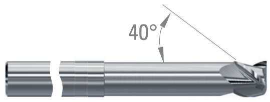
SELECTION OF TOOLS

✓ = item from stock

SPOTTING DRILLS		Z	Page	Cutting length		☐ CARBIDE	TiALN	DIXAL	
DIXI 1106 Ø1.00 - Ø20.00		2	10			✓	✓		
DIXI 1107 Ø1.00 - Ø20.00		2	11			✓			

SELF-CENTERING TWIST DRILLS		Z	Page	Cutting length		CARBIDE	TiALN	DIXAL	
DIXI 1149 Ø1.00 - Ø14.00		2	12		DIN 6537K 3-4xD_1		✓		
DIXI 1147 Ø0.50 - Ø10.00		2	14		6.5xD_1		✓		

SELF-CENTERING TWIST DRILLS WITH THROUGH COOLANT		Z	Page	Cutting length		CARBIDE	TiALN	DIXAL	
DIXI 1145-HH Ø0.70 - Ø14.00		2	16		DIN 6537L 5-7xD_1		✓		
DIXI 1146-HH Ø0.80 - Ø10.00		2	18		10xD_1		✓		
DIXI 1345-3D-HH Ø3.00 - Ø16.00		2	20		3xD_1		✓		
DIXI 1345-5D-HH Ø3.00- Ø16.00		2	20		5xD_1		✓		
DIXI 1345-8D-HH Ø3.00 - Ø16.00		2	20		8xD_1		✓		

END MILLS Z=3		Z	Page	Cutting length		CARBIDE	TiALN	DIXAL	
DIXI 7563 Ø4.00 - Ø20.00		3	24		λ2 λ1			✓	
DIXI 7563-FC Ø6.00 - Ø20.00		3	24		λ2 λ1			✓	
DIXI 7593 Ø4.00 - Ø20.00		3-4	25		DIN 6527	✓			

ISO	P			M	K	N				S		H
VDI 3323	1-5	6-9	10-13	14.1-14.4	15-20	21-22	23-25	26-28	29-30	31-35	36-37	38-41
	Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron	Al alloy	Cast Al	Cu alloy bronze brass	Plastic	Refractory alloy	Titanium, titanium alloy	Steel Hardened cast iron > 45 HRC

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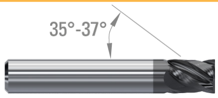
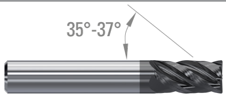
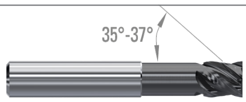
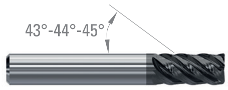
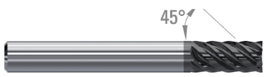
○ good ◎ excellent

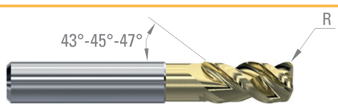
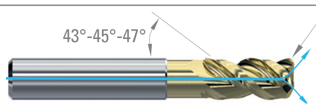
SELECTION OF TOOLS

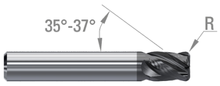
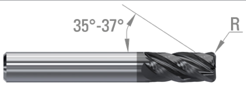
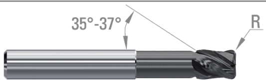
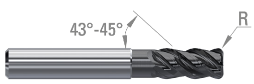
✓ = item from stock

END MILLS Z=4		Z	Page	Cutting length		DIXMILL	DIXAL	
DIXI 7804 Ø6.00 - Ø20.00		4	26			✓		
DIXI 7814 Ø6.00 - Ø25.00		4	27			✓		
DIXI 7824 Ø6.00 - Ø20.00		4	28			✓		

END MILLS Z=5								
DIXI 7844 Ø6.00 - Ø25.00		5	29			✓		
DIXI 7854 Ø6.00 - Ø25.00		5	30					

END MILLS Z=6								
DIXI 7830 Ø6.00 - Ø25.00		6	31			✓		
DIXI 7831 Ø6.00 - Ø25.00		6	32			✓		

END MILLS WITH CORNER RADIUS Z=3								
DIXI 7565 Ø4.00 - Ø20.00		3	33				✓	
DIXI 7565-FC Ø6.00 - Ø20.00		3	33				✓	

END MILLS WITH CORNER RADIUS Z=4								
DIXI 7805 Ø6.00 - Ø20.00		4	34			✓		
DIXI 7815 Ø6.00 - Ø25.00		4	35			✓		
DIXI 7825 Ø6.00 - Ø20.00		4	36			✓		
DIXI 7856 Ø6.00 - Ø25.00		4	37			✓		

ISO	P			M	K	N				S		H
VDI 3323	1-5	6-9	10-13	14.1-14.4	15-20	21-22	23-25	26-28	29-30	31-35	36-37	38-41
	Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron	Al alloy	Cast Al	Cu alloy bronze brass	Plastic	Refractory alloy	Titanium, titanium alloy	Steel Hardened cast iron > 45 HRC

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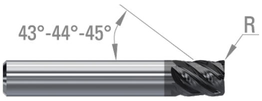
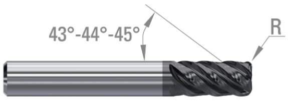
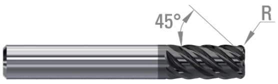
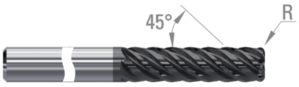
○ good ◎ excellent

✓ = item from stock

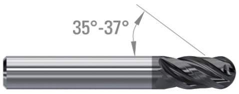
END MILLS WITH CORNER RADIUS Z=5

Tool	Z	Page	Cutting length		DIXMILL	DAC	C-TOP	XIDUR
DIXI 7845 Ø6.00 - Ø25.00 	5	38			✓			
DIXI 7855 Ø6.00 - Ø25.00 	5	39			✓			

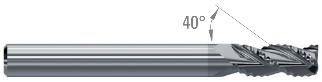
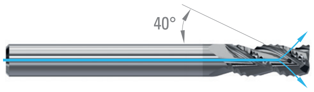
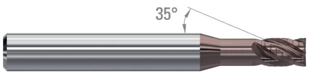
END MILLS WITH CORNER RADIUS Z=6

Tool	Z	Page	Cutting length		DIXMILL	DAC	C-TOP	XIDUR
DIXI 7840 Ø6.00 - Ø25.00 	6	40			✓			
DIXI 7841 Ø6.00 - Ø25.00 	6	41			✓			

BALL-NOSE END MILL Z=4

Tool	Z	Page	Cutting length		DIXMILL	DAC	C-TOP	XIDUR
DIXI 7834 Ø6.00 - Ø25.00 	4	42		R = D₁/2	✓			

ROUGHING END MILLS AND HIGH FEED END MILL

Tool	Z	Page	Cutting length		DIXMILL	DAC	C-TOP	XIDUR
DIXI 7215 Ø6.00 - Ø16.00 	3	43				✓		
DIXI 7215-FC Ø6.00 - Ø16.00 	3	43				✓		
DIXI 7220 Ø3.00 - Ø16.00 	3-4	44					✓	
DIXI 7220-3D Ø3.00 - Ø8.00 	3-4	45					✓	
DIXI 7702 Ø0.50 - Ø12.00 	2	46						✓

ISO	P			M	K	N				S		H
VDI 3323	1-5	6-9	10-13	14.1-14.4	15-20	21-22	23-25	26-28	29-30	31-35	36-37	38-41
	Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron	Al alloy	Cast Al	Cu alloy bronze brass	Plastic	Refractory alloy	Titanium, titanium alloy	Steel Hardened cast iron > 45 HRC

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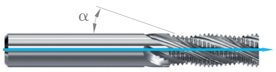
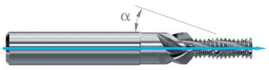
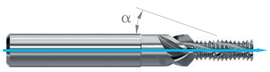
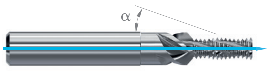
○ good ◎ excellent

✓ = item from stock

WHIRLING TOOLS		Z	Page	Cutting length		☐ CARBIDE	■ TiAlN	■ CUTINOX	■ DAC
DIXI 1730-xD M0.8 - M10		3-6	47		ISO 60°	✓	✓		
DIXI 1735-xD UNF N°1 - UNC 1/2″		3-6	49		UN 60°	✓	✓		

DRILLING THREAD WHIRLERS		Z	Page	Cutting length		CARBIDE	TiAlN	CUTINOX	DAC
DIXI 1742 M5 - M12		3-4	50		ISO 60°				✓
DIXI 1744 M5 - M12		4	51		ISO 60°			✓	

THREAD MILLS		Z	Page	Cutting length		CARBIDE	TiAlN	CUTINOX	DAC
DIXI 7913-TC M10 - M30		4-5	52		ISO 60°	✓		✓	
DIXI 7914-TC UN 1/2″- UN 1″		4-5	53		UN 60°	✓		✓	
DIXI 7923-TC 2xD UNJF N°10 - UNJF 1/2″		3-4	54		UNJ 60°	✓			

THREAD MILLS WITH COUNTERSINK		Z	Page	Cutting length		CARBIDE	TiAlN	CUTINOX	DAC
DIXI 7915-xD-TC 1.5xD-2xD-2.5xD M4 - M16		3-4	55		ISO 60°	✓		✓	
DIXI 7925-xD-TC 1.5xD-2xD-2.5xD UNC N°8 - UNC 5/8″		3-4	56		UN 60°	✓		✓	
DIXI 7935-xD-TC 1.5xD-2xD-2.5xD UNF N°8 - UNF 5/8″		3-4	57		UN 60°	✓		✓	

ISO	P			M	K	N				S		H
VDI 3323	1-5	6-9	10-13	14.1-14.4	15-20	21-22	23-25	26-28	29-30	31-35	36-37	38-41
	Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron	Al alloy	Cast Al	Cu alloy bronze brass	Plastic	Refractory alloy	Titanium, titanium alloy	Steel Hardened cast iron > 45 HRC

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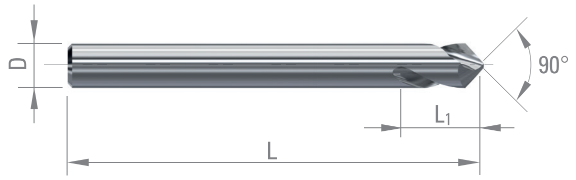
○ good ◎ excellent

DIXI 1106-90° Z = 2

SPOTTING DRILLS

P.58



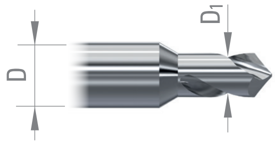
- 90° spotting drills, for general machining.
  Useable for 45° chamfering.
  Can only be used on the point.
- TiAlN coating improves tool life in ferrous materials.

○ good ◎ excellent

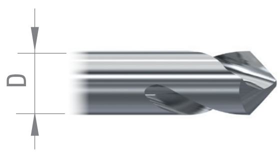
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	◎	◎				

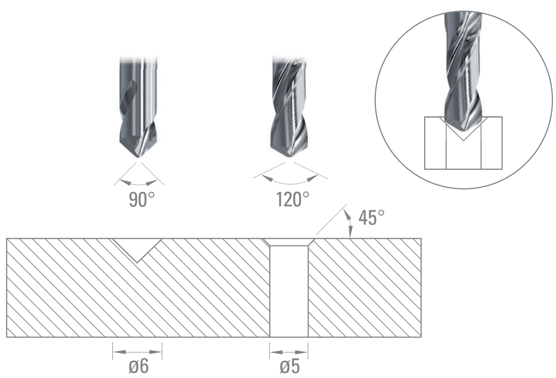
$D_{1\ h6}$	L_1	D_{h5}	L	CARBIDE	TiAlN
1.00	3	3	38	956799	957230
1.50	5	3	38	956800	957231
2.00	5	3	38	956801	957232



	D_{h5}	L_1	L	CARBIDE	TiAlN
	1.00	3	32	953781	953780
	1.50	5	32	953778	953779
	2.00	5	32	47101	62892
	3.00	9	38	43231	34090
	4.00	10	50	36911	61280
	5.00	13	50	47716	63736
*	6.00	13	57	42788	63757
*	8.00	27	63	42789	63758
*	10.00	30	72	43233	61561
*	12.00	35	83	43064	41463
*	16.00	46	92	43234	63759
*	20.00	52	104	43235	63760



* = logarithmic relief

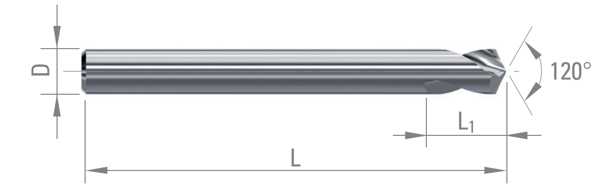


DIXI 1107-120°

Z = 2

P.58

SPOTTING DRILLS



- 120° spotting drills, for general machining. Can only be used on the point.

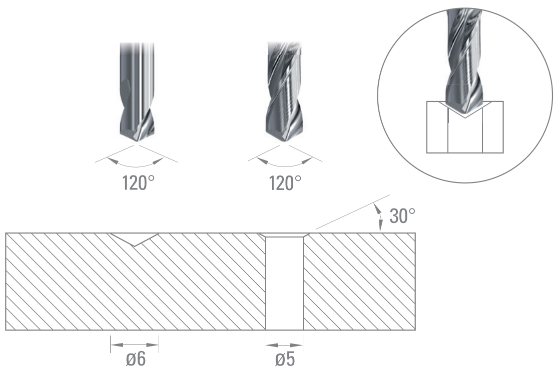
○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	◎	◎				

	D_{h5}	L_1	L	CARBIDE
	1.00	3	38	985118
	2.00	5	38	985120
	3.00	9	38	43236
	4.00	10	50	36914
*	6.00	13	57	43238
*	8.00	27	63	43239
*	10.00	30	72	43240
*	12.00	35	83	43241
*	16.00	46	92	43242
*	20.00	52	104	43243

* = logarithmic relief



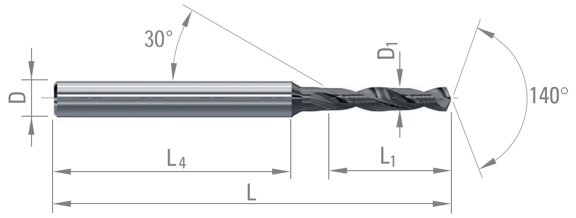
DIXI 1149 TiAlN

Z = 2

P.60

DIN 6537K

SELF-CENTERING TWIST DRILLS REINFORCED SHANK



- Self-centering twist drills with reinforced shank. High-performance tools developed for the drilling of long chip materials.
- TiAlN coating improves tool life in ferrous materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	○	○	○	○	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	○	○	○	○	○	○	○	○			○	○	○	○	○	◎	◎				

$D_{1\ h6}$	L_1	L_4	D_{h5}	L	TiAlN
1.00	5	26	3	38	976857
1.10	5	26	3	38	976858
1.20	5	26	3	38	976859
1.30	5	26	3	38	976860
1.40	5	26	3	38	976861
1.50	7	25	3	38	976862
1.60	7	25	3	38	976863
1.70	7	25	3	38	976864
1.80	7	25	3	38	976865
1.90	7	25	3	38	976866
2.00	9	35	3	50	43300
2.10	9	35	3	50	43301
2.20	9	35	3	50	43302
2.30	9	35	3	50	43303
2.40	9	35	3	50	43304
2.50	9	36	3	50	43305
2.60	11	31	4	50	43306
2.70	11	31	4	50	43307
2.80	11	31	4	50	41777
2.90	11	31	4	50	43308
3.00	14	39	6	62	43309
3.10	14	39	6	62	43310
3.175	14	39	6	62	64419
3.20	14	39	6	62	43311
3.30	14	39	6	62	43312
3.40	14	39	6	62	43313
3.50	14	39	6	62	43314

$D_{1\ h6}$	L_1	L_4	D_{h5}	L	TiAlN
3.60	14	39	6	62	43315
3.70	14	40	6	62	43316
3.80	17	40	6	66	43317
3.90	17	40	6	66	43318
4.00	17	40	6	66	43319
4.10	17	40	6	66	43320
4.20	17	40	6	66	43321
4.30	17	40	6	66	43322
4.40	17	40	6	66	43323
4.50	17	40	6	66	43324
4.60	17	40	6	66	43325
4.70	17	40	6	66	43326
4.762	20	37	6	66	43673
4.80	20	37	6	66	43327
4.90	20	38	6	66	43328
5.00	20	38	6	66	43329
5.10	20	38	6	66	966749
5.20	20	38	6	66	43330
5.30	20	38	6	66	43331
5.40	20	38	6	66	966750
5.50	20	38	6	66	43332
5.60	22	37	6	66	960752
5.70	22	37	6	66	966751
5.80	22	37	6	66	43333
5.90	22	37	6	66	966752
6.00	22	37	6	66	43334

DIXI 1149 TiAlN

SELF-CENTERING TWIST DRILLS REINFORCED SHANK

f Vc Ap

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DIN 6537K

$D_{1\ h6}$	L_1	L_4	D_{h5}	L	TiAlN
6.20	24	43	8	79	43447
6.30	24	43	8	79	43538
6.35	24	43	8	79	44585
6.40	24	43	8	79	63641
6.50	24	43	8	79	39394
6.60	24	43	8	79	43539
6.70	24	43	8	79	966756
6.80	24	44	8	79	43540
6.90	24	44	8	79	966757
7.00	24	43	8	79	43541
7.20	29	38	8	79	56826
7.50	29	38	8	79	43542
7.80	29	38	8	79	43543
8.00	29	39	8	79	43544
8.20	35	40	10	89	43448
8.40	35	40	10	89	55450
8.50	35	40	10	89	42654
8.70	35	41	10	89	54604
8.80	35	41	10	89	56828
9.00	35	41	10	89	43545
9.20	35	41	10	89	55451
9.50	35	41	10	89	43546
9.80	35	41	10	89	43547
10.00	35	42	10	89	43548
10.10	40	47	12	102	978563
10.20	40	47	12	102	43549
10.50	40	47	12	102	43550
10.80	40	48	12	102	59472
11.00	40	48	12	102	43551
11.50	41	47	12	102	43552
12.00	42	47	12	102	43553
13.00	46	47	14	107	43554
14.00	49	45	14	107	43556

DIXI 1147 TiAIN

$Z = 2$

$L_1 = 6{,}5 \times D_1$

DIN 6537L

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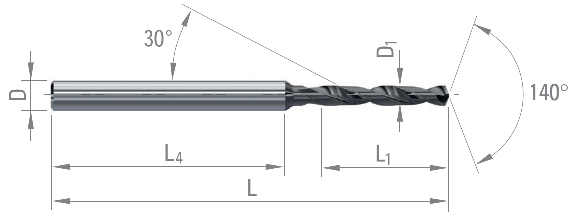
SELF-CENTERING TWIST DRILLS REINFORCED SHANK



- Self-centering twist drills with reinforced shank, 6.5xD_1 cutting length. High-performance tools developed for drilling short chip materials.
- TiAIN coating improves tool life in ferrous materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	○	○	○

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	○	○	○	○	○	○	○	○			◎	◎	◎	◎	◎	○	○				

$D_{1\ h6}$	L_1	L_4	D_{h5}	L	TiAIN
0.50	3.3	29	3	38	960468
0.55	3.6	29	3	38	960469
0.60	3.9	29	3	38	960470
0.65	4.2	33	3	43	960471
0.70	4.6	33	3	43	960472
0.75	4.9	33	3	43	960473
0.80	5.2	32	3	43	960474
0.85	5.5	32	3	43	960475
0.90	5.9	32	3	43	960476
0.95	6.2	32	3	43	960477
1.00	6.5	31	3	43	960478
1.10	7.2	31	3	43	960479
1.20	7.8	37	3	50	960480
1.30	8.5	37	3	50	960481
1.40	9.1	36	3	50	960482
1.50	9.8	35	3	50	960483
1.60	10.4	35	3	50	960484
1.70	11.1	34	3	50	960485
1.80	11.7	34	3	50	960486
1.90	12.4	33	3	50	960487
2.00	13.0	43	4	62	960137
2.10	13.7	42	4	62	960138
2.20	14.3	42	4	62	960139
2.30	15.0	41	4	62	960140
2.40	15.6	41	4	62	960141

$D_{1\ h6}$	L_1	L_4	D_{h5}	L	TiAIN
2.50	16.3	40	4	62	960142
2.60	16.9	39	4	62	960143
2.70	17.6	39	4	62	960144
2.80	18.2	38	4	62	960145
2.90	18.9	38	4	62	960146
3.00	19.5	37	4	62	960147
3.10	20.2	53	6	79	960148
3.20	20.8	52	6	79	960149
3.30	21.5	51	6	79	960150
3.40	22.1	51	6	79	960151
3.50	22.8	50	6	79	960152
3.60	23.4	50	6	79	966741
3.75	24.4	49	6	79	960153
3.80	24.7	48	6	79	960154
3.90	25.4	47	6	79	961304
4.00	26.0	47	6	79	960155
4.10	26.7	46	6	79	960156
4.20	27.3	45	6	79	960157
4.30	28.0	45	6	79	960158
4.40	28.6	44	6	79	959769
4.50	29.3	43	6	79	960159
4.60	29.9	43	6	79	960160
4.70	30.6	42	6	79	960161
4.80	31.2	42	6	79	960162
4.90	31.9	41	6	79	960163

SELF-CENTERING TWIST DRILLS
REINFORCED SHANK

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DIN 6537L

$D_{1\ h6}$	L_1	L_4	D_{h5}	L	TiAIN
5.00	32.5	50	6	89	959770
5.10	33.2	49	6	89	960167
5.20	33.8	49	6	89	960169
5.30	33.5	48	6	89	960170
5.40	35.1	48	6	89	966742
5.50	35.8	47	6	89	960171
5.60	36.4	46	6	89	960172
5.70	37.1	46	6	89	966743
5.80	37.7	45	6	89	960173
5.90	38.4	44	6	89	966744
6.00	39.0	44	6	89	960174
6.10	39.7	54	8	102	960175
6.20	40.3	53	8	102	960176
6.30	41.0	53	8	102	960177
6.35	41.3	53	8	102	960178
6.40	41.6	52	8	102	966745
6.50	42.3	51	8	102	960179
6.60	42.9	51	8	102	960180

$D_{1\ h6}$	L_1	L_4	D_{h5}	L	TiAIN
6.70	43.6	50	8	102	966747
6.80	44.2	50	8	102	960181
6.90	44.9	49	8	102	966748
7.00	45.5	48	8	102	960182
7.20	46.8	47	8	102	960183
7.50	48.8	45	8	102	960184
7.80	50.7	43	8	102	960185
8.00	52.0	42	8	102	960186
8.20	53.3	54	10	118	960187
8.40	54.0	54	10	118	960188
8.50	55.3	52	10	118	960189
8.80	57.2	51	10	118	960190
9.00	58.5	49	10	118	960191
9.50	61.8	46	10	118	960192
9.80	63.7	44	10	118	960193
10.00	65.0	43	10	118	960194

DIXI 1145-HH TiAlN Z = 2

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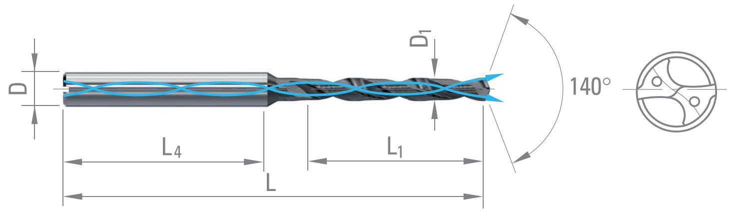
DIN 6537L

SELF-CENTERING TWIST DRILLS REINFORCED SHANK WITH THROUGH COOLANT



- Self-centering twist drills with through coolant and reinforced shank. High-performance tools developed for drilling of long chip materials.
- TiAlN coating improves tool life in ferrous materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	○	○	○	○	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	○	○	○	○	○	○	○	○			○	○	○	○	○	◎	◎				

$D_{1\ h6}$	L_1	L_4	D_{h5}	L	TiAlN
0.70	5	26	3	38	956705
0.80	5	26	3	38	954321
1.40	7	25	3	38	956694
1.50	11	20	3	38	956692
1.60	11	20	3	38	956690
1.70	11	20	3	38	956688
1.80	11	20	3	38	956686
1.90	11	20	3	38	956683
2.00	15	18	3	38	954320
2.10	15	18	3	38	956325
2.20	15	18	3	38	956326
2.30	15	26	4	50	956327
2.40	15	27	4	50	956328
2.50	18	24	4	50	956329
2.60	18	24	4	50	956330
2.70	18	24	4	50	956331
2.80	18	24	4	50	956332
2.90	23	35	6	66	956333
3.00	23	35	6	66	65470
3.10	23	35	6	66	953836
3.20	23	35	6	66	953835
3.30	23	35	6	66	65471
3.40	23	35	6	66	953837
3.50	23	35	6	66	65472

$D_{1\ h6}$	L_1	L_4	D_{h5}	L	TiAlN
3.60	29	35	6	74	966718
3.70	29	35	6	74	966719
3.75	29	36	6	74	65473
3.80	29	36	6	74	953838
3.90	29	36	6	74	966720
4.00	29	36	6	74	45540
4.10	29	36	6	74	953839
4.20	29	36	6	74	56829
4.30	29	36	6	74	62995
4.40	29	36	6	74	956579
4.50	35	38	6	82	953840
4.60	35	38	6	82	966721
4.70	35	38	6	82	966722
4.80	35	38	6	82	45541
4.90	35	38	6	82	966826
5.00	35	39	6	82	43272
5.10	35	39	6	82	953841
5.20	35	39	6	82	56830
5.30	35	39	6	82	59465
5.40	35	39	6	82	953842
5.50	35	39	6	82	45542
5.60	35	39	6	82	954509
5.70	35	39	6	82	966723
5.80	35	39	6	82	59466
5.90	35	39	6	82	966724

DIXI 1145-HH TiAlN

SELF-CENTERING TWIST DRILLS
REINFORCED SHANK WITH THROUGH COOLANT

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DIN 6537L

$D_{1\ h6}$	L_1	L_4	D_{h5}	L	TiAlN
6.00	35	40	6	82	38821
6.10	43	36	8	91	953843
6.20	43	36	8	91	56831
6.30	43	36	8	91	43279
6.35	43	36	8	91	59467
6.40	43	36	8	91	953844
6.50	43	36	8	91	39758
6.60	43	36	8	91	59468
6.70	43	36	8	91	956886
6.80	43	36	8	91	45614
6.90	43	36	8	91	966725
7.00	43	36	8	91	43283
7.20	43	36	8	91	56833
7.30	43	36	8	91	954510
7.40	43	36	8	91	59384
7.50	43	36	8	91	43284
7.60	43	36	8	91	954511
7.80	43	36	8	91	43285
8.00	43	-	8	91	39530
8.10	49	40	10	103	954512
8.20	49	40	10	103	56834
8.30	49	40	10	103	954513
8.40	49	40	10	103	59469

$D_{1\ h6}$	L_1	L_4	D_{h5}	L	TiAlN
8.50	49	40	10	103	52633
8.60	49	40	10	103	954514
8.80	49	40	10	103	45615
9.00	49	41	10	103	43288
9.20	49	41	10	103	953849
9.40	49	41	10	103	954515
9.50	49	41	10	103	63430
9.60	49	41	10	103	954516
9.70	49	41	10	103	953846
9.80	49	41	10	103	44777
10.00	49	-	10	103	40751
10.10	56	47	12	118	954326
10.20	56	47	12	118	56837
10.30	56	47	12	118	954518
10.50	56	47	12	118	44152
10.60	56	47	12	118	954517
10.80	56	47	12	118	45616
11.00	56	48	12	118	43294
11.30	58	46	12	118	954519
11.50	58	46	12	118	45207
12.00	60	45	12	118	40752
13.00	65	45	14	124	44339
14.00	70	-	14	124	45649

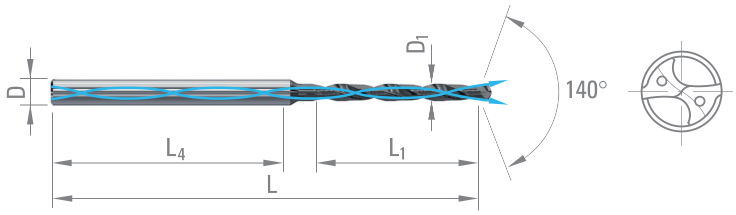
DIXI 1146-HH TiAlN

Z = 2

$L_1 = 10 \times D_1$

P.62

SELF-CENTERING TWIST DRILLS REINFORCED SHANK WITH THROUGH COOLANT



- Self-centering twist drills with through coolant and reinforced shank, $10xD_1$ cutting length. High-performance tools developed for drilling of short chip materials.
- TiAlN coating improves tool life in ferrous materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	○	○	○

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	○	○	○	○	○	○	○	○			◎	◎	◎	◎	◎	○	○				

$D_{1\ h6}$	L_1	L_4	D_{h5}	L	TiAlN
0.80	8.0	37	3	50	960206
0.85	8.5	37	3	50	960208
0.90	9.0	36	3	50	960209
0.95	9.5	36	3	50	960210
1.00	10.0	35	3	50	960211
1.10	11.0	34	3	50	960212
1.20	12.0	33	3	50	960214
1.30	13.0	33	3	50	960215
1.40	14.0	32	3	50	960216
1.50	15.0	43	3	62	960217
1.60	16.0	42	3	62	960218
1.70	17.0	41	3	62	960219
1.80	18.0	40	3	62	960220
1.90	19.0	39	3	62	960221
2.00	20.0	38	3	62	960222
2.10	21.0	37	3	62	960223
2.20	22.0	36	3	62	960224
2.30	23.0	51	4	79	960225
2.40	24.0	50	4	79	960226
2.50	25.0	49	4	79	960227
2.60	26.0	48	4	79	960228
2.70	27.0	47	4	79	960229
2.80	28.0	46	4	79	960230
2.90	29.0	44	6	79	960231
3.00	30.0	43	6	79	960232
3.10	31.0	52	6	89	966726

$D_{1\ h6}$	L_1	L_4	D_{h5}	L	TiAlN
3.20	32.0	51	6	89	966727
3.30	33.0	50	6	89	960243
3.40	34.0	49	6	89	966728
3.50	35.0	48	6	89	960244
3.60	36.0	47	6	89	966729
3.75	37.5	46	6	89	960245
3.90	39.0	44	6	89	966730
4.00	40.0	56	6	102	960246
4.10	41.0	55	6	102	966731
4.20	42.0	54	6	102	960247
4.30	43.0	53	6	102	960248
4.40	44.0	52	6	102	966732
4.50	45.0	51	6	102	960249
4.60	46.0	50	6	102	966733
4.70	47.0	49	6	102	966734
4.80	48.0	48	6	102	960250
4.90	49.0	47	6	102	966735
5.00	50.0	46	6	102	960251
5.10	51.0	45	6	102	966736
5.20	52.0	44	6	102	960252
5.30	53.0	43	6	102	960253
5.40	54.0	42	6	102	966737
5.50	55.0	41	6	102	960254
5.60	56.0	56	6	118	966738
5.70	57.0	55	6	118	966739
5.80	58.0	54	6	118	960255
5.90	59.0	53	6	118	963660

DIXI 1146-HH TiAlN

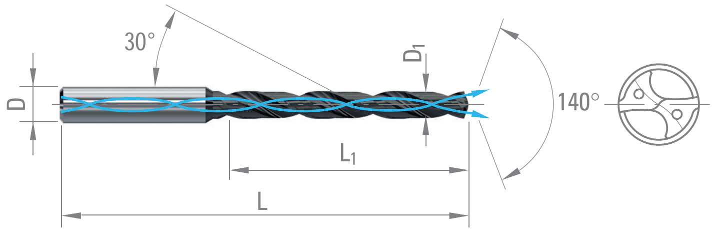
SELF-CENTERING TWIST DRILLS
REINFORCED SHANK WITH THROUGH COOLANT

P.62

$D_{1\ h6}$	L_1	L_4	D_{h5}	L	TiAlN
6.00	60.0	52	6	118	960256
6.10	61.0	49	8	118	966740
6.20	62.0	48	8	118	960257
6.30	63.0	47	8	118	960426
6.40	64.0	47	8	118	960427
6.50	65.0	45	8	118	960428
6.60	66.0	59	8	133	960429
6.80	68.0	56	8	133	960430
6.90	69.0	56	8	133	963661
7.00	70.0	55	8	133	960431
7.20	72.0	53	8	133	960432
7.50	75.0	50	8	133	960433
7.80	78.0	47	8	133	960434
8.00	80.0	45	8	133	960435
8.20	82.0	59	10	151	960436
8.40	84.0	57	10	151	960437
8.50	85.0	56	10	151	960438
8.80	88.0	53	10	151	960439
9.00	90.0	60	10	160	960440
9.20	92.0	58	10	160	960441
9.40	94.0	56	10	160	960442
9.525	95.3	55	10	160	960443
9.80	98.0	52	10	160	960444
10.00	100.0	50	10	160	960445

DIXI 1345-xD-HH TiAlN Z = 2

SELF-CENTERING TWIST DRILLS
REINFORCED SHANK WITH THROUGH COOLANT



P.64

- Self-centering twist drills with through coolant and reinforced shank, $3xD_1$, $5xD_1$, $8xD_1$ cutting length. High-performance tools developed for drilling of low machinability materials.
- TiAlN coating improves tool life in ferrous materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations		◎	○			◎	○					◎	◎	◎	◎	◎	◎						

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	◎	◎	○	○	○												○				

$D_{1\ h6}$	D_{h5}	L_1	L	DIXI	TiAlN
3.0	6	20	62	1345-3D	387110
		28	66	1345-5D	387227
		34	72	1345-8D	387349
3.1	6	20	62	1345-3D	387111
		28	66	1345-5D	387228
		34	72	1345-8D	387350
3.2	6	20	62	1345-3D	387112
		28	66	1345-5D	387229
		34	72	1345-8D	387351
3.3	6	20	62	1345-3D	387113
		28	66	1345-5D	387230
		34	72	1345-8D	387352
3.4	6	20	62	1345-3D	387114
		28	66	1345-5D	387231
		34	72	1345-8D	387353
3.5	6	20	62	1345-3D	387115
		28	66	1345-5D	387232
		34	72	1345-8D	387354
3.6	6	20	62	1345-3D	387116
		28	66	1345-5D	387233
		34	72	1345-8D	387355
3.7	6	20	62	1345-3D	387117
		28	66	1345-5D	387234
		34	72	1345-8D	387356
3.8	6	24	66	1345-3D	387118
		36	74	1345-5D	387235
		43	81	1345-8D	387357
3.9	6	24	66	1345-3D	387119
		36	74	1345-5D	387236
		43	81	1345-8D	387358
4.0	6	24	66	1345-3D	387120
		36	74	1345-5D	387237
		43	81	1345-8D	387359
4.1	6	24	66	1345-3D	387121
		36	74	1345-5D	387238
		43	81	1345-8D	387360

$D_{1\ h6}$	D_{h5}	L_1	L	DIXI	TiAlN
4.2	6	24	66	1345-3D	387122
		36	74	1345-5D	387239
		43	81	1345-8D	387361
4.3	6	24	66	1345-3D	387123
		36	74	1345-5D	387240
		43	81	1345-8D	387362
4.4	6	24	66	1345-3D	387124
		36	74	1345-5D	387241
		43	81	1345-8D	387363
4.5	6	24	66	1345-3D	387125
		36	74	1345-5D	387242
		43	81	1345-8D	387364
4.6	6	24	66	1345-3D	387126
		36	74	1345-5D	387243
		43	81	1345-8D	387365
4.7	6	24	66	1345-3D	387127
		36	74	1345-5D	387244
		43	81	1345-8D	387366
4.8	6	28	66	1345-3D	387128
		44	82	1345-5D	387245
		57	95	1345-8D	387367
4.9	6	28	66	1345-3D	387129
		44	82	1345-5D	387246
		57	95	1345-8D	387368
5.0	6	28	66	1345-3D	387130
		44	82	1345-5D	387247
		57	95	1345-8D	387369
5.1	6	28	66	1345-3D	387131
		44	82	1345-5D	387248
		57	95	1345-8D	387370
5.2	6	28	66	1345-3D	387132
		44	82	1345-5D	387249
		57	95	1345-8D	387371
5.3	6	28	66	1345-3D	387133
		44	82	1345-5D	387250
		57	95	1345-8D	387372

DIXI 1345-xD-HH TiAlN

SELF-CENTERING TWIST DRILLS
REINFORCED SHANK WITH THROUGH COOLANT

P.64

$D_{1\ h6}$	D_{h5}	L_1	L	DIXI	TiAlN
5.4	6	28	66	1345-3D	387134
		44	82	1345-5D	387251
		57	95	1345-8D	387373
5.5	6	28	66	1345-3D	387135
		44	82	1345-5D	387252
		57	95	1345-8D	387374
5.6	6	28	66	1345-3D	387136
		44	82	1345-5D	387253
		57	95	1345-8D	387375
5.7	6	28	66	1345-3D	387137
		44	82	1345-5D	387254
		57	95	1345-8D	387376
5.8	6	28	66	1345-3D	387138
		44	82	1345-5D	387255
		57	95	1345-8D	387377
5.9	6	28	66	1345-3D	387139
		44	82	1345-5D	387256
		57	95	1345-8D	387378
6.0	6	28	66	1345-3D	387140
		44	82	1345-5D	387257
		57	95	1345-8D	387379
6.1	8	34	79	1345-3D	387141
		53	91	1345-5D	387258
		76	114	1345-8D	387380
6.2	8	34	79	1345-3D	387142
		53	91	1345-5D	387259
		76	114	1345-8D	387381
6.3	8	34	79	1345-3D	387143
		53	91	1345-5D	387260
		76	114	1345-8D	387382
6.4	8	34	79	1345-3D	387144
		53	91	1345-5D	387261
		76	114	1345-8D	387383
6.5	8	34	79	1345-3D	387145
		53	91	1345-5D	387262
		76	114	1345-8D	387384
6.6	8	34	79	1345-3D	387146
		53	91	1345-5D	387263
		76	114	1345-8D	387385
6.7	8	34	79	1345-3D	387147
		53	91	1345-5D	387264
		76	114	1345-8D	387386
6.8	8	34	79	1345-3D	387148
		53	91	1345-5D	387265
		76	114	1345-8D	387387
6.9	8	34	79	1345-3D	387149
		53	91	1345-5D	387266
		76	114	1345-8D	387388
7.0	8	34	79	1345-3D	387150
		53	91	1345-5D	387267
		76	114	1345-8D	387389
7.1	8	41	79	1345-3D	387151
		53	91	1345-5D	387268
		76	114	1345-8D	387390

$D_{1\ h6}$	D_{h5}	L_1	L	DIXI	TiAlN
7.2	8	41	79	1345-3D	387152
		53	91	1345-5D	387269
		76	114	1345-8D	387391
7.3	8	41	79	1345-3D	387153
		53	91	1345-5D	387270
		76	114	1345-8D	387392
7.4	8	41	79	1345-3D	387154
		53	91	1345-5D	387271
		76	114	1345-8D	387393
7.5	8	41	79	1345-3D	387155
		53	91	1345-5D	387272
		76	114	1345-8D	387394
7.6	8	41	79	1345-3D	387156
		53	91	1345-5D	387273
		76	114	1345-8D	387395
7.7	8	41	79	1345-3D	387157
		53	91	1345-5D	387274
		76	114	1345-8D	387396
7.8	8	41	79	1345-3D	387158
		53	91	1345-5D	387275
		76	114	1345-8D	387397
7.9	8	41	79	1345-3D	387159
		53	91	1345-5D	387276
		76	114	1345-8D	387398
8.0	8	41	79	1345-3D	387160
		53	91	1345-5D	387277
		76	114	1345-8D	387399
8.1	10	47	89	1345-3D	387161
		61	103	1345-5D	387278
		95	142	1345-8D	387400
8.2	10	47	89	1345-3D	387162
		61	103	1345-5D	387279
		95	142	1345-8D	387401
8.3	10	47	89	1345-3D	387163
		61	103	1345-5D	387280
		95	142	1345-8D	387402
8.4	10	47	89	1345-3D	387164
		61	103	1345-5D	387281
		95	142	1345-8D	387403
8.5	10	47	89	1345-3D	387165
		61	103	1345-5D	387282
		95	142	1345-8D	387404
8.6	10	47	89	1345-3D	387166
		61	103	1345-5D	387283
		95	142	1345-8D	387405
8.7	10	47	89	1345-3D	387167
		61	103	1345-5D	387284
		95	142	1345-8D	387406
8.8	10	47	89	1345-3D	387168
		61	103	1345-5D	387285
		95	142	1345-8D	387407
8.9	10	47	89	1345-3D	387169
		61	103	1345-5D	387286
		95	142	1345-8D	387408

DIXI 1345-xD-HH TiAIN

SELF-CENTERING TWIST DRILLS
REINFORCED SHANK WITH THROUGH COOLANT

P.64

$D_{1\ h6}$	D_{h5}	L_1	L	DIXI	TiAlN
9.0	10	47	89	1345-3D	387170
		61	103	1345-5D	387287
		95	142	1345-8D	387409
9.1	10	47	89	1345-3D	387171
		61	103	1345-5D	387288
		95	142	1345-8D	387410
9.2	10	47	89	1345-3D	387172
		61	103	1345-5D	387289
		95	142	1345-8D	387411
9.3	10	47	89	1345-3D	387173
		61	103	1345-5D	387290
		95	142	1345-8D	387412
9.4	10	47	89	1345-3D	387174
		61	103	1345-5D	387291
		95	142	1345-8D	387413
9.5	10	47	89	1345-3D	387175
		61	103	1345-5D	387292
		95	142	1345-8D	387414
9.6	10	47	89	1345-3D	387176
		61	103	1345-5D	387293
		95	142	1345-8D	387415
9.7	10	47	89	1345-3D	387177
		61	103	1345-5D	387294
		95	142	1345-8D	387416
9.8	10	47	89	1345-3D	387178
		61	103	1345-5D	387295
		95	142	1345-8D	387417
9.9	10	47	89	1345-3D	387179
		61	103	1345-5D	387296
		95	142	1345-8D	387418
10.0	10	47	89	1345-3D	387180
		61	103	1345-5D	387297
		95	142	1345-8D	387419
10.1	12	55	102	1345-3D	387181
		71	118	1345-5D	387298
		114	162	1345-8D	387420
10.2	12	55	102	1345-3D	387182
		71	118	1345-5D	387299
		114	162	1345-8D	387421
10.3	12	55	102	1345-3D	387183
		71	118	1345-5D	387300
		114	162	1345-8D	387422
10.4	12	55	102	1345-3D	387184
		71	118	1345-5D	387301
		114	162	1345-8D	387423
10.5	12	55	102	1345-3D	387185
		71	118	1345-5D	387302
		114	162	1345-8D	387424
10.6	12	55	102	1345-3D	387186
		71	118	1345-5D	387303
		114	162	1345-8D	387425
10.7	12	55	102	1345-3D	387187
		71	118	1345-5D	387304
		114	162	1345-8D	387426

$D_{1\ h6}$	D_{h5}	L_1	L	DIXI	TiAlN
10.8	12	55	102	1345-3D	387188
		71	118	1345-5D	387305
		114	162	1345-8D	387427
10.9	12	55	102	1345-3D	387189
		71	118	1345-5D	387306
		114	162	1345-8D	387428
11.0	12	55	102	1345-3D	387190
		71	118	1345-5D	387307
		114	162	1345-8D	387429
11.1	12	55	102	1345-3D	387191
		71	118	1345-5D	387308
		114	162	1345-8D	387430
11.2	12	55	102	1345-3D	387192
		71	118	1345-5D	387309
		114	162	1345-8D	387431
11.3	12	55	102	1345-3D	387193
		71	118	1345-5D	387310
		114	162	1345-8D	387432
11.4	12	55	102	1345-3D	387194
		71	118	1345-5D	387311
		114	162	1345-8D	387433
11.5	12	55	102	1345-3D	387195
		71	118	1345-5D	387312
		114	162	1345-8D	387434
11.6	12	55	102	1345-3D	387196
		71	118	1345-5D	387313
		114	162	1345-8D	387435
11.7	12	55	102	1345-3D	387197
		71	118	1345-5D	387314
		114	162	1345-8D	387436
11.8	12	55	102	1345-3D	387198
		71	118	1345-5D	387315
		114	162	1345-8D	387437
11.9	12	55	102	1345-3D	387199
		71	118	1345-5D	387316
		114	162	1345-8D	387438
12.0	12	55	102	1345-3D	387200
		71	118	1345-5D	387317
		114	162	1345-8D	387439
12.1	14	60	107	1345-3D	387201
		77	124	1345-5D	387318
		133	178	1345-8D	387440
12.2	14	60	107	1345-3D	387202
		77	124	1345-5D	387319
		133	178	1345-8D	387441
12.3	14	60	107	1345-3D	387203
		77	124	1345-5D	387320
		133	178	1345-8D	387442
12.4	14	77	124	1345-5D	387321
		133	178	1345-8D	387443
12.5	14	60	107	1345-3D	387204
		77	124	1345-5D	387322
		133	178	1345-8D	387444

DIXI 1345-xD-HH TiAlN

SELF-CENTERING TWIST DRILLS
REINFORCED SHANK WITH THROUGH COOLANT

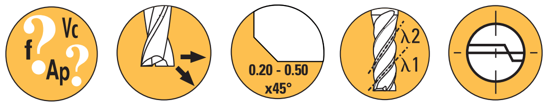
P.64

$D_{1\ h6}$	D_{h5}	L_1	L	DIXI	TiAlN
12.6	14	60	107	1345-3D	387205
		77	124	1345-5D	387323
		133	178	1345-8D	387445
12.7	14	60	107	1345-3D	387206
		77	124	1345-5D	387324
		133	178	1345-8D	387446
12.8	14	60	107	1345-3D	387207
		77	124	1345-5D	387325
		133	178	1345-8D	387447
12.9	14	60	107	1345-3D	387208
		77	124	1345-5D	387326
		133	178	1345-8D	387448
13.0	14	60	107	1345-3D	387209
		77	124	1345-5D	387327
		133	178	1345-8D	387449
13.1	14	60	107	1345-3D	387210
		77	124	1345-5D	387328
		133	178	1345-8D	387450
13.2	14	60	107	1345-3D	387211
		77	124	1345-5D	387329
		133	178	1345-8D	387451
13.3	14	77	124	1345-5D	387330
		133	178	1345-8D	387452
13.4	14	77	124	1345-5D	387331
		133	178	1345-8D	387453
13.5	14	60	107	1345-3D	387212
		77	124	1345-5D	387332
		133	178	1345-8D	387454
13.6	14	60	107	1345-3D	387213
		77	124	1345-5D	387333
		133	178	1345-8D	387455
13.7	14	77	124	1345-5D	387334
		133	178	1345-8D	387456
13.8	14	60	107	1345-3D	387214
		77	124	1345-5D	387335
		133	178	1345-8D	387457

$D_{1\ h6}$	D_{h5}	L_1	L	DIXI	TiAlN
13.9	14	60	107	1345-3D	387215
		77	124	1345-5D	387336
		133	178	1345-8D	387458
14.0	14	60	107	1345-3D	387216
		77	124	1345-5D	387337
		133	178	1345-8D	387459
14.1	16	65	115	1345-3D	387217
		83	133	1345-5D	387338
14.2	16	65	115	1345-3D	387218
		83	133	1345-5D	387339
14.3	16	65	115	1345-3D	387219
14.5	16	65	115	1345-3D	387220
		83	133	1345-5D	387340
		152	203	1345-8D	387460
14.6	16	65	115	1345-3D	387221
14.7	16	83	133	1345-5D	387341
14.8	16	83	133	1345-5D	387342
15.0	16	65	115	1345-3D	387222
		83	133	1345-5D	387343
		152	203	1345-8D	387461
15.1	16	83	133	1345-5D	387344
15.2	16	65	115	1345-3D	387223
		83	133	1345-5D	387345
15.5	16	65	115	1345-3D	387224
		83	133	1345-5D	387346
		152	203	1345-8D	387462
15.8	16	65	115	1345-3D	387225
		83	133	1345-5D	387347
16.0	16	65	115	1345-3D	387226
		83	133	1345-5D	387348
		152	203	1345-8D	387463

DIXI 7563 - 7563-FC DIXAL

Z = 3



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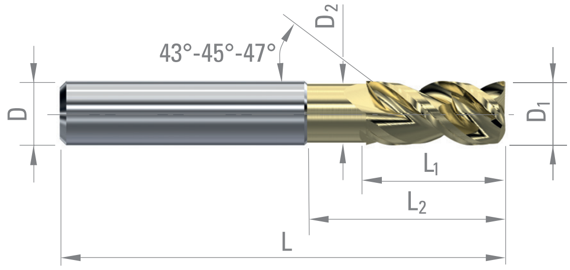
END MILLS
STANDARD LENGTH, NECKED DOWN



- Necked down end mills with variable helix and double-groove geometry developed for the machining of non-ferrous materials.
- DIXI 7563-FC with coolant in the flutes.
- DIXAL coating improves tool life in non-ferrous materials and prevents built-up edges.

○ good ◎ excellent

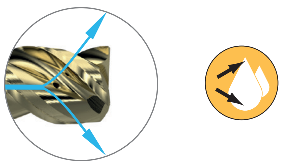
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations																							

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	◎	◎	◎	◎	◎	○	○	○													

$D_{1\,h10}$	L_1	D_2	L_2	D_{h5}	L	7563 DIXAL	7563-FC DIXAL
4.00	9.0	3.60	14	4	57	991388	
6.00	13.0	5.60	21	6	57	991389	321899
8.00	19.0	7.40	26	8	63	991390	321900
10.00	22.0	9.30	30	10	72	991391	321901
12.00	26.0	11.00	37	12	83	991392	321902
16.00	32.0	15.00	42	16	92	991393	321903
20.00	38.0	19.00	50	20	104	991394	322866

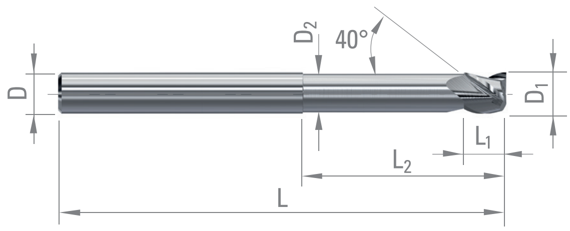
DIXI 7563

DIXI 7563-FC



P.25

END MILLS
SHORT LENGTH, NECKED DOWN



- Necked down end mills developed for the machining of deep pockets and grooves in aluminium alloys.

○ good ◎ excellent

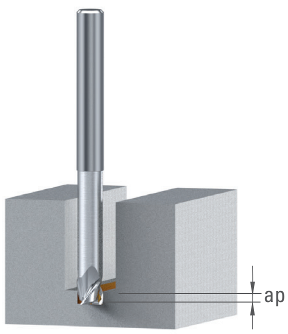
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations																							

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	◎	◎	◎	◎	◎																

$D_{1\ h5}$	L_1	D_2	L_2	D_{h5}	L	Z	CARBIDE
6.00	6.0	5.6	30	6	66	3	49281
8.00	8.0	7.6	45	8	81	3	49282
10.00	10.0	9.6	50	10	90	3	49283
12.00	12.0	11.6	55	12	100	3	49284
16.00	16.0	15.6	72	16	120	3	49285
20.00	20.0	19.6	80	20	130	4	49286

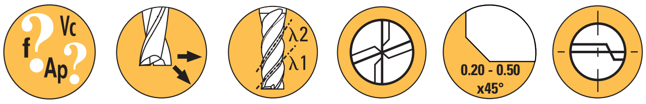
CUTTING CONDITIONS

D_1	Z	Vc [m/min]	n [rpm]	Vf [mm/min]	ap [mm]	ae [mm]	fz [mm]
6.00	3	400	21220	570	3	6	0.009
8.00	3	400	15920	570	4	8	0.012
10.00	3	400	12730	760	5	10	0.020
12.00	3	400	10610	760	6	12	0.024
16.00	3	400	7960	760	8	16	0.032
18.00	3	400	7070	760	9	18	0.036
20.00	4	400	5370	1020	10	20	0.040



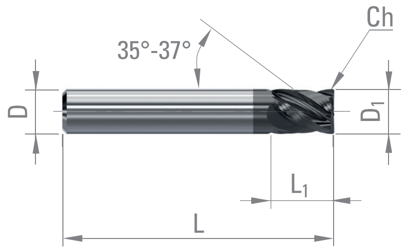
DIXI 7804 DIXMILL

Z = 4



P.68

END MILLS
SHORT LENGTH



- Short length end mills with variable helix and chamfers. Tools developed for the roughing and finishing in slotting and contouring operations.
- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

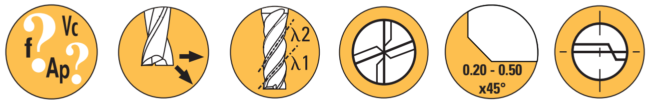
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	○	○				

D_1 Ø≤12.00 - 0/-0.02 Ø> 12.00 - 0/-0.03	L_1	D_{h5}	L	Ch	DIXMILL
6.00	10.0	6	54	0.20	387464
8.00	12.0	8	58	0.20	387465
10.00	14.0	10	66	0.30	387466
12.00	16.0	12	73	0.35	387467
14.00	18.0	14	75	0.40	387468
16.00	22.0	16	82	0.40	387469
18.00	24.0	18	84	0.50	387470
20.00	26.0	20	92	0.50	387471

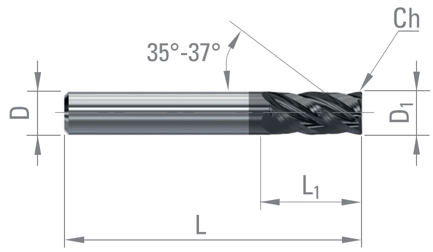
DIXI 7814 DIXMILL

Z = 4



P.68

END MILLS
STANDARD LENGTH



- Standard length end mills with variable helix and chamfers. Tools developed for the roughing and finishing in slotting and contouring operations.
- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

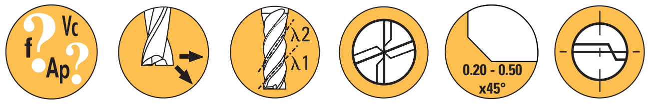
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	○	○				

D_1 Ø≤12.00 - 0/-0.02 Ø> 12.00 - 0/-0.03	L_1	D_{h5}	L	Ch	DIXMILL
6.00	13.0	6	57	0.20	387490
8.00	19.0	8	63	0.20	387491
10.00	22.0	10	72	0.30	387492
12.00	26.0	12	83	0.35	387493
14.00	26.0	14	83	0.40	387494
16.00	32.0	16	92	0.40	387495
18.00	32.0	18	92	0.50	387496
20.00	38.0	20	104	0.50	387497
25.00	38.0	25	104	0.50	387498

DIXI 7824 DIXMILL

Z = 4



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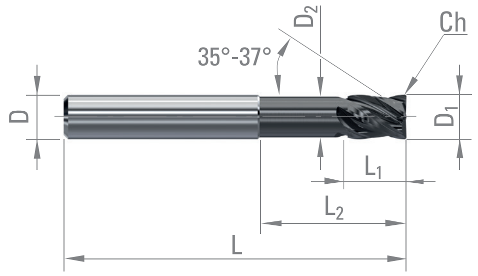
END MILLS
SHORT LENGTH, NECKED DOWN



- Necked down short length end mills with variable helix and chamfers. Tools developed for the roughing and finishing in slotting and contouring operations.
- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

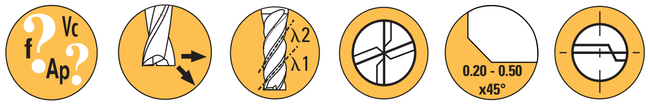
ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	○	○				

D_1 Ø≤12.00 - 0/-0.02 Ø> 12.00 - 0/-0.03	D_2	D_{h5}	Ch	L_1	L_2	L	DIXMILL
6.00	5.5	6	0.20	10.0	15	57	387518
				10.0	20	62	387519
				10.0	32	74	387520
				13.0	21	57	387521
8.00	7.5	8	0.20	12.0	20	63	387522
				12.0	30	73	387523
				12.0	46	90	387524
				19.0	27	63	387525
10.00	9.2	10	0.30	14.0	25	72	387526
				14.0	35	82	387527
				14.0	55	102	387528
				22.0	32	72	387529
12.00	11.0	12	0.35	16.0	30	83	387530
				16.0	40	93	387531
				16.0	64	117	387532
				26.0	38	83	387533
16.00	15.0	16	0.40	22.0	38	92	387534
				22.0	55	109	387535
				22.0	87	141	387536
				32.0	44	92	387537
20.00	19.0	20	0.50	26.0	50	104	387538
				26.0	70	124	387539
				26.0	110	164	387540
				38.0	54	104	387541

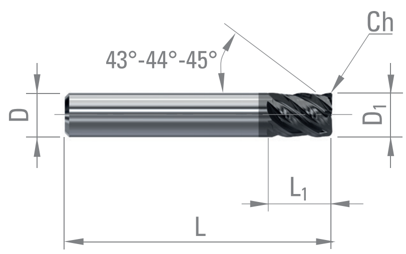
DIXI 7844 DIXMILL

Z = 5

END MILLS SHORT LENGTH



P.68



- Short length end mills with variable helix and chamfers. Tools developed for semi-finishing and finishing in contouring operations.

- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

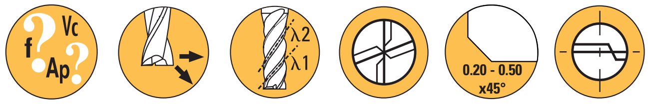
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	○	○	○	○	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	◎	◎				

$D_{1\ 0/-0.03}$	L_1	D_{h5}	L	Ch	DIXMILL
6.00	10.0	6	54	0.20	387666
8.00	12.0	8	58	0.20	387667
10.00	14.0	10	66	0.30	387668
12.00	16.0	12	73	0.35	387669
16.00	22.0	16	82	0.40	387670
20.00	26.0	20	92	0.50	387671
25.00	29.0	25	100	0.50	387672

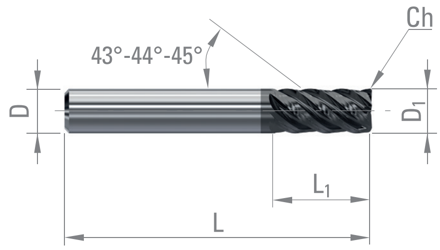
DIXI 7854 DIXMILL

Z = 5



P.70

END MILLS
STANDARD LENGTH



- Standard length end mills with variable helix and chamfers. Tools developed for semi-finishing and finishing in contouring operations.
- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	○	○	○	○	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○

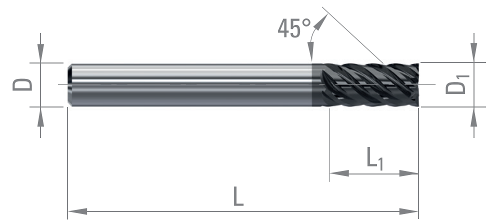
ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	◎	◎				

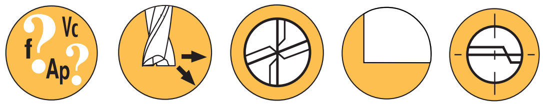
$D_{1\ 0/-0.03}$	L_1	D_{h5}	L	Ch	DIXMILL
6.00	13.0	6	57	0.20	387680
8.00	19.0	8	63	0.20	387681
10.00	22.0	10	72	0.30	387682
12.00	26.0	12	83	0.35	387683
16.00	36.0	16	92	0.40	387684
20.00	44.0	20	104	0.50	387685
25.00	54.0	25	121	0.50	387686

DIXI 7830 DIXMILL

Z = 6

END MILLS
STANDARD LENGTH





P.72

- Sharp corner standard length end mills developed for finishing contouring operations and trochoïdal machining.
- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

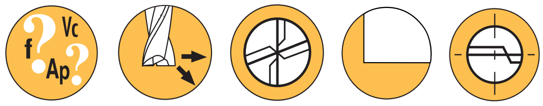
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	○	○				

D_1 Ø≤12.00 - 0/-0.02 Ø> 12.00 - 0/-0.03	L_1	D_{h5}	L	DIXMILL
6.00	13.0	6	57	387590
8.00	19.0	8	63	387591
10.00	22.0	10	72	387592
12.00	26.0	12	83	387593
16.00	32.0	16	92	387594
20.00	38.0	20	104	387595
25.00	44.0	25	104	387596

DIXI 7831 DIXMILL

Z = 6



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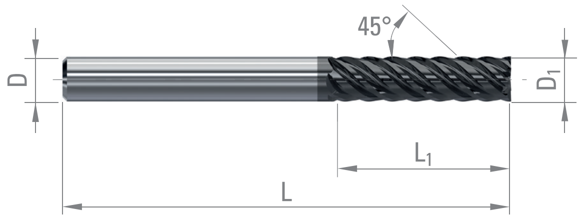
END MILLS
LONG LENGTH



- Sharp corner long length end mills developed for finishing contouring operations and trochoïdal machining.
- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

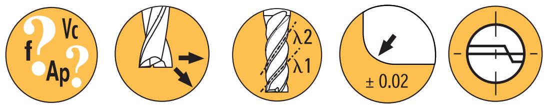
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	○	○				

$D_{1\ 0/-0.03}$	L_1	D_{h5}	L	DIXMILL
6.00	24.0	6	75	387597
8.00	32.0	8	75	387598
10.00	40.0	10	100	387599
12.00	48.0	12	120	387600
16.00	64.0	16	140	387601
20.00	80.0	20	150	387602
25.00	100.0	25	170	387603

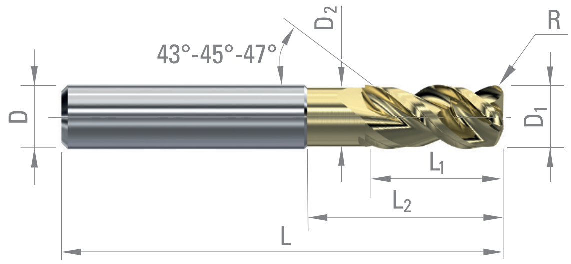
DIXI 7565 - 7565-FC DIXAL

Z = 3



P.66

END MILLS WITH CORNER RADIUS STANDARD LENGTH, NECKED DOWN



- Necked down, standard length end mills with corner radius, variable helix, developed for the machining of non-ferrous materials.
- DIXI 7565-FC with coolant in the flutes.
- DIXAL coating improves tool life in non-ferrous materials and prevents built-up edges.

○ good ◎ excellent

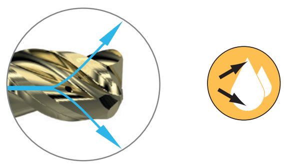
ISO	P												M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations																							

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	◎	◎	◎	◎	◎	○	○	○													

$D_{1\ h10}$	L_1	D_2	L_2	D_{h5}	L	R	7565 DIXAL	7565-FC DIXAL
4.00	9.0	3.60	14	4	57	0.5	339042	
						1.0	339043	
6.00	13.0	5.60	21	6	57	0.5	339044	339067
						1.0	339045	339068
						1.5	339046	339069
8.00	19.0	7.40	26	8	63	0.5	339047	339070
						1.0	339048	339071
						2.0	339049	339072
						3.0	339050	339073
10.00	22.0	9.30	30	10	72	0.5	339051	339074
						1.0	339052	339075
						2.0	339053	339076
						3.0	339054	339077
12.00	26.0	11.00	37	12	83	0.5	339055	339078
						1.0	339056	339079
						2.0	339057	339080
						3.0	339058	339081
16.00	32.0	15.00	42	16	92	1.0	339059	339082
						2.0	339060	339083
						3.0	339061	339084
						4.0	339062	339085
20.00	38.0	19.00	50	20	104	1.0	339063	339086
						2.0	339064	339087
						3.0	339065	339088
						4.0	339066	339089

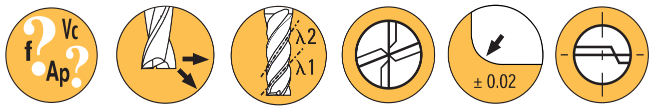
DIXI 7565

DIXI 7565-FC



DIXI 7805 DIXMILL   Z = 4

END MILLS WITH CORNER RADIUS SHORT LENGTH



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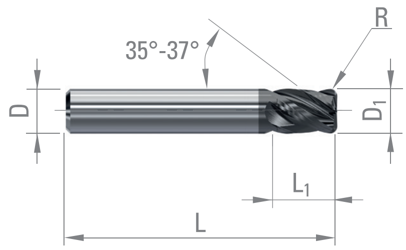


- Short length end mills with corner radius and variable helix developed for the roughing and finishing in slotting and contouring operations.
- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

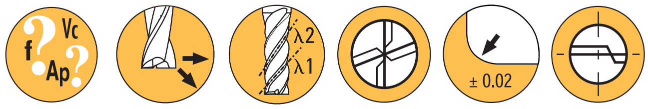
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	○	○				

D_1 Ø≤12.00 - 0/-0.02 Ø> 12.00 - 0/-0.03	L_1	D_{h5}	L	R	DIXMILL
6.00	10.0	6	54	0.3 0.5 1.0	387472 387473 387474
8.00	12.0	8	58	0.5 1.0	387475 387476
10.00	14.0	10	66	0.5 1.0	387477 387478
12.00	16.0	12	73	0.5 1.0 2.0	387479 387480 387481
14.00	18.0	14	75	0.5	387482
16.00	22.0	16	82	1.0 2.0 3.0	387483 387484 387485
18.00	24.0	18	84	1.0	387486
20.00	26.0	20	92	1.0 2.0 3.0	387487 387488 387489

DIXI 7815 DIXMILL

Z = 4



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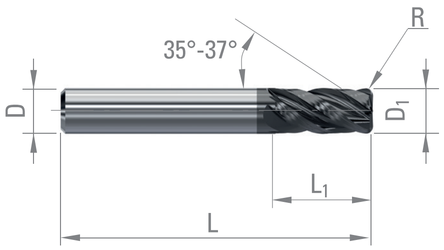
END MILLS WITH CORNER RADIUS STANDARD LENGTH



- Standard length end mills with corner radius and variable helix developed for the roughing and finishing in slotting and contouring operations.
- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

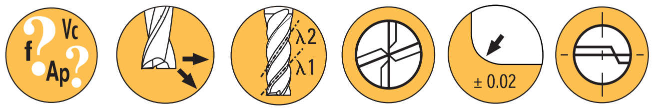
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	○	○				

D_1 Ø≤12.00 - 0/-0.02 Ø> 12.00 - 0/-0.03	L_1	D_{h5}	L	R	DIXMILL
6.00	13.0	6	57	0.3	387499
				0.5	387500
				1.0	387501
8.00	19.0	8	63	0.5	387502
				1.0	387503
10.00	22.0	10	72	0.5	387504
				1.0	387505
12.00	26.0	12	83	0.5	387506
				1.0	387507
				2.0	387508
14.00	26.0	14	83	0.5	387509
16.00	32.0	16	92	1.0	387510
				2.0	387511
				3.0	387512
18.00	32.0	18	92	1.0	387513
20.00	38.0	20	104	1.0	387514
				2.0	387515
				3.0	387516
25.00	38.0	25	104	1.0	387517

DIXI 7825 DIXMILL

Z = 4



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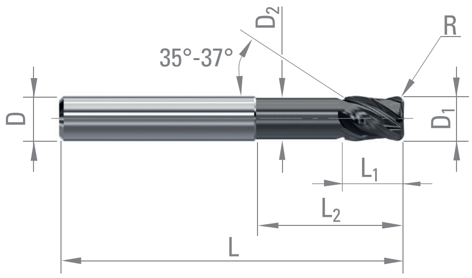
END MILLS WITH CORNER RADIUS
SHORT LENGTH, NECKED DOWN



- Necked down, short length end mills with corner radius and variable helix developed for the roughing and finishing in slotting and contouring operations.
- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

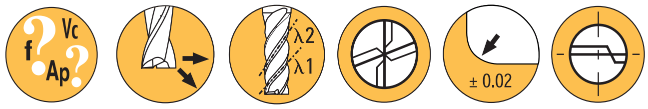
ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	○	○				

D_1 Ø≤12.00 - 0/-0.02 Ø> 12.00 - 0/-0.03	L_1	D_2	L_2	D_{h5}	L	R	DIXMILL
6.00	10.0	5.5	15	6	57	0.3	387542
						0.5	387543
						1.0	387544
6.00	10.0	5.5	20	6	62	0.3	387545
						0.5	387546
						1.0	387547
6.00	10.0	5.5	32	6	74	0.3	387548
						0.5	387549
						1.0	387550
8.00	12.0	7.5	20	8	63	0.5	387551
						1.0	387552
8.00	12.0	7.5	30	8	73	0.5	387553
						1.0	387554
8.00	12.0	7.5	46	8	90	0.5	387555
						1.0	387556
10.00	14.0	9.2	25	10	72	0.5	387557
						1.0	387558
10.00	14.0	9.2	35	10	82	0.5	387559
						1.0	387560
10.00	14.0	9.2	55	10	102	0.5	387561
						1.0	387562
12.00	16.0	11.0	30	12	83	0.5	387563
						1.0	387564
						2.0	387565

D_1 Ø≤12.00 - 0/-0.02 Ø> 12.00 - 0/-0.03	L_1	D_2	L_2	D_{h5}	L	R	DIXMILL
12.00	16.0	11.0	40	12	93	0.5	387566
						1.0	387567
						2.0	387568
12.00	16.0	11.0	64	12	117	0.5	387569
						1.0	387570
						2.0	387571
16.00	22.0	15.0	38	16	92	1.0	387572
						2.0	387573
						3.0	387574
16.00	22.0	15.0	55	16	109	1.0	387575
						2.0	387576
						3.0	387577
16.00	22.0	15.0	87	16	141	1.0	387578
						2.0	387579
						3.0	387580
20.00	26.0	19.0	50	20	104	1.0	387581
						2.0	387582
						3.0	387583
20.00	26.0	19.0	70	20	124	1.0	387584
						2.0	387585
						3.0	387586
20.00	26.0	19.0	110	20	164	1.0	387587
						2.0	387588
						3.0	387589

DIXI 7856 DIXMILL

Z = 4



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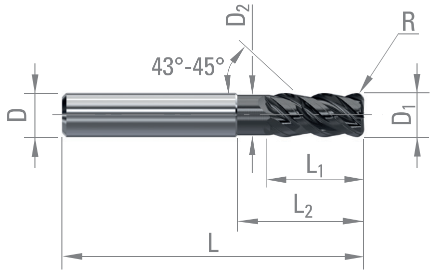
END MILLS WITH CORNER RADIUS STANDARD LENGTH, NECKED DOWN



- Necked down, standard length end mills with corner radius, variable helix and double-groove geometry developed for the roughing and finishing in slotting and contouring operations.

- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

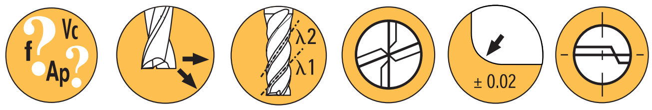
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	○	○	○	○	○	○	○	○	○	○	○	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	◎	◎				

$D_{1\ 0/-0.03}$	L_1	D_2	L_2	D_{h5}	L	R	DIXMILL
6.00	13.0	5.5	20	6	57	0.5	387724
						1.0	387725
8.00	19.0	7.5	25	8	63	0.5	387726
						1.0	387727
						1.5	387728
						2.0	387729
10.00	22.0	9.2	30	10	72	0.5	387730
						1.0	387731
						1.5	387732
						2.0	387733
12.00	26.0	11.0	35	12	83	0.5	387734
						1.0	387735
						1.5	387736
						2.0	387737
						3.0	387738
14.00	26.0	13.0	35	14	83	1.0	387739
						2.0	387740
16.00	35.0	15.0	43	16	92	1.0	387741
						1.5	387742
						2.0	387743
						3.0	387744
						4.0	387745
20.00	44.0	19.0	56	20	110	1.0	387746
						1.5	387747
						2.0	387748
						3.0	387749
						3.5	387750
						4.0	387751
25.00	55.0	24.0	70	25	130	1.0	387752
						1.5	387753
						2.0	387754
						3.0	387755
						4.0	387756

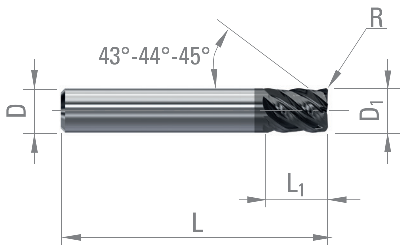
DIXI 7845 DIXMILL

Z = 5



P.70

END MILLS WITH CORNER RADIUS SHORT LENGTH



- Short length end mills with corner radius and variable helix developed for semi-finishing and finishing in slotting and contouring operations.
- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

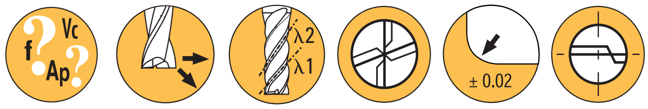
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	○	○	○	○	○	○	○	○	○	○	○	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	◎	◎				

$D_{1\ 0/-0.03}$	L_1	D_{h5}	L	R	DIXMILL
6.00	10.0	6	54	0.5	387673
8.00	12.0	8	58	0.5	387674
10.00	14.0	10	66	0.5	387675
12.00	16.0	12	73	0.5	387676
16.00	22.0	16	82	1.0	387677
20.00	26.0	20	92	1.0	387678
25.00	29.0	25	100	1.0	387679

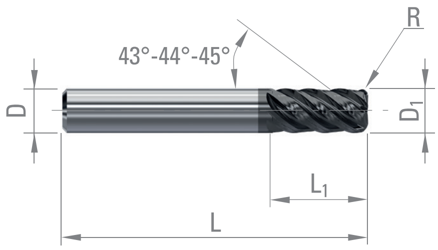
DIXI 7855 DIXMILL

Z = 5



P.70

END MILLS WITH CORNER RADIUS STANDARD LENGTH



- Standard length end mills with corner radius and variable helix developed for semi-finishing and finishing in slotting and contouring operations.
- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

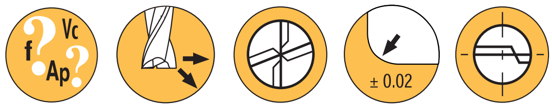
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	○	○	○	○	○	○	○	○	○	○	○	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	◎	◎				

$D_{1\ 0/-0.03}$	L_1	D_{h5}	L	R	DIXMILL
6.00	13.0	6	57	0.3	387687
				0.5	387688
				1.0	387689
8.00	19.0	8	63	0.5	387690
				1.0	387691
				1.5	387692
				2.0	387693
10.00	22.0	10	72	0.5	387694
				1.0	387695
				1.5	387696
				2.0	387697
12.00	26.0	12	83	0.5	387698
				1.0	387699
				1.5	387700
				2.0	387701
				2.5	387702
				3.0	387703
16.00	36.0	16	92	1.0	387704
				1.5	387705
				2.0	387706
				2.5	387707
				3.0	387708
				4.0	387709
20.00	44.0	20	104	1.0	387710
				1.5	387711
				2.0	387712
				2.5	387713
				3.0	387714
				4.0	387715
				5.0	387716
25.00	54.0	25	121	1.0	387717
				1.5	387718
				2.0	387719
				2.5	387720
				3.0	387721
				4.0	387722
				5.0	387723

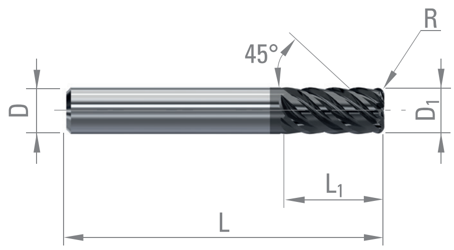
DIXI 7840 DIXMILL

Z = 6



P.72

END MILLS WITH CORNER RADIUS STANDARD LENGTH



- Standard length end mills with corner radius developed for finishing contouring operations and trochoïdal machining.
- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

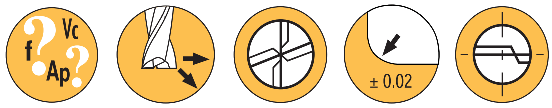
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	○	○				

D_1 Ø≤12.00 - 0/-0.02 Ø> 12.00 - 0/-0.03	L_1	D_{h5}	L	R	DIXMILL
6.00	13.0	6	57	0.5	387604
				1.0	387605
8.00	19.0	8	63	0.5	387606
				1.0	387607
10.00	22.0	10	72	0.5	387608
				1.0	387609
				1.5	387610
				2.0	387611
12.00	26.0	12	83	0.5	387612
				1.0	387613
				1.5	387614
				2.0	387615
				3.0	387616
16.00	32.0	16	92	1.0	387617
				1.5	387618
				2.0	387619
				3.0	387620
20.00	38.0	20	104	1.0	387621
				1.5	387622
				2.0	387623
				3.0	387624
25.00	44.0	25	104	1.0	387625
				1.5	387626
				2.0	387627
				3.0	387628

DIXI 7841 DIXMILL

Z = 6



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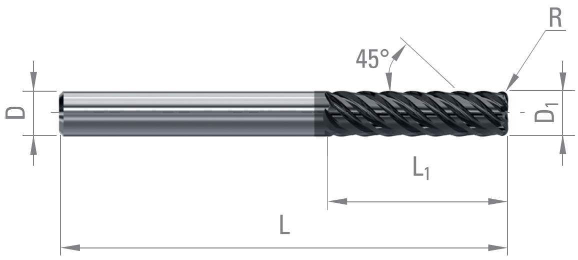
END MILLS WITH CORNER RADIUS
LONG LENGTH



- Long length end mills with corner radius developed for finishing contouring operations and trochoïdal machining.
- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

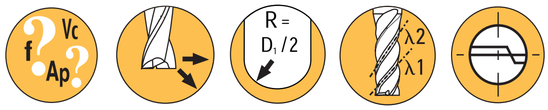
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	○	○				

D_1 0/-0.03	L_1	D_{h5}	L	R	DIXMILL
6.00	24.0	6	75	0.5	387629
				1.0	387630
8.00	32.0	8	75	0.5	387631
				1.0	387632
				2.0	387633
10.00	40.0	10	100	0.5	387634
				1.0	387635
				1.5	387636
				2.0	387637
12.00	48.0	12	120	0.5	387638
				1.0	387639
				1.5	387640
				2.0	387641
				3.0	387642
16.00	64.0	16	140	1.0	387643
				1.5	387644
				2.0	387645
				3.0	387646
20.00	80.0	20	150	1.0	387647
				1.5	387648
				2.0	387649
				3.0	387650
				4.0	387651
				5.0	387652
25.00	100.0	25	170	1.0	387653
				1.5	387654
				2.0	387655
				3.0	387656
				4.0	387657
				5.0	387658

DIXI 7834 DIXMILL

Z = 4



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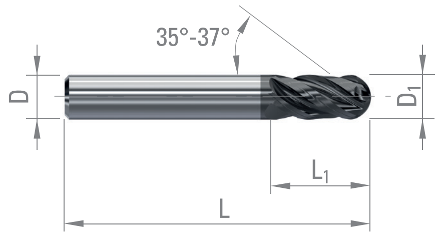
BALL-NOSE END MILLS STANDARD LENGTH



- Standard length ball-nose end mills developed for copying and contouring in semi-finishing and finishing operations.
- DIXMILL coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

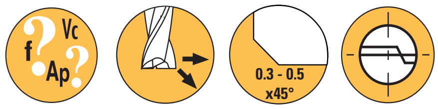
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations											○	○	○	○	○	○	○				

D_1 Ø≤12.00 - 0/-0.02 Ø> 12.00 - 0/-0.03	L_1	D_{h5}	L	DIXMILL
6.00	13.0	6	57	387659
8.00	19.0	8	63	387660
10.00	22.0	10	72	387661
12.00	26.0	12	83	387662
16.00	32.0	16	92	387663
20.00	38.0	20	104	387664
25.00	38.0	25	104	387665

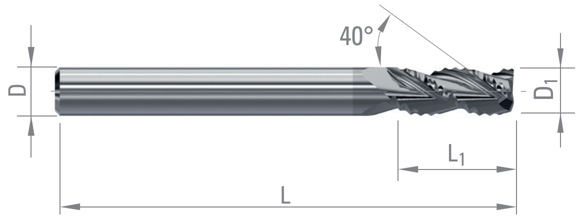
DIXI 7215 - 7215-FC DAC

Z = 3



P.72

ROUGHING END MILLS
NON-FERROUS MATERIALS



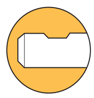
- Roughing end mills developed for non-ferrous materials machining.
- DIXI 7215-FC with coolant in the flutes.
- DAC coating improves tool life in non-ferrous materials and prevents the formation of built-up edges.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations																							

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	◎	◎	◎	◎	◎	○	○	○													

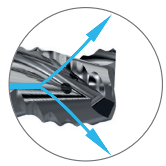
$D_{1\ d12}$	L_1	D_{h5}	L	7215 DAC	7215-FC DAC
6.00	13.0	6	57	993017	995594
8.00	19.0	8	63	993018	995595
10.00	22.0	10	72	993003	995596
12.00	26.0	12	83	990143	995597
16.00	32.0	16	92	993019	307320

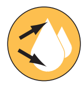


On request

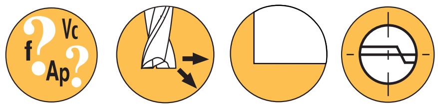
DIXI 7215

DIXI 7215-FC





DIXI 7220 C-TOP Z = 3-4



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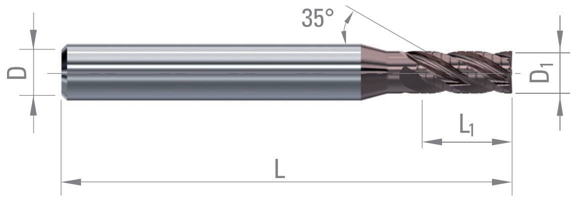
ROUGHING END MILLS
DIFFICULT TO MACHINE MATERIALS



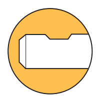
- Roughing end mills developed for the machining of difficult materials. Produces a better surface finish than a conventional roughing profile end mill.
- The extra smooth C-TOP coating improves tool life even at high temperatures in difficult to machine materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○

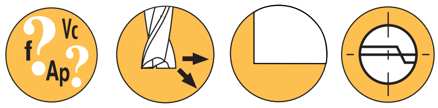
ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations						◎	◎	◎			◎	◎	◎	◎	◎	◎	◎				

$D_{1\ d12}$	L_1	D_{h5}	L	Z	C-TOP
3.00	4.5 8.0	6	55	3	358881 358883
3.50	5.5	6	55	3	358884
4.00	6.0 10.0	6	55	3	358886 358888
4.50	7.0	6	55	3	358889
5.00	7.5 13.0	6	55	3	358891 358893
6.00	9.0 13.0	6 8	55 64	4	358894 358896
8.00	12.0 16.0	8	64	4	358897 358899
10.00	15.0 22.0	10	67	4	358900 358902
12.00	18.0 26.0	12	83	4	358903 358905
16.00	24.0	16	91	4	358906



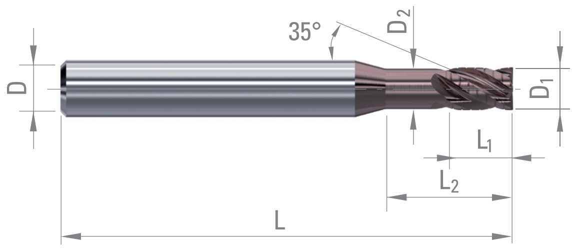
On request

DIXI 7220-3D C-TOP   Z = 3-4



P.76

NECKED DOWN ROUGHING END MILLS
DIFFICULT TO MACHINE MATERIALS



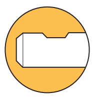
- 3xD necked down roughing end mills developed for the machining of difficult materials. Produces a better surface finish than a conventional roughing end mill.
- The extra smooth C-TOP coating improves tool life even at high temperatures in difficult to machine materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations						◎	◎	◎			◎	◎	◎	◎	◎	◎	◎				

$D_{1\ d12}$	L_1	D_2	L_2	D_{h5}	L	Z	C-TOP
3.00	4.5	2.8	9.0	6	55	3	358882
3.50	5.5	3.3	10.5	6	55	3	358885
4.00	6.0	3.7	12.0	6	55	3	358887
4.50	7.0	4.2	13.5	6	55	3	358890
5.00	7.5	4.6	15.0	6	55	3	358892
6.00	9.0	5.5	18.0	6	64	4	358895
8.00	12.0	7.5	24.0	8	64	4	358898



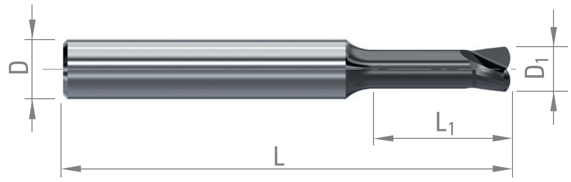
On request

DIXI 7702 XIDUR

Z = 2

HIGH FEED END MILLS

P.78-83



- End mills developed for high feed milling and plunging strategy. Can be used in all types of materials, including hardened steel.
- XIDUR coating improves tool life even at high temperatures in low machinability materials up to 65 HRC.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

D_1 D ≤ 0.80 - 0/-0.01 D ≤ 6.00 - 0/-0.02 D > 6.00 - 0.80	L_1	D_{h6}	L	XIDUR
0.50	1.50	6	40	305279
0.80	2.40	6	40	305280
1.00	3.00	6	40	997920
1.50	4.50	6	40	997921
2.00	6.00	6	40	997922
3.00	9.00	6	40	997923
4.00	12.00	6	57	997924
5.00	15.00	6	57	997925
6.00	18.00	8	63	997926
8.00	24.00	10	80	997927
10.00	30.00	10	80	997928
12.00	36.00	12	80	997929

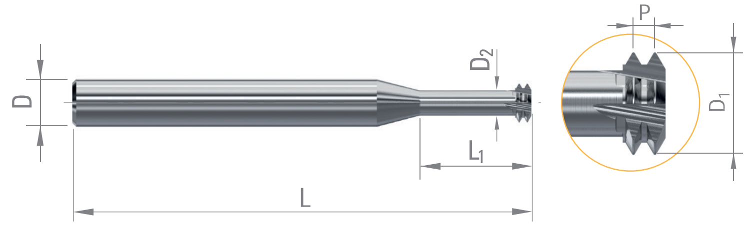
Download the cutting conditions (pdf + xls) and the dxf profiles
www.dixipolytool.com

DIXI 1730-xD Z = 3-6

ISO 60°

P.84

ISO WHIRLING TOOLS FULL PROFILE



- ISO whirling tools, with 2 profiles necked-down at 2xD and 3xD. Tools developed to reduce cutting forces for all materials. No burrs thanks to the full profile.
- Threads according to ISO 965 (DIN 13).
- TiAlN coating improves tool life in ferrous materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	○	○	○	○	○	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	○	○	○	○

D nom.	P	D_1	D_2	D_{h5}	L	Z	L_1	DIXI	CARBIDE	TiAlN
M 0.80	0.20	0.57	0.25	3	38	3	1.85 2.60	1730-2D 1730-3D	958853 961148	960446 961176
M 0.90	0.225	0.64	0.25	3	38	3	2.10 2.90	1730-2D 1730-3D	953216 961150	960117 961177
M 1.00	0.25	0.71	0.25	3	38	3	2.30 3.20	1730-2D 1730-3D	953217 961151	960118 961178
M 1.20	0.25	0.91	0.25	3	38	3	2.80 3.85	1730-2D 1730-3D	953218 961152	960450 961179
M 1.40	0.30	1.05	0.25	3	38	3	3.20 4.50	1730-2D 1730-3D	953219 961153	960451 961180
M 1.60	0.35	1.19	0.25	3	38	3	3.70 5.10	1730-2D 1730-3D	953220 961154	960453 961181
M 1.80	0.20	1.55	0.25	3	38	3	4.10 5.80	1730-2D 1730-3D	961128 961155	961130 961182
M 1.80	0.35	1.39	0.25	3	38	3	4.10 5.80	1730-2D 1730-3D	953221 961156	960454 961183
M 2.00	0.40	1.53	0.25	3	38	3	4.60 6.40	1730-2D 1730-3D	953222 961157	960455 961184
M 2.20	0.20	1.94	0.25	3	38	3	5.10 7.10	1730-2D 1730-3D	961129 961158	961132 961185
M 2.20	0.45	1.67	0.25	3	38	3	5.10 7.10	1730-2D 1730-3D	953223 961159	960456 961186
M 2.50	0.25	2.18	0.25	3	38	3	5.80 8.00	1730-2D 1730-3D	960062 961160	960459 961187
M 2.50	0.35	0.57	0.25	3	38	3	5.80 8.00	1730-2D 1730-3D	960063 961161	960460 961188
M 2.50	0.45	0.57	0.25	3	38	3	5.80 8.00	1730-2D 1730-3D	953225 961162	960461 961189
M 3.00	0.50	0.57	0.25	4	42	3	7.00 9.60	1730-2D 1730-3D	955698 961171	960462 961190
M 4.00	0.70	0.57	0.25	4	42	3	9.30 12.80	1730-2D 1730-3D	955699 961172	960463 961191

DIXI 1730-xD

ISO WHIRLING TOOLS
FULL PROFILE

ISO 60°

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D nom.	P	D_1	D_2	D_{h5}	L	Z	L_1	**DIXI**	CARBIDE	TiAlN
M 5.00	0.80	4.05	2.78	6	57	4	11.50 16.00	1730-2D 1730-3D	957925 961173	960464 961192
M 6.00	1.00	4.81	3.23	6	57	4	13.80 19.20	1730-2D 1730-3D	957982 961174	960465 961193
M 8.00	1.25	6.51	4.53	8	75	6	18.40 25.60	1730-2D 1730-3D	958039 961175	960466 961194
M 10.00	1.50	7.90	5.53	8	75	6	23.00 32.00	1730-2D 1730-3D	958040 960883	960467 961195

DIXI 1735-xD Z = 3-6

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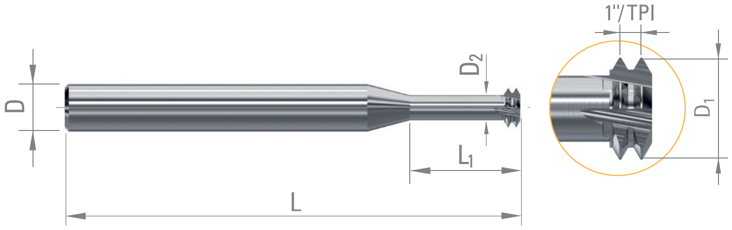
UN 60°

UN WHIRLING TOOLS FULL PROFILE



- UN whirling tools, with 2 profiles necked-down at 2xD and 3xD. Tools developed to reduce cutting forces for all materials. No burrs thanks to the full profile.
- Threads according to ISO 5854 (ASME B1.1).
- TiAlN coating improves tool life in ferrous materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	○	○	○	○	○	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	○	○	○	○

UNC	UNF	UNEF	UN	TPI	D_1	D_2	D_{h5}	L	Z	L_1	DIXI	CARBIDE	TiAlN
	N°1			72	1.44	0.88	3	38	3	4.30	1735-2D	966664	966833
										6.00	1735-3D	966653	966852
N°1	N°2			64	1.39	0.77	3	38	3	4.30	1735-2D	966663	966834
										6.00	1735-3D	966652	966851
N°2	N°3			56	1.65	0.94	3	38	3	5.00	1735-2D	966662	966835
										7.00	1735-3D	966651	966850
N°3	N°4			48	1.90	1.06	3	38	3	5.80	1735-2D	966661	966836
										8.10	1735-3D	966650	966849
	N°5			44	2.49	1.58	3	38	3	7.30	1735-2D	966660	966837
										10.20	1735-3D	966649	966848
N°4				40	2.11	1.11	4	42	3	6.60	1735-2D	966659	966838
										9.10	1735-3D	966648	966847
N°5	N°6			40	2.43	1.43	4	42	3	7.30	1735-2D	966658	966839
										10.20	1735-3D	966647	966846
	N°8			36	3.33	2.21	4	42	3	9.60	1735-2D	966657	966841
										13.40	1735-3D	966646	966845
N°6				32	2.59	1.33	4	42	3	8.10	1735-2D	966656	966840
										11.30	1735-3D	966645	966844
N°8	N°10	N°12		32	3.24	1.98	4	55	3	9.60	1735-2D	960205	960628
										13.40	1735-3D	961020	961062
	N°12	7/16''	5/16''	28	4.41	2.97	6	63	4	12.60	1735-2D	966655	966842
										17.60	1735-3D	966644	966643
	1/4''	7/16''	5/16''	28	5.26	3.82	6	63	4	14.60	1735-2D	966654	966843
										20.30	1735-3D	966641	966642
N°10				24	3.60	1.93	4	55	3	11.10	1735-2D	960395	960629
										15.50	1735-3D	961052	961063
1/4''			5/16''	20	4.87	2.86	6	57	4	14.60	1735-2D	960397	960631
										20.30	1735-3D	961054	961085
5/16''	9/16''			18	6.28	4.04	8	63	6	18.20	1735-2D	960398	960635
										25.40	1735-3D	961055	961086

DIXI 1735-xD

UN WHIRLING TOOLS FULL PROFILE

UN 60°

P.84

UNC	UNF	UNEF	UN	TPI	D_1	D_2	D_{h5}	L	Z	L_1	DIXI	CARBIDE	TiAlN
3/8"			7/16"	16	7.65	5.13	8	63	6	21.90 30.50	1735-2D 1735-3D	960399 961056	960636 961087
7/16"	7/8"			14	8.96	6.08	10	75	6	25.60 35.50	1735-2D 1735-3D	960400 961057	960637 961088
1/2"				13	10.37	7.27	12	75	6	29.20 40.60	1735-2D 1735-3D	960402 961058	960638 961060

DIXI 1742-TC DAC

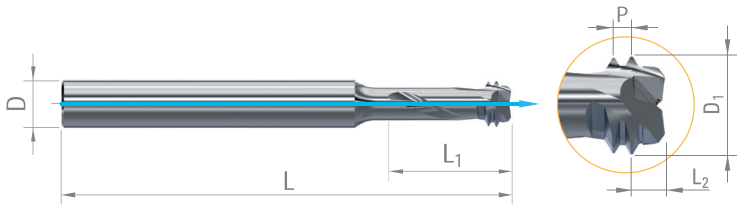
Z = 2

ISO DRILLING THREAD WHIRLERS WITH THROUGH COOLANT

ISO 60°

P.84

- ISO drilling thread whirlers with through coolant. Tools developed for threading without pre-drilling of non-ferrous materials.
- Threading according to ISO 965 (DIN 13).
- DAC coating improves tool life in non-ferrous materials and prevents built-up edges.



○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations																							

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎											

D nom.	P	D_1	L_1	L_2	D_{h5}	L	DAC
M 5.00	0.80	4.00	12.5	1.50	8	60	303475
M 6.00	1.00	4.80	15.0	1.85	8	60	303476
M 8.00	1.25	6.40	20.0	2.30	8	75	303477
M 10.00	1.50	7.80	25.0	2.75	8	75	303478
M 12.00	1.75	9.50	30.0	3.10	10	100	308709

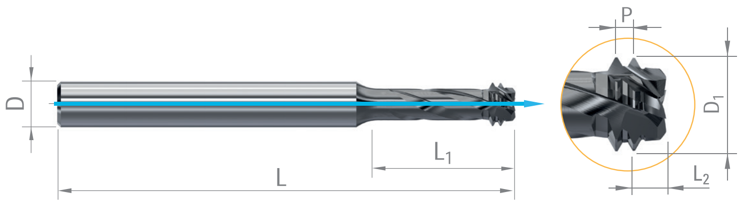
DIXI 1744-TC CUTINOX

Z = 4

ISO DRILLING THREAD WHIRLERS WITH THROUGH COOLANT

ISO 60°

P.86



- ISO drilling thread whirlers with through coolant. Tools developed for threading without pre-drilling of ferrous materials.
- Threading according to ISO 965 (DIN 13).
- CUTINOX coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

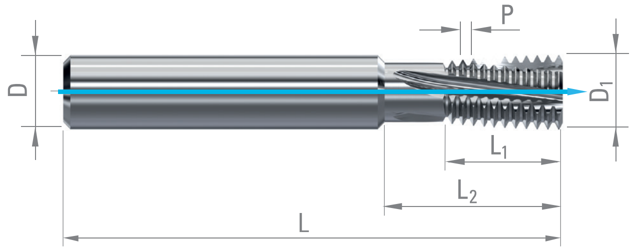
ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations						◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎						

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations						◎	◎	◎			○	○	○	○	○	○	○				

D nom.	P	D_1	L_1	L_2	D_{h5}	L	CUTINOX
M 5.00	0.80	4.00	12.5	1.50	8	60	303479
M 6.00	1.00	4.80	15.0	1.85	8	60	303480
M 8.00	1.25	6.40	20.0	2.30	8	75	303481
M 10.00	1.50	7.80	25.0	2.75	8	75	303482
M 12.00	1.75	9.50	30.0	3.10	10	100	308710

DIXI 7913-TC **Z = 4-5**

ISO THREAD MILLS, FINE PITCH WITH THROUGH COOLANT



ISO 60°

P.86

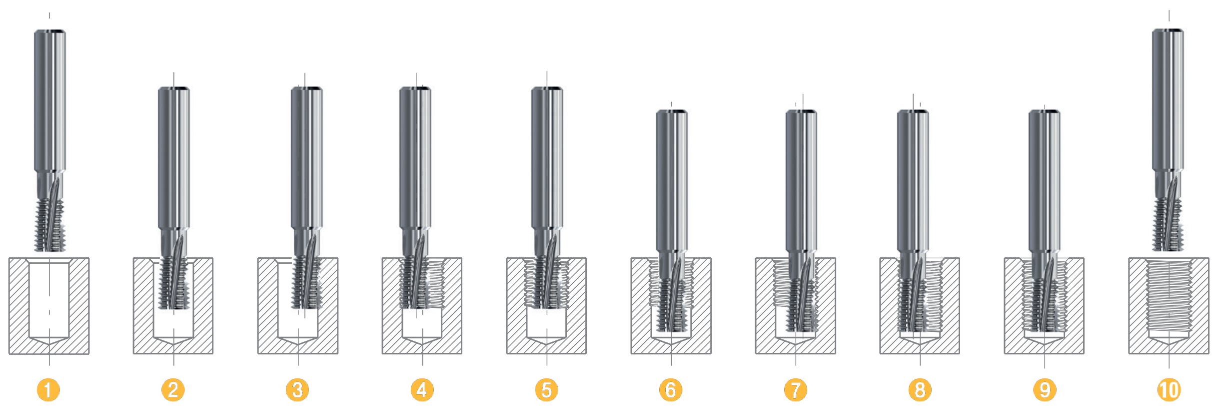
- ISO thread mills with through coolant, necked-down. Tools developed for fine pitch and deep threading. Through coolant improves chip removal.
- Threads according to ISO 965 (DIN 13).
- CUTINOX coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	○	○	○	○	○	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

P	D nom.	D_1	L_1	L_2	D_{h5}	L	Z	CARBIDE	CUTINOX
0.50	M 10	7.95	16	-	8	64	4	303435	303455
	M 14	11.95	20	31	12	80	4	303436	303456
0.75	M 10	7.95	16	-	8	64	4	303437	303457
	M 12	9.95	16	25	10	70	4	303438	303458
	M 14	11.95	20	31	12	80	4	303439	303459
1.00	M 12	9.95	16	25	10	70	4	303440	303460
	M 16	11.95	20	31	12	80	4	303441	303461
	M 20	15.95	25	40	16	90	5	303442	303462
	M 24	19.95	33	50	20	105	5	303443	303463
1.25	M 14	9.95	16	25	10	70	4	303444	303464
	M 16	11.95	20	31	12	80	4	303445	303465
1.50	M 14	9.95	16	25	10	70	4	303446	303466
	M 16	11.95	20	31	12	80	4	303447	303467
	M 22	15.95	25	40	16	90	5	303448	303468
	M 26	19.95	33	50	20	105	5	303449	303469
2.00	M 16	11.95	20	31	12	80	4	303450	303470
	M 22	15.95	25	40	16	90	5	303451	303471
	M 27	19.95	33	50	20	105	5	303452	303472
2.50	M 22	15.95	25	40	16	90	5	303453	303473
	M 30	19.95	33	50	20	105	5	303454	303474

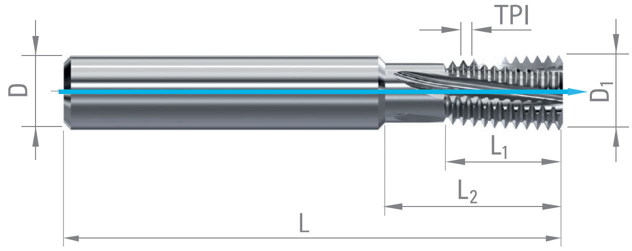


DIXI 7914-TC Z = 4-5

UN 60°

P.86

UN THREAD MILLS, FINE PITCH WITH THROUGH COOLANT



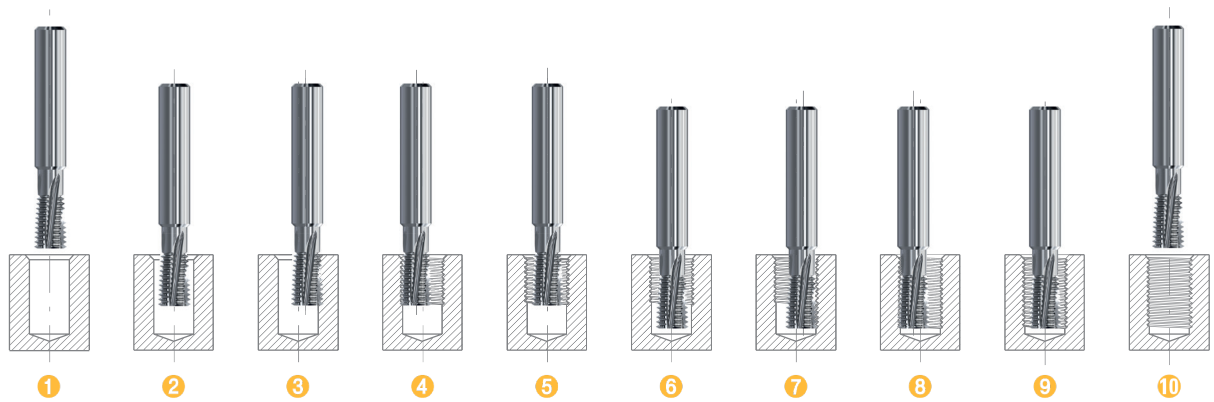
- UN thread mills with through coolant, necked-down. Tools developed for fine pitch and deep threading. Through coolant improves chip removal.
- Threads according to ISO 5854 (ASME B1.1).
- CUTINOX coating improves tool life, even at high temperatures, in low machinability materials.

◯ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◯	◯	◯	◯	◯	◯	◯				

TPI	D nom.	D_1	L_1	L_2	D_{h5}	L	Z	CARBIDE	CUTINOX
32	1/2''	9.95	16	25	10	70	4	392460	392479
24	1/2''	9.95	16	25	10	70	4	392461	392480
	5/8''	11.95	20	31	12	80	4	392462	392481
	13/16''	15.95	25	40	16	90	5	392463	392482
20	11/16''	11.95	20	31	12	80	4	392464	392483
	13/16''	15.95	25	40	16	90	5	392465	392484
	1''	19.95	33	50	20	105	5	392466	392485
18	5/8''	11.95	20	31	12	80	4	392467	392486
	7/8''	15.95	25	40	16	90	5	392468	392487
	1''	19.95	33	50	20	105	5	392469	392488
16	5/8''	11.95	20	31	12	80	4	392470	392489
	7/8''	15.95	25	40	16	90	5	392471	392490
	1''	19.95	33	50	20	105	5	392472	392491
14	7/8''	15.95	25	40	16	90	5	392473	392492
12	7/8''	15.95	25	40	16	90	5	392474	392493
	1''	19.95	33	50	20	105	5	392475	392494
10	3/4''	11.95	20	31	12	80	4	392476	392495
	7/8''	15.95	25	40	16	90	5	392477	392496
8	1''	19,95	33	50	20	105	5	392478	392497

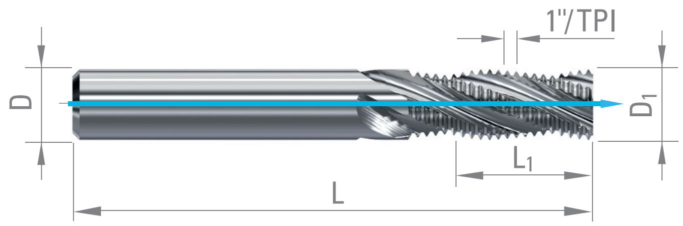


DIXI 7923-TC Z = 3-4

UNJ 60°

P.86

UNJF THREAD MILLS WITH THROUGH COOLANT



- UNJF thread mills with through coolant allowing a better chip removal.
  No burrs thanks to the full profile.
- Thread according to ISO 3161 (ASME B1.15).

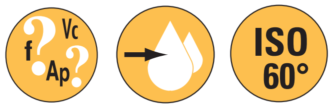
○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

UNJF	TPI	D_1	L_1	D_{h5}	L	Z	CARBIDE
N°10	32	3.90	11.50	6	54	3	303381
1/4''	28	5.20	14.00	6	54	3	303382
5/16''	24	5.95	17.40	6	54	3	303383
3/8''	24	7.95	20.60	8	64	4	303384
7/16''	20	7.95	24.70	8	64	4	303385
1/2''	20	9.95	27.30	10	74	4	303386

DIXI 7915-xD-TC   Z = 3-4



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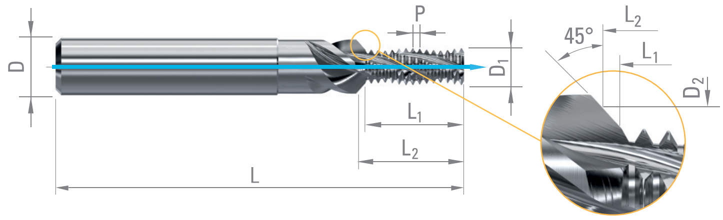
ISO THREAD MILLS WITH COUNTERSINK AND THROUGH COOLANT



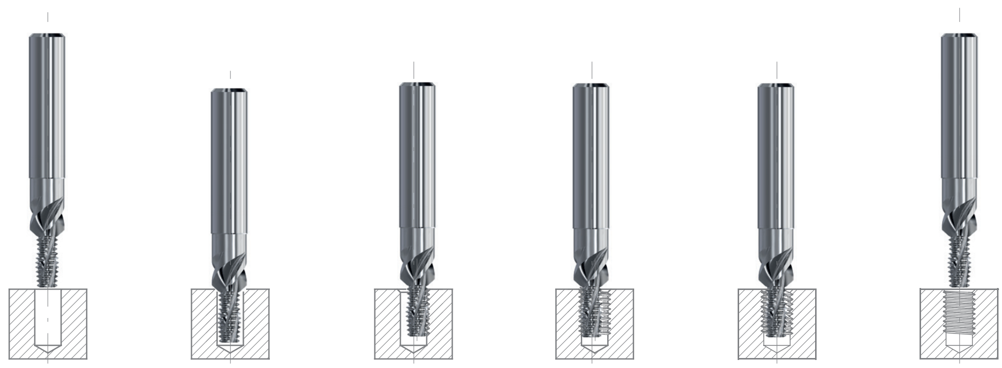
- ISO thread mills with countersink and through coolant allowing a better chip removal.
  No burrs thanks to the full profile.
- Thread according to ISO 965 (DIN 13).
- CUTINOX coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

D nom.	P	D_1	D_2	D_{h5}	L	Z	L_1	L_2	DIXI	CARBIDE	CUTINOX
M 4.0	0.70	3.10	4.2	6	48	3	7.35 8.75 10.85	7.9 9.3 11.4	7915-1.5D 7915-2D 7915-2.5D	392515 303387 392524	392532 303394 392541
M 5.0	0.80	3.90	5.3	6	54	3	9.15 10.75 13.15	9.9 11.5 13.9	7915-1.5D 7915-2D 7915-2.5D	392516 303388 392525	392533 303395 392542
M 6.0	1.00	4.70	6.3	8	62	3	10.50 13.50 16.50	11.30 14.3 17.3	7915-1.5D 7915-2D 7915-2.5D	392517 303389 392526	392534 303396 392543
M 8.0	1.25	6.40	8.4	10	74	3	13.10 18.10 21.85	14.1 19.1 22.8	7915-1.5D 7915-2D 7915-2.5D	392518 303390 392527	392535 303397 392544
M 10.0	1.50	8.10	10.5	12	80	4	17.20 21.70 26.20	18.4 22.9 27.4	7915-1.5D 7915-2D 7915-2.5D	392519 303391 392528	392536 303398 392545
M 12.0	1.75	9.95	12.6	14	90	4	20.05 25.30 32.30	21.5 26.7 33.7	7915-1.5D 7915-2D 7915-2.5D	392520 303392 392529	392537 303399 392546
M 14.0	2.00	11.50	14.7	16	102	4	24.95 30.95 36.95	26.5 32.5 38.5	7915-1.5D 7915-2D 7915-2.5D	392521 392523 392530	392538 392540 392547
M 16.0	2.00	13.40	16.8	18	102	4	26.95 34.95 42.95	28.6 36.6 44.6	7915-1.5D 7915-2D 7915-2.5D	303393 392522 392531	303400 392539 392548



1 2 3 4 5 6

DIXI 7925-TC Z = 3-4

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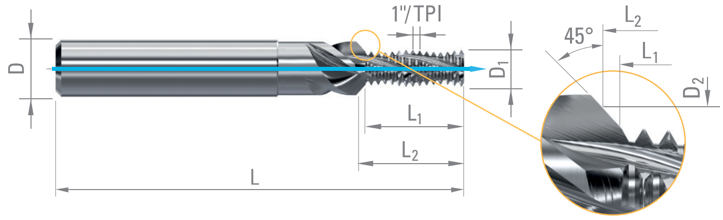
UNC THREAD MILLS WITH COUNTERSINK AND THROUGH COOLANT



- UNC thread mills with countersink and through coolant allowing a better chip removal.
  No burrs thanks to the full profile.
- Thread according to ISO 5854 (ASME B1.1).
- CUTINOX coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

UNC	TPI	D_1	D_2	D_{h5}	L	Z	L_1	L_2	DIXI	CARBIDE	CUTINOX
N°8	32	3.10	4.4	6	48	3	7.50	8.10	7925-1.5D	394340	394359
							9.10	9.70	7925-2D	303401	303411
N°10	24	3.60	5.1	6	54	3	10.00	10.80	7925-1.5D	394341	394360
							11.00	11.90	7925-2D	303402	303412
							13.20	14.00	7925-2.5D	394350	394369
N°12	24	4.10	5.8	6	54	3	10.00	10.90	7925-1.5D	394342	394361
							12.10	13.00	7925-2D	303403	303413
							14.25	15.10	7925-2.5D	394351	394370
1/4''	20	4.80	6.7	8	62	3	12.00	13.00	7925-1.5D	394343	394362
							14.50	15.60	7925-2D	303404	303414
							27.10	18.10	7925-2.5D	394352	394371
5/16''	18	5.95	8.3	10	74	3	14.75	15.90	7925-1.5D	394344	394363
							17.60	18.70	7925-2D	303405	303415
							20.40	21.50	7925-2.5D	394353	394372
3/8''	16	7.50	10.0	12	80	4	16.60	17.90	7925-1.5D	394345	394364
							21.40	18.70	7925-2D	303406	303416
							24.55	21.50	7925-2.5D	394354	394373
7/16''	14	8.80	11.7	12	80	4	19.00	20.40	7925-1.5D	394346	394365
							24.40	25.90	7925-2D	303407	303417
							28.05	29.50	7925-2.5D	394355	394374
1/2''	13	10.30	13.3	14	90	4	22.40	23.90	7925-1.5D	394347	394366
							28.20	29.80	7925-2D	303408	303418
							32.20	33.70	7925-2.5D	394356	394375
9/16''	12	10.80	15.0	16	102	4	24.25	26.00	7925-1.5D	394348	394367
							30.60	32.30	7925-2D	303409	303419
							37.00	38.70	7925-2.5D	394357	394376
5/8''	11	11.90	16.7	18	102	4	26.50	28.30	7925-1.5D	394349	394368
							35.70	37.60	7925-2D	303410	303420
							40.35	42.20	7925-2.5D	394358	394377

DIXI 7935-xD-TC Z = 3-4

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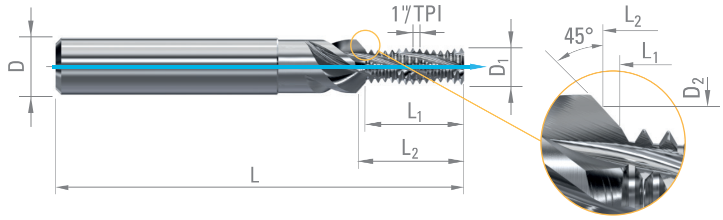
UNF THREAD MILLS WITH COUNTERSINK AND THROUGH COOLANT



- UNF thread mills with countersink and through coolant allowing a better chip removal.
  No burrs thanks to the full profile.
- Thread according to ISO 5854 (ASME B1.1).
- CUTINOX coating improves tool life, even at high temperatures, in low machinability materials.

○ good ◎ excellent

ISO	P													M				K					
Materials Description	Unalloyed steel					Low alloyed steel				High alloyed steel		Martensitic stainless steel		DUPLEX stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	14.4	15	16	17	18	19	20
Recommendations	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	○	○	○	○	○	◎	◎	◎	◎	◎	

ISO	N										S							H			
Materials Description	Wrought aluminium alloy		Cast aluminium alloy			Cu alloy bronze brass			Plastic		Refractory alloy					Titanium, titanium alloy		Hardened steel		Hardened cast	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Recommendations	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○				

UNF	TPI	D_1	D_2	D_{h5}	L	Z	L_1	L_2	DIXI	CARBIDE	CUTINOX
N°10	32	3.60	5.1	6	54	3	8.30 10.70 12.30	9.0 11.3 12.9	7935-1.5D 7935-2D 7935-2.5D	392576 392585 392594	392603 392612 392621
N°12	28	4.10	5.8	6	54	3	9.50 14.00 12.20	10.3 14.8 13.0	7935-1.5D 7935-2D 7935-2.5D	392577 392595 392586	392604 392613 392622
1/4''	28	4.80	6.7	8	62	3	11.30 14.05 16.75	12.1 14.8 17.6	7935-1.5D 7935-2D 7935-2.5D	392578 392587 392596	392605 392614 392623
5/16''	24	5.95	8.3	10	74	3	13.20 17.40 20.60	14.1 18.3 21.5	7935-1.5D 7935-2D 7935-2.5D	392579 392588 392597	392606 392615 392624
3/8''	24	7.95	10.0	12	80	4	16.35 20.60 24.85	17.4 21.6 25.8	7935-1.5D 7935-2D 7935-2.5D	392580 392589 392598	392607 392616 392625
7/16''	20	9.40	11.7	12	80	4	18.35 24.70 28.55	19.6 25.9 29.7	7935-1.5D 7935-2D 7935-2.5D	392581 392590 392599	392608 392617 392626
1/2''	20	10.90	13.3	14	90	4	20.90 27.25 32.35	22.1 28.5 33.5	7935-1.5D 7935-2D 7935-2.5D	392582 392591 392600	392609 392618 392627
9/16''	18	10.80	15.0	16	102	4	23.25 35.95 30.30	24.6 37.5 31.6	7935-1.5D 7935-2D 7935-2.5D	392583 392592 392601	392610 392619 392628
5/8''	18	12.00	16.7	18	102	4	26.05 33.10 40.15	27.5 34.5 41.6	7935-1.5D 7935-2D 7935-2.5D	392584 392593 392602	392611 392620 392629

CUTTING CONDITIONS

		VDI 3323	CARBIDE Vc [m/min	TiAlN Vc [m/min]
P	Unalloyed steel	1 - 5	**50** - 80	**60** - 90
	Low alloyed steel - Rm < 800 N/mm²	6 - 9	**40** - 70	**50** - 80
	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**30** - 50	**40** - 60
	Martensitic stainless steel	12 - 13	**35** - 50	**40** - 60
M	DUPLEX stainless steel	14.1-14.4	**20** - 40	**30** - 50
K	Grey cast iron	15 - 16	**30** - 50	**40** - 60
	Nodular pearlitic iron	17 - 18	**30** - 50	**40** - 60
	Malleable cast iron	19 - 20	**20** - 40	**30** - 50
N	Aluminium alloys	21 - 22	**90** - 120	**100** - 130
	Cast aluminium	23 - 25	**80** - 100	**90** - 120
	Copper and copper alloys	26 - 28	**70** - 110	**90** - 130
	Plastic	29 - 30	**30** - 60	**50** - 80
S	Special alloys / Heat resistant stainless steel	31 - 35	**10** - 25	**20** - 50
	Titanium, titanium alloys	36 - 37	**40** - 70	**50** - 90

$$n\,[rpm] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[rpm] \times f\,[mm]$$

Feed per revolution f [mm]

Ø D_1 0.50 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00	Ø D_1 14.00 -16.00	Ø D_1 16.00 - 20.00
0.009 - 0.020	0.016 - 0.030	0.024 - 0.04	0.03 - 0.05	0.05 - 0.10	0.08 - 0.14	0.11 - 0.20	0.16 - 0.28	0.22 - 0.32	0.26 - 0.40
0.007 - 0.015	0.013 - 0.023	0.020 - 0.03	0.03 - 0.04	0.04 - 0.08	0.07 - 0.11	0.09 - 0.15	0.13 - 0.21	0.18 - 0.24	0.21 - 0.30
0.006 - 0.015	0.011 - 0.023	0.017 - 0.03	0.02 - 0.04	0.03 - 0.08	0.06 - 0.11	0.08 - 0.15	0.11 - 0.21	0.15 - 0.24	0.18 - 0.30
0.007 - 0.015	0.013 - 0.023	0.020 - 0.03	0.03 - 0.04	0.04 - 0.08	0.07 - 0.11	0.09 - 0.15	0.13 - 0.21	0.18 - 0.24	0.21 - 0.30
0.006 - 0.015	0.011 - 0.023	0.017 - 0.03	0.02 - 0.04	0.03 - 0.08	0.06 - 0.11	0.08 - 0.15	0.11 - 0.21	0.15 - 0.24	0.18 - 0.30
0.006 - 0.015	0.011 - 0.023	0.017 - 0.03	0.02 - 0.04	0.03 - 0.08	0.06 - 0.11	0.08 - 0.15	0.11 - 0.21	0.15 - 0.24	0.18 - 0.30
0.007 - 0.015	0.013 - 0.023	0.020 - 0.03	0.03 - 0.04	0.04 - 0.08	0.07 - 0.11	0.09 - 0.15	0.13 - 0.21	0.18 - 0.24	0.21 - 0.30
0.006 - 0.015	0.011 - 0.020	0.017 - 0.03	0.02 - 0.04	0.03 - 0.08	0.06 - 0.11	0.08 - 0.15	0.11 - 0.21	0.15 - 0.24	0.18 - 0.30
0.011 - 0.030	0.020 - 0.045	0.030 - 0.06	0.04 - 0.08	0.06 - 0.15	0.10 - 0.21	0.14 - 0.30	0.20 - 0.42	0.28 - 0.48	0.32 - 0.60
0.011 - 0.030	0.020 - 0.045	0.030 - 0.06	0.04 - 0.08	0.06 - 0.15	0.10 - 0.21	0.14 - 0.30	0.20 - 0.42	0.28 - 0.48	0.32 - 0.60
0.011 - 0.030	0.020 - 0.045	0.030 - 0.06	0.04 - 0.08	0.06 - 0.15	0.10 - 0.21	0.14 - 0.30	0.20 - 0.42	0.28 - 0.48	0.32 - 0.60
0.013 - 0.045	0.027 - 0.068	0.041 - 0.09	0.05 - 0.11	0.08 - 0.23	0.14 - 0.32	0.19 - 0.45	0.27 - 0.63	0.38 - 0.72	0.43 - 0.90
0.006 - 0.015	0.011 - 0.023	0.017 - 0.03	0.02 - 0.04	0.03 - 0.08	0.06 - 0.11	0.08 - 0.15	0.11 - 0.21	0.15 - 0.24	0.18 - 0.30
0.009 - 0.020	0.016 - 0.030	0.024 - 0.04	0.03 - 0.05	0.05 - 0.10	0.08 - 0.14	0.11 - 0.20	0.16 - 0.28	0.22 - 0.32	0.26 - 0.40

DIXI 1149 TiAlN

CUTTING CONDITIONS

		VDI 3323	TiAlN Vc [m/min]
P	Unalloyed steel	1 - 5	**70** - 90
P	Low alloyed steel - Rm < 800 N/mm^2	6 - 9	**40** - 60
P	High alloyed steel - Rm 700-1500 N/mm^2	10 - 11	**35** - 50
P	Martensitic stainless steel	12 - 13	**50** - 70
M	DUPLEX stainless steel	14.1 - 14.4	**35** - 50
K	Grey cast iron	15 - 16	**45** - 70
K	Nodular pearlitic iron	17 - 18	**50** - 70
K	Malleable cast iron	19 - 20	**30** - 50
N	Aluminium alloys	21 - 25	**130** - 160
N	Copper and copper alloys	26 - 28	**70** - 90
S	Special alloys / Heat resistant stainless steel	31 - 35	**12** - 30
S	Titanium, titanium alloys	36 - 37	**30** - 60

DIXI 1147 TiAlN

CUTTING CONDITIONS

		VDI 3323	TiAlN Vc [m/min]
P	Unalloyed steel	1 - 5	**70** - 100
P	Low alloyed steel - Rm < 800 N/mm^2	6 - 9	**50** - 80
P	High alloyed steel - Rm 700-1500 N/mm^2	10 - 11	**40** - 70
P	Martensitic stainless steel	12 - 13	**50** - 70
M	DUPLEX stainless steel	14.1 - 14.4	**35** - 50
K	Grey cast iron	15 - 16	**45** - 70
K	Nodular ferritic cast iron / pearlitic	17 - 18	**50** - 70
K	Malleable cast iron	19 - 20	**30** - 50
N	Aluminium alloys	21 - 25	**130** - 160
S	Special alloys / Heat resistant stainless steel	31 - 35	**15** - 30
S	Titanium, titanium alloys	36 - 37	**50** - 100

$$n\,[rpm] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[rpm] \times f\,[mm]$$

Feed per revolution f [mm]

Ø D_1 1.00 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 5.00	Ø D_1 5.00 - 6.00	Ø D_1 6.00 - 7.00	Ø D_1 7.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 -12.00	Ø D_1 12.00 -14.00
0.02 - 0.04	0.03 - 0.06	0.04 - 0.09	0.06 - 0.11	0.08 - 0.12	0.10 - 0.14	0.11 - 0.16	0.13 - 0.18	0.15 - 0.20	0.15 - 0.30
0.02 - 0.04	0.02 - 0.05	0.04 - 0.07	0.05 - 0.08	0.07 - 0.09	0.08 - 0.11	0.09 - 0.12	0.10 - 0.14	0.12 - 0.15	0.13 - 0.20
0.01 - 0.03	0.01 - 0.04	0.03 - 0.07	0.05 - 0.08	0.07 - 0.09	0.07 - 0.11	0.08 - 0.12	0.09 - 0.14	0.12 - 0.15	0.12 - 0.20
0.02 - 0.04	0.02 - 0.05	0.04 - 0.07	0.05 - 0.08	0.07 - 0.09	0.08 - 0.11	0.09 - 0.12	0.10 - 0.14	0.12 - 0.15	0.13 - 0.20
0.01 - 0.03	0.01 - 0.04	0.03 - 0.07	0.05 - 0.08	0.07 - 0.09	0.08 - 0.11	0.09 - 0.12	0.09 - 0.14	0.12 - 0.15	0.12 - 0.20
0.02 - 0.04	0.04 - 0.05	0.04 - 0.07	0.05 - 0.08	0.07 - 0.09	0.08 - 0.11	0.09 - 0.12	0.10 - 0.14	0.12 - 0.15	0.13 - 0.20
0.02 - 0.04	0.04 - 0.05	0.04 - 0.07	0.05 - 0.08	0.07 - 0.09	0.08 - 0.11	0.09 - 0.12	0.10 - 0.14	0.12 - 0.15	0.13 - 0.20
0.02 - 0.04	0.03 - 0.04	0.03 - 0.07	0.05 - 0.08	0.07 - 0.09	0.07 - 0.11	0.08 - 0.12	0.09 - 0.14	0.12 - 0.15	0.12 - 0.20
0.02 - 0.04	0.02 - 0.06	0.05 - 0.08	0.06 - 0.10	0.08 - 0.12	0.10 - 0.14	0.11 - 0.16	0.13 - 0.18	0.13 - 0.20	0.16 - 0.30
0.02 - 0.04	0.02 - 0.06	0.05 - 0.08	0.06 - 0.10	0.08 - 0.12	0.10 - 0.14	0.11 - 0.16	0.13 - 0.18	0.13 - 0.20	0.16 - 0.30
0.008 - 0.03	0.01 - 0.03	0.03 - 0.07	0.05 - 0.08	0.07 - 0.09	0.07 - 0.11	0.08 - 0.12	0.09 - 0.14	0.12 - 0.15	0.12 - 0.20
0.008 - 0.03	0.01 - 0.03	0.03 - 0.07	0.05 - 0.08	0.07 - 0.09	0.07 - 0.12	0.08 - 0.12	0.09 - 0.14	0.12 - 0.15	0.12 - 0.20

Feed per revolution f [mm]

Ø D_1 0.50 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00
0.03 - 0.11	0.06 - 0.16	0.08 - 0.21	0.11 - 0.26	0.13 - 0.32	0.16 - 0.37	0.19 - 0.42
0.03 - 0.10	0.06 - 0.15	0.08 - 0.20	0.10 - 0.25	0.12 - 0.30	0.15 - 0.35	0.18 - 0.40
0.03 - 0.10	0.06 - 0.15	0.08 - 0.20	0.12 - 0.25	0.12 - 0.30	0.15 - 0.35	0.18 - 0.40
0.03 - 0.10	0.06 - 0.15	0.08 - 0.20	0.12 - 0.25	0.12 - 0.30	0.15 - 0.35	0.18 - 0.40
0.008 - 0.02	0.01 - 0.04	0.02 - 0.06	0.03 - 0.08	0.04 - 0.10	0.05 - 0.12	0.07 - 0.14
0.03 - 0.12	0.07 - 0.17	0.09 - 0.23	0.12 - 0.29	0.14 - 0.35	0.17 - 0.40	0.21 - 0.46
0.03 - 0.12	0.07 - 0.17	0.09 - 0.23	0.12 - 0.29	0.14 - 0.35	0.17 - 0.40	0.21 - 0.46
0.03 - 0.10	0.06 - 0.15	0.08 - 0.20	0.10 - 0.25	0.12 - 0.30	0.15 - 0.35	0.18 - 0.40
0.03 - 0.10	0.06 - 0.15	0.08 - 0.20	0.10 - 0.25	0.12 - 0.30	0.15 - 0.35	0.18 - 0.40
0.008 - 0.02	0.01 - 0.04	0.02 - 0.06	0.03 - 0.08	0.04 - 0.10	0.05 - 0.12	0.07 - 0.14
0.008 - 0.02	0.01 - 0.04	0.02 - 0.06	0.03 - 0.08	0.04 - 0.10	0.05 - 0.12	0.07 - 0.14

DIXI 1145-HH TiAlN

CUTTING CONDITIONS

		VDI 3323	Ø D_1 < 2.00 TiAlN Vc [m/min]	Ø D_1 ⩾ 2.00 TiAlN Vc [m/min]
P	Unalloyed steel	1 - 5	30 - 60	70 - 90
P	Low alloyed steel - Rm < 800 N/mm²	6 - 9	35 - 50	50 - 80
P	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	20 - 40	40 - 70
P	Martensitic stainless steel	12 - 13	35 - 50	50 - 70
M	DUPLEX stainless steel	14.1 - 14.4	20 - 35	35 - 50
K	Grey cast iron	15 - 16	25 - 45	45 - 70
K	Nodular ferritic cast iron / pearlitic	17 - 18	30 - 50	50 - 70
K	Malleable cast iron	19 - 20	15 - 30	30 - 50
N	Aluminium alloys	21 - 25	90 - 120	100 - 130
N	Copper and copper alloys	26 - 28	50 - 90	90 - 110
S	Special alloys / Heat resistant stainless steel	31 - 35	10 - 25	15 - 35
S	Titanium, titanium alloys	36 - 37	20 - 45	40 - 70

DIXI 1146 TiAlN

CUTTING CONDITIONS

		VDI 3323	TiAlN Vc [m/min]
P	Unalloyed steel	1 - 5	80 - 120
P	Low alloyed steel - Rm < 800 N/mm²	6 - 9	70 - 100
P	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	40 -70
P	Martensitic stainless steel	12 - 13	45 - 70
M	DUPLEX stainless steel	14.1 - 14.4	30 - 50
K	Grey cast iron	15 - 16	50 - 80
K	Nodular ferritic cast iron / pearlitic	17 - 18	60 - 90
K	Malleable cast iron	19 - 20	40 - 70
N	Aluminium alloys	21 - 25	140 - 170
S	Special alloys / Heat resistant stainless steel	31 - 35	15 - 30
S	Titanium, titanium alloys	36 - 37	50 - 100

$$n\,[rpm] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[rpm] \times f\,[mm]$$

Feed per revolution f [mm]

Ø D_1 < 1.00	Ø D_1 1.00 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 4.50	Ø D_1 4.50 - 6.00	Ø D_1 6.00 - 7.00	Ø D_1 7.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 -12.00	Ø D_1 12.00 -14.00
0.02 - 0.03	0.03 - 0.05	0.03 - 0.06	0.04 - 0.10	0.08 - 0.12	0.10 - 0.14	0.11 - 0.16	0.13 - 0.20	0.15 - 0.25	0.20 - 0.30
0.01 - 0.02	0.015 - 0.04	0.02 - 0.05	0.04 - 0.08	0.07 - 0.09	0.08 - 0.11	0.09 - 0.12	0.10 - 0.15	0.13 - 0.18	0.16 - 0.20
0.005 - 0.008	0.007 - 0.012	0.01 - 0.04	0.03 - 0.08	0.07 - 0.09	0.08 - 0.11	0.09 - 0.12	0.10 - 0.15	0.13 - 0.18	0.16 - 0.20
0.005 - 0.008	0.009 - 0.02	0.01 - 0.04	0.03 - 0.08	0.06 - 0.09	0.07 - 0.11	0.08 - 0.12	0.09 - 0.15	0.12 - 0.18	0.15 - 0.20
0.005 - 0.008	0.009 - 0.02	0.01 - 0.04	0.03 - 0.08	0.06 - 0.09	0.07 - 0.11	0.08 - 0.12	0.09 - 0.15	0.12 - 0.18	0.15 - 0.20
0.02 - 0.03	0.03 - 0.04	0.04 - 0.05	0.04 - 0.08	0.07 - 0.09	0.08 - 0.11	0.09 - 0.12	0.10 - 0.15	0.13 - 0.18	0.16 - 0.20
0.01 - 0.02	0.02 - 0.03	0.03 - 0.04	0.03 - 0.08	0.06 - 0.09	0.07 - 0.11	0.08 - 0.12	0.09 - 0.15	0.12 - 0.18	0.15 - 0.20
0.02 - 0.03	0.03 - 0.04	0.04 - 0.05	0.04 - 0.08	0.07 - 0.09	0.08 - 0.11	0.09 - 0.12	0.10 - 0.15	0.13 - 0.18	0.16 - 0.20
0.04 - 0.05	0.05 - 0.06	0.06 - 0.08	0.07 - 0.12	0.09 - 0.14	0.11 - 0.16	0.12 - 0.18	0.14 - 0.22	0.18 - 0.28	0.22 - 0.32
0.03 - 0.04	0.04 - 0.05	0.045 - 0.06	0.05 - 0.10	0.08 - 0.12	0.10 - 0.14	0.11 - 0.16	0.13 - 0.20	0.16 - 0.25	0.20 - 0.30
0.004 - 0.01	0.005 - 0.015	0.005 - 0.02	0.012 - 0.04	0.02 - 0.05	0.03 - 0.08	0.04 - 0.09	0.05 - 0.11	0.06 - 0.12	0.07 - 0.15
0.008 - 0.02	0.01 - 0.03	0.01 - 0.04	0.03 - 0.08	0.06 - 0.09	0.07 - 0.11	0.08 - 0.12	0.09 - 0.15	0.12 - 0.18	0.15 - 0.20

Feed per revolution f [mm]

Ø D_1 0.80 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00
0.03 - 0.11	0.06 - 0.16	0.08 - 0.21	0.11 - 0.25	0.13 - 0.27	0.16 - 0.33	0.19 - 0.35
0.03 - 0.10	0.06 - 0.15	0.08 - 0.20	0.10 - 0.23	0.12 - 0.25	0.15 - 0.27	0.18 - 0.30
0.03 - 0.10	0.06 - 0.15	0.08 - 0.17	0.12 - 0.22	0.12 - 0.23	0.15 - 0.25	0.18 - 0.28
0.01 - 0.04	0.02 - 0.06	0.03 - 0.08	0.04 - 0.10	0.05 - 0.12	0.07 - 0.14	0.10 - 0.18
0.008 - 0.02	0.01 - 0.04	0.02 - 0.06	0.03 - 0.08	0.04 - 0.10	0.05 - 0.12	0.07 - 0.14
0.03 - 0.12	0.07 - 0.17	0.09 - 0.23	0.12 - 0.29	0.14 - 0.35	0.17 - 0.40	0.21 - 0.46
0.03 - 0.12	0.07 - 0.17	0.09 - 0.23	0.12 - 0.29	0.14 - 0.35	0.17 - 0.40	0.21 - 0.46
0.03 - 0.10	0.06 - 0.15	0.08 - 0.20	0.10 - 0.25	0.12 - 0.30	0.15 - 0.35	0.18 - 0.40
0.03 - 0.12	0.07 - 0.17	0.09 - 0.23	0.12 - 0.29	0.14 - 0.35	0.17 - 0.40	0.21 - 0.46
0.008 - 0.02	0.01 - 0.04	0.02 - 0.06	0.03 - 0.08	0.04 - 0.10	0.05 - 0.12	0.07 - 0.14
0.008 - 0.02	0.01 - 0.04	0.02 - 0.06	0.03 - 0.08	0.04 - 0.10	0.05 - 0.12	0.07 - 0.14

DIXI 1345-3D-HH - 1345-5D-HH

CUTTING CONDITIONS

		VDI 3323	TiAlN Vc [m/min]
P	Unalloyed steel	1 - 5	**80** - 120
P	Low alloyed steel - Rm < 800 N/mm²	6	**80** - 120
P	Low alloyed steel - Rm < 800 N/mm²	7 - 9	**60** - 85
P	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**40** - 60
P	Martensitic stainless steel	12 - 13	**40** - 60
M	Austenitic stainless steel	14.1 - 14.2	**50** - 70
M	DUPLEX stainless steel	14.3 - 14.4	**40** - 60
K	Cast iron	15 - 20	**60** - 85
N	Aluminium alloys	21	**160** - 200
N	Aluminium alloys	22	**160** - 200
N	Cast aluminium alloys	23	**140** - 180
N	Cast aluminium alloys	24	**140** - 180
N	Cast aluminium alloys	25	**110** - 150
S	Special alloys / Heat resistant stainless steel	31 - 35	**15** - 30
S	Titanium, titanium alloys	36 - 37	**30** - 50

DIXI 1345-8D-HH

CUTTING CONDITIONS

		VDI 3323	TiAlN Vc [m/min]
P	Unalloyed steel	1 - 5	**80** - 120
P	Low alloyed steel - Rm < 800 N/mm²	6	**80** - 120
P	Low alloyed steel - Rm < 800 N/mm²	7 - 9	**60** - 85
P	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**40** - 60
P	Martensitic stainless steel	12 - 13	**40** - 60
M	Austenitic stainless steel	14.1 - 14.2	**50** - 70
M	DUPLEX stainless steel	14.3 - 14.4	**40** - 60
K	Cast iron	15 - 20	**60** - 85
N	Aluminium alloys	21	**160** - 200
N	Aluminium alloys	22	**160** - 200
N	Cast aluminium alloys	23	**140** - 180
N	Cast aluminium alloys	24	**140** - 180
N	Cast aluminium alloys	25	**110** - 150
S	Special alloys / Heat resistant stainless steel	31 - 35	**15** - 30
S	Titanium, titanium alloys	36 - 37	**30** - 50

$$n\ [rpm] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [rpm] \times f\ [mm]$$

Feed per revolution f [mm]

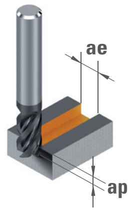
Ø D_1 3.00 - 3.90	Ø D_1 4.00 - 4.90	Ø D_1 5.00 - 5.90	Ø D_1 6 .00- 7.90	Ø D_1 8 .00- 9.90	Ø D_1 10 .00- 11.90	Ø D_1 12.00 - 13.90	Ø D_1 14.00 - 14.90	Ø D_1 15.00 - 16.00
0.04 - 0.10	0.06 - 0.12	0.12 - 0.18	0.14 - 0.20	0.16 - 0.22	0.18 - 0.26	0.19 - 0.28	0.20 - 0.30	0.22 - 0.32
0.04 - 0.10	0.06 - 0.12	0.12 - 0.18	0.14 - 0.20	0.16 - 0.22	0.18 - 0.26	0.19 - 0.28	0.20 - 0.30	0.22 - 0.32
0.04 - 0.10	0.06 - 0.12	0.12 - 0.18	0.14 - 0.20	0.16 - 0.22	0.18 - 0.26	0.19 - 0.28	0.20 - 0.30	0.22 - 0.32
0.03 - 0.08	0.05 - 0.10	0.10 - 0.15	0.11 - 0.17	0.13 - 0.18	0.15 - 0.22	0.16 - 0.23	0.17 - 0.25	0.18 - 0.27
0.03 - 0.05	0.05 - 0.09	0.07 - 0.11	0.09 - 0.13	0.09 - 0.13	0.10 - 0.15	0.11 - 0.16	0.12 - 0.17	0.13 - 0.18
0.03 - 0.05	0.05 - 0.09	0.07 - 0.11	0.09 - 0.13	0.09 - 0.13	0.10 - 0.15	0.11 - 0.16	0.12 - 0.17	0.13 - 0.18
0.04 - 0.06	0.06 - 0.10	0.08 - 0.12	0.10 - 0.14	0.10 - 0.14	0.11 - 0.16	0.12 - 0.17	0.13 - 0.18	0.14 - 0.19
0.03 - 0.05	0.05 - 0.09	0.07 - 0.11	0.09 - 0.13	0.09 - 0.13	0.10 - 0.15	0.11 - 0.16	0.12 - 0.17	0.13 - 0.18
0.14 - 0.20	0.19 - 0.25	0.20 - 0.26	0.22 - 0.28	0.24 - 0.30	0.29 - 0.35	0.29 - 0.35	0.30 - 0.40	0.30 - 0.40
0.14 - 0.20	0.19 - 0.25	0.20 - 0.26	0.22 - 0.28	0.24 - 0.30	0.29 - 0.35	0.29 - 0.35	0.30 - 0.40	0.30 - 0.40
0.14 - 0.20	0.19 - 0.25	0.20 - 0.26	0.22 - 0.28	0.24 - 0.30	0.29 - 0.35	0.29 - 0.35	0.30 - 0.40	0.30 - 0.40
0.14 - 0.20	0.19 - 0.25	0.20 - 0.26	0.22 - 0.28	0.24 - 0.30	0.29 - 0.35	0.29 - 0.35	0.30 - 0.40	0.30 - 0.40
0.12 - 0.18	0.16 - 0.22	0.17 - 0.23	0.19 - 0.25	0.22 - 0.28	0.24 - 0.30	0.24 - 0.30	0.25 - 0.35	0.25 - 0.35
0.02 - 0.04	0.04 - 0.08	0.06 - 0.10	0.08 - 0.12	0.08 - 0.12	0.09 - 0.14	0.10 - 0.15	0.11 - 0.16	0.12 - 0.17
0.02 - 0.04	0.04 - 0.08	0.06 - 0.10	0.08 - 0.12	0.08 - 0.12	0.09 - 0.14	0.10 - 0.15	0.11 - 0.16	0.12 - 0.17

Feed per revolution f [mm]

Ø D_1 3.00 - 3.90	Ø D_1 4.00 - 4.90	Ø D_1 5.00 - 5.90	Ø D_1 6 .00- 7.90	Ø D_1 8 .00- 9.90	Ø D_1 10 .00- 11.90	Ø D_1 12.00 - 13.90	Ø D_1 14.00 - 14.90	Ø D_1 15.00 - 16.00
0.03 - 0.08	0.05 - 0.10	0.10 - 0.15	0.11 - 0.17	0.13 - 0.18	0.15 - 0.22	0.16 - 0.23	0.17 - 0.25	0.18 - 0.27
0.03 - 0.08	0.05 - 0.10	0.10 - 0.15	0.11 - 0.17	0.13 - 0.18	0.15 - 0.22	0.16 - 0.23	0.17 - 0.25	0.18 - 0.27
0.03 - 0.08	0.05 - 0.10	0.10 - 0.15	0.11 - 0.17	0.13 - 0.18	0.15 - 0.22	0.16 - 0.23	0.17 - 0.25	0.18 - 0.27
0.02 - 0.04	0.04 - 0.07	0.06 - 0.09	0.07 - 0.11	0.07 - 0.11	0.08 - 0.12	0.09 - 0.13	0.10 - 0.14	0.11 - 0.15
0.02 - 0.04	0.04 - 0.07	0.06 - 0.09	0.07 - 0.11	0.07 - 0.11	0.08 - 0.12	0.09 - 0.13	0.10 - 0.14	0.11 - 0.15
0.02 - 0.04	0.04 - 0.07	0.06 - 0.09	0.07 - 0.11	0.07 - 0.11	0.08 - 0.12	0.09 - 0.13	0.10 - 0.14	0.11 - 0.15
0.03 - 0.05	0.05 - 0.08	0.06 - 0.10	0.08 - 0.11	0.08 - 0.11	0.09 - 0.13	0.10 - 0.14	0.11 - 0.15	0.11 - 0.16
0.02 - 0.04	0.04 - 0.07	0.06 - 0.09	0.07 - 0.11	0.07 - 0.11	0.08 - 0.12	0.09 - 0.13	0.10 - 0.14	0.11 - 0.15
0.11 - 0.17	0.16 - 0.21	0.17 - 0.22	0.18 - 0.23	0.20 - 0.25	0.24 - 0.29	0.24 - 0.29	0.25 - 0.34	0.25 - 0.34
0.11 - 0.17	0.16 - 0.21	0.17 - 0.22	0.18 - 0.23	0.20 - 0.25	0.24 - 0.29	0.24 - 0.29	0.25 - 0.34	0.25 - 0.34
0.11 - 0.17	0.16 - 0.21	0.17 - 0.22	0.18 - 0.23	0.20 - 0.25	0.24 - 0.29	0.24 - 0.29	0.25 - 0.34	0.25 - 0.34
0.11 - 0.17	0.16 - 0.21	0.17 - 0.22	0.18 - 0.23	0.20 - 0.25	0.24 - 0.29	0.24 - 0.29	0.25 - 0.34	0.25 - 0.34
0.10 - 0.15	0.13 - 0.18	0.14 - 0.19	0.16 - 0.21	0.18 - 0.23	0.20 - 0.25	0.20 - 0.25	0.21 - 0.29	0.21 - 0.29
0.01 - 0.03	0.03 - 0.06	0.05 - 0.08	0.06 - 0.10	0.06 - 0.10	0.07 - 0.11	0.08 - 0.12	0.09 - 0.13	0.10 - 0.14
0.01 - 0.03	0.03 - 0.06	0.05 - 0.08	0.06 - 0.10	0.06 - 0.10	0.07 - 0.11	0.08 - 0.12	0.09 - 0.13	0.10 - 0.14

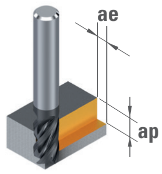
CUTTING CONDITIONS

Slotting

		VDI 3323		DIXAL Vc [m/min]	ap [mm]	ae [mm]
N	Aluminium alloys	21 - 22		**400** - 550	< 1 × ØD$_1$	1 × ØD$_1$
	Cast aluminium	23 - 25		**150** - 250	< 1 × ØD$_1$	1 × ØD$_1$
	Copper and copper alloys	26 - 28		**150** - 200	< 1 × ØD$_1$	1 × ØD$_1$

DIXI 7563-FC - DIXI 7565-FC ⇒ Vc +30%
fz +30%

Routing

		VDI 3323		DIXAL Vc [m/min]	ap [mm]	ae [mm]
N	Aluminium alloys	21 - 22		**450** - 650	< 1.5 × ØD$_1$	0.45 × ØD$_1$
	Cast aluminium	23 - 25		**200** - 300	< 1.5 × ØD$_1$	0.35 × ØD$_1$
	Copper and copper alloys	26 - 28		**200** - 300	< 1.5 × ØD$_1$	0.45 × ØD$_1$

DIXI 7563-FC - DIXI 7565-FC ⇒ Vc +30%
fz +30%

$$n\ [rpm] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [rpm] \times fz\ [mm] \times Z$$

Feed per tooth fz [mm]

Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 16.00
0.024 - 0.066	0.036 - 0.088	0.048 - 0.100	0.050 - 0.108	0.048 - 0.128
0.020 - 0.056	0.031 - 0.075	0.041 - 0.085	0.043 - 0.092	0.041 - 0.109
0.024 - 0.066	0.036 - 0.088	0.048 - 0.100	0.050 - 0.108	0.048 - 0.128

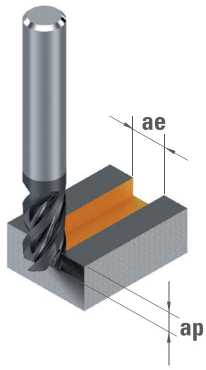
Feed per tooth fz [mm]

Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 16.00
0.030 - 0.083	0.045 - 0.114	0.060 - 0.110	0.063 - 0.132	0.060 - 0.144
0.026 - 0.070	0.038 - 0.097	0.051 - 0.094	0.053 - 0.112	0.051 - 0.122
0.030 - 0.083	0.045 - 0.114	0.060 - 0.110	0.063 - 0.132	0.060 - 0.144

CUTTING CONDITIONS

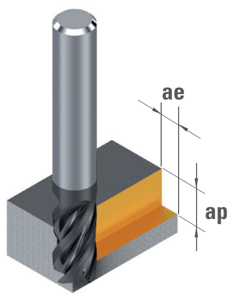
Slotting

		VDI 3323	DIXMILL Vc [m/min]	ap [mm]	ae [mm]
P	Unalloyed steel	1 - 4	**160** - 200	< 1 × D_1	1 × D_1
P	Unalloyed steel	5	**100** - 140	< 1 × D_1	1 × D_1
P	Low alloyed steel - Rm < 800 N/mm²	6 - 7	**160** - 200	< 1 × D_1	1 × D_1
P	Low alloyed steel - Rm < 800 N/mm²	8 - 9	**100** - 140	< 1 × D_1	1 × D_1
P	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**70** - 100	< 1 × D_1	1 × D_1
P	Martensitic stainless steel	12 - 13	**120** - 160	< 1 × D_1	1 × D_1
M	Austenitic stainless steel	14.1 - 14.2	**90** - 130	< 1 × D_1	1 × D_1
M	DUPLEX stainless steel	14.3 - 14.4	**80** - 110	< 1 × D_1	1 × D_1
K	Cast iron	15 - 20	**100** - 140	< 1 × D_1	1 × D_1
S	Special alloys / Heat resistant stainless steel	15 - 20	**20** - 30	< 0.5 × D_1	1 × D_1
S	Titanium, titanium alloys	36 - 37	**50** - 70	< 0.5 × D	1 × D_1



Routing

		VDI 3323	DIXMILL Vc [m/min]	ap [mm]	ae [mm]
P	Unalloyed steel	1 - 4	**160** - 200	< 1.5 × D_1	0.5 × D_1
P	Unalloyed steel	5	**100** - 140	< 1.5 × D_1	0.5 × D_1
P	Low alloyed steel - Rm < 800 N/mm²	6 - 7	**160** - 200	< 1.5 × D_1	0.5 × D_1
P	Low alloyed steel - Rm < 800 N/mm²	8 - 9	**100** - 140	< 1.5 × D_1	0.5 × D_1
P	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**70** - 100	< 1.5 × D_1	0.5 × D_1
P	Martensitic stainless steel	12 - 13	**120** - 160	< 1.5 × D_1	0.5 × D_1
M	Austenitic stainless steel	14.1 - 14.2	**90** - 130	< 1.5 × D_1	0.5 × D_1
M	DUPLEX stainless steel	14.3 - 14.4	**80** - 110	< 1.5 × D_1	0.5 × D_1
K	Cast iron	15 - 20	**100** - 140	< 1.5 × D_1	0.5 × D_1
S	Special alloys / Heat resistant stainless steel	15 - 20	**20** - 30	< 1 × D_1	0.25 × D_1
S	Titanium, titanium alloys	36 - 37	**50** - 70	< 1 × D_1	0.4 × D_1



$$n\,[rpm] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[rpm] \times fz\,[mm] \times Z$$

Feed per tooth fz [mm]

Ø D_1 6.00	Ø D_1 8.00	Ø D_1 10.00	Ø D_1 12.00	Ø D_1 14.00	Ø D_1 16.00	Ø D_1 18.00	Ø D_1 20.00	Ø D_1 25.00
0.016	0.027	0.038	0.047	0.049	0.053	0.059	0.065	0.064
0.016	0.027	0.038	0.047	0.049	0.053	0.059	0.065	0.064
0.016	0.027	0.038	0.047	0.049	0.053	0.059	0.065	0.064
0.016	0.027	0.038	0.047	0.049	0.053	0.059	0.065	0.064
0.011	0.019	0.027	0.032	0.034	0.037	0.041	0.045	0.045
0.013	0.022	0.034	0.039	0.042	0.045	0.050	0.055	0.055
0.018	0.028	0.048	0.055	0.059	0.062	0.070	0.077	0.077
0.018	0.028	0.048	0.055	0.059	0.062	0.069	0.076	0.076
0.020	0.034	0.048	0.058	0.061	0.065	0.073	0.081	0.079
0.012	0.019	0.033	0.038	0.040	0.043	0.048	0.054	0.052
0.016	0.025	0.042	0.050	0.053	0.055	0.062	0.068	0.069

Feed per tooth fz [mm]

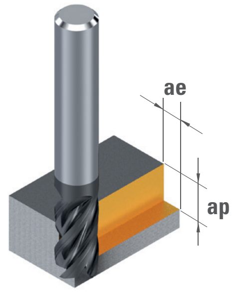
Ø D_1 6.00	Ø D_1 8.00	Ø D_1 10.00	Ø D_1 12.00	Ø D_1 14.00	Ø D_1 16.00	Ø D_1 18.00	Ø D_1 20.00	Ø D_1 25.00
0.016	0.027	0.038	0.047	0.049	0.053	0.059	0.065	0.064
0.016	0.027	0.038	0.047	0.049	0.053	0.059	0.065	0.064
0.016	0.027	0.038	0.047	0.049	0.053	0.059	0.065	0.064
0.016	0.027	0.038	0.047	0.049	0.053	0.059	0.065	0.064
0.011	0.019	0.027	0.032	0.034	0.037	0.041	0.045	0.045
0.013	0.022	0.034	0.039	0.042	0.045	0.050	0.055	0.055
0.018	0.028	0.048	0.055	0.059	0.062	0.070	0.077	0.077
0.018	0.028	0.048	0.055	0.059	0.062	0.069	0.076	0.076
0.020	0.034	0.048	0.058	0.061	0.065	0.073	0.081	0.079
0.012	0.019	0.033	0.038	0.040	0.043	0.048	0.054	0.052
0.016	0.025	0.042	0.050	0.053	0.055	0.062	0.068	0.069

DIXI 7844 - 7845 - 7854 - 7855

CUTTING CONDITIONS

Routing

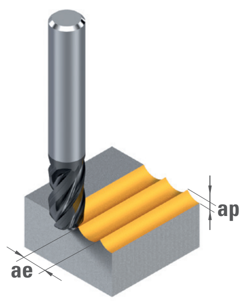
		VDI 3323	DIXMILL Vc [m/min]	ap [mm]	ae [mm]
P	Unalloyed steel	1 - 4	**130** - 160	< 1.5 × D_1	0.3 × D_1
		5	**90** - 120	< 1.5 × D_1	0.3 × D_1
	Low alloyed steel - Rm < 800 N/mm²	6 - 7	**130** - 160	< 1.5 × D_1	0.3 × D_1
		8 - 9	**90** - 120	< 1.5 × D_1	0.3 × D_1
	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**50** - 70	< 1.5 × D_1	0.3 × D_1
	Martensitic stainless steel	12 - 13	**110** - 130	< 1.5 × D_1	0.3 × D_1
M	Austenitic stainless steel	14.1 - 14.2	**70** - 90	< 1.5 × D_1	0.3 × D_1
	DUPLEX stainless steel	14.3 - 14.4	**50** - 70	< 1.5 × D_1	0.3 × D_1
K	Cast iron	15 - 20	**95** - 120	< 1.5 × D_1	0.3 × D_1
S	Special alloys / Heat resistant stainless steel	31-35	**25** - 35	< 1.5 × D_1	0.1 × D_1
	Titanium, titanium alloys	36 - 37	**60** - 80	< 1.5 × D_1	0.3 × D_1



DIXI 7834

CUTTING CONDITIONS

		VDI 3323	DIXMILL Vc [m/min]	ap [mm]	ae [mm]
P	Unalloyed steel	1 - 4	**150** - 175	< 1 × D_1	< 0.5 × D_1
		5	**100** - 125	< 1 × D_1	< 0.5 × D_{11}
	Low alloyed steel - Rm < 800 N/mm²	6 - 7	**150** - 175	< 1 × D_1	< 0.5 × D_1
		8 - 9	**100** - 125	< 1 × D_1	< 0.5 × D_1
	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**60** - 80	< 1 × D_1	< 0.5 × D_1
	Martensitic stainless steel	12 - 13	**70** - 90	< 1 × D_1	< 0.5 × D_1
M	Austenitic stainless steel	14.1 - 14.2	**75** - 95	< 1 × D_1	< 0.5 × D_1
	DUPLEX stainless steel	14.3 - 14.4	**70** - 90	< 1 × D_1	< 0.5 × D_1
K	Cast iron	15 - 20	**110** - 130	< 1 × D_1	< 0.5 × D_1
S	Special alloys / Heat resistant stainless steel	31-35	**15** - 25	< 0.3 × D_1	< 0.2 × D_1
	Titanium, titanium alloys	36 - 37	**40** - 60	< 0.3 × D_1	< 0.5 × D_1



$$n\,[rpm] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[rpm] \times fz\,[mm] \times Z$$

Feed per tooth fz [mm]

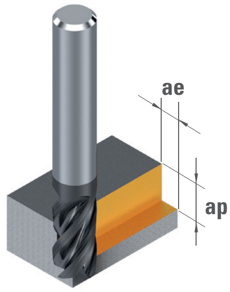
Ø D_1 6.00	Ø D_1 8.00	Ø D_1 10.00	Ø D_1 12.00	Ø D_1 14.00	Ø D_1 16.00	Ø D_1 18.00	Ø D_1 20.00	Ø D_1 25.00
0.034	0.038	0.050	0.063	0.069	0.076	0.083	0.089	0.101
0.034	0.038	0.050	0.063	0.069	0.076	0.083	0.089	0.101
0.034	0.038	0.050	0.063	0.069	0.076	0.083	0.089	0.101
0.034	0.038	0.050	0.063	0.069	0.076	0.083	0.089	0.101
0.024	0.027	0.035	0.044	0.049	0.054	0.058	0.062	0.071
0.024	0.025	0.030	0.046	0.051	0.054	0.057	0.061	0.071
0.030	0.032	0.038	0.063	0.065	0.069	0.070	0.076	0.088
0.030	0.032	0.038	0.063	0.065	0.069	0.070	0.076	0.088
0.043	0.048	0.063	0.079	0.087	0.096	0.103	0.111	0.126
0.021	0.022	0.027	0.044	0.046	0.048	0.049	0.053	0.062
0.027	0.029	0.034	0.057	0.059	0.062	0.063	0.069	0.079

Feed per tooth fz [mm]

Ø D_1 6.00	Ø D_1 8.00	Ø D_1 10.00	Ø D_1 12.00	Ø D_1 16.00	Ø D_1 18.00	Ø D_1 20.00	Ø D_1 25.00
0.040	0.060	0.065	0.070	0.075	0.080	0.090	0.099
0.040	0.060	0.065	0.070	0.074	0.079	0.090	0.099
0.040	0.060	0.065	0.070	0.075	0.080	0.090	0.099
0.040	0.060	0.065	0.070	0.074	0.079	0.090	0.099
0.028	0.042	0.045	0.049	0.052	0.056	0.063	0.070
0.030	0.040	0.045	0.050	0.054	0.059	0.058	0.059
0.041	0.045	0.050	0.055	0.060	0.064	0.065	0.068
0.041	0.045	0.050	0.055	0.060	0.064	0.065	0.068
0.050	0.074	0.081	0.087	0.093	0.099	0.112	0.124
0.028	0.031	0.035	0.038	0.042	0.045	0.045	0.048
0.037	0.040	0.045	0.049	0.054	0.058	0.058	0.061

CUTTING CONDITIONS

Routing

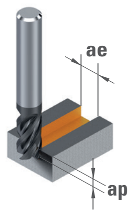


		VDI 3323	DIXMILL Vc [m/min]	ap [mm]	ae [mm]
P	Unalloyed steel	1 - 4	**280** - 320	$< 2 \times D_1$	$0.05 \times D_1$
		5	**180** - 220	$< 2 \times D_1$	$0.05 \times D_1$
	Low alloyed steel - Rm < 800 N/mm²	6 - 7	**280** - 320	$< 2 \times D_1$	$0.05 \times D_1$
		8 - 9	**180** - 220	$< 2 \times D_1$	$0.05 \times D_1$
	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**90** - 120	$< 2 \times D_1$	$0.05 \times D_1$
	Martensitic stainless steel	12 - 13	**200** - 225	$< 2 \times D_1$	$0.05 \times D_1$
M	Austenitic stainless steel	14.1 - 14.2	**140** - 160	$< 2 \times D_1$	$0.05 \times D_1$
	DUPLEX stainless steel	14.3 - 14.4	**125** - 140	$< 2 \times D_1$	$0.05 \times D_1$
S	Special alloys / Heat resistant stainless steel	31-35	**30** - 40	$< 2 \times D_1$	$0.05 \times D_1$
	Titanium, titanium alloys	36 - 37	**110** - 120	$< 2 \times D_1$	$0.05 \times D_1$

DIXI 7215 - 7215-FC DAC

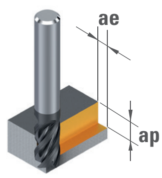
CUTTING CONDITIONS

Slotting



		VDI 3323	DIXAL Vc [m/min]	ap [mm]	ae [mm]
N	Aluminium alloys	21 - 22	**400** - 550	$< 1.5 \times ØD_1$	$1 \times ØD_1$
	Cast aluminium	23 - 25	**150** - 250	$< 1.5 \times ØD_1$	$1 \times ØD_1$
	Copper and copper alloys	26 - 28	**150** - 250	$< 1.5 \times ØD_1$	$1 \times ØD_1$

Routing



		VDI 3323	DIXAL Vc [m/min]	ap [mm]	ae [mm]
N	Aluminium alloys	21 - 22	**450** - 650	$< 1.5 \times ØD_1$	$0.55 \times ØD_1$
	Cast aluminium	23 - 25	**200** - 300	$< 1.5 \times ØD_1$	$0.45 \times ØD_1$
	Copper and copper alloys	26 - 28	**200** - 300	$< 1.2 \times ØD_1$	$0.55 \times ØD_1$

DIXI 7215-FC ⇒ Vc +30%
fz +30%

$$n\,[rpm] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[rpm] \times fz\,[mm] \times Z$$

Feed per tooth fz [mm]

Ø D_1 6.00	Ø D_1 8.00	Ø D_1 10.00	Ø D_1 12.00	Ø D_1 16.00	Ø D_1 20.00	Ø D_1 25.00
0.068	0.116	0.144	0.173	0.202	0.225	0.232
0.050	0.085	0.106	0.128	0.149	0.167	0.174
0.068	0.116	0.144	0.173	0.202	0.225	0.232
0.050	0.085	0.106	0.128	0.149	0.167	0.174
0.041	0.071	0.088	0.105	0.123	0.137	0.144
0.049	0.084	0.104	0.125	0.146	0.162	0.168
0.041	0.071	0.088	0.105	0.123	0.137	0.143
0.041	0.071	0.088	0.105	0.123	0.137	0.142
0.033	0.055	0.070	0.082	0.097	0.112	0.115
0.033	0.055	0.070	0.083	0.097	0.113	0.117

Feed per tooth fz [mm]

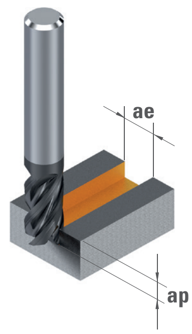
Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 16.00
0.030 - 0.080	0.040 - 0.100	0.040 - 0.110	0.050 - 0.110	0.050 - 0.140
0.030 - 0.060	0.030 - 0.090	0.040 - 0.090	0.040 - 0.100	0.050 - 0.120
0.030 - 0.080	0.040 - 0.100	0.040 - 0.110	0.050 - 0.110	0.050 - 0.140

Feed per tooth fz [mm]

Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 16.00
0.040 - 0.090	0.050 - 0.130	0.060 - 0.140	0.070 - 0.150	0.070 - 0.180
0.030 - 0.080	0.040 - 0.111	0.050 - 0.120	0.060 - 0.130	0.060 - 0.150
0.040 - 0.090	0.050 - 0.130	0.060 - 0.140	0.070 - 0.150	0.070 - 0.180

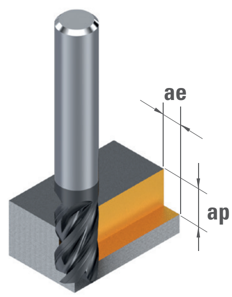
CUTTING CONDITIONS

Slotting



		VDI 3323	DIXMILL Vc [m/min]	ap [mm]	ae [mm]
P	Unalloyed steel	1 - 4	**115** - 140	< 1 × D_1	1 × D_1
		5	**110** - 135	< 1 × D_1	1 × D_1
	Low alloyed steel - Rm < 800 N/mm²	6 - 7	**115** - 140	< 1 × D_1	1 × D_1
		8 - 9	**110** - 135	< 1 × D_1	1 × D_1
	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**110** - 135	< 1 × D_1	1 × D_1
	Martensitic stainless steel	12 - 13	**115** - 140	< 1 × D_1	1 × D_1
M	Austenitic stainless steel	14.1 - 14.2	**75** - 95	< 1 × D_1	1 × D_1
	DUPLEX stainless steel	14.3 - 14.4	**30** - 45	< 0.5 × D_1	1 × D_1
K	Cast iron	15 - 20	**130** - 150	< 1 × D_1	1 × D_1
S	Special alloys / Heat resistant stainless steel	31 - 35	**20** - 30	< 0.4 × D_1	1 × D_1
	Titanium, titanium alloys	36 - 37	**45** - 65	< 1 × D_1	1 × D_1

Routing



		VDI 3323	DIXMILL Vc [m/min]	ap [mm]	ae [mm]
P	Unalloyed steel	1 - 4	**160** - 200	< 1 × D_1	0.4 × D_1
		5	**150** - 180	< 1 × D_1	0.4 × D_1
	Low alloyed steel - Rm < 800 N/mm²	6 - 7	**160** - 200	< 1 × D_1	0.4 × D_1
		8	**150** - 180	< 1 × D_1	0.4 × D_1
		9	**150** - 180	< 1 × D_1	0.4 × D_1
	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**150** - 180	< 1 × D_1	0.4 × D_1
	Martensitic stainless steel	12 - 13	**130** - 160	< 1 × D_1	0.4 × D_1
M	Austenitic stainless steel	14.1 - 14.2	**90** - 120	< 1 × D_1	0.4 × D_1
	DUPLEX stainless steel	14.3 - 14.4	**40** - 60	< 0.6 × D_1	0.4 × D_1
K	Cast iron	15 - 20	**150** - 180	< 1 × D_1	0.4 × D_1
S	Special alloys / Heat resistant stainless steel	31 - 35	**25** - 35	< 0.6 × D_1	0.3 × D_1
	Titanium, titanium alloys	36 - 37	**60** - 80	< 1 × D_1	0.4 × D_1

$$n\,[rpm] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[rpm] \times fz\,[mm] \times Z$$

Feed per tooth fz [mm]

Ø D_1 6.00	Ø D_1 8.00	Ø D_1 10.00	Ø D_1 12.00	Ø D_1 14.00	Ø D_1 16.00	Ø D_1 20.00	Ø D_1 25.00
0.025	0.034	0.042	0.049	0.056	0.063	0.070	0.084
0.025	0.034	0.042	0.049	0.056	0.063	0.070	0.077
0.025	0.034	0.042	0.049	0.056	0.063	0.070	0.084
0.025	0.034	0.042	0.049	0.056	0.063	0.070	0.077
0.027	0.035	0.042	0.053	0.058	0.063	0.077	0.084
0.034	0.046	0.057	0.067	0.074	0.081	0.095	0.105
0.025	0.034	0.042	0.048	0.055	0.062	0.071	0.081
0.016	0.021	0.027	0.032	0.036	0.040	0.046	0.052
0.021	0.028	0.035	0.042	0.048	0.053	0.060	0.067
0.018	0.024	0.030	0.036	0.040	0.044	0.050	0.055
0.034	0.046	0.057	0.067	0.076	0.086	0.095	0.105

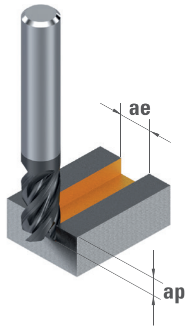
Feed per tooth fz [mm]

Ø D_1 6.00	Ø D_1 8.00	Ø D_1 10.00	Ø D_1 12.00	Ø D_1 14.00	Ø D_1 16.00	Ø D_1 20.00	Ø D_1 25.00
0.027	0.035	0.042	0.053	0.058	0.063	0.077	0.084
0.025	0.035	0.042	0.049	0.056	0.063	0.070	0.084
0.027	0.035	0.042	0.053	0.058	0.063	0.077	0.084
0.025	0.035	0.042	0.049	0.056	0.063	0.070	0.084
0.027	0.035	0.046	0.053	0.060	0.067	0.077	0.084
0.027	0.035	0.046	0.053	0.060	0.067	0.077	0.084
0.034	0.046	0.057	0.067	0.076	0.086	0.095	0.114
0.025	0.034	0.042	0.048	0.055	0.062	0.071	0.081
0.016	0.021	0.027	0.032	0.036	0.040	0.046	0.052
0.021	0.028	0.035	0.042	0.048	0.053	0.060	0.070
0.020	0.026	0.032	0.038	0.044	0.048	0.055	0.065
0.034	0.048	0.057	0.067	0.076	0.086	0.095	0.114

CUTTING CONDITIONS

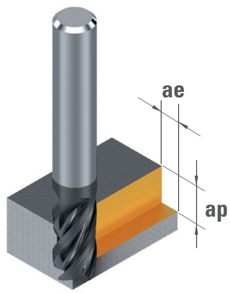
Slotting

		VDI 3323	C-TOP Vc [m/min]	ap [mm]	ae [mm]
P	Unalloyed steel	1 - 5	**75** - 135	< 1 × D_1	< 1 × D_1
	Low alloyed steel - Rm < 800 N/mm²	6 - 9	**60** - 130	< 1 × D_1	< 1 × D_1
	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**50** - 80	< 1 × D_1	< 0.8 × D_1
	Martensitic stainless steel	12 - 13	**60** - 80	< 1 × D_1	< 0.7 × D_1
M	DUPLEX stainless steel	14.1 - 14.4	**40** - 60	< 1 × D_1	< 0.5 × D_1
K	Grey cast iron	15 - 16	**90** - 170	< 1 × D_1	< 1.3 × D_1
	Nodular pearlitic iron / Nodular ferritic cast iron	17 - 18	**80** - 130	< 1 × D_1	< 1 × D_1
	Malleable cast iron	19 - 20	**60** - 110	< 1 × D_1	< 1 × D_1
N	Copper and copper alloy	26 - 28	**110** - 190	< 1 × D_1	< 1.3 × D_1
S	Special alloys / Heat resistant stainless steel	31 - 35	**20** - 30	< 1 × D_1	< 0.3 × D_1
	Titanium, titanium alloys	36 - 37	**30** - 60	< 1 × D_1	< 1 × D_1



Routing

		VDI 3323	C-TOP Vc [m/min]	ap [mm]	ae [mm]
P	Unalloyed steel	1 - 5	**100** - 180	< 0.9 × L_1	< 0.4 × D_1
	Low alloyed steel - Rm < 800 N/mm²	6 - 9	**80** - 170	< 0.9 × L_1	< 0.3 × D_1
	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**70** - 100	< 0.9 × L_1	< 0.3 × D_1
	Martensitic stainless steel	12 - 13	**80** - 110	< 0.9 × L_1	< 0.3 × D_1
M	DUPLEX stainless steel	14.1 - 14.4	**50** - 80	< 0.9 × L_1	< 0.25 × D_1
K	Grey cast iron	15 - 16	**120** - 230	< 0.9 × L_1	< 0.4 × D_{11}
	Nodular pearlitic iron / Nodular ferritic cast iron	17 - 18	**100** - 170	< 0.9 × L_1	< 0.3 × D_1
	Malleable cast iron	19 - 20	**80** - 140	< 0.9 × L_1	< 0.3 × D_1
N	Copper and copper alloy	26 - 28	**150** - 200	< 1.5 × L_1	< 0.4 × D_1
S	Special alloys / Heat resistant stainless steel	31 - 35	**20** - 45	< 0.9 × L_1	< 0.15 × D_1
	Titanium, titanium alloys	36 - 37	**45** - 80	< 0.9 × L_1	< 0.3 × D_1



$$n\ [rpm] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [rpm] \times fz\ [mm] \times Z$$

Feed per tooth fz [mm]

Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 16.00
0.024 - 0.034	0.022 - 0.044	0.034 - 0.090	0.044 - 0.100	0.052 - 0.108	0.054 - 0.106
0.022 - 0.032	0.020 - 0.044	0.032 - 0.084	0.044 - 0.096	0.048 - 0.102	0.052 - 0.100
0.016 - 0.022	0.014 - 0.028	0.022 - 0.058	0.028 - 0.066	0.032 - 0.070	0.036 - 0.068
0.016 - 0.022	0.014 - 0.028	0.022 - 0.058	0.028 - 0.066	0.032 - 0.070	0.036 - 0.068
0.012 - 0.016	0.010 - 0.020	0.016 - 0.040	0.020 - 0.044	0.022 - 0.048	0.024 - 0.046
0.034 - 0.046	0.032 - 0.064	0.046 - 0.126	0.064 - 0.142	0.070 - 0.152	0.076 - 0.148
0.024 - 0.034	0.022 - 0.044	0.034 - 0.090	0.044 - 0.100	0.052 - 0.108	0.054 - 0.106
0.024 - 0.034	0.022 - 0.044	0.034 - 0.090	0.044 - 0.100	0.052 - 0.108	0.054 - 0.106
0.032 - 0.044	0.028 - 0.058	0.044 - 0.116	0.058 - 0.132	0.066 - 0.140	0.070 - 0.136
0.014 - 0.020	0.012 - 0.028	0.020 - 0.054	0.028 - 0.060	0.030 - 0.064	0.032 - 0.062
0.030 - 0.042	0.028 - 0.056	0.042 - 0.112	0.056 - 0.124	0.064 - 0.134	0.066 - 0.130

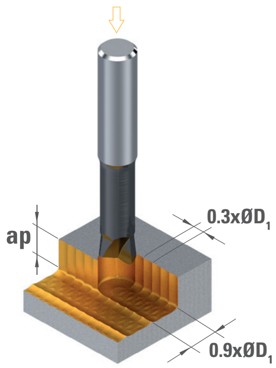
Feed per tooth fz [mm]

Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 16.00
0.030 - 0.042	0.028 - 0.056	0.042 - 0.112	0.056 - 0.126	0.064 - 0.134	0.068 - 0.132
0.028 - 0.040	0.026 - 0.054	0.040 - 0.106	0.054 - 0.120	0.060 - 0.128	0.064 - 0.124
0.024 - 0.034	0.022 - 0.044	0.034 - 0.090	0.044 - 0.100	0.050 - 0.108	0.054 - 0.104
0.024 - 0.034	0.022 - 0.044	0.034 - 0.090	0.044 - 0.100	0.050 - 0.108	0.054 - 0.104
0.022 - 0.030	0.020 - 0.040	0.030 - 0.078	0.040 - 0.088	0.044 - 0.094	0.048 - 0.092
0.038 - 0.052	0.036 - 0.070	0.052 - 0.140	0.070 - 0.158	0.078 - 0.168	0.084 - 0.164
0.030 - 0.042	0.028 - 0.056	0.042 - 0.112	0.056 - 0.126	0.064 - 0.134	0.068 - 0.132
0.030 - 0.042	0.028 - 0.056	0.042 - 0.112	0.056 - 0.126	0.064 - 0.134	0.068 - 0.132
0.040 - 0.054	0.036 - 0.072	0.054 - 0.146	0.072 - 0.164	0.082 - 0.174	0.088 - 0.170
0.018 - 0.026	0.016 - 0.034	0.026 - 0.068	0.034 - 0.076	0.038 - 0.080	0.040 - 0.078
0.034 - 0.046	0.030 - 0.062	0.046 - 0.124	0.062 - 0.138	0.070 - 0.148	0.074 - 0.144

CUTTING CONDITIONS

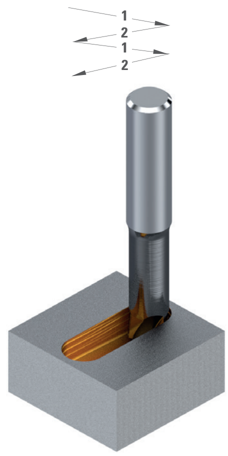
Plunge milling

		VDI 3323	XIDUR Vc [m/min]	ap [mm]
P	Unalloyed steel	1 - 5	**175**	< 1 x ØD_1
P	Low alloyed steel - Rm < 800 N/mm^2	6 - 9	**140**	< 1 x ØD_1
P	High alloyed steel - Rm 700-1500 N/mm^2	10 - 11	**140**	< 1 x ØD_1
P	Martensitic stainless steel	12 - 13	**80**	< 0.8 x ØD_1
M	DUPLEX stainless steel	14.1 - 14.4	**60**	< 1 x ØD_1
K	Grey cast iron	15 - 16	**110**	< 1 x ØD_1
K	Nodular pearlitic iron / Nodular ferritic cast iron	17 - 18	**70**	< 1 x ØD_1
K	Malleable cast iron	19 - 20	**80**	< 1 x ØD_1
N	Aluminium alloys	21 - 22	**300**	< 1 x ØD_1
N	Cast aluminium	23 - 25	**250**	< 1 x ØD_1
N	Copper and copper alloys	26 - 28	**280**	< 1 x ØD_1
S	Special alloys / Heat resistant stainless steel	31 - 35	**80**	< 0.8 x ØD_1
S	Titanium, titanium alloys	36 - 37	**70**	< 0.8 x ØD_1
H	Hardened steel > 50HRC	38 - 41	**50**	< 0.8 x ØD_1

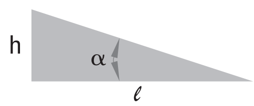


Ramping

		VDI 3323	XIDUR Vc [m/min]	ap [mm]
P	Unalloyed steel	1 - 5	**200**	0.75 × D_1
P	Low alloyed steel - Rm < 800 N/mm^2	6 - 9	**150**	0.75 × D_1
P	High alloyed steel - Rm 700-1500 N/mm^2	10 - 11	**150**	0.75 × D_1
P	Martensitic stainless steel	12 - 13	**110**	0.50 × D_1
M	DUPLEX stainless steel	14.1 - 14.4	**80**	0.50 × D_1
K	Grey cast iron	15 - 16	**150**	0.75 × D_1
K	Nodular pearlitic iron / Nodular ferritic cast iron	17 - 18	**100**	0.75 × D_1
K	Malleable cast iron	19 - 20	**80**	0.75 × D_1
N	Aluminium alloys	21 - 22	**350**	1.20 × D_1
N	Cast aluminium	23 - 25	**300**	1.00 × D_1
N	Copper and copper alloys	26 - 28	**330**	1.20 × D_1
S	Special alloys / Heat resistant stainless steel	31 - 35	**60**	0.50 × D_1
S	Titanium, titanium alloys	36 - 37	**80**	0.50 × D_1
H	Hardened steel > 50HRC	38 - 41	**200**	0.75 × D_1



Ramping value calculation :



1. h = ℓ x tan α
2. Return to the horizontal position ℓ

$$n\ [rpm] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [rpm] \times fz\ [mm] \times Z$$

Feed per tooth fz [mm]

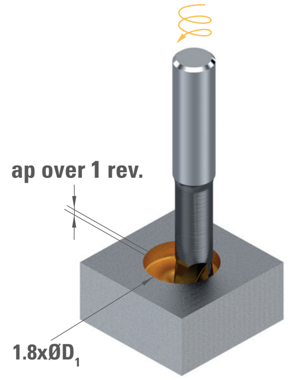
Ø D_1 0.50	Ø D_1 0.80	Ø D_1 1.00	Ø D_1 1.50	Ø D_1 2.00	Ø D_1 3.00	Ø D_1 4.00	Ø D_1 5.00	Ø D_1 6.00	Ø D_1 8.00	Ø D_1 10.00	Ø D_1 12.00
0.004	0.006	0.008	0.012	0.016	0.024	0.032	0.040	0.048	0.064	0.080	0.096
0.003	0.005	0.006	0.010	0.013	0.019	0.026	0.032	0.038	0.051	0.064	0.077
0.003	0.005	0.006	0.010	0.013	0.019	0.026	0.032	0.038	0.051	0.064	0.077
0.003	0.004	0.006	0.008	0.011	0.017	0.022	0.028	0.034	0.045	0.056	0.067
0.003	0.004	0.006	0.008	0.011	0.017	0.022	0.028	0.034	0.045	0.056	0.067
0.004	0.006	0.008	0.012	0.016	0.024	0.032	0.040	0.048	0.064	0.080	0.096
0.003	0.005	0.006	0.010	0.013	0.019	0.026	0.032	0.038	0.051	0.064	0.077
0.003	0.004	0.006	0.008	0.011	0.017	0.022	0.028	0.034	0.045	0.056	0.067
0.006	0.009	0.012	0.018	0.024	0.036	0.048	0.06	0.072	0.096	0.12	0.144
0.004	0.006	0.008	0.012	0.016	0.024	0.032	0.04	0.048	0.064	0.08	0.096
0.006	0.009	0.012	0.018	0.024	0.036	0.048	0.06	0.072	0.096	0.12	0.144
0.002	0.004	0.005	0.007	0.010	0.014	0.019	0.024	0.029	0.038	0.048	0.058
0.003	0.004	0.006	0.008	0.011	0.017	0.022	0.028	0.034	0.045	0.056	0.067
0.003	0.004	0.006	0.008	0.011	0.017	0.022	0.028	0.034	0.045	0.056	0.067

Ø D_1 0.50	Ø D_1 0.80	Ø D_1 1.00	Ø D_1 1.50	Ø D_1 2.00	Ø D_1 3.00	Ø D_1 4.00	Ø D_1 5.00	Ø D_1 6.00	Ø D_1 8.00	Ø D_1 10.00	Ø D_1 12.00
0.013	0.021	0.026	0.040	0.053	0.079	0.106	0.132	0.158	0.211	0.264	0.317
0.012	0.019	0.024	0.036	0.048	0.072	0.096	0.120	0.144	0.192	0.240	0.288
0.012	0.019	0.024	0.036	0.048	0.072	0.096	0.120	0.144	0.192	0.240	0.288
0.010	0.015	0.019	0.029	0.038	0.058	0.077	0.096	0.115	0.154	0.192	0.230
0.010	0.015	0.019	0.029	0.038	0.058	0.077	0.096	0.115	0.154	0.192	0.230
0.010	0.015	0.019	0.029	0.038	0.058	0.077	0.096	0.115	0.154	0.192	0.230
0.007	0.012	0.014	0.022	0.029	0.043	0.058	0.072	0.086	0.115	0.144	0.173
0.006	0.010	0.013	0.019	0.026	0.038	0.051	0.064	0.077	0.102	0.128	0.154
0.020	0.032	0.039	0.060	0.080	0.119	0.159	0.198	0.237	0.317	0.396	0.476
0.013	0.021	0.026	0.040	0.053	0.079	0.106	0.132	0.158	0.211	0.264	0.317
0.020	0.032	0.039	0.060	0.080	0.119	0.159	0.198	0.237	0.317	0.396	0.476
0.007	0.012	0.014	0.022	0.029	0.043	0.058	0.072	0.086	0.115	0.144	0.173
0.008	0.013	0.017	0.025	0.034	0.050	0.067	0.084	0.101	0.134	0.168	0.202
0.004	0.006	0.008	0.012	0.016	0.024	0.032	0.040	0.048	0.064	0.080	0.096

CUTTING CONDITIONS

Helical milling

		VDI 3323	XIDUR Vc [m/min]	ap [mm]
P	Unalloyed steel	1 - 5	**250**	$0.75 \times D_1$
P	Low alloyed steel - Rm < 800 N/mm²	6 - 9	**200**	$0.75 \times D_1$
P	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**200**	$0.75 \times D_1$
P	Martensitic stainless steel	12 - 13	**150**	$0.50 \times D_1$
M	DUPLEX stainless steel	14.1 - 14.4	**110**	$0.50 \times D_1$
K	Grey cast iron	15 - 16	**150**	$0.75 \times D_1$
K	Nodular pearlitic iron / Nodular ferritic cast iron	17 - 18	**100**	$0.75 \times D_1$
K	Malleable cast iron	19 - 20	**80**	$0.75 \times D_1$
N	Aluminium alloys	21 - 22	**400**	$1.20 \times D_1$
N	Cast aluminium	23 - 25	**350**	$1.00 \times D_1$
N	Copper and copper alloys	26 - 28	**380**	$1.20 \times D_1$
S	Special alloys / Heat resistant stainless steel	31 - 35	**80**	$0.50 \times D_1$
S	Titanium, titanium alloys	36 - 37	**100**	$0.50 \times D_1$
H	Hardened steel > 50HRC	38 - 41	**200**	$0.75 \times D_1$

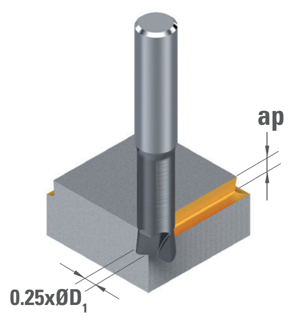


Value calculation of helical pitch :

ap over 1 revolution = π x D1 x tan α

Routing

		VDI 3323	XIDUR Vc [m/min]	ap [mm]
P	Unalloyed steel	1 - 5	**250**	$< 0.50 \times D_1$
P	Low alloyed steel - Rm < 800 N/mm²	6 - 9	**200**	$< 0.50 \times D_1$
P	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**200**	$< 0.50 \times D_1$
P	Martensitic stainless steel	12 - 13	**150**	$< 0.40 \times D_1$
M	DUPLEX stainless steel	14.1 - 14.4	**110**	$< 0.40 \times D_1$
K	Grey cast iron	15 - 16	**150**	$< 0.50 \times D_1$
K	Nodular pearlitic iron / Nodular ferritic cast iron	17 - 18	**100**	$< 0.50 \times D_1$
K	Malleable cast iron	19 - 20	**80**	$< 0.50 \times D_1$
N	Aluminium alloys	21 - 22	**400**	$< 0.50 \times D$
N	Cast aluminium	23 - 25	**300**	$< 0.50 \times D$
N	Copper and copper alloys	26 - 28	**350**	$< 0.50 \times D_1$
S	Special alloys / Heat resistant stainless steel	31 - 35	**80**	$< 0.40 \times D_1$
S	Titanium, titanium alloys	36 - 37	**100**	$< 0.40 \times D_1$
H	Hardened steel > 50HRC	38 - 41	**200**	$< 0.40 \times D_1$



$$n\,[rpm] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[rpm] \times fz\,[mm] \times Z$$

Feed per tooth fz [mm]

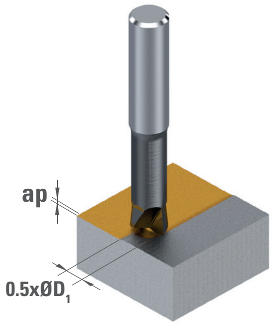
Ø D_1 0.50	Ø D_1 0.80	Ø D_1 1.00	Ø D_1 1.50	Ø D_1 2.00	Ø D_1 3.00	Ø D_1 4.00	Ø D_1 5.00	Ø D_1 6.00	Ø D_1 8.00	Ø D_1 10.00	Ø D_1 12.00
0.018	0.028	0.035	0.053	0.070	0.106	0.141	0.176	0.211	0.282	0.352	0.422
0.016	0.026	0.032	0.048	0.064	0.096	0.128	0.160	0.192	0.256	0.320	0.384
0.016	0.026	0.032	0.048	0.064	0.096	0.128	0.160	0.192	0.256	0.320	0.384
0.013	0.020	0.026	0.038	0.051	0.077	0.102	0.128	0.154	0.205	0.256	0.307
0.013	0.020	0.026	0.038	0.051	0.077	0.102	0.128	0.154	0.205	0.256	0.307
0.013	0.020	0.026	0.038	0.051	0.077	0.102	0.128	0.154	0.205	0.256	0.307
0.010	0.015	0.019	0.029	0.038	0.058	0.077	0.096	0.115	0.154	0.192	0.230
0.010	0.015	0.019	0.029	0.038	0.058	0.077	0.096	0.115	0.154	0.192	0.230
0.027	0.042	0.053	0.080	0.105	0.159	0.212	0.264	0.317	0.423	0.528	0.633
0.018	0.028	0.035	0.053	0.070	0.106	0.141	0.176	0.211	0.282	0.352	0.422
0.027	0.042	0.053	0.080	0.105	0.159	0.212	0.264	0.317	0.423	0.528	0.633
0.008	0.012	0.015	0.023	0.030	0.046	0.061	0.076	0.091	0.122	0.152	0.182
0.011	0.018	0.022	0.034	0.045	0.067	0.090	0.112	0.134	0.179	0.224	0.269
0.005	0.008	0.010	0.014	0.019	0.029	0.038	0.048	0.058	0.077	0.096	0.115

Ø D_1 0.50	Ø D_1 0.80	Ø D_1 1.00	Ø D_1 1.50	Ø D_1 2.00	Ø D_1 3.00	Ø D_1 4.00	Ø D_1 5.00	Ø D_1 6.00	Ø D_1 8.00	Ø D_1 10.00	Ø D_1 12.00
0.010	0.017	0.021	0.031	0.042	0.062	0.083	0.104	0.125	0.166	0.208	0.250
0.010	0.015	0.019	0.029	0.038	0.058	0.077	0.096	0.115	0.154	0.192	0.230
0.010	0.015	0.019	0.029	0.038	0.058	0.077	0.096	0.115	0.154	0.192	0.230
0.008	0.013	0.016	0.024	0.032	0.048	0.064	0.080	0.096	0.128	0.160	0.192
0.008	0.013	0.016	0.024	0.032	0.048	0.064	0.080	0.096	0.128	0.160	0.192
0.008	0.013	0.016	0.024	0.032	0.048	0.064	0.080	0.096	0.128	0.160	0.192
0.006	0.009	0.011	0.017	0.022	0.034	0.045	0.056	0.067	0.090	0.112	0.134
0.005	0.008	0.010	0.016	0.021	0.031	0.042	0.052	0.062	0.083	0.104	0.125
0.012	0.020	0.025	0.037	0.050	0.074	0.100	0.125	0.150	0.199	0.250	0.300
0.010	0.017	0.021	0.031	0.042	0.062	0.083	0.104	0.125	0.166	0.208	0.250
0.012	0.020	0.025	0.037	0.050	0.074	0.100	0.125	0.150	0.199	0.250	0.300
0.006	0.009	0.011	0.017	0.022	0.034	0.045	0.056	0.067	0.090	0.112	0.134
0.007	0.011	0.014	0.020	0.027	0.041	0.054	0.068	0.082	0.109	0.136	0.163
0.005	0.008	0.010	0.014	0.019	0.029	0.038	0.048	0.058	0.077	0.096	0.115

CUTTING CONDITIONS

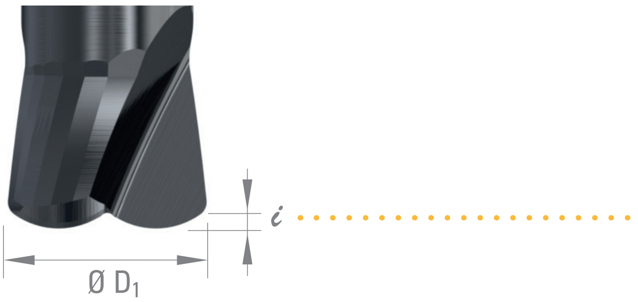
Face milling

		VDI 3323	XIDUR Vc [m/min]	ap [mm]
P	Unalloyed steel	1 - 5	250	<1x i
P	Low alloyed steel - Rm < 800 N/mm²	6 - 9	200	<1x i
P	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	200	<1x i
P	Martensitic stainless steel	12 - 13	150	<0.8x i
M	DUPLEX stainless steel	14.1 - 14.4	110	<0.8x i
K	Grey cast iron	15 - 16	150	<1x i
K	Nodular pearlitic iron / Nodular ferritic cast iron	17 - 18	100	<1x i
K	Malleable cast iron	19 - 20	80	<1x i
N	Aluminium alloys	21 - 22	400	<1x i
N	Cast aluminium	23 - 25	300	<1x i
N	Copper and copper alloys	26 - 28	350	<1x i
S	Special alloys / Heat resistant stainless steel	31 - 35	80	<0.5x i
S	Titanium, titanium alloys	36 - 37	100	<0.5x i
H	Hardened steel > 50HRC	38 - 41	200	<0.8x i



This tool doesn't have centre cutting edge

For face milling operation, the i value value is depending on the Ø D1



$$n\,[rpm] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[rpm] \times fz\,[mm] \times Z$$

Feed per tooth fz [mm]

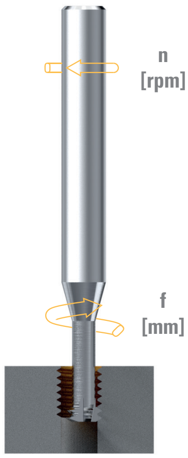
Ø D_1 0.50	Ø D_1 0.80	Ø D_1 1.00	Ø D_1 1.50	Ø D_1 2.00	Ø D_1 3.00	Ø D_1 4.00	Ø D_1 5.00	Ø D_1 6.00	Ø D_1 8.00	Ø D_1 10.00	Ø D_1 12.00
0.022	0.035	0.044	0.066	0.088	0.132	0.176	0.220	0.264	0.352	0.440	0.528
0.020	0.032	0.040	0.060	0.080	0.120	0.160	0.200	0.240	0.320	0.400	0.480
0.020	0.032	0.040	0.060	0.080	0.120	0.160	0.200	0.240	0.320	0.400	0.480
0.016	0.026	0.032	0.048	0.064	0.096	0.128	0.160	0.192	0.256	0.320	0.384
0.016	0.026	0.032	0.048	0.064	0.096	0.128	0.160	0.192	0.256	0.320	0.384
0.016	0.026	0.032	0.048	0.064	0.096	0.128	0.160	0.192	0.256	0.320	0.384
0.012	0.019	0.024	0.036	0.048	0.072	0.096	0.120	0.144	0.192	0.240	0.288
0.012	0.019	0.024	0.036	0.048	0.072	0.096	0.120	0.144	0.192	0.240	0.288
0.026	0.042	0.053	0.079	0.106	0.158	0.211	0.264	0.317	0.422	0.528	0.634
0.022	0.035	0.044	0.066	0.088	0.132	0.176	0.220	0.264	0.352	0.440	0.528
0.026	0.042	0.053	0.079	0.106	0.158	0.211	0.264	0.317	0.422	0.528	0.634
0.010	0.015	0.019	0.029	0.038	0.058	0.077	0.096	0.115	0.154	0.192	0.230
0.014	0.022	0.028	0.042	0.056	0.084	0.112	0.140	0.168	0.224	0.280	0.336
0.006	0.010	0.012	0.018	0.024	0.036	0.048	0.060	0.072	0.096	0.120	0.144
0.025	**0.04**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**	**0.35**	**0.40**	**0.45**	**0.50**

i Value

Download the cutting conditions (pdf + xls) and the dxf profiles
www.dixipolytool.com

CUTTING CONDITIONS

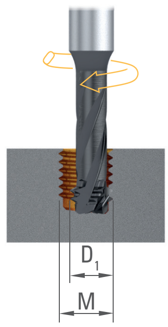
		VDI 3323	CARBIDE Vc [m/min]	TiAlN Vc [m/min]
P	Unalloyed steel	1 - 5	65 - 80	90 - 130
P	Low alloyed steel - Rm < 800 N/mm²	6 - 9		70 - 100
P	High alloyed steel - Rm 700-1500 N/mm²	10 - 11		75 - 105
P	Martensitic stainless steel	12 - 13	35 - 50	70 - 100
M	DUPLEX stainless steel	14.1 - 14.4		55 - 80
K	Grey cast iron	15 - 16	80 - 100	90 - 110
K	Nodular pearlitic iron / Nodular ferritic cast iron	17 - 18	65 - 80	75 - 90
K	Malleable cast iron	19 - 20	60 - 75	70 - 85
N	Aluminium alloys	21 - 25	80 - 200	
N	Copper and copper alloys	26 - 28	70 - 150	
N	Plastic	29 - 30	80 - 200	
S	Special alloys / Heat resistant stainless steel	31 - 35		25 - 50
S	Titanium, titanium alloys	36 - 37	50 - 90	



CUTTING CONDITIONS

		VDI 3323	DAC Vc [m/min]
N	Aluminium alloys	21 - 22	250
N	Cast aluminium	23 - 25	200
N	Copper and copper alloys	26 - 28	200
N	Plastic	29 - 30	250

$$\text{Vf tool centre} = \text{Vf x} \left(1 - \frac{D_1}{M}\right)$$



$$n\ [rpm] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [rpm] \times fz\ [mm] \times Z$$

Feed per tooth fz [mm]

Ø D_1 0.20 - 0.60	Ø D_1 0.60 - 1.20	Ø D_1 1.20 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 8.00
0.001 - 0.006	0.004 - 0.016	0.010 - 0.026	0.017 - 0.04	0.03 - 0.06	0.04 - 0.10
0.001 - 0.006	0.004 - 0.015	0.009 - 0.024	0.015 - 0.04	0.02 - 0.06	0.04 - 0.09
0.001 - 0.005	0.003 - 0.013	0.008 - 0.022	0.014 - 0.03	0.02 - 0.05	0.03 - 0.08
0.001 - 0.005	0.003 - 0.013	0.008 - 0.022	0.014 - 0.03	0.02 - 0.05	0.03 - 0.08
0.001 - 0.004	0.003 - 0.011	0.007 - 0.018	0.011 - 0.03	0.02 - 0.04	0.03 - 0.06
0.002 - 0.011	0.007 - 0.026	0.017 - 0.044	0.028 - 0.07	0.04 - 0.10	0.07 - 0.16
0.002 - 0.008	0.005 - 0.020	0.013 - 0.033	0.021 - 0.05	0.03 - 0.08	0.05 - 0.12
0.002 - 0.008	0.005 - 0.020	0.013 - 0.033	0.021 - 0.05	0.03 - 0.08	0.05 - 0.12
0.002 - 0.011	0.007 - 0.026	0.017 - 0.044	0.082 - 0.07	0.04 - 0.10	0.07 - 0.16
0.001 - 0.007	0.004 - 0.017	0.011 - 0.028	0.018 - 0.04	0.03 - 0.07	0.04 - 0.10
0.002 - 0.008	0.005 - 0.020	0.013 - 0.033	0.021 - 0.05	0.03 - 0.08	0.05 - 0.12
0.001 - 0.003	0.002 - 0.007	0.004 - 0.011	0.007 - 0.02	0.01 - 0.03	0.02 - 0.04
0.001 - 0.007	0.004 - 0.017	0.011 - 0.028	0.018 - 0.04	0.03 - 0.07	0.04 - 0.10

Feed at tool centre Vf [mm/min]

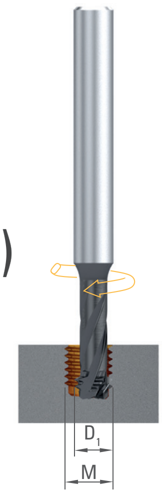
M5	M6	M8	M10	M12
1’200	1’500	1’600	1’600	1’440
800	1’000	1’100	1’100	990
1’020	1’275	1’360	1’360	1’120
1’200	1’500	1’600	1’600	1’440

DIXI 1744-TC

CUTTING CONDITIONS

		VDI 3323	CUTINOX Vc [m/min]
P	Unalloyed steel	1 - 5	**150**
P	Low alloyed steel - Rm < 800 N/mm²	6 - 9	**120**
P	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**70**
P	Martensitic stainless steel	12 - 13	**90**
M	DUPLEX stainless steel	14.3 - 14.4	**60**
K	Grey cast iron	15 - 16	**200**
K	Nodular pearlitic iron / Nodular ferritic cast iron	17 - 18	**130**
K	Malleable cast iron	19 - 20	**110**
S	Special alloys / Heat resistant stainless steel	31 - 35	**50**
S	Titanium, titanium alloys	36 - 37	**60**

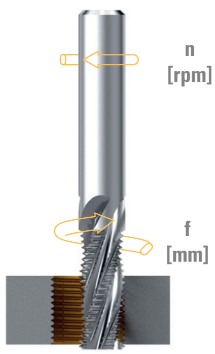
Vf tool centre = Vf x $\left(1-\frac{D_1}{M}\right)$



DIXI 7913-TC - 7914-TC - 7915-TC 7923-TC - 7925-TC - 7935-TC

CUTTING CONDITIONS

		VDI 3323	CARBIDE Vc [m/min]	TiAIN Vc [m/min]
P	Unalloyed steel	1 - 5	**70** - 100	**90** - 110
P	Low alloyed steel - Rm < 800 N/mm²	6 - 9	**40** - 60	**70** - 90
P	High alloyed steel - Rm 700-1500 N/mm²	10 - 11	**40** - 60	**70** - 90
P	Martensitic stainless steel	12 - 13	**30** - 45	**40** - 55
M	DUPLEX stainless steel	14.1 - 14.4	**40** - 60	**70** - 90
K	Grey cast iron	15 - 16	**70** - 100	**90** - 110
K	Nodular pearlitic iron / Nodular ferritic cast iron	17 - 18	**40** - 70	**70** - 90
K	Malleable cast iron	19 - 20	**70** - 100	**90** - 110
N	Aluminium alloys	21 - 22	**180** - 260	**230** - 270
N	Cast aluminium	23 - 25	**140** - 160	**210** - 230
N	Copper and copper alloys	26 - 28	**140** - 160	**200** - 220
S	Special alloys / Heat resistant stainless steel	31 - 35	**10** - 20	**15** - 30
S	Titanium, titanium alloys	36 - 37	**30** - 45	**40** - 60



$$n\ [rpm] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [rpm] \times fz\ [mm] \times Z$$

Feed at tool centre Vf [mm/min]

M5	M6	M8	M10	M12
800	600	500	500	450
600	500	350	350	300
450	400	250	250	200
500	450	350	350	280
400	300	200	200	150
1000	800	500	500	460
600	500	350	350	300
550	450	300	300	250
250	200	150	150	100
300	250	200	200	150

Feed per tooth fz [mm]

Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 16.00
0.018 - 0.03	0.024 - 0.05	0.036 - 0.06	0.05 - 0.08	0.06 - 0.10	0.07 - 0.13
0.012 - 0.02	0.016 - 0.04	0.024 - 0.05	0.03 - 0.06	0.04 - 0.07	0.05 - 0.10
0.012 - 0.02	0.016 - 0.04	0.024 - 0.05	0.03 - 0.06	0.04 - 0.07	0.05 - 0.10
0.012 - 0.02	0.016 - 0.04	0.024 - 0.05	0.03 - 0.06	0.04 - 0.07	0.05 - 0.10
0.012 - 0.02	0.016 - 0.04	0.024 - 0.05	0.03 - 0.06	0.04 - 0.07	0.05 - 0.10
0.018 - 0.03	0.024 - 0.05	0.036 - 0.06	0.05 - 0.08	0.06 - 0.10	0.07 - 0.13
0.012 - 0.02	0.016 - 0.04	0.024 - 0.05	0.03 - 0.06	0.04 - 0.07	0.05 - 0.10
0.018 - 0.03	0.024 - 0.05	0.036 - 0.06	0.05 - 0.08	0.06 - 0.10	0.07 - 0.13
0.021 - 0.05	0.028 - 0.07	0.042 - 0.10	0.06 - 0.12	0.07 - 0.14	0.08 - 0.19
0.021 - 0.05	0.028 - 0.07	0.042 - 0.10	0.06 - 0.12	0.07 - 0.14	0.08 - 0.19
0.021 - 0.05	0.028 - 0.07	0.042 - 0.10	0.06 - 0.12	0.07 - 0.14	0.08 - 0.19
0.008 - 0.013	0.010 - 0.026	0.016 - 0.033	0.02 - 0.04	0.026 - 0.046	0.033 - 0.066
0.012 - 0.02	0.016 - 0.04	0.024 - 0.05	0.03 - 0.06	0.04 - 0.07	0.05 - 0.10

	VDI 3323	W.-Nr.	AISI/SAE	DIN	BS	AFNOR	JIS
	1	0.0030	A 366 (1012); 1008	C10	040 A 10; 045 M 10; 1449 10 CS	AF 34 C 10; XC 10	S 10C
	1	1.0028		Ust 34-2 (S250G1T)		A 34-2	SS 330
	1	1.0034		RSt 34-2 (S250G2T)	1449 34/20 HR, HS, CR, CS	A 34-2 NE	
	1	1.0035		St185 (Fe 310-0); St 33	Fe 310-0; 1449 15 HR, HS	A 33	
	1	1.0036	A 570; Gr. 33,36	S235JRG1 (Fe 360 B) Ust 37-2	Fe 360 B; 4360-40 B		
	1	1.0037		S235JR (Fe 360 B) St 37-2	Fe 360 B; 4360-40 B	E 24-2	STKM 12A;C
	1	1.0038	1115	GS-CK16	030A04		SS 330
	1	1.0044	A 570 Gr. 40	S275JR (Fe 430 B) St44-2	Fe 430 B FN; 1449 43/25 HR, HS 4360-43 B	E 28-2	SM 400 A;B;C
	1	1.0045		S355JR	4360-50 B	E 36-2	
	1	1.0050	A 570 Gr.50; A 572 Gr.50	E295 (Fe 490-2); St 50-2	Fe 490-2 FN; 4360-50 B	A 50-2	SS 490
	1	1.0060	A 572 Gr. 65	E335 (Fe 590-2); St 60-2	Fe 60-2; 4360-55 E; 55 C	A 60-2	SM 570
	1	1.0070		E360 (Fe 690-2); St 70-2	Fe 690-2 FN	E 28-2	
	1	1.0112		P235S	1501-164-360B LT20	E 36-2	
	1	1.0114		S235JU;St 37-3 U	4360-40C	A 50-2	
	1	1.0116	A 284 Gr.D; A 573 Gr.58; A 570 Gr 36;C A 611 Gr. C	S235J2G3 (Fe 360 D 1); St 37-3	Fe 360 D1 FF 1449 37/23 CR 4360-40 D	A 60-2	
	1	1.0130		P265S	1501-164-400B LT 20	A 42 AP	
	1	1.0143		S275J0; St 44-3 U	4360-43C	E 28-3	
	1	1.0144	A 573 Gr. 70; A 611 Gr.D	S275J2G3 (Fe 430 D 1); St 44-3	Fe 430 D1 FF; 4360-43 C; 43 D	E 28-3; E 28-4	SM 400 A;B;C
	1	1.0149		S275JOH; RoSt 44-2	4360-43C		
	1	1.0226		DX51D; St 02 Z			
	1	1.0301	M 1010	C10	040 A 10; 045 M 10; 1449 10 CS	AF 34 C 10; XC 10	S 10C
	1	1.033	A 621 (1008)	DC 01; St 2; St 12	1449 4 CR; 1449 3 CS	TE	SPHD
P	1	1.0333	A 619 (1008)	Ust 3 (DC03G1); Ust 13	1449 2 CR;3 CR	E	SPCD
	1	1.0334	A 621 (1008)	UStW 23 (DD12G1)		SC	SPHE
	1	1.0335	A 622 (1008)	DD13; StW 24	1449 1 HR	3C	SPHE
	1	1.0338	A 620 (1008)	DC04; St4; St 14	1449 1 CR;2 CR	ES	SPCE
	1	1.0345	A 516 Gr. 65; 55; A 515 Gr. 65;55 A 414 Gr. C; A 442 Gr.55	P235GH HI	1501 Gr. 141-360 1501 Gr. 161-360; 151-360 1501 Gr. 161-400; 154-360 1501 Gr. 164-360; 161-360	A 37 CP;AP	SGV 410, SGV 450, SGV 48, SPV 450;SPV 480
	1	1.0402	(M) 1020; M 1023	C22	055 M 15, 070 M 20 2C/2D 1499 22 HS, CS	AF 42 C 20; XC 25;1 C 22	S20C
	1	1.0402	1020	C22	050A20 2C/2D	CC20	S22C
	1	1.0402	1020;1023	C22	055 M 15, 070 M 20 2C	AF 42 C 20; XC 25;1 C 22	S 20 C;S 22 C
	1	1.0425		P265GH H II	1501 Gr. 161-400;151-400 1501 Gr. 164-360; 161-400 1501 Gr. 164-400;154-400	A 42 CP; AP	SPV 315; SPV 355 SG 295; SGV 410 SGV 450; SGV 480
	1	1.0443	A27 65-35	GS-45	A1	E 23-45 M	
	1	1.0539		S355NH;StE 335		TSE 355-4	
	1	1.0545		S355N; StE 355	4360-50E	E 355 R	
	1	1.0546		S355NL;TStE 355	4360-50EE	E 355 FP	
	1	1.0547		S355JOH	4360-50C	TSE 355-3	
	1	1.0549		S355 NLH;TStE 355			
	1	1.0533		S355JO;St 52-3U	4360-50C	E 36-3	
	1	1.0562	A 633 Gr.C; A 588	P355N; StE 355	1501 Gr.225-490A LT 20	FeE 355 KG N E 355 R/FP; A 510 AP	SM 490 A;B;C; YA;YB
	1	1.0565		P355NH; WStE 355	1501-225-490B LT 20	A 510 AP	S20C
	1	1.0566	A 366 (1012); 1008	P355NL1; TStE 355	1501-225-490A LT 50	A 510 FP	
	1	1.0570	1213	S355J2G3 St 52-3	Fe 510 D1 FF ;1449 50/35 HR>HS ; 4360-50 D	E 36-3; E 36-4	SM 490 A;B;C; YA;YB
	1	1.0715	1213	9 SMn 28 (1SMn30)	230 M 07	S 250	SUM 22
	1	1.0715	12 L 13	9 SMn 28	230 M 07	S 250	SUM 22
	1	1.0718	1108; 1109	9 SMnPb 28 (11SMnPb30)	Fe 360 B; 4360-40 B	S 250 Pb	SUM 22 L ;SUM 23 L, SUM 24 L

MATERIAL GROUPS

	VDI 3323	W.-Nr.	AISI/SAE	DIN	BS	AFNOR	JIS
	1	1.0721	11 L 08	10 S 20	(210 M 15)	10 S 20; 10 F 2	
	1	1.0722	11 L 08	10 SPb 20		10 Pb F 2	
	1	1.0736	1215	10 SPb 20		10 Pb F 2	SUM25
	1	1.0737	12 L 14	9 SMn 36 11SMn37)			
	1	1.0972	A 570 Gr.50; A 572 Gr.50	9 SMnPb 36 (11SMnPb37)	1501-40F30	E 315 D	
	1	1.0976	A 572 Gr. 65	S315MC; QStE 300 TM	1501-43F35	E 355 D	
	1	1.0982		S355MC; QStE 360 TM	1501-50F45		
	1	1.0984		S460MC; QStE 460 TM		E 490 D	
	1	1.0986		S500MC; QStE 500 TM	1501 - 60F55	E 560 D	
	1	1.1121	1010	CK 10 (C10E)	040 A 10	XC 10	S 9 CK; S 10 C
	1	1.1121		St 37-1	4360 40 A		
	1	1.1141	1015	CK 15 (C15E)	040 A 15; 080 M 15	XC 12 XC15; XC 18	S 15; S 15 CK
	1	1.1151	1020 ; 1023	C22E CK 22		2 C 22 XC18; XC 25	S 20 C, S 20 CK; S 22 C
	1	1.2080	D 3	X 210 Cr 12	BD 3	Z 200 C 12	
	1		A36	St 44-2	4360 43 A	NFA 35-501 E 28	
	1		A 621 (1008)	StE 320-3Z	1 501 160		
	1	1.8900	A572-60	StE 380	4360 55 E		S 25C
	1	1.0406	(M) 1025	C 25	070 M 26	1 C 25	
	1	1.0416	A 622 (1008)	GS-38		20-400 M	
	1	1.0473	A 537 Cl.1 A 414 Gr. G A 612	P355GH	19 Mn 6	A 52 CP	SGV 410; SGV 450 SGV 480
	1	1.0501	1035	C 35	080 A 32, 080 A 35 ;080 M 36, 1449 40 CS	1 C 35 AF 55 C 35 XC 38	S35C
	2	1.0503	1045	CF 45 (C45G)	060 A 47 ;080 M 46	XC 42 H 1 TS	S 45 C
	2	1.0511	1040	C 40	080 M 40	1 C 40; AF 60 C 40	S 40 C
P	2	1.0540		C 50			
	2	1.0551	A27 70-36	GS-52	A2	280-480 M	
	2	1.0553	A148 80-40	GS-60	A3	320-560 M	
	2	1.0577	A738	S355J2G4 (Fe 510 D 2)	Fe 510 D2 FF 1501 Gr.224-460 1501 Gr. 224-490	A 52 FP	
	2	1.0726	1140	35 S 20	212 M 36	35MF 6	
	2	1.0727	1146	45 S 20 (46S20)		45 MF 4	
	2	1.1157	1035; 1041	40Mn4	150 M 36	35 M 5; 40 M 5	S 09CK; S 25 C
	2	1.1158	1025	C25E; CK 25	(070 M 25)	2 C 25; XC 25	
	2	1.1166	1536	34Mn5	4360-50C		
	2	1.1170	1330	28Mn6	(150 M 28), (150 M 18)	20 M 5, 28 Mn 6	SCMn 1
	2	1.1170	1330	28Mn6	150 M 5	20 M 5	
	2	1.1170	1330	28Mn6		20 M 5	SCMn 1
	2	1.1178		C30E; CK 30	080M30	XC 32	
	2	1.1170	1330	28Mn6	(150 M 28), (150 M 18)	20 M 5, 28 Mn 6	SCMn 1
	2	1.1170	1330	28Mn6	150 M 5	20 M 5	
	2	1.1170	1330	28Mn6		20 M 5	SCMn 1
	2	1.1178		C30E; CK 30	080M30	XC 32	
	2	1.1180	1035	C35R; Cm 35	080 A 35	3 C 35; XC 32	
	2	1.1181	1035; 1038	C35E CK 35	080 A 35; (080 M 36)	2 C 35, XC 32; XC 38 H 1	S 35 C
	2	1.1181	1035	C35E; CK 35	080 A 35; (080 M 36)		S 35 C
	2	1.1191	1042	GS- Ck 45	080 A 46	XC 45	
	2	1.1206	1049; 1050	C50E CK 50	080 M 50	2 C 50; XC 48 H 1; XC 50 H 1	
	2	1.1213	1050; 1055	Cf 53 (C53G)	070 M 55	XC 48 H TS	S 50 C
	2	1.5423	4520	22Mo4	1503-245-420		SB 450 M

MATERIAL GROUPS

	VDI 3323	W.-Nr.	AISI/SAE	DIN	BS	AFNOR	JIS
	2	1.0481	A 516 Gr.70; A 515 Gr. 70 A 414 Gr.F; G	P295GH 17 Mn 4	1501 Gr. 224	A 48 Cp;AP	SG 365, SGV 410; SGV 450 SGV 480
	2	1.0503	1043	C35	060 A 47; 080 M 46; 1449 50 HS, CS	1 C 45; AF 65 C 45	S 45 C
	2	1.0614	1074	C 76 D; D 75-2		XC 75	
	2	1.0616	1086	C 86 D; D 85-2		XC 80	SMn 433 H; SCMn 2
	2	1.0618	1095	C 92 D;D 95-2		XC 90	SMn 438 (H); SCMn 3
	2	1.1165	1036; 1330	30Mn5	120 M 36; (150 M 28)	35 M 5	S 40 C
	2	1.1167	1335	30Mn5	150 M 36	40 M 5	S 45 C; S 48 C
	3	1.1186	1040	C40E CK 40	060 A 40, 080 A 40; 080 M 40	2 C 40; XC 42 H 1	S 50 C
	3	1.1191	1045	C45E CK 45	080 M 46; 060 A 47	2 C 45; XC 42 H 1; XC 45; XC 48 H 1	
	3	1.1201	1049	C45R; Cm 45	080 M 46	3 C 45; XC 42 H 1; XC 48 H 1	SM 400 A;B;C
	3	1.7242		18 CrMo 4			
	3	1.7337	A 387 Gr. 12 Cl	16 CrMo 4 4			
	3	1.7362		12 CrMo 19 5		Z 10 CD 5.05	
	3		A572-60	17 MnV 6	3606-625	NFA 35-501 E 36	
	3	1.0535	1055	C55	436055 E	1 C 55; AF 70 C 55	S 55 C
	3	1.0601	1060	C60	070 M 55	1 C 60; AF 70 C 55	S 58 C
	3	1.0603	1070	C67	060 A 62; 1449 HS,CS	XC 65	
	3	1.0605	1074; 1075	C75	080 A 67; 1449 70HS		
	3	1.1203	1055	C55E CK 55	1449 80 HS	2 C 5; XC 55 H 1	S 55 C
	3	1.1209	1055	C55R Cm 55	060 A 57; 070 M 55	3 C 55; XC 55 H 1	
	3	1.1221	1060; 1064	C60E CK 60	070 M 55	2 C 60; XC 60 H 1	S 58 C
	3	1.1231	1070	CK 67 (C67E)	060 A 62	XC 68	
	3	1.1248	1074; 1075; 1078	CK 75 (C75E)	060 A 67	XC 75	
P	4	1.1269	1086	CK 85 (C85E)		XC 90	
	4	1.1274	1095	Ck 101 (C101E); C 125 W		XC 100	SUP 4
	4	1.1663	W 112	C 125 W		Y2 120	
	4	1.0070		St70-2			
	4	1.7238		49 CrMo 4			
	4	1.7701		51 CrMoV 4			
	4	1.0116	A573-81 65	St 37-3	4360 40 B		
	4	1.0345	A515 65	H1	1 501 161		
	4	1.0841	5120	St 52-3	150 M 19		
	4	1.0904	9255	55 Si 7	250A53		
	4	1.0904	9254	55 Si 7	250 A 53		
	5	1.0961	9262	60SiCr7	1 501 161	60 SC 6	
	5	1.2067	L3	100Cr6	BL3	100 C6	
	5	1.2108	L1	90 CrSi 5			
	6	1.2210	L2	115CrV3		100 C 3	
	6	1.2241		51CrV4			
	6	1.2311		40 CrMnMo 7			
	6	1.2330	4135	35 CrMo 4	708 A 37	34 CD 4	SCM435TK
	6	1.2419		105WCr6	BO1	105 WC 13	
	6	1.2510	1	100 MnCrW 4	BS1	8 MO 8	SKS 31
	6	1.2542	S1	45 WCrV7			
	6	1.2550	S1	60WCrV7		55 WC 20	
	6	1.2713	L6	55NiCrMoV6		55 NCDV 7	SKT 4
	6	1.2721	L6	50NiCr13		55 NCV 6	
	6	1.2842	O2	90MnCrV8	BO2	90 MV8	
	6	1.3501	E 50100	100 Cr 2		55 WC 20	
	6	1.3505	52100	100Cr6	2 S 135; 535 A 99	100 C 6	SUJ2

MATERIAL GROUPS

	VDI 3323	W.-Nr.	AISI/SAE	DIN	BS	AFNOR	JIS
P	6	1.5024		46Si7		45 S 7; 46 SI 7	
	6	1.5025	9255	51Si7		51 S 7; 51 Si 7	
	6	1.5026	9255	55Si7	251 a 58	55 S 7	
	6	1.5027	9260	60Si7	251 A 60; 251 H 60	60 S 7	
	6	1.5028	9260 H	65Si7		60 S 7	50 P 7 SUP 6
	6	1.5120		38 MnSi 4			
	6	1.5415	A 204 Gr.A; 4017	16Mo3; 15 Mo 3	1503-243 B	15 D 3	
	6	1.5419	4419	20Mo4	1503-243-430		SCPH 11
	6	1.5622	A 350-LF 5	14Ni6		16 N 6	
	6	1.5732	3415	1 NiICr10		14 NC 11	
	6	1.5752	3310; 3314	14NiICr14	655M13	12 NC 15	
	6	1.6587		17CrNiMo6	820A16	18 NCD 6	
	6	1.6657		14NiCrMo134			
	6	1.7015	5515	15 Cr 3	523 M 15	12 C 3	SCr415(H)
	6	1.7033	5132	34Cr4	530A32	32 C 4	SCr430(H)
	6	1.7035	5140	41C r4	530M40	42 C 4	SCr440(H)
	6	1.7045	5140	42Cr41	530 A 40	42 C 4 TS	SCr440
	6	1.7131	5115	16MnCr5	527 M 17	16 MC 5	
	6	1.7139		16MnCr5			
	6	1.7176	5515	55Cr3	527 A 60	55 C 3	SUP9(A)
	6	1.7220	4135; 4137	34CrMo4	708 Aa 37	35 CD 4	
	6	1.7223	4142	41CrMo4			SNB 22-1
	6	1.7225	4140	42CrMo4	708 M 0	42 CD 4	
	6	1.7176	5515	55Cr3	527 A 60	55 C 3	SUP9(A)
	6	1.7220	4135; 4137	34CrMo4	708 Aa 37	35 CD 4	
	6	1.7223	4142	41CrMo4			SNB 22-1
	6	1.7225	4140	42CrMo4	708 M 0	42 CD 4	
	6	1.7228		55NiCrMoV6G	823M30		
	6	1.7262		15CrMo5	28Mn6	12 CD 4	
	6	1.7321		20 mOcR 4	C30E; CK 30		
	6	1.7335	ASTM A182 F-12	13CrMo4 4	1501-620Gr27		
	6	1.7335	A 182-F11;12	13 CrMo 4 4	1 501 620 Gr. 27	15 CD 4.5	SCM415(H)
	6	1.7380	ASTM A 182 F.22	10CrMo9 10	1501-622gR31; 45		
	6	1.7380	A182 F-22	10 CrMo 9 10	1501-622	12 CD 9.10	
	6	1.7715		14MoV6 3	1503-660-440		
	6	1.8509	A355A	41CrAlMo 7	905 M 39	40 CAD 6.12	
	7	1.0038	A570.36	S235JRG2 (Fe 360 B) RSt 37-2	Fe 360 B FU 1449 27/23 CR; 4360-40 B	E 24-2NE	
	7	1.5710	3135	36NiCr6	640A35	35 NC 6	
	7	1.5755		31 NiCr 14	653 M 31	18 NC 13	
	7	1.6523	8620	2 NiCrMo2	805M20	20 NCD 2	
	7	1.6546	8740	40 NiCrMo 22	311-Tyre 7		
	7	1.7218	4130	25CrMo4	CDS 110	25 CD 4	
	7	1.7733		24 CrMoV 5 5		20 CDV 6	
	7	1.7755		GS-45 CrMOV 10 4			
	7	1.8070		21 CrMoV 5 11			
	8	1.2332	4142	47 CrMo 4	708 M 40	42 CD 4	SCM (440)
	8	1.3401	A128 (A)	G-X120 Mn 12		Z 120 M 12	SCMnH 1, SCMn; H 11
	8	1.5736	3435	36 NiCr 10		30 NC 11	

MATERIAL GROUPS

	VDI 3323	W.-Nr.	AISI/SAE	DIN	BS	AFNOR	JIS
P	8	1.6511	9840	36CrNiMo4	816M40	40 NCD 3	SUP 10
	8	1.6582	4340	35CrNiM 6	817 M 40	35 NCD 6	SNCM 447
	8	1.7361		32 CeMo12	722 M 24	30 CD 12	
	8	1.8159	6150	50 CrV 4	735 A 50	50 CV 4	
	8	1.8161		58 CrV 4			
	8	1.8515		32 CrMo 12	722 M 24	30 CD 12	
	8	1.8523		39CrMoV13 9	897M39		
	9	1.4882		X 50 CrMnNiNbN 21 9		Z 50 CMNNb 21.09	
	9	1.5710	3135	36NiCr6	640A35	35 NC 6	SNC236
	9	1.5864		35 niCr 18			
	9			31 NiCrMo 13 4	830 M 31		
	10	1.0144	A573-81	ST 44-3	4360 43 C	E 28-3	SM 400A;B;C
	10	1.0347	A 619	DC03; RSt;RRSt 13	1449 3 CR; 1449 2 CR	E	
	10	1.0401	M 1015; M 1016; M 1017	C15	080 M 15	AF 37 C12; XC 18	S 15 C
	10	1.0570		ST 52-3	4360 50 B	E 36-3	SM490A;B;C;YA;YB
	10	1.0718	12L13	9 SMnPb 28		S 250 Pb	SUM 22L
	10	1.0723		15 S 22; 15 S 20	210 A 15; 210 M 15		SUM 32
	10	1.2083					
	10	1.2343	H 11	X 38 CrMoV 5 1	BH 11	Z 38 CDV 5	
	10	1.2344	H 13	X 40 CrMoV 5 1	BH 13	Z 40 CDV 5	SKD61
	10	1.2363	A 2	X100 CrMoV 5 1	BA 2	Z 100 CDV 5	SKD12
	10	1.2379	D 2	X 155 CrVMo 12 1	BD2	Z 160 CDV 12	
	10	1.2379	HNV3	X210Cr12G	BD2	Z 160 CDV 12	
	10	1.2436	D 4 (D 6)	X 210 CrW 12	BD6	Z 200 CD 12	
	10	1.2581	H 21	X 30 WCrV 9 3	BH 21	Z 30 WCV 9	SKD5
	10	1.2601		X 165 CrMoV 12			
	10	1.2606	H 12	X 37 CrMoW 5 1	BH 12	Z 35 CWDV 5	
	10	1.3343	D3	S 6-5-2	BM2	Z 200 C12	SUH3
	10	1.2436	D 4 (D 6)	X 210 CrW 12	BD6	Z 200 CD 12	
	10	1.2581	H 21	X 30 WCrV 9 3	BH 21	Z 30 WCV 9	SKD5
	10	1.2601		X 165 CrMoV 12			
	10	1.2606	H 12	X 37 CrMoW 5 1	BH 12	Z 35 CWDV 5	
	10	1.3343	D3	S 6-5-2	BM2	Z 200 C12	SUH3
	10	1.4563	N08028			Z 1 NCDU 31-27-03	
	10	1.5662	ASTM A353	X8Ni9	1501-509;510		SL9N60(53)
	10	1.5662	ASM A353	X8Ni9	502-650	9 Ni	
	10	1.5680	2517	12Ni19	12Ni19	Z 18 N 5	
	11	1.3202		S 12-1-4-5	BT 15		SKS 31
	11	1.3207		S 10-4-3-10	BT 42	Z 130 WKCDV	
	11	1.3243	T15	S 6-5-2-5		KCV 06-05-05-04-02	SKH55
	11	1.3246		S 7-4-2-5		Z 110 WKCDV 07-05-04	
	11	1.3247		S 2-10-1-8	BM 42	Z 110 DKCWV 09-08-04	
	11	1.3249	M 42	S 2-9-2-8	BM 34		
	11	1.3255	T 4	S 18-1-2-5	BT 4	Z80 WKCV 18-05-04-0	
	11	1.3343	M 2	S6-5-2	BM2	Z 85 WDCV	SKH 51
	11	1.3348	M 7	S2-9-2		Z 100 DCWV 09-04-02	
	11	1.3355	T 1	S 18-0-1	BT 1	Z 80 WCV 18-4-01	
	11	1.4548	630			Z 7 CNU 17-04	
	11	1.4718	HNV 3	X45CrSi 9 3	401S45	Z 45 CS 9	SUH1
	11	1.4935	422	X20 CrMoWV 12 1			
	12	1.4000	403	X6Cr13	403 S 17	Z 6 C 13	SUS403
	12	1.4001		X6Cr14			
	12	1.4001	(410S)	X7 Cr 13	(403 S 7)	Z 8 C 13	SCPH 11
	12	1.4002	405	X6CrA12	405S17	Z 8 CA 12	
	12	1.4002	405	X6 CrAl 13	405 S 17	Z6 CA 13	
	12	1.4005	416	X12CrS 13	416 S 21	Z 11 CF 13	SUS403

MATERIAL GROUPS

	VDI 3323	W.-Nr.	AISI/SAE	DIN	BS	AFNOR	JIS
	12	1.4006	410; CA-15	(G-)X10 Cr 13	410S21	Z 10 C 13	SUS403
	12	1.4016	430	X8Cr17	Z8C17	430 S15	
	12	1.4016		X6 Cr 17	430 S 15	Z 8 C 17	SUS 430
	12	1.4027		G-X20Cr14	420 C 29	Z 20 C 13M	
	12	1.4027	5140	G-X 20 Cr 14	420 C 29	Z20 C 13M	
	12	1.4028	420	X30 Cr 13	420 S 45	Z 30 C 13	
	12	1.4086		G-X120Cr29	452C11		
	12	1.4104	430 F	X12CrMoS17	420 S 37	Z 10 CF 17	SUS430F
	12	1.4112	440B	X90 CrMoV 18			
	12	1.4113	434	X6CrMo 17	434 S 17	Z 8 CD 17.01	SUS434
	12	1.4340		G-X40CrNi27 4			
	12	1.4417	S31500	X2CrNiM0Si19 5			
	12	1.4418		X2 CrNoMoSi 18 5 3		Z 6 CND 16-04-01	
	12	1.4510	XM 8; 430 Ti; 439	X4 CrNiMo16 5		Z 4 CT 17	SUS 430 LK
	12	1.4511	XM 8; 430 Ti; 439	X 6 CrNb 17(X 6 CrNb 17		Z 4 CNb 17	SUS 430 LK
	12	1.4512	409	X 6 CrTi 12 (X2CrTi12)	LW 19; 409 S 19	Z 3 CT 12	SUH 409
	12	1.4418		X2 CrNoMoSi 18 5 3		Z 6 CND 16-04-01	
	12	1.4510	XM 8; 430 Ti; 439	X4 CrNiMo16 5		Z 4 CT 17	SUS 430 LK
	12	1.4511	XM 8; 430 Ti; 439	X 6 CrNb 17(X 6 CrNb 17		Z 4 CNb 17	SUS 430 LK
	12	1.4512	409	X 6 CrTi 12 (X2CrTi12)	LW 19; 409 S 19	Z 3 CT 12	SUH 409
	12	1.4720		X20CrMo13			
	12	1.4724	405	X10CrA113	403S17	Z 10 C 13	
	12	1.4742	430	X10CrA118	439S15	Z 10 CAS 18	SUS430
	12	1.4747	HNV6	X80CrNiSi20	443S65	Z 80 CSN 20.02	SUH4
	12	1.4749	446	X18 CrN 28			
	12	1.4762	446	X10CrA124		Z 10 CAS 24	SUH446
	12	1.4871	EV 8	X 53 CrMnNiN 21 9	349 S 54	Z 52 CMN 21.09	SUH35,SUH36
	12		302	X12 CrNi 18 9	302 S 31	Z 10 CN 18-09	
	12		429	X10 CrNi 15			
	12	1.4521	443; 444	X2CrMoTi18-2	317 S 16		SUS 444
	13	1.4021	420	X20Cr13	420S37	Z 20 C 13	
	13	1.4031	420	X40 Cr 13		Z 40 C 14	
	13	1.4034		X46Cr13	420 S 45	Z 40 C 14	SUS420J2
	13	1.4057	431	X20CrNi172	431 S 29	Z 15 CN 16.02	SUS431
	13	1.4125		X 105 CrMo 17		Z 100 CD 17	
	13	1.4313	8620	2 NiCrMo2	805M20	20 NCD 2	
	13	1.4544			S. 524; S. 526		
	13	1.4546	348	X5CrNiNb 18-10	347 S 31; 2 S. 130; 2 S. 143/144/145; S.525/527		
	13	1.4922		X20CrMoV12-1			
	13	1.4923		X22 CrMoV12 1			
	14.1	1.4305	303	X10 CrNiS 18 9	303 S 21	Z 8 CNF 18-09	
	14.1	1.4306	304L	X2CrNi18 9	304S12	Z 2 CN 18 10	SCM (440)
	14.1	1.4305	303	X10 CrNiS 18 9	303 S 21	Z 8 CNF 18-09	
	14.1	1.4306	304L	X2CrNi18 9	304S12	Z 2 CN 18 10	SCM (440)
	14.2	1.4301	304	X 5 CrNi 18 9	304 S 15	Z 5 CN 18.09	SCMnH 1, SCMn; H 11
M	14.2	1.4306	304L	X2 CrNi 18 10	304 S 11	Z 3 CN 19-11	
	14.2	1.4308	CF-8	X6 CrNi 18 9	304 C 15	Z 6 CN 18-10 M	SUP 10
	14.2	1.4310	301	X12CrN i17 7	301 S 21	Z 12 CN 17.07	SNCM 447
	14.2	1.4311	304 LN	X2 CrNiN 18 10	304 S 62	Z 2 CN18.10	
	14.2	1.4312		G-X10CrNi18 8	302C25	Z 10 CN 18.9M	
	14.2	1.4312	305	X8 CrNi 18 12	305 S 19		

MATERIAL GROUPS

	VDI 3323	W.-Nr.	AISI/SAE	DIN	BS	AFNOR	JIS
	14.2	1.4332		X2 CrNi 18-8		Z 6CN18.09	
	14.2	1.4350	304	X5CrNi18 9	304S15	Z 8 CMN 18- 08-05	
	14.2	1.4371	202	X3 CrMnNiN 188 8 7	284 S 16	Z 3 CND 17 -11-01;Z 6 CND 17-11; Z 6 CND 17-11-02; Z 7 CND 17-11-02; Z 7 CND 17-12-02	
	14.2	1.4401	316	X 5 CrNiMo 17 12 2; (X4 CrNiMo 17 -12-2)	316 S 13; 316 S 17; 316 S 19; 316 S 31 ;316 S 33	Z 2 CND 17-12; Z 2 CND 18-13; Z 3 CND 17-11-02; Z 3 CND 17-12-02 FF; Z 3 CND 18-12-03; Z 3 CND 19.10 M	SNC236
	14.2	1.4404	316L	X2 CrNiMo 17 13 2; (X2 CrNiMo 17-12-2) GX 2 CrNiMoN 18-10	316 S 11, 316 S 13; 316 S 14, 316 S 31; 316 S 42, S.537;316;C 12, T.75, S. 161	Z2 CND 17-12 AZ	
	14.2	1.4406	316LN	X2 CrNiMoN 17 12 2; (X2CrNiMoN 18-10)	316 S 61; 316 S 63		
	14.2	1.4408	CF-8M	GX 5 CrNiMoN 7 12 2; G-X 6 CrNiMo 18 10	316 C 16 (LT 196);ANC 4 B"		SM 400A;B;C
	14.2	1.4429	316 Ln	X2 CrNiMo 17 -13-3	316 S 62	Z 2 CND 17-13 Az	
	14.2	1.4435	316L	X2 CrNiMo18 14 3	316 S 11;316 S 13; 316 S 14;316 S 31; LW 22; LWCF 22	Z 3 CND 17-12-03; Z 3 CND 18-14-03	S 15 C
	14.2	1.4436	316	X 5 CrNiMo 17 13 3; (X4CRNIMO 17-13-3	316 S 19; 316 S 31; 316 S 33; LW 23; LWCF 23	Z 6 CND 18-12-03; Z 7 CND 18-12-03	SM490A;B;C;YA;YB
	14.2	1.4438	317L	X2 CrNiMo 18 16 4; (X2CrNiMo 18-15-4)	317 S 12	Z 2 CND 19-15-04; Z 3 CND 19-15-04	SUM 22L
	14.2	1.4439	(s31726)	X 2 CrNiMo 18 13		Z 3 CND 18-14-06 AZ	SUM 32
	14.2	1.4440		X5 CrNiMo 17 13 3			
	14.2	1.4449	317	X 4 CrNiMo 27 5 2 (X3CrNiMo27-5-2)	317 S 16	(Z 3 CND 25-07 Az); Z 5 CND 27-05 Az	
	14.2	1.4449; 1.4460	329	G-X7NiCrMoCuNb25 20		23 NCDU 25.20M	SKD61
	14.2	1.4500		X1NiCrMoCuN25-20-5		Z 2 NCDU 25-20	SKD12
	14.2	1.4539		X1NiCrMoCuN25-20-5		Z 1 NCDU 25-02 M	
	14.2	1.4539	904L	(G-)X1 NiCrMoCu 25 20 5		Z 6 CNT 18-10	
	14.2	1.4541	CN-7M	X1 CrNiMoN 20 18 7	321 S 31; 321 S 51 (1010;1105); LW 24; LWCF 24	Z 200 CD 12	
	14.2	1.4547	321	X6 CrNiMoTi 17 12 2			SKD5
M	14.2	1.4571	S31254	G-X 5 CrNiMoNb	320 S 31	Z 6 CNDT 17-12002	
	14.2	1.4581		X 10CrNiMoNb 18 12	318 C 17	Z 4 CNDNb 18.12 M	
	14.2	1.4583	318	G-X7CrNiMoCuNb18 18	303 S 21	Z 15 CNS 20.12	SUH3
	14.2	1.4585		X5 CrNiNb 18 10			
	14.2	1.4891	Ss30415	X 30 WCrV 9 3		Z 20 CNS 25.04	SKD5
	14.2	1.4893	S30815	X8 CrNiNb 11			
	14.2	1.4948	304H	X6 CrNi 18 11	304 S 51	Z 5 CN 18-09	
	14.3	1.4362	S32304	X2 CrNiN 23 4		Z 2 CN 23-04 AZ	SUH3
	14.3	1.4410		G-X10CrNiMo18 9		Z 5 CNaD 20.12M	
	14.3	1.4460	329	X8CrNiMo27 5			SL9N60(53)
	14.3	1.4462		X2CrNiMoN22 5 3	318 S 13	Z 3 CND 22-05 Az; (Z 2 CND 24 -08 Az) (Z 3 CND 25-06-03 Az)	
	14.3	1.4823	310	G-X40CrNiSi27 4		Z 30 CN 26-05	
	14.4	1.4542	630	X 5 CrNiCuNb 17 4; (X5CrNiCuNb 16-4)		Z 7 CNU 15-05; Z 7 CNU 17-04	SKS 31
	14.4	1.4542	17-4PH			Z 7 CNU 17-04	
	14.4	1.4550	347	X6 CrNiNb 18 10	347 S 17	Z 6 CNNb 18.10	SKH55
	14.4		17-7PH		316 S 111		
	14.4	1.4821		X20CrNiSi25 4		Z 20 CNS 25.04	
	14.4	1.4828	309	X15CrNiSi20 12	309 S 24	Z 15 CNS 20.12	SCS17
	14.4	1.4833	309S	X6 CrNi 22 13	309 S 13	Z 15 CN 24-13	
	14.4	1.4845	310 S	X12 CrNi 25 21	310 S 24	Z 12 CN 25-20	SUH310
	14.4	1.4878	321	X6 CrNiTi 18 9	32 1 S 20	Z 6 CNT 18-12 (B)	SUS321
	14.4	1.4980	660	X6 NiCrTiMoVB25–15–2		E-Z6 NCT 25	
	15	0.6010	A48-20B	GG 10		Ft 10 D	
	15	0.6015	NO 25 B	GG 15	Grade 150	Ft 15 D	FC150
	15	0.6015	CLASS25	GG 15	Grade 150	Ft 15D	
K	15	0.6015	A48 25 B	GG 15	Grade 150	Ft 15 D	
	15	0.6020	A48-30B	GG 20	Grade 220	Ft 20 D	
	15	0.6020	NO 30 B	GG 20	Grade 220	Ft 20 D	FC200
	15	0.6660	A436 Type 2	GGL-NiCr202	L-NiCuCr202	L-NC 202	
	15	0.7040	60-40-18	GGG 40	SNG 420/12	FCS 400-12	FCD400

MATERIAL GROUPS

	VDI 3323	W.-Nr.	AISI/SAE	DIN	BS	AFNOR	JIS
K	15	0.6660	A436 Type 2	GGL-NiCr202	L-NiCuCr202	L-NC 202	
	15	0.7040	60-40-18	GGG 40	SNG 420/12	FCS 400-12	FCD400
	15		No 20 B	GG 10		Ft 10 D	FC100
	16	0.6020	CLASS30	GG 20	Grade 220	Ft 20D	
	16	0.6030	CLASS45	GG 30	Grade 300	Ft 30D	FC300
	16	0.6030	A48-45 B		Grade 350	Ft 30D	
	16	0.6035	A48-50	GG 35	Grade 350	Ft 35 D	FC350
	16	0.6040	A48-60 B	GG 40	Grade 400	Ft 40 D	
	16	0.7070	100/70/03	GGG 70	SNG700/2	FGS 700-2	FCD700
	17	0.7033		GGG35.3			
	17		434	GGG-35.3	350/22 L 40	FGS 370/17	
	17	0.7040	60-40-18	GGG-40	SNG 420/12	FGS 400-12	
	17	0.7043	60/40/18	GGG-40.3	370/7	FGS 370/17	
	17	0.7050	80-55-06	GGG50	SNG500/7	FGS 500/7	
	17		65-45-12	GGG-50	SNG 500/7	FGS 500-7	FCD 500
	17	0.7652		GGG-NiMn 13 7	S-NiMn 137	S-Mn 137	
	17	0.7660	A43D2	GGG-NiCr 20 2	Grade S6	S-NC 202	
	17				SNG 370/17	FGS 370-17	
	18	0.6025	A48-40 B	GG25	Grade260	Ft 25 D	
	18	0.7060		GGG60	SNG600/3	FGS600-3	FC250
	18		80/55/06	GGG-60	600/3	FGS 600/3	
	18		A48 40 B				FCD600
	19	0.8055		GTW55			
	19	0.8135	32510	GTS-35-10	B 340/12	MN35-10	
	19		A47-32510	GTS-35-10	B 340/2	MN 35-10	
	19	0.8145	A220-40010	GTS-45-06	P 440/7	MN 450-6	
	19			GTS-35	B 340/12		
	19				8 290/6	MN 32-8	
	19		32510	GTS-35	B340/12	MN 35-10	
	20	0.8035		GTM-35	W340/3	MB35-7	AC4A
	20	0.8040		GTW-40	W410/4	MB40-10	FCMW330
	20	0.8045					
	20	0.8065		GTMW-65			
	20	0.8155	A220-50005	GTS-55-04	P 510/4	MN 550-4	
	20		50005	GTS-55-04	P 510/4	MP 50-5	
	20	0.8165	70003	GTS-65-02	P 570/3	MN 650-3	
	20	0.8170	90001	GTS-70-02	P 690/2	MN 700-2	FCMP490
	20		A220-90001	GTS-70-02		MN 700-2	FCMP590
	20	0.8170		GTS-70-02	IP 70-2		FCMP690
	20	1.1133	1022; 1518	20Mn5	120 M 19	20 M 5	
	20	1.1183	1035	Cf 35 (C35G)	080 A 35	XC 38 H 1 TS	
	20		40 010	GTS-45	P440/7		SMnC 420
	20		70003	GTS-65	P 570/3	MP 60-3	S 35 C
N	21	3.0205	Al99				
	21	3.0255	1000	Al99.5	L31/34/36	A59050C	FCMP540
	21	3.3315		AlMg1			
	22	3.1325		AlCuMg 1			
	22	3.1655		AlCuSiPb			
	22	3.2315		AlMgSi1			
	21	3.4345	7050	AlZnMgCuO,5	L 86	AZ 4 GU/9051	
	23	3.2381		G-AlSi 10 Mg			

MATERIAL GROUPS

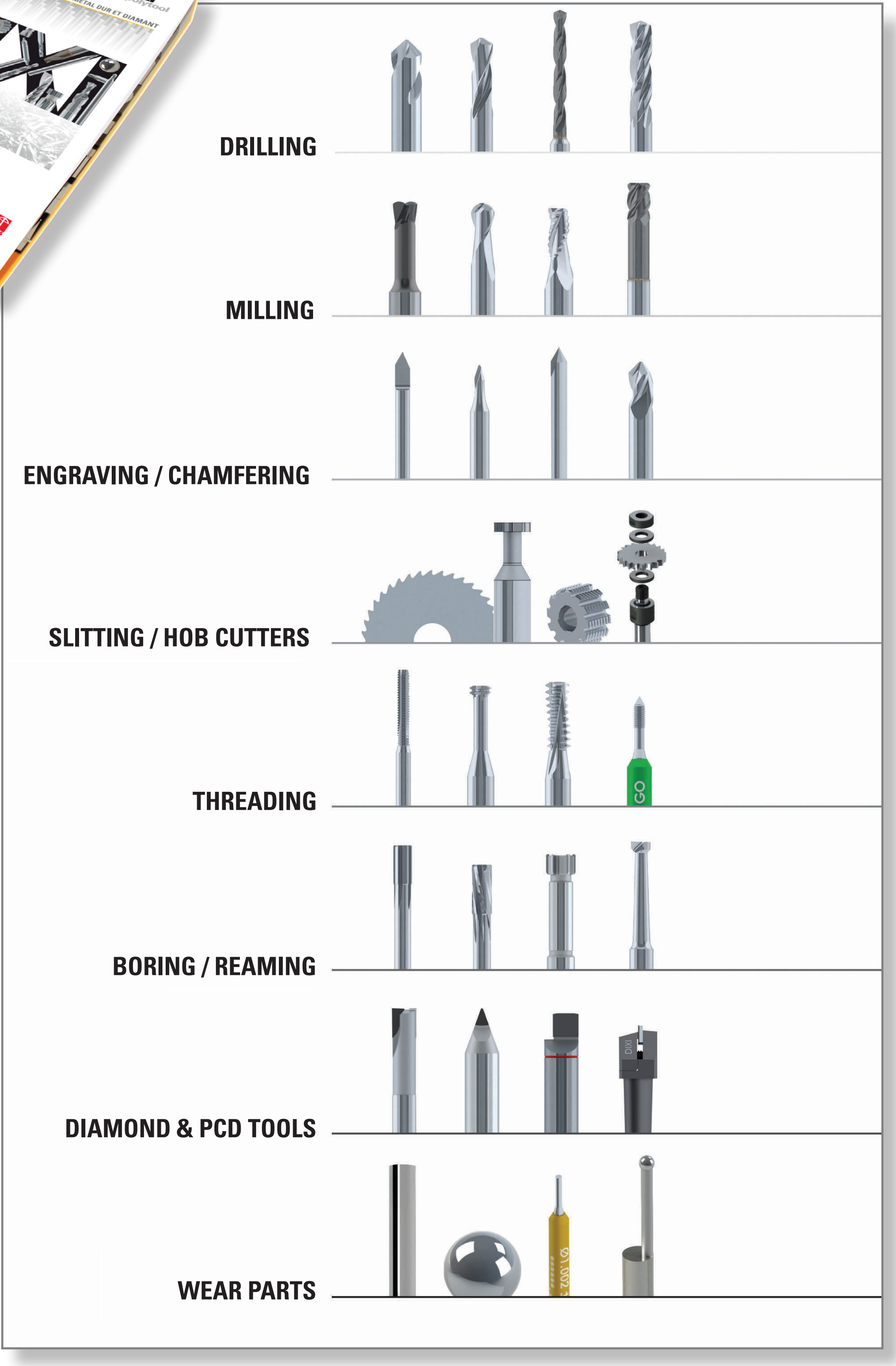
	VDI 3323	W.-Nr.	AISI/SAE	DIN	BS	AFNOR	JIS
N	23	3.2382		GD-AlSi10Mg			
	23	3.2581		G-AlSi12			
	23	3.3561		G-AlMg 5			
	23	3.5101	ZE 41	G-MgZn4sE1Zr1	MAG 5		
	23	3.5103	EZ 33	MgSE3Zn27r1	MAG 6	G-TR3Z2	
	23	3.5812	AZ 81	G-MgAl8Zn1	NMAG 1		
	23	3.5912	AZ 91	G-MgAl9Zn1	MAG 7		
	24	2.1871		G-AlCu 4 TiMg			
	24	3.1754		G-AlCu5Ni1,5			
	24	3.2163		G-AlSi9Cu3			
	24	3.2371	4218 B	G-AlSi 7 Mg			
	24	3.2373	SC64D	G-AISI9MGWA		A-S7G	C4BS
	24	3.2373		G-AlSi 9 Mg			
	24	3.5106	QE 22	G-MgAg3SE2Zr1	mag 12		
	24		GD-AISI12	G-ALMG5	LM5	A-SU12	
	23-24	3.2383	A360.2	G-AlSi0Mg(Cu)	LM9		
	23-24		A356-72		2789;1973	NF A32-201	
	23-24		356,1		LM25		A5052
	23-24		A413.2	G-AlSi12	LM6		
	23-24		A413.1	G-AlSi 12 (Cu)	LM20		ADC12
	23-24		A413.0	GD-AlSi12			A6061
	23-24		A380.1	GD-AlSi8Cu3	LM24		A7075
	26	2.1090	C93200	G-CuSn 7 5 pb		U-E 7 Z 5 pb 4	
	26	2.1096	C83600	G-CuSn5ZnPb	LG 2		
	26	2.1098	C83600	G-CuSn 2 Znpb			
	26	2.1182	C23000	G-CuPb15Sn	LB1	U-pb 15 E 8	
	26	2.1182	C93800	G-CuPb15Sn		Uu-PB 15e 8	
	27	2.0240		CuZn 15			
	27	2.0321	C27200	CuZn 37	cz 108	CuZn 36, CuZn 37	
	27	2.0590		G-CuZn40Fe			
	27	2.0592	C 86500	G-CuZn 35 Al 1	U-Z 36 N 3	HTB 1	
	27	2.0596	C 86200	G-CuZn 34 Al 2	HTB 1	U-Z 36 N 3	
	27	2.1293	C 18200	CuCrZr	CC 102	U-Cr 0.8 Zr	
	28	2.0060		E-Cu57			
	28	2.0375		CuZn36Pb3			
	28	2.0596	C 94100	G-CuZn 34 Al 2	HTB 1	U-Z 36 N 3	
	28	2.0966	C 63000	CuAl 10 Ni 5 Fe 4	Ca 104	U-A 10 N	
	28	2.0975	B-148-52	G-CuAl 10 Ni			
	28	2.1050	C 90700	G-CuSn 10	CT1		
	28	2.1052	C 90800	G-CuSn 12	pb 2		
	28	2.1292	C 81500	G-CuCrF 35	CC1-FF		
	28	2.4764					
S	31	1.4558	N 08800	X 2 NiCrAlTi 32 20	NA 15		
	31	1.4562	N 08031	X 1 NiCrMoCu 32 28 7			
	31	1.4563	N 08028	X 1 NiCrMoCuN 32 27 4			
	31	1.4564	N 08330	X 12 NiCrSi 36 16	NA 17	Z 12 NCS 35.16	
	31	1.4564	330	X12 NiCrSi 36 16	NA 17	Z 12 NCS 37.18	SUH330
	31	1.4865		G-X40NiCrSi38 18	330 C 40		SCH15
	31	1.4958		X 5 NiCrAlTi			
	31	2.4668	AMS 5544	NiCr19NbMo		NC 20 K14	
	32	1.4977		X 40 CoCrNi 20 20		Z 42 CNKDWNb	
	33	2.4360	Monel 400	NiCu30Fe	NA 13	NU 30	
	33	2.4603	5390A			NC 22 FeD	
	33	2.4610	Hastelloy C-4	NiMo16cR16Ti			
	33	2.4630	Nimonic 75	NiCr20Ti	HR 5,203-4	NC 20 T	

MATERIAL GROUPS

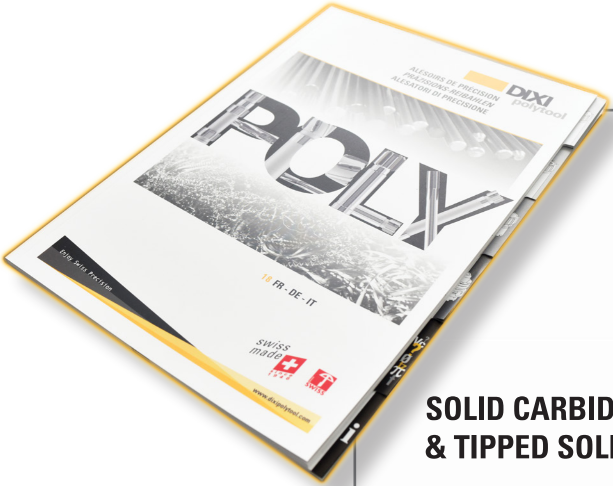
	VDI 3323	W.-Nr.	AISI/SAE	DIN	BS	AFNOR	JIS
S	33	2.4642	Inconel 690	NiC29Fe		NC 30 Fe	
	33	2.4856	Inconel 625	NiCr22Mo9Nb	NA 21	NC 22 FeDNb	
	33	2.4858	Incoloy 825	NiCr21Mo	NA 16	NC 21 Fe DU	
	34	2.4375	Monel k-500	NiCu30 Al	NA 18	NU 30 AT	
	34	2.4375	4676	NiCu30Al	3072-76		
	34	2.4631		NiCr20TiAl	Hr40;601	NC20TA	
	34	2.4668	Inconel 718	NiCr19FeNbMo		NC 19 Fe Nb	
	34	2.4694	Inconel	NiCr16fE7TiAl		NC 19 Fe Nb	
	34	2.4955		NiFe25Cr20NbTi			
	34	2.4668	5383	NiCr19Fe19NbMo	HR8	NC 19 FeNB	
	34	2.4670	5391	S-NiCr13A16MoNb	3146-3	NC 12 AD	
	34	2.4662	5660	NiFe35Cr14MoTi		Z 8 NCDT 42	
	34	2.4964	5537C	CoCr20W15Ni		KC20WN	
	34		AMS 5772	C0Cr22W14Ni		KC22WN	
	35	2.4669	Inconel X-750	NiCr15Fe7TiAl		NC 15 TNb A	
	35	2.4685	Hastelloy B	G-NiMo28			
	35	2.4810	Hastelloy C	G-NiMo30			
	35	2.4973	AMS 5399	NiCr19Co11MoTi		NC 19 KDT	
	35	3.7115		TiAl5Sn2			
	36	3.7025	R 50250	Ti 1	2 TA 1		
	36	3.7225	R 52250	Ti 1 pd	TP 1		
	36	2.4674	AMS 5397	NiCo15Cr10MoAlTi			
	37	3.7124		TiCu2	2 TA 21-24		
	37	3.7145	R 54620	TiAl6Sn2Zr4Mo2Si			
	37	3.7165		TiAl6V4	TA 10-13;TA 28	T-A 6 V	
	37	3.7185		TiAl4Mo4Sn2	TA 45-51; TA 57		
	37	3.7195		TiAl 3 V 2.5			
	37			TiAl4Mo4Sn4Si0.5			
	37		AMS R54520	TiAl5Sn2.5	TA14/17	T-A5E	
	37		AMS R56400	TiAl6V4	TA10-13/TA28	T-A6V	
	37		AMS R56401	TiAl6V4ELI	TA11		
H	38	1.1545	W 1	C105W1	BW 1A	Y1105	SK3
	38	1.1545	W210	C105W1	BW2	Y120	SUP4
	38	1.2762		75 CrMoNiW 6 7			
	38	1.4125	440C	X105 CrMo 17		Z 100 CD 17	
	38	1.6746		32 nlcRm0 14 5	832 M 31	35 NCD 14	
	40	0.9620	Ni- Hard 2	G-X 260 NiCr 4 2	Grade 2 A		
	40	0.9625	Ni- Hard 1	G-X 330 Ni Cr 4 2	Grade 2 B		
	40	0.9630	Ni- Hard 4	G-X 300 CrNiSi 9 5 2			
	40	0.9640		G-X 300 CrMoNi 15 2 1			
	40	0.9650	A 532 III A 25% Cr	G-X 260 Cr 27	Grade 3 D		
	40	0.9655	A 532 III A 25% Cr	G-X 300 CrNMo 27 1	Grade 3 E		
	40	1.2419		105 WCr 6	105WC 13		
	40	1.4841	310	X15 CrNiSi 25 20	314 S31	Z 15 CNS 25-20	
	41	0.9635		G-X 300 CrMo 15 3			
	41	0.9645		G-X 260 CrMoNi 20 2 1			
	41	0.9655		G-X 300 CrNMo 27 1			

OTHER AVAILABLE CATALOGUES

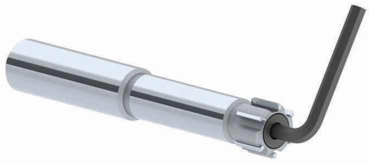
TUNGSTEN CARBIDE AND DIAMOND PRECISION TOOLS



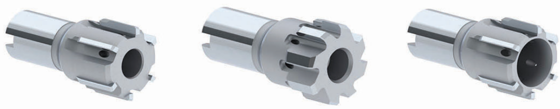
OTHER AVAILABLE CATALOGUES
PRECISION REAMERS



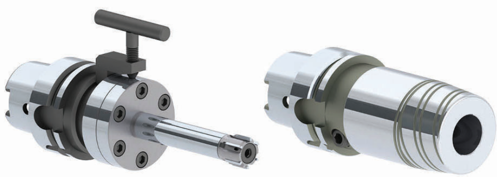
SOLID CARBIDE
& TIPPED SOLID REAMERS



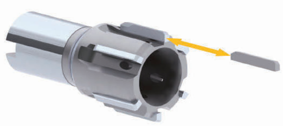
EXPANDABLE TIPPED REAMERS



TIPPED SOLID
& EXPANDABLE HEADS



COMPENSATION HOLDERS
& HOLDERS



RETIPPING
TECHNOLOGY
CUTTING GEOMETRY

DIXI POLYTOOL S.A.

DIXI POLYTOOL S.A. is specialized in the production of tungsten carbide and diamond cutting tools as well as precision reamers.

The company is based in Le Locle since 1946. In 2014, the premises have been completely renovated and enlarged.

With the introduction of the Lean Project, back in 2013, and the heavy investments in the production, our efforts are also focused on supporting our 250 co-workers.

Eager to guarantee the quality of its products while preserving the environment, DIXI POLYTOOL S.A. elaborated a system of certified management according the standards ISO 9001 and ISO 14001.

A DAILY COMMITMENT TO BE ECO-FRIENDLY

For several years, DIXI POLYTOOL SA has decided to use only 100% recycled paper, natural colouring ink for our catalogues and flyers. Furthermore, we are proud to be a precursor by using green energy for the maintenance of the building and the production, since January 2015.

Our commitment for the sustainable development…

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