



ALÉSAGE

REIBEN

REAMING

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ESCARIADO

SELECTION OF BORING TOOLS AND REAMERS 336



SOLID CARBIDE REAMERS 340



EXPANSIBLE REAMERS 355



REAMERS ON REQUEST 359



BORING AND CHAMFERING TOOLS 363



BORING TOOLS 365

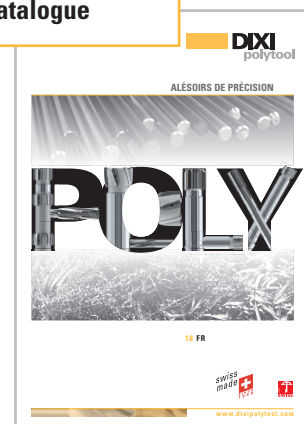


CUTTING CONDITIONS 369



TOOLS ON REQUEST 374

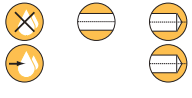
For other types of reamers, see the POLYTOOL catalogue



SELECTION OF BORING TOOLS AND REAMERS

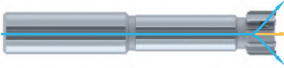
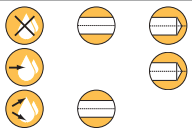
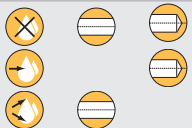
✓ = item from stock

CARBIDE REAMERS

	Z	Page		CARBIDE	TAIN	CERMET	Hole tolerance
POLY 4001 Ø 0.40 - 12.02  with through coolant > Ø 2.98	3 - 6	340		✓			IT 7
POLY 4005 Ø 2.97 - 6.50  with through coolant > Ø 2.98	4 - 6	347		✓			IT 7
POLY 4007 Ø 0.37 - 12.02 	3 - 6	348		✓			IT 7

REAMERS WITH CARBIDE OR CERMET INSERTS

Use CERMET in materials p. 372

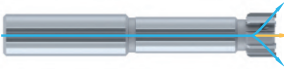
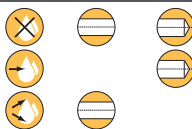
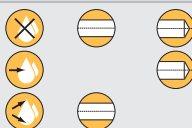
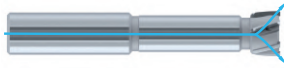
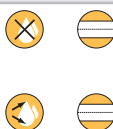
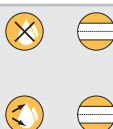
POLY 4361 Ø 6.00 - 24.00 	4 - 6	355		✓	✓	✓	IT 5 IT 6 IT 7
POLY 4371 Ø 6.00 - 24.00 	4 - 6	357		✓	✓	✓	IT 5 IT 6 IT 7

BORING TOOLS

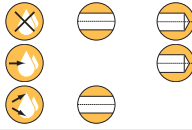
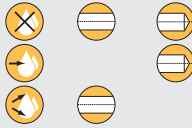
REAMERS ON REQUEST - CARBIDE OR CERMET INSERTS

SOLID REAMERS

Use CERMET in materials p. 372

POLY 4261 Ø 5.80 - 120.00 	4 - 6	359					IT 7
POLY 4271 Ø 5.80 - 120.00 	4 - 6	360					IT 7
POLY 4264 Ø 5.80 - 120.00 	4 - 6	359					IT 7
POLY 4274 Ø 5.80 - 120.00 	4 - 6	360					IT 7

EXPANSIBLE REAMERS

POLY 4361 Ø 5.80 - 55.00 	4 - 6	361					IT 5 IT 6 IT 7
POLY 4371 Ø 5.80 - 55.00 	4 - 6	362					IT 5 IT 6 IT 7



○ good ⊙ excellent

Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
⊙	⊙	○	○		⊙	○	⊙	⊙	⊙	⊙		⊙
⊙	⊙	○	○		⊙	○	⊙	⊙	⊙	⊙		⊙
⊙	⊙	○	○		⊙	○	⊙	⊙	⊙	⊙		⊙

⊙	⊙	○	○		⊙	○	⊙	⊙	⊙	⊙		
⊙	⊙	○	○		⊙	○	⊙	⊙	⊙	⊙		

⊙	⊙	○	○	⊙	⊙	○	⊙	⊙	⊙	⊙		
⊙	⊙	○	○	⊙	⊙	○	⊙	⊙	⊙	⊙		
⊙	⊙	○	○	⊙	⊙	○	⊙	⊙	⊙	⊙		
⊙	⊙	○	○	⊙	⊙	○	⊙	⊙	⊙	⊙		

⊙	⊙	○	○	⊙	⊙	○	⊙	⊙	⊙	⊙		
⊙	⊙	○	○	⊙	⊙	○	⊙	⊙	⊙	⊙		



SELECTION OF BORING TOOLS AND REAMERS

✓ = item from stock

EXPANSIBLE REAMERS

POLY 4364
Ø 5.80 - 55.00



Z

Page

☐ CARBIDE

☒ TiAIN

☐ CERMET

Hole
tolerance

4 - 6

361



POLY 4374
Ø 5.80 - 55.00



4 - 6

362



BORING AND CHAMFERING TOOLS

DIXI 2577
Ø 0.26 - 0.86



-

363



✓

DIXI 2567
Ø 0.20 - 1.00



-

364



✓

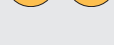
BORING TOOLS

DIXI 2578
Ø 0.30 - 1.00



-

365



✓

DIXI 2579
Ø 0.60 - 3.00



-

366



✓

DIXI 2580
Ø 0.50 - 20.00



-

367



✓

DIXI 2581
Ø 0.50 - 18.00



-

368



✓

BORING TOOLS HOLDER

DIXI 2764



-

365

○ good ⊙ excellent

Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
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⊙	⊙	○	○	⊙	⊙	○	⊙	⊙	⊙	⊙		
⊙	⊙	○	○	⊙	⊙	○	⊙	⊙	⊙	⊙		

⊙	⊙	○	○		⊙	○	⊙	⊙	⊙	⊙		⊙
⊙	⊙	○	○		⊙	○	⊙	⊙	⊙	⊙		⊙

⊙	⊙	○	○		⊙	○	⊙	⊙	⊙	⊙		⊙
⊙	⊙	○	○		⊙	○	⊙	⊙	⊙	⊙		⊙
⊙	⊙	○	○		⊙	○	⊙	⊙	⊙	⊙		⊙
⊙	⊙	○	○		⊙	○	⊙	⊙	⊙	⊙		⊙

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POLY 4001 - 4001-TC

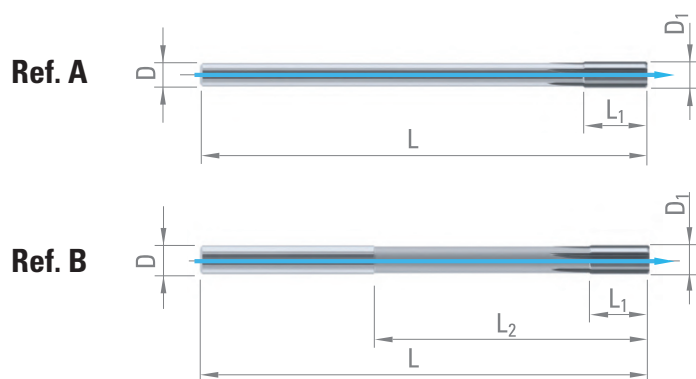
STRAIGHT FLUTE REAMERS IRREGULAR TEETH



P. 370



> Ø 2.98

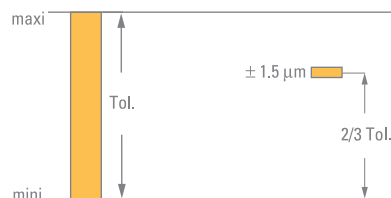


Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D nom. H7	D ₁ ± 1.5µm	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
0.40	(0.407)	3	5	3	38	3	B	959801
0.41	(0.417)	3	5	3	38	3	B	964623
0.42	(0.427)	3	5	3	38	3	B	959802
0.43	(0.437)	3	5	3	38	3	B	978100
0.44	(0.447)	3	5	3	38	3	B	959803
0.45	(0.457)	3	5	3	38	3	B	954360
0.46	(0.467)	3	5	3	38	3	B	959804
0.47	(0.477)	3	5	3	38	3	B	963057
0.48	(0.487)	3	5	3	38	3	B	959805
0.49	(0.497)	3	5	3	38	3	B	954359
0.50	(0.507)	3	5	3	38	3	B	959662
0.51	(0.517)	4	6	3	38	3	B	200007
0.52	(0.527)	4	6	3	38	3	B	200000
0.53	(0.537)	4	6	3	38	3	B	200004
0.54	(0.547)	4	6	3	38	3	B	200005
0.55	(0.557)	4	6	3	38	3	B	200001
0.56	(0.567)	4	6	3	38	3	B	966312
0.57	(0.577)	4	6	3	38	3	B	326970
0.58	(0.587)	4	6	3	38	3	B	200003
0.59	(0.597)	4	6	3	38	3	B	200006
0.60	(0.607)	4	6	3	38	3	B	200002
0.61	(0.617)	4	7	3	38	3	B	964889
0.62	(0.627)	4	7	3	38	3	B	200010
0.63	(0.637)	4	7	3	38	3	B	965815
0.64	(0.647)	4	7	3	38	3	B	200015
0.65	(0.657)	4	7	3	38	3	B	200008
0.66	(0.667)	4	7	3	38	3	B	200012
0.67	(0.677)	4	7	3	38	3	B	200013
0.68	(0.687)	4	7	3	38	3	B	200011
0.69	(0.697)	4	7	3	38	3	B	200014
0.70	(0.707)	4	7	3	38	3	B	200009
0.71	(0.717)	4	8	3	38	3	B	955902
0.72	(0.727)	4	8	3	38	3	B	200018
0.73	(0.737)	4	8	3	38	3	B	959571
0.74	(0.747)	4	8	3	38	3	B	200022
0.75	(0.757)	4	8	3	38	3	B	200016
0.76	(0.767)	4	8	3	38	3	B	961872
0.77	(0.777)	4	8	3	38	3	B	200020
0.78	(0.787)	4	8	3	38	3	B	200019
0.79	(0.797)	4	8	3	38	3	B	200021
0.80	(0.807)	4	8	3	38	3	B	200017

D nom. H7	D ₁ ± 1.5µm	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
0.81	(0.817)	5	9	3	38	3	B	964624
0.82	(0.827)	5	9	3	38	3	B	200025
0.83	(0.837)	5	9	3	38	3	B	200029
0.84	(0.847)	5	9	3	38	3	B	200028
0.85	(0.857)	5	9	3	38	3	B	200023
0.86	(0.867)	5	9	3	38	3	B	200030
0.87	(0.877)	5	9	3	38	3	B	200031
0.88	(0.887)	5	9	3	38	3	B	200026
0.89	(0.897)	5	9	3	38	3	B	200027
0.90	(0.907)	5	9	3	38	3	B	200024
0.91	(0.917)	5	10	3	38	3	B	200039
0.92	(0.927)	5	10	3	38	3	B	200035
0.93	(0.937)	5	10	3	38	3	B	960023
0.94	(0.947)	5	10	3	38	3	B	963188
0.95	(0.957)	5	10	3	38	3	B	200034
0.96	(0.967)	5	10	3	38	3	B	200036
0.97	(0.977)	5	10	3	38	3	B	200037
0.98	(0.987)	5	10	3	38	3	B	200032
0.99	(0.997)	5	10	3	38	3	B	200033
1.00	(1.007)	5	10	3	38	3	B	200038
1.01	(1.017)	5	11	3	38	3	B	959800
1.02	(1.027)	5	11	3	38	3	B	200040
1.03	(1.037)	5	11	3	38	3	B	966908
1.04	(1.047)	5	11	3	38	3	B	962626
1.05	(1.057)	5	11	3	38	3	B	200041
1.06	(1.067)	5	11	3	38	3	B	966799
1.07	(1.077)	5	11	3	38	3	B	968047
1.08	(1.087)	5	11	3	38	3	B	200042
1.09	(1.097)	5	12	3	38	3	B	955685
1.10	(1.107)	5	12	3	38	3	B	200045
1.11	(1.117)	5	12	3	38	3	B	951529
1.12	(1.127)	5	12	3	38	3	B	951598
1.13	(1.137)	5	12	3	38	3	B	968503
1.14	(1.147)	5	12	3	38	3	B	968504
1.15	(1.157)	5	12	3	38	3	B	200043
1.16	(1.167)	5	12	3	38	3	B	967147
1.17	(1.177)	5	12	3	38	3	B	956647
1.18	(1.187)	5	12	3	38	3	B	67307
1.19	(1.197)	5	12	3	38	3	B	960753
1.20	(1.207)	5	12	3	38	3	B	200044
1.21	(1.217)	6	13	3	38	3	B	67308

All Ø with tolerance ±2µm available
through our express-service





P. 370



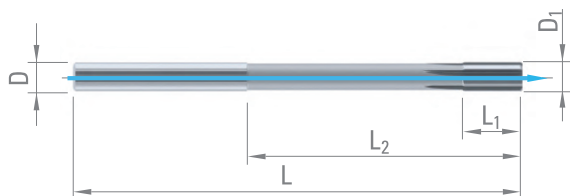
> Ø 2.98



Ref. A



Ref. B



Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D nom. H7 D₁ ± 1.5µm L₁ L₂ D_{h5} L Z Ref. CARBIDE

1.22	(1.227)	6	13	3	38	3	B	968605
1.23	(1.237)	6	13	3	38	3	B	968606
1.24	(1.247)	6	13	3	38	3	B	968607
1.25	(1.257)	6	13	3	38	3	B	200046
1.26	(1.267)	6	13	3	38	3	B	968608
1.27	(1.277)	6	13	3	38	3	B	964024
1.28	(1.287)	6	13	3	38	3	B	200048
1.29	(1.297)	6	13	3	38	3	B	950915
1.30	(1.307)	6	13	3	38	3	B	200047
1.31	(1.317)	6	13	3	38	3	B	959472
1.32	(1.327)	6	13	3	38	3	B	961369
1.33	(1.337)	6	13	3	38	3	B	961963
1.34	(1.347)	6	13	3	38	3	B	326971
1.35	(1.357)	6	13	3	38	3	B	200049
1.36	(1.367)	6	13	3	38	3	B	968242
1.37	(1.377)	6	13	3	38	3	B	960591
1.38	(1.387)	6	13	3	38	3	B	966541
1.39	(1.397)	6	13	3	38	3	B	960202
1.40	(1.407)	6	13	3	38	3	B	200050
1.41	(1.417)	7	15	3	38	3	B	957425
1.42	(1.427)	7	15	3	38	3	B	955757
1.43	(1.437)	7	15	3	38	3	B	955746
1.44	(1.447)	7	15	3	38	3	B	961345
1.45	(1.457)	7	15	3	38	3	B	200053
1.46	(1.467)	7	15	3	38	3	B	66791
1.47	(1.477)	7	15	3	38	3	B	961456
1.48	(1.487)	7	15	3	38	3	B	200051
1.49	(1.497)	7	15	3	38	3	B	200052
1.50	(1.507)	7	15	3	38	3	B	200054
1.51	(1.517)	7	15	3	50	3	B	200104
1.52	(1.527)	7	15	3	50	3	B	200105
1.53	(1.537)	7	15	3	50	3	B	960836
1.54	(1.547)	7	15	3	50	3	B	63795
1.55	(1.557)	7	15	3	50	3	B	200125
1.56	(1.567)	7	15	3	50	3	B	973910
1.57	(1.577)	7	15	3	50	3	B	963006
1.58	(1.587)	7	15	3	50	3	B	961472
1.59	(1.597)	7	15	3	50	3	B	959620
1.60	(1.607)	7	15	3	50	3	B	200111
1.61	(1.617)	7	16	3	50	3	B	59391
1.62	(1.627)	7	16	3	50	3	B	955366
1.63	(1.637)	7	16	3	50	3	B	326972
1.64	(1.647)	7	16	3	50	3	B	326973
1.65	(1.657)	7	16	3	50	3	B	200124
1.66	(1.667)	7	16	3	50	3	B	991141
1.67	(1.677)	7	16	3	50	3	B	965451
1.68	(1.687)	7	16	3	50	3	B	326974

D nom. H7 D₁ ± 1.5µm L₁ L₂ D_{h5} L Z Ref. CARBIDE

1.69	(1.697)	7	16	3	50	3	B	952172
1.70	(1.707)	7	16	3	50	3	B	200126
1.71	(1.717)	7	17	3	50	3	B	66359
1.72	(1.727)	7	17	3	50	3	B	959573
1.73	(1.737)	7	17	3	50	3	B	326975
1.74	(1.747)	7	17	3	50	3	B	968498
1.75	(1.757)	7	17	3	50	3	B	200127
1.76	(1.767)	7	17	3	50	3	B	974605
1.77	(1.777)	7	17	3	50	3	B	961458
1.78	(1.787)	7	17	3	50	3	B	63459
1.79	(1.797)	7	17	3	50	3	B	200146
1.80	(1.807)	7	17	3	50	3	B	200112
1.81	(1.817)	8	17	3	50	3	B	962183
1.82	(1.827)	8	17	3	50	3	B	960953
1.83	(1.837)	8	17	3	50	3	B	951867
1.84	(1.847)	8	17	3	50	3	B	326976
1.85	(1.857)	8	17	3	50	3	B	200113
1.86	(1.867)	8	17	3	50	3	B	964274
1.87	(1.877)	8	17	3	50	3	B	326977
1.88	(1.887)	8	17	3	50	3	B	954731
1.89	(1.897)	8	17	3	50	3	B	200137
1.90	(1.907)	8	17	3	50	3	B	200114
1.91	(1.917)	8	18	3	50	3	B	982028
1.92	(1.927)	8	18	3	50	3	B	326978
1.93	(1.937)	8	18	3	50	3	B	326979
1.94	(1.947)	8	18	3	50	3	B	67301
1.95	(1.957)	8	18	3	50	3	B	200115
1.96	(1.967)	8	18	3	50	3	B	200145
1.97	(1.977)	8	18	3	50	3	B	200106
1.98	(1.987)	8	18	3	50	3	B	200107
1.99	(1.997)	8	18	3	50	3	B	200108
2.00	(2.007)	8	18	3	50	3	B	200102
2.01	(2.017)	8	18	3	50	3	B	200109
2.02	(2.027)	8	18	3	50	3	B	200110
2.03	(2.037)	8	18	3	50	3	B	63271
2.04	(2.047)	8	18	3	50	3	B	200147
2.05	(2.057)	8	18	3	50	3	B	200121
2.06	(2.067)	8	18	3	50	3	B	954744
2.07	(2.077)	8	18	3	50	3	B	63796
2.08	(2.087)	8	18	3	50	3	B	57717
2.09	(2.097)	8	18	3	50	3	B	957058
2.10	(2.107)	8	18	3	50	3	B	200144
2.11	(2.117)	8	18	3	50	3	B	952428
2.12	(2.127)	8	18	3	50	3	B	952429
2.13	(2.137)	8	18	3	50	3	B	967590
2.14	(2.147)	8	18	3	50	3	B	968815
2.15	(2.157)	8	18	3	50	3	B	200120





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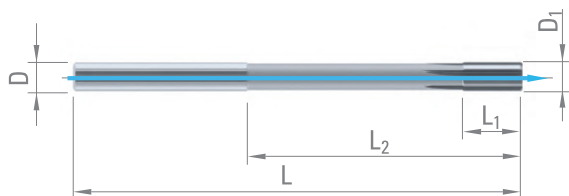
> Ø 2.98



Ref. A



Ref. B



Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D nom. H7	D ₁ ± 1.5µm	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
2.16	(2.167)	8	18	3	50	3	B	968156
2.17	(2.177)	8	18	3	50	3	B	959096
2.18	(2.187)	8	18	3	50	3	B	968449
2.19	(2.197)	8	18	3	50	3	B	952213
2.20	(2.207)	8	18	3	50	3	B	200139
2.21	(2.217)	8	18	3	50	3	B	968816
2.22	(2.227)	8	18	3	50	3	B	953362
2.23	(2.237)	8	18	3	50	3	B	326980
2.24	(2.247)	8	18	3	50	3	B	326981
2.25	(2.257)	8	18	3	50	3	B	200119
2.26	(2.267)	8	18	3	50	3	B	326982
2.27	(2.277)	8	18	3	50	3	B	956015
2.28	(2.287)	8	18	3	50	3	B	326983
2.29	(2.297)	8	18	3	50	3	B	985826
2.30	(2.307)	8	18	3	50	3	B	200131
2.31	(2.317)	10	20	3	50	3	B	951944
2.32	(2.327)	10	20	3	50	3	B	200135
2.33	(2.337)	10	20	3	50	3	B	957326
2.34	(2.347)	10	20	3	50	3	B	956298
2.35	(2.357)	10	20	3	50	3	B	200130
2.36	(2.367)	10	20	3	50	3	B	955027
2.37	(2.377)	10	20	3	50	3	B	958068
2.38	(2.387)	10	20	3	50	3	B	962361
2.39	(2.397)	10	20	3	50	3	B	965907
2.40	(2.407)	10	20	3	50	3	B	200129
2.41	(2.417)	10	20	3	50	3	B	950038
2.42	(2.427)	10	20	3	50	3	B	950039
2.43	(2.437)	10	20	3	50	3	B	955020
2.44	(2.447)	10	20	3	50	3	B	962239
2.45	(2.457)	10	20	3	50	3	B	200128
2.46	(2.467)	10	20	3	50	3	B	326984
2.47	(2.477)	10	20	3	50	3	B	959535
2.48	(2.487)	10	20	3	50	3	B	200140
2.49	(2.497)	10	20	3	50	3	B	200141
2.50	(2.507)	10	20	3	50	3	B	200103
2.51	(2.517)	10	20	3	61	4	B	200142
2.52	(2.527)	10	20	3	61	4	B	200143
2.53	(2.537)	10	20	3	61	4	B	954733
2.54	(2.547)	10	20	3	61	4	B	955042
2.55	(2.557)	10	20	3	61	4	B	200118
2.56	(2.567)	10	20	3	61	4	B	326985
2.57	(2.577)	10	20	3	61	4	B	326986
2.58	(2.587)	10	20	3	61	4	B	958772
2.59	(2.597)	10	20	3	61	4	B	971141
2.60	(2.607)	10	20	3	61	4	B	200117
2.61	(2.617)	10	25	3	61	4	B	970909
2.62	(2.627)	10	25	3	61	4	B	952158

D nom. H7	D ₁ ± 1.5µm	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
2.63	(2.637)	10	25	3	61	4	B	326987
2.64	(2.647)	10	25	3	61	4	B	962551
2.65	(2.657)	10	25	3	61	4	B	200116
2.66	(2.667)	10	25	3	61	4	B	954075
2.67	(2.677)	10	25	3	61	4	B	200136
2.68	(2.687)	10	25	3	61	4	B	954450
2.69	(2.697)	10	25	3	61	4	B	991586
2.70	(2.707)	10	25	3	61	4	B	200123
2.71	(2.717)	10	25	3	61	4	B	954783
2.72	(2.727)	10	25	3	61	4	B	326988
2.73	(2.737)	10	25	3	61	4	B	326989
2.74	(2.747)	10	25	3	61	4	B	969786
2.75	(2.757)	10	25	3	61	4	B	200122
2.76	(2.767)	10	25	3	61	4	B	326990
2.77	(2.777)	10	25	3	61	4	B	326991
2.78	(2.787)	10	25	3	61	4	B	954734
2.79	(2.797)	10	25	3	61	4	B	965219
2.80	(2.807)	10	25	3	61	4	B	200138
2.81	(2.817)	10	25	3	61	4	B	953881
2.82	(2.827)	10	25	3	61	4	B	960888
2.83	(2.837)	10	25	3	61	4	B	326992
2.84	(2.847)	10	25	3	61	4	B	326993
2.85	(2.857)	10	25	3	61	4	B	200132
2.86	(2.867)	10	25	3	61	4	B	326994
2.87	(2.877)	10	25	3	61	4	B	326995
2.88	(2.887)	10	25	3	61	4	B	326996
2.89	(2.897)	10	25	3	61	4	B	953937
2.90	(2.907)	10	25	3	61	4	B	200133
2.91	(2.917)	10	25	3	61	4	B	964090
2.92	(2.927)	10	25	3	61	4	B	66683
2.93	(2.937)	10	25	3	61	4	B	326997
2.94	(2.947)	10	25	3	61	4	B	326998
2.95	(2.957)	10	25	3	61	4	B	200134
2.96	(2.967)	10	25	3	61	4	B	961012
2.97	(2.977)	10	25	3	61	4	B	959664
2.98	(2.987)	10	25	3	70	6	B	321202
2.99	(2.997)	10	25	3	70	6	B	321203
3.00	(3.007)	10	25	3	70	6	B	321204
3.01	(3.018)	10	25	3	70	6	B	321205
3.02	(3.028)	10	25	3	70	6	B	321206
3.03	(3.038)	10	25	3	70	6	B	321207
3.04	(3.048)	10	25	3	70	6	B	321208
3.05	(3.058)	10	25	3	70	6	B	321209
3.06	(3.068)	10	25	3	70	6	B	321210
3.07	(3.078)	10	25	3	70	6	B	321211
3.08	(3.088)	10	25	3	70	6	B	321212
3.09	(3.098)	10	25	3	70	6	B	321213





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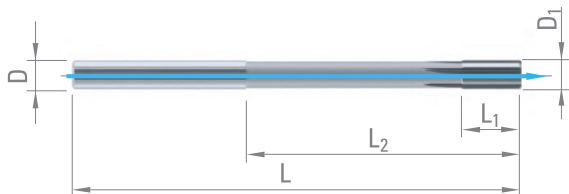
> Ø 2.98



Ref. A



Ref. B



Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D nom. H7	D ₁ ± 1.5µm	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
3.10	(3.108)	10	-	3	70	6	A	321214
3.11	(3.118)	10	-	3	70	6	A	321215
3.12	(3.128)	10	-	3	70	6	A	321216
3.13	(3.138)	10	-	3	70	6	A	321217
3.14	(3.148)	10	-	3	70	6	A	321218
3.15	(3.158)	10	-	3	70	6	A	321219
3.16	(3.168)	10	-	3	70	6	A	321220
3.17	(3.178)	10	-	3	70	6	A	321221
3.18	(3.188)	10	-	3	70	6	A	321222
3.19	(3.198)	10	-	3	70	6	A	321223
3.20	(3.208)	10	-	3	70	6	A	321224
3.21	(3.218)	10	-	3	70	6	A	321225
3.22	(3.228)	10	-	3	70	6	A	321226
3.23	(3.238)	10	-	3	70	6	A	321227
3.24	(3.248)	10	-	3	70	6	A	321228
3.25	(3.258)	10	-	3	70	6	A	321229
3.26	(3.268)	10	-	3	70	6	A	321230
3.27	(3.278)	10	-	3	70	6	A	321231
3.28	(3.288)	10	-	3	70	6	A	321232
3.29	(3.298)	10	-	3	70	6	A	321233
3.30	(3.308)	10	-	3	70	6	A	321234
3.31	(3.318)	10	-	3	70	6	A	321235
3.32	(3.328)	10	-	3	70	6	A	321236
3.33	(3.338)	10	-	3	70	6	A	321237
3.34	(3.348)	10	-	3	70	6	A	321238
3.35	(3.358)	10	-	3	70	6	A	321239
3.36	(3.368)	10	-	3	70	6	A	321240
3.37	(3.378)	10	-	3	70	6	A	321241
3.38	(3.388)	10	-	3	70	6	A	321242
3.39	(3.398)	10	-	3	70	6	A	321243
3.40	(3.408)	10	-	3	70	6	A	321244
3.41	(3.418)	10	-	3	70	6	A	321245
3.42	(3.428)	10	-	3	70	6	A	321246
3.43	(3.438)	10	-	3	70	6	A	321247
3.44	(3.448)	10	-	3	70	6	A	321248
3.45	(3.458)	10	-	3	70	6	A	321249
3.46	(3.468)	10	-	3	70	6	A	321250
3.47	(3.478)	10	-	3	70	6	A	321251
3.48	(3.488)	10	-	3	70	6	A	321252
3.49	(3.498)	10	-	3	70	6	A	321253
3.50	(3.508)	10	-	3	70	6	A	321254
3.51	(3.518)	10	-	3	70	6	A	321255
3.52	(3.528)	10	-	3	70	6	A	321256
3.53	(3.538)	10	-	3	70	6	A	321257
3.54	(3.548)	10	-	3	70	6	A	321258
3.55	(3.558)	10	-	3	70	6	A	321259
3.56	(3.568)	10	-	3	70	6	A	321260

D nom. H7	D ₁ ± 1.5µm	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
3.57	(3.578)	10	-	3	70	6	A	321261
3.58	(3.588)	10	-	3	70	6	A	321262
3.59	(3.598)	10	-	3	70	6	A	321263
3.60	(3.608)	10	-	3	70	6	A	321264
3.61	(3.618)	10	-	3	70	6	A	321265
3.62	(3.628)	10	-	3	70	6	A	321266
3.63	(3.638)	10	-	3	70	6	A	321267
3.64	(3.648)	10	-	3	70	6	A	321268
3.65	(3.658)	10	-	3	70	6	A	321269
3.66	(3.668)	10	-	3	70	6	A	321270
3.67	(3.678)	10	-	3	70	6	A	321271
3.68	(3.688)	10	-	3	70	6	A	321272
3.69	(3.698)	10	-	3	70	6	A	321273
3.70	(3.708)	10	-	3	70	6	A	321274
3.71	(3.718)	10	-	3	70	6	A	321275
3.72	(3.728)	10	-	3	70	6	A	321276
3.73	(3.738)	10	-	3	70	6	A	321277
3.74	(3.748)	10	-	3	70	6	A	321278
3.75	(3.758)	10	-	3	70	6	A	321279
3.76	(3.768)	10	-	3	70	6	A	321280
3.77	(3.778)	10	-	3	70	6	A	321281
3.78	(3.788)	10	-	3	70	6	A	321282
3.79	(3.798)	10	-	3	70	6	A	321283
3.80	(3.808)	10	-	3	70	6	A	321284
3.81	(3.818)	10	-	3	70	6	A	321285
3.82	(3.828)	10	-	3	70	6	A	321286
3.83	(3.838)	10	-	3	70	6	A	321287
3.84	(3.848)	10	-	3	70	6	A	321288
3.85	(3.858)	10	-	3	70	6	A	321289
3.86	(3.868)	10	-	3	70	6	A	321290
3.87	(3.878)	10	-	3	70	6	A	321291
3.88	(3.888)	10	-	3	70	6	A	321292
3.89	(3.898)	10	-	3	70	6	A	321293
3.90	(3.908)	10	-	3	70	6	A	321294
3.91	(3.918)	10	-	3	70	6	A	321295
3.92	(3.928)	10	-	3	70	6	A	321296
3.93	(3.938)	10	-	3	70	6	A	321297
3.94	(3.948)	10	-	3	70	6	A	321298
3.95	(3.958)	10	-	3	70	6	A	321299
3.96	(3.968)	10	-	3	70	6	A	321300
3.97	(3.978)	10	-	3	70	6	A	321301
3.98	(3.988)	10	-	3	70	6	A	321302
3.99	(3.998)	10	-	3	70	6	A	321303
4.00	(4.008)	10	-	3	70	6	A	321304
4.01	(4.018)	10	-	3	70	6	A	321305
4.02	(4.028)	10	-	3	70	6	A	321306
4.03	(4.038)	10	-	3	70	6	A	321307





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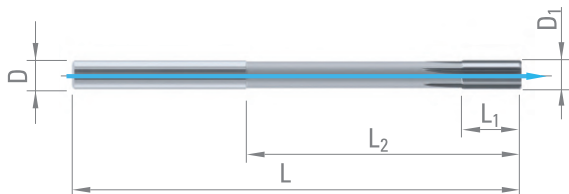
> Ø 2.98



Ref. A



Ref. B



Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D nom. H7	D ₁ ± 1.5µm	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
4.04	(4.048)	10	-	3	70	6	A	321308
4.05	(4.058)	10	-	3	70	6	A	321309
4.06	(4.068)	10	-	3	70	6	A	321310
4.07	(4.078)	10	-	3	70	6	A	321311
4.08	(4.088)	10	-	3	70	6	A	321312
4.09	(4.098)	10	-	3	70	6	A	321313
4.10	(4.108)	12	-	4	80	6	A	321314
4.11	(4.118)	12	-	4	80	6	A	321315
4.12	(4.128)	12	-	4	80	6	A	321316
4.13	(4.138)	12	-	4	80	6	A	321317
4.14	(4.148)	12	-	4	80	6	A	321318
4.15	(4.158)	12	-	4	80	6	A	321319
4.16	(4.168)	12	-	4	80	6	A	321320
4.17	(4.178)	12	-	4	80	6	A	321321
4.18	(4.188)	12	-	4	80	6	A	321322
4.19	(4.198)	12	-	4	80	6	A	321323
4.20	(4.208)	12	-	4	80	6	A	321324
4.21	(4.218)	12	-	4	80	6	A	321325
4.22	(4.228)	12	-	4	80	6	A	321326
4.23	(4.238)	12	-	4	80	6	A	321327
4.24	(4.248)	12	-	4	80	6	A	321328
4.25	(4.258)	12	-	4	80	6	A	321329
4.26	(4.268)	12	-	4	80	6	A	321330
4.27	(4.278)	12	-	4	80	6	A	321331
4.28	(4.288)	12	-	4	80	6	A	321332
4.29	(4.298)	12	-	4	80	6	A	321333
4.30	(4.308)	12	-	4	80	6	A	321334
4.31	(4.318)	12	-	4	80	6	A	321335
4.32	(4.328)	12	-	4	80	6	A	321336
4.33	(4.338)	12	-	4	80	6	A	321337
4.34	(4.348)	12	-	4	80	6	A	321338
4.35	(4.358)	12	-	4	80	6	A	321339
4.36	(4.368)	12	-	4	80	6	A	321340
4.37	(4.378)	12	-	4	80	6	A	321341
4.38	(4.388)	12	-	4	80	6	A	321342
4.39	(4.398)	12	-	4	80	6	A	321343
4.40	(4.408)	12	-	4	80	6	A	321344
4.41	(4.418)	12	-	4	80	6	A	321345
4.42	(4.428)	12	-	4	80	6	A	321346
4.43	(4.438)	12	-	4	80	6	A	321347
4.44	(4.448)	12	-	4	80	6	A	321348
4.45	(4.458)	12	-	4	80	6	A	321349
4.46	(4.468)	12	-	4	80	6	A	321350
4.47	(4.478)	12	-	4	80	6	A	321351
4.48	(4.488)	12	-	4	80	6	A	321352
4.49	(4.498)	12	-	4	80	6	A	321353
4.50	(4.508)	12	-	4	80	6	A	321354

D nom. H7	D ₁ ± 1.5µm	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
4.51	(4.518)	12	-	4	80	6	A	321355
4.52	(4.528)	12	-	4	80	6	A	321356
4.53	(4.538)	12	-	4	80	6	A	321357
4.54	(4.548)	12	-	4	80	6	A	321358
4.55	(4.558)	12	-	4	80	6	A	321359
4.56	(4.568)	12	-	4	80	6	A	321360
4.57	(4.578)	12	-	4	80	6	A	321361
4.58	(4.588)	12	-	4	80	6	A	321362
4.59	(4.598)	12	-	4	80	6	A	321363
4.60	(4.608)	12	-	4	80	6	A	321364
4.61	(4.618)	12	-	4	80	6	A	321365
4.62	(4.628)	12	-	4	80	6	A	321366
4.63	(4.638)	12	-	4	80	6	A	321367
4.64	(4.648)	12	-	4	80	6	A	321368
4.65	(4.658)	12	-	4	80	6	A	321369
4.66	(4.668)	12	-	4	80	6	A	321370
4.67	(4.678)	12	-	4	80	6	A	321371
4.68	(4.688)	12	-	4	80	6	A	321372
4.69	(4.698)	12	-	4	80	6	A	321373
4.70	(4.708)	12	-	4	80	6	A	321374
4.71	(4.718)	12	-	4	80	6	A	321375
4.72	(4.728)	12	-	4	80	6	A	321376
4.73	(4.738)	12	-	4	80	6	A	321377
4.74	(4.748)	12	-	4	80	6	A	321378
4.75	(4.758)	12	-	4	80	6	A	321379
4.76	(4.768)	12	-	4	80	6	A	321380
4.77	(4.778)	12	-	4	80	6	A	321381
4.78	(4.788)	12	-	4	80	6	A	321382
4.79	(4.798)	12	-	4	80	6	A	321383
4.80	(4.808)	12	-	4	80	6	A	321384
4.81	(4.818)	12	-	4	80	6	A	321385
4.82	(4.828)	12	-	4	80	6	A	321386
4.83	(4.838)	12	-	4	80	6	A	321387
4.84	(4.848)	12	-	4	80	6	A	321388
4.85	(4.858)	12	-	4	80	6	A	321389
4.86	(4.868)	12	-	4	80	6	A	321390
4.87	(4.878)	12	-	4	80	6	A	321391
4.88	(4.888)	12	-	4	80	6	A	321392
4.89	(4.898)	12	-	4	80	6	A	321393
4.90	(4.908)	12	-	4	80	6	A	321394
4.91	(4.918)	12	-	4	80	6	A	321395
4.92	(4.928)	12	-	4	80	6	A	321396
4.93	(4.938)	12	-	4	80	6	A	321397
4.94	(4.948)	12	-	4	80	6	A	321398
4.95	(4.958)	12	-	4	80	6	A	321399
4.96	(4.968)	12	-	4	80	6	A	321400
4.97	(4.978)	12	-	4	80	6	A	321401





P. 370



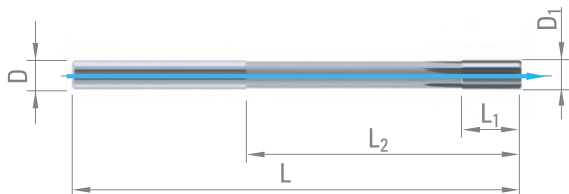
> Ø 2.98



Ref. A



Ref. B



Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D nom. H7	D ₁ ± 1.5µm	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
4.98	(4.988)	12	-	4	80	6	A	321402
4.99	(4.998)	12	-	4	80	6	A	321403
5.00	(5.008)	12	-	4	80	6	A	321404
5.01	(5.018)	12	-	4	80	6	A	321405
5.02	(5.028)	12	-	4	80	6	A	321406
5.03	(5.038)	12	-	4	80	6	A	321407
5.04	(5.048)	12	-	4	80	6	A	321408
5.05	(5.058)	12	-	4	80	6	A	321409
5.06	(5.068)	12	-	4	80	6	A	321410
5.07	(5.078)	12	-	4	80	6	A	321411
5.08	(5.088)	12	-	4	80	6	A	321412
5.09	(5.098)	12	-	4	80	6	A	321413
5.10	(5.108)	12	-	4	80	6	A	321414
5.11	(5.118)	12	-	4	80	6	A	321415
5.12	(5.128)	12	-	4	80	6	A	321416
5.13	(5.138)	12	-	4	80	6	A	321417
5.14	(5.148)	12	-	4	80	6	A	321418
5.15	(5.158)	12	-	4	80	6	A	321419
5.16	(5.168)	12	-	4	80	6	A	321420
5.17	(5.178)	12	-	4	80	6	A	321421
5.18	(5.188)	12	-	4	80	6	A	321422
5.19	(5.198)	12	-	4	80	6	A	321423
5.20	(5.208)	12	-	4	80	6	A	321424
5.21	(5.218)	12	-	4	80	6	A	321425
5.22	(5.228)	12	-	4	80	6	A	321426
5.23	(5.238)	12	-	4	80	6	A	321427
5.24	(5.248)	12	-	4	80	6	A	321428
5.25	(5.258)	12	-	4	80	6	A	321429
5.26	(5.268)	12	-	4	80	6	A	321430
5.27	(5.278)	12	-	4	80	6	A	321431
5.28	(5.288)	12	-	4	80	6	A	321432
5.29	(5.298)	12	-	4	80	6	A	321433
5.30	(5.308)	12	-	4	80	6	A	321434
5.31	(5.318)	12	-	4	80	6	A	321435
5.32	(5.328)	12	-	4	80	6	A	321436
5.33	(5.338)	12	-	4	80	6	A	321437
5.34	(5.348)	12	-	4	80	6	A	321438
5.35	(5.358)	12	-	4	80	6	A	321439
5.36	(5.368)	12	-	4	80	6	A	321440
5.37	(5.378)	12	-	4	80	6	A	321441
5.38	(5.388)	12	-	4	80	6	A	321442
5.39	(5.398)	12	-	4	80	6	A	321443
5.40	(5.408)	12	-	4	80	6	A	321444
5.41	(5.418)	12	-	4	80	6	A	321445
5.42	(5.428)	12	-	4	80	6	A	321446
5.43	(5.438)	12	-	4	80	6	A	321447
5.44	(5.448)	12	-	4	80	6	A	321448

D nom. H7	D ₁ ± 1.5µm	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
5.45	(5.458)	12	-	4	80	6	A	321449
5.46	(5.468)	12	-	4	80	6	A	321450
5.47	(5.478)	12	-	4	80	6	A	321451
5.48	(5.488)	12	-	4	80	6	A	321452
5.49	(5.498)	12	-	4	80	6	A	321453
5.50	(5.508)	12	-	4	80	6	A	321454
5.51	(5.518)	12	-	4	80	6	A	321455
5.52	(5.528)	12	-	4	80	6	A	321456
5.53	(5.538)	12	-	4	80	6	A	321457
5.54	(5.548)	12	-	4	80	6	A	321458
5.55	(5.558)	12	-	4	80	6	A	321459
5.56	(5.568)	12	-	4	80	6	A	321460
5.57	(5.578)	12	-	4	80	6	A	321461
5.58	(5.588)	12	-	4	80	6	A	321462
5.59	(5.598)	12	-	4	80	6	A	321463
5.60	(5.608)	12	-	4	80	6	A	321464
5.61	(5.618)	12	-	4	80	6	A	321465
5.62	(5.628)	12	-	4	80	6	A	321466
5.63	(5.638)	12	-	4	80	6	A	321467
5.64	(5.648)	12	-	4	80	6	A	321468
5.65	(5.658)	12	-	4	80	6	A	321469
5.66	(5.668)	12	-	4	80	6	A	321470
5.67	(5.678)	12	-	4	80	6	A	321471
5.68	(5.688)	12	-	4	80	6	A	321472
5.69	(5.698)	12	-	4	80	6	A	321473
5.70	(5.708)	12	-	4	80	6	A	321474
5.71	(5.718)	12	-	4	80	6	A	321475
5.72	(5.728)	12	-	4	80	6	A	321476
5.73	(5.738)	12	-	4	80	6	A	321477
5.74	(5.748)	12	-	4	80	6	A	321478
5.75	(5.758)	12	-	4	80	6	A	321479
5.76	(5.768)	12	-	4	80	6	A	321480
5.77	(5.778)	12	-	4	80	6	A	321481
5.78	(5.788)	12	-	4	80	6	A	321482
5.79	(5.798)	12	-	4	80	6	A	321483
5.80	(5.808)	12	-	4	80	6	A	321484
5.81	(5.818)	12	-	4	80	6	A	321485
5.82	(5.828)	12	-	4	80	6	A	321486
5.83	(5.838)	12	-	4	80	6	A	321487
5.84	(5.848)	12	-	4	80	6	A	321488
5.85	(5.858)	12	-	4	80	6	A	321489
5.86	(5.868)	12	-	4	80	6	A	321490
5.87	(5.878)	12	-	4	80	6	A	321491
5.88	(5.888)	12	-	4	80	6	A	321492
5.89	(5.898)	12	-	4	80	6	A	321493
5.90	(5.908)	12	-	4	80	6	A	321494
5.91	(5.918)	12	-	4	80	6	A	321495





P. 370



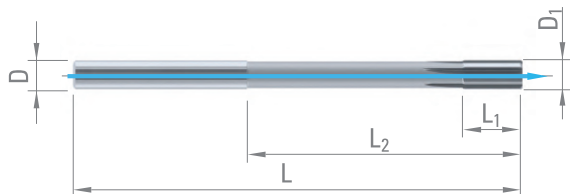
> Ø 2.98



Ref. A



Ref. B



Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D nom. H7	D ₁ ± 1.5µm	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
5.92	(5.928)	12	-	4	80	6	A	321496
5.93	(5.938)	12	-	4	80	6	A	321497
5.94	(5.948)	12	-	4	80	6	A	321498
5.95	(5.958)	12	-	4	80	6	A	321499
5.96	(5.968)	12	-	4	80	6	A	321500
5.97	(5.978)	12	-	4	80	6	A	321501
5.98	(5.988)	12	-	4	80	6	A	321502
5.99	(5.998)	12	-	4	80	6	A	321503
6.00	(6.008)	12	-	4	80	6	A	321504
6.01	(6.020)	12	-	4	80	6	A	321505
6.02	(6.030)	12	-	4	80	6	A	321506
6.03	(6.040)	12	-	4	80	6	A	321507
6.04	(6.050)	12	-	4	80	6	A	321508
6.05	(6.060)	12	-	4	80	6	A	321509
6.06	(6.070)	12	-	4	80	6	A	321510
6.07	(6.080)	12	-	4	80	6	A	321511
6.08	(6.090)	12	-	4	80	6	A	321512
6.09	(6.100)	12	-	4	80	6	A	321513
6.10	(6.110)	12	-	4	80	6	A	321514
6.11	(6.120)	12	-	4	80	6	A	321515
6.12	(6.130)	12	-	4	80	6	A	321516
6.13	(6.140)	12	-	4	80	6	A	321517
6.14	(6.150)	12	-	4	80	6	A	321518
6.15	(6.160)	12	-	4	80	6	A	321519
6.16	(6.170)	12	-	4	80	6	A	321520
6.17	(6.180)	12	-	4	80	6	A	321521
6.18	(6.190)	12	-	4	80	6	A	321522
6.19	(6.200)	12	-	4	80	6	A	321523
6.20	(6.210)	16	-	6	101	6	A	341670
6.30	(6.310)	16	-	6	101	6	A	341680
6.35	(6.360)	16	-	6	101	6	A	341685
6.40	(6.410)	16	-	6	101	6	A	341690
6.48	(6.490)	16	-	6	101	6	A	341698
6.49	(6.500)	16	-	6	101	6	A	341699
6.50	(6.510)	16	-	6	101	6	A	341700
6.51	(6.520)	16	-	6	101	6	A	341701
6.52	(6.530)	16	-	6	101	6	A	341702
6.55	(6.560)	16	-	6	101	6	A	341705
6.60	(6.610)	16	-	6	101	6	A	341710
6.70	(6.710)	16	-	6	101	6	A	341720
6.80	(6.810)	16	-	6	101	6	A	341730
6.90	(6.910)	16	-	6	101	6	A	341740
7.00	(7.010)	16	-	6	101	6	A	341750
7.01	(7.020)	16	-	6	101	6	A	341751
7.02	(7.030)	16	-	6	101	6	A	341752
7.10	(7.110)	16	-	6	101	6	A	341760
7.20	(7.210)	16	-	6	101	6	A	341770

D nom. H7	D ₁ ± 1.5µm	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
7.30	(7.310)	16	-	6	101	6	A	341780
7.40	(7.410)	16	-	6	101	6	A	341790
7.50	(7.510)	16	-	6	101	6	A	341800
7.60	(7.610)	16	-	6	101	6	A	341810
7.70	(7.710)	16	-	6	101	6	A	341820
7.80	(7.810)	16	-	6	101	6	A	341830
7.90	(7.910)	16	-	6	101	6	A	341840
7.98	(7.990)	16	-	6	101	6	A	341848
7.99	(8.000)	16	-	6	101	6	A	341849
8.00	(8.010)	16	-	6	101	6	A	341850
8.01	(8.020)	16	-	6	101	6	A	341851
8.02	(8.030)	16	-	6	101	6	A	341852
8.05	(8.060)	16	-	6	101	6	A	341855
8.10	(8.110)	16	-	6	117	6	A	341860
8.20	(8.210)	16	-	6	117	6	A	341870
8.30	(8.310)	16	-	6	117	6	A	341880
8.40	(8.410)	16	-	6	117	6	A	341890
8.50	(8.510)	16	-	6	117	6	A	341900
8.70	(8.710)	16	-	6	117	6	A	341920
9.00	(9.010)	16	-	6	117	6	A	341950
9.30	(9.310)	16	-	6	117	6	A	341980
9.50	(9.510)	16	-	6	117	6	A	342000
9.70	(9.710)	16	-	6	117	6	A	342020
9.98	(9.990)	16	-	6	117	6	A	342048
9.99	(10.000)	16	-	6	117	6	A	342049
10.00	(10.010)	16	-	6	117	6	A	342050
10.01	(10.020)	16	-	6	117	6	A	342051
10.02	(10.032)	19	87	10	133	6	B	952322
10.04	(10.052)	19	87	10	133	6	B	962649
10.05	(10.062)	19	87	10	133	6	B	962568
10.10	(10.112)	19	87	10	133	6	B	952765
10.40	(10.412)	19	87	10	133	6	B	968160
10.50	(10.512)	19	87	10	133	6	B	952766
10.60	(10.612)	19	87	10	133	6	B	952767
11.00	(11.012)	19	96	12	142	6	B	952768
11.50	(11.512)	19	96	12	142	6	B	952769
11.80	(11.812)	19	96	12	142	6	B	952770
12.00	(12.012)	19	105	12	151	6	B	952771
12.02	(12.032)	19	105	12	151	6	B	952772

All Ø with tolerance ±2µm available through our express-service

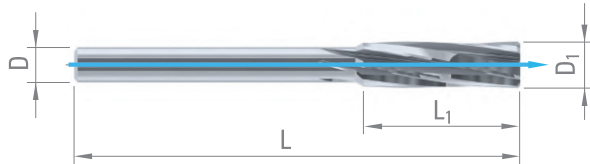


POLY 4005-TC

HELICAL REAMERS, RIGHT-HAND SPIRAL
RIGHT-HAND CUTTING, IRREGULAR TEETH



P. 370

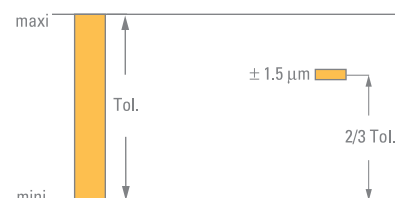


Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D nom. H7	D ₁ ± 1.5µm	L ₁	D _{h5}	L	Z	CARBIDE
2.97	(2.977)	20	2.5	56	4	969074
2.99	(2.997)	20	2.5	56	4	969379
3.00	(3.007)	20	2.5	56	4	969382
3.01	(3.018)	20	2.5	56	4	969398
3.02	(3.028)	20	2.5	56	4	969399
3.05	(3.058)	20	2.5	56	4	969400
3.08	(3.088)	20	2.5	56	4	969401
3.10	(3.108)	20	2.5	56	4	969402
3.11	(3.118)	20	2.5	56	4	969403
3.15	(3.158)	20	2.5	56	4	969404
3.18	(3.188)	20	2.5	56	4	969405
3.20	(3.208)	20	2.5	56	4	969406
3.21	(3.218)	20	2.5	56	4	969407
3.25	(3.258)	20	2.5	56	4	969408
3.28	(3.288)	20	2.5	56	4	969409
3.30	(3.308)	20	2.5	56	4	969410
3.31	(3.318)	20	2.5	56	4	969411
3.35	(3.358)	20	2.5	56	4	969412
3.38	(3.388)	20	2.5	56	4	969413
3.40	(3.408)	20	2.5	56	4	969414
3.41	(3.418)	20	2.5	56	4	969415
3.45	(3.458)	20	2.5	56	4	969416
3.49	(3.498)	20	2.5	56	4	969417
3.50	(3.508)	20	3.0	56	4	969418
3.51	(3.518)	20	3.0	56	4	969421
3.55	(3.558)	20	3.0	56	4	969422
3.58	(3.588)	20	3.0	56	4	969423
3.60	(3.608)	20	3.0	56	4	969424
3.61	(3.618)	20	3.0	56	4	969425
3.65	(3.658)	20	3.0	56	4	969426
3.68	(3.688)	20	3.0	56	4	969427
3.70	(3.708)	20	3.0	56	4	969428
3.71	(3.718)	20	3.0	56	4	969429

D nom. H7	D ₁ ± 1.5µm	L ₁	D _{h5}	L	Z	CARBIDE
3.75	(3.758)	20	3.0	56	4	969430
3.78	(3.788)	20	3.0	56	4	969431
3.80	(3.808)	20	3.0	56	4	969432
3.85	(3.858)	20	3.0	56	4	969433
3.90	(3.908)	20	3.0	56	4	969434
3.95	(3.958)	20	3.0	56	4	969435
4.00	(4.008)	20	3.0	56	4	969436
4.04	(4.048)	22	3.5	63	6	993718
4.10	(4.108)	22	3.5	63	6	969437
4.20	(4.208)	22	3.5	63	6	969438
4.30	(4.308)	22	3.5	63	6	969439
4.40	(4.408)	22	3.5	63	6	969440
4.50	(4.508)	22	4.0	63	6	969441
4.60	(4.608)	22	4.0	63	6	969442
4.70	(4.708)	22	4.0	63	6	969443
4.80	(4.808)	22	4.0	63	6	969444
4.90	(4.908)	22	4.0	63	6	969445
5.00	(5.008)	22	4.0	63	6	969446
5.10	(5.108)	22	4.0	63	6	969447
5.20	(5.208)	22	4.0	63	6	969448
5.30	(5.308)	22	4.0	63	6	969449
5.40	(5.408)	22	4.0	63	6	969450
5.50	(5.508)	22	5.0	63	6	969451
5.60	(5.608)	22	5.0	63	6	969452
5.70	(5.708)	22	5.0	63	6	969453
5.80	(5.808)	22	5.0	63	6	969454
5.90	(5.908)	22	5.0	63	6	969455
6.00	(6.008)	22	5.0	63	6	969456
6.10	(6.110)	22	5.0	63	6	969457
6.20	(6.210)	22	5.0	63	6	969458
6.30	(6.310)	22	5.0	63	6	969459
6.40	(6.410)	22	5.0	63	6	969460
6.50	(6.510)	22	5.0	63	6	969461

All Ø with tolerance ±2µm available
through our express-service



POLY 4007 - 4007-TC

HELICAL REAMERS, LEFT-HAND SPIRAL
RIGHT-HAND CUTTING, IRREGULAR TEETH



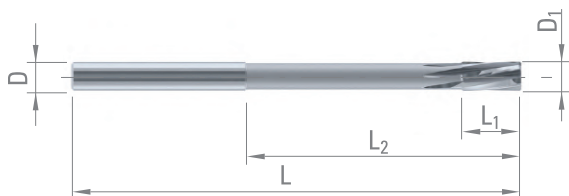
P. 370



Ref. A



Ref. B



Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D _{10/+0.003}	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
0.37	3	5	3	38	3	B	983079
0.38	3	5	3	38	3	B	326999
0.39	3	5	3	38	3	B	969543
0.40	3	5	3	38	3	B	200716
0.41	3	5	3	38	3	B	963823
0.42	3	5	3	38	3	B	200717
0.43	3	5	3	38	3	B	327000
0.44	3	5	3	38	3	B	200718
0.45	3	5	3	38	3	B	965207
0.46	3	5	3	38	3	B	200719
0.47	3	5	3	38	3	B	327001
0.48	3	5	3	38	3	B	200720
0.49	3	5	3	38	3	B	963716
0.50	3	5	3	38	3	B	200746
0.51	4	6	3	38	3	B	200745
0.52	4	6	3	38	3	B	200738
0.53	4	6	3	38	3	B	200742
0.54	4	6	3	38	3	B	200743
0.55	4	6	3	38	3	B	200739
0.56	4	6	3	38	3	B	968834
0.57	4	6	3	38	3	B	973253
0.58	4	6	3	38	3	B	200741
0.59	4	6	3	38	3	B	200744
0.60	4	6	3	38	3	B	200740
0.61	4	7	3	38	3	B	964652
0.62	4	7	3	38	3	B	200750
0.63	4	7	3	38	3	B	327002
0.64	4	7	3	38	3	B	200755
0.65	4	7	3	38	3	B	200748
0.66	4	7	3	38	3	B	200752
0.67	4	7	3	38	3	B	200753
0.68	4	7	3	38	3	B	200751
0.69	4	7	3	38	3	B	200754
0.70	4	7	3	38	3	B	200749
0.71	4	8	3	38	3	B	965167
0.72	4	8	3	38	3	B	200758
0.73	4	8	3	38	3	B	327003
0.74	4	8	3	38	3	B	200762
0.75	4	8	3	38	3	B	200756
0.76	4	8	3	38	3	B	327004
0.77	4	8	3	38	3	B	200760
0.78	4	8	3	38	3	B	200759
0.79	4	8	3	38	3	B	200761
0.80	4	8	3	38	3	B	200757
0.81	5	9	3	38	3	B	965168

D _{10/+0.003}	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
0.82	5	9	3	38	3	B	200765
0.83	5	9	3	38	3	B	200769
0.84	5	9	3	38	3	B	200768
0.85	5	9	3	38	3	B	200763
0.86	5	9	3	38	3	B	200770
0.87	5	9	3	38	3	B	200771
0.88	5	9	3	38	3	B	200766
0.89	5	9	3	38	3	B	200767
0.90	5	9	3	38	3	B	200764
0.91	5	10	3	38	3	B	200733
0.92	5	10	3	38	3	B	200729
0.93	5	10	3	38	3	B	327005
0.94	5	10	3	38	3	B	327006
0.95	5	10	3	38	3	B	200728
0.96	5	10	3	38	3	B	200730
0.97	5	10	3	38	3	B	200731
0.98	5	10	3	38	3	B	200726
0.99	5	10	3	38	3	B	200727
1.00	5	10	3	38	3	B	200732
1.01	5	11	3	38	3	B	200715
1.02	5	11	3	38	3	B	200772
1.03	5	11	3	38	3	B	967191
1.04	5	11	3	38	3	B	327007
1.05	5	11	3	38	3	B	200773
1.06	5	11	3	38	3	B	327008
1.07	5	11	3	38	3	B	327009
1.08	5	11	3	38	3	B	200774
1.09	5	11	3	38	3	B	965169
1.10	5	11	3	38	3	B	200777
1.11	5	12	3	38	3	B	327010
1.12	5	12	3	38	3	B	327011
1.13	5	12	3	38	3	B	327012
1.14	5	12	3	38	3	B	327013
1.15	5	12	3	38	3	B	200775
1.16	5	12	3	38	3	B	327014
1.17	5	12	3	38	3	B	327015
1.18	5	12	3	38	3	B	63965
1.19	5	12	3	38	3	B	327016
1.20	5	12	3	38	3	B	200776
1.21	6	13	3	38	3	B	965171
1.22	6	13	3	38	3	B	327017
1.23	6	13	3	38	3	B	327018
1.24	6	13	3	38	3	B	327019
1.25	6	13	3	38	3	B	200778
1.26	6	13	3	38	3	B	963588

All Ø with tolerance ±2µm available through our express-service





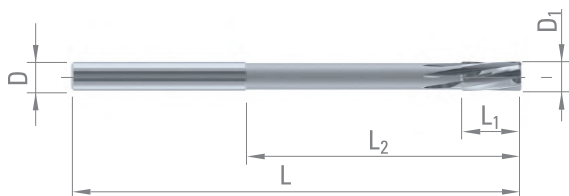
P. 370



Ref. A



Ref. B



Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D _{10/+0.003}	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
1.27	6	13	3	38	3	B	972014
1.28	6	13	3	38	3	B	200780
1.29	6	13	3	38	3	B	327020
1.30	6	13	3	38	3	B	200779
1.31	6	13	3	38	3	B	967299
1.32	6	13	3	38	3	B	327021
1.33	6	13	3	38	3	B	327022
1.34	6	13	3	38	3	B	973390
1.35	6	13	3	38	3	B	200734
1.36	6	13	3	38	3	B	327023
1.37	6	13	3	38	3	B	327024
1.38	6	13	3	38	3	B	327025
1.39	6	13	3	38	3	B	327026
1.40	6	13	3	38	3	B	200735
1.41	7	15	3	38	3	B	327027
1.42	7	15	3	38	3	B	327028
1.43	7	15	3	38	3	B	327029
1.44	7	15	3	38	3	B	327030
1.45	7	15	3	38	3	B	200783
1.46	7	15	3	38	3	B	327031
1.47	7	15	3	38	3	B	327032
1.48	7	15	3	38	3	B	200781
1.49	7	15	3	38	3	B	200782
1.50	7	15	3	38	3	B	200784
1.51	7	15	3	50	3	B	200787
1.52	7	15	3	50	3	B	200788
1.53	7	15	3	50	3	B	327033
1.54	7	15	3	50	3	B	327034
1.55	7	15	3	50	3	B	200692
1.56	7	15	3	50	3	B	976176
1.57	7	15	3	50	3	B	964655
1.58	7	15	3	50	3	B	63966
1.59	7	15	3	50	3	B	965174
1.60	7	15	3	50	3	B	200794
1.61	7	16	3	50	3	B	965175
1.62	7	16	3	50	3	B	327035
1.63	7	16	3	50	3	B	327036
1.64	7	16	3	50	3	B	327037
1.65	7	16	3	50	3	B	200691
1.66	7	16	3	50	3	B	327038
1.67	7	16	3	50	3	B	327039
1.68	7	16	3	50	3	B	327040
1.69	7	16	3	50	3	B	965209
1.70	7	16	3	50	3	B	200693
1.71	7	17	3	50	3	B	327041
1.72	7	17	3	50	3	B	327042
1.73	7	17	3	50	3	B	327043

D _{10/+0.003}	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
1.74	7	17	3	50	3	B	327044
1.75	7	17	3	50	3	B	200694
1.76	7	17	3	50	3	B	327045
1.77	7	17	3	50	3	B	327046
1.78	7	17	3	50	3	B	327047
1.79	7	17	3	50	3	B	200713
1.80	7	17	3	50	3	B	200795
1.81	8	17	3	50	3	B	327048
1.82	8	17	3	50	3	B	327049
1.83	8	17	3	50	3	B	971471
1.84	8	17	3	50	3	B	327050
1.85	8	17	3	50	3	B	200796
1.86	8	17	3	50	3	B	972720
1.87	8	17	3	50	3	B	964530
1.88	8	17	3	50	3	B	971918
1.89	8	17	3	50	3	B	200704
1.90	8	17	3	50	3	B	20079
1.91	8	18	3	50	3	B	965177
1.92	8	18	3	50	3	B	327051
1.93	8	18	3	50	3	B	327052
1.94	8	18	3	50	3	B	327053
1.95	8	18	3	50	3	B	200682
1.96	8	18	3	50	3	B	200712
1.97	8	18	3	50	3	B	200789
1.98	8	18	3	50	3	B	200790
1.99	8	18	3	50	3	B	200791
2.00	8	18	3	50	3	B	200785
2.01	8	18	3	50	3	B	200792
2.02	8	18	3	50	3	B	200793
2.03	8	18	3	50	3	B	327054
2.04	8	18	3	50	3	B	200714
2.05	8	18	3	50	3	B	200688
2.06	8	18	3	50	3	B	327055
2.07	8	18	3	50	3	B	327056
2.08	8	18	3	50	3	B	327057
2.09	8	18	3	50	3	B	968093
2.10	8	18	3	50	3	B	200711
2.11	8	18	3	50	3	B	327058
2.12	8	18	3	50	3	B	968735
2.13	8	18	3	50	3	B	327059
2.14	8	18	3	50	3	B	968737
2.15	8	18	3	50	3	B	200687
2.16	8	18	3	50	3	B	327060
2.17	8	18	3	50	3	B	327061
2.18	8	18	3	50	3	B	327062
2.19	8	18	3	50	3	B	967119
2.20	8	18	3	50	3	B	200706





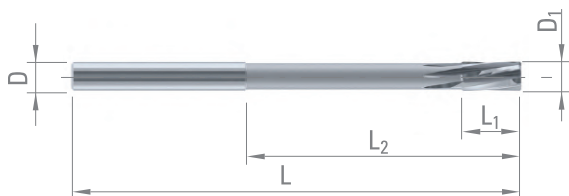
P. 370



Ref. A



Ref. B



Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D _{10/+0.003}	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
2.21	8	18	3	50	3	B	327063
2.22	8	18	3	50	3	B	327064
2.23	8	18	3	50	3	B	327065
2.24	8	18	3	50	3	B	327066
2.25	8	18	3	50	3	B	200686
2.26	8	18	3	50	3	B	327067
2.27	8	18	3	50	3	B	327068
2.28	8	18	3	50	3	B	327069
2.29	8	18	3	50	3	B	327070
2.30	8	18	3	50	3	B	200698
2.31	10	20	3	50	3	B	327071
2.32	10	20	3	50	3	B	200702
2.33	10	20	3	50	3	B	327072
2.34	10	20	3	50	3	B	327073
2.35	10	20	3	50	3	B	200697
2.36	10	20	3	50	3	B	327074
2.37	10	20	3	50	3	B	327075
2.38	10	20	3	50	3	B	327076
2.39	10	20	3	50	3	B	327077
2.40	10	20	3	50	3	B	200696
2.41	10	20	3	50	3	B	972007
2.42	10	20	3	50	3	B	327078
2.43	10	20	3	50	3	B	327079
2.44	10	20	3	50	3	B	327080
2.45	10	20	3	50	3	B	200695
2.46	10	20	3	50	3	B	327081
2.47	10	20	3	50	3	B	327082
2.48	10	20	3	50	3	B	200707
2.49	10	20	3	50	3	B	200708
2.50	10	20	3	50	3	B	200786
2.51	10	20	3	61	4	B	200709
2.52	10	20	3	61	4	B	200710
2.53	10	20	3	61	4	B	327083
2.54	10	20	3	61	4	B	327084
2.55	10	20	3	61	4	B	200685
2.56	10	20	3	61	4	B	327085
2.57	10	20	3	61	4	B	327086
2.58	10	20	3	61	4	B	327087
2.59	10	20	3	61	4	B	327088
2.60	10	20	3	61	4	B	200684
2.61	10	25	3	61	4	B	327089
2.62	10	25	3	61	4	B	327090
2.63	10	25	3	61	4	B	327091
2.64	10	25	3	61	4	B	327092
2.65	10	25	3	61	4	B	200683
2.66	10	25	3	61	4	B	327093
2.67	10	25	3	61	4	B	200703

D _{10/+0.003}	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
2.68	10	25	3	61	4	B	327094
2.69	10	25	3	61	4	B	327095
2.70	10	25	3	61	4	B	200690
2.71	10	25	3	61	4	B	327096
2.72	10	25	3	61	4	B	327097
2.73	10	25	3	61	4	B	327098
2.74	10	25	3	61	4	B	327099
2.75	10	25	3	61	4	B	200689
2.76	10	25	3	61	4	B	327100
2.77	10	25	3	61	4	B	327101
2.78	10	25	3	61	4	B	327102
2.79	10	25	3	61	4	B	327103
2.80	10	25	3	61	4	B	200705
2.81	10	25	3	61	4	B	327104
2.82	10	25	3	61	4	B	327105
2.83	10	25	3	61	4	B	327106
2.84	10	25	3	61	4	B	327107
2.85	10	25	3	61	4	B	200699
2.86	10	25	3	61	4	B	327108
2.87	10	25	3	61	4	B	327109
2.88	10	25	3	61	4	B	327110
2.89	10	25	3	61	4	B	327111
2.90	10	25	3	61	4	B	200700
2.91	10	25	3	61	4	B	327112
2.92	10	25	3	61	4	B	327113
2.93	10	25	3	61	4	B	327114
2.94	10	25	3	61	4	B	327115
2.95	10	25	3	61	4	B	200701
2.96	10	25	3	61	4	B	327116
2.97	10	25	3	61	4	B	200747
2.98	10	25	3	70	6	B	321524
2.99	10	25	3	70	6	B	321525
3.00	10	25	3	70	6	B	321526
3.01	10	25	3	70	6	B	321527
3.02	10	25	3	70	6	B	321528
3.03	10	25	3	70	6	B	321529
3.04	10	25	3	70	6	B	321530
3.05	10	25	3	70	6	B	321531
3.06	10	25	3	70	6	B	321532
3.07	10	25	3	70	6	B	321533
3.08	10	25	3	70	6	B	321534
3.09	10	25	3	70	6	B	321535
3.10	10	-	3	70	6	A	321536
3.11	10	-	3	70	6	A	321537
3.12	10	-	3	70	6	A	321538
3.13	10	-	3	70	6	A	321539
3.14	10	-	3	70	6	A	321540

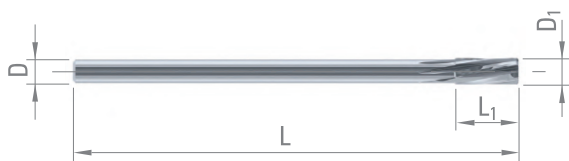




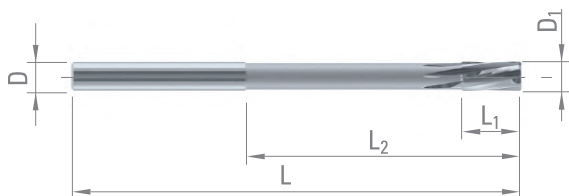
P. 370



Ref. A



Ref. B



Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D _{10/+0.003}	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
3.15	10	-	3	70	6	A	321541
3.16	10	-	3	70	6	A	321542
3.17	10	-	3	70	6	A	321543
3.18	10	-	3	70	6	A	321544
3.19	10	-	3	70	6	A	321545
3.20	10	-	3	70	6	A	321546
3.21	10	-	3	70	6	A	321547
3.22	10	-	3	70	6	A	321548
3.23	10	-	3	70	6	A	321549
3.24	10	-	3	70	6	A	321550
3.25	10	-	3	70	6	A	321551
3.26	10	-	3	70	6	A	321552
3.27	10	-	3	70	6	A	321553
3.28	10	-	3	70	6	A	321554
3.29	10	-	3	70	6	A	321555
3.30	10	-	3	70	6	A	321556
3.31	10	-	3	70	6	A	321557
3.32	10	-	3	70	6	A	321558
3.33	10	-	3	70	6	A	321559
3.34	10	-	3	70	6	A	321560
3.35	10	-	3	70	6	A	321561
3.36	10	-	3	70	6	A	321562
3.37	10	-	3	70	6	A	321563
3.38	10	-	3	70	6	A	321564
3.39	10	-	3	70	6	A	321565
3.40	10	-	3	70	6	A	321566
3.41	10	-	3	70	6	A	321567
3.42	10	-	3	70	6	A	321568
3.43	10	-	3	70	6	A	321569
3.44	10	-	3	70	6	A	321570
3.45	10	-	3	70	6	A	321571
3.46	10	-	3	70	6	A	321572
3.47	10	-	3	70	6	A	321573
3.48	10	-	3	70	6	A	321574
3.49	10	-	3	70	6	A	321575
3.50	10	-	3	70	6	A	321576
3.51	10	-	3	70	6	A	321577
3.52	10	-	3	70	6	A	321578
3.53	10	-	3	70	6	A	321579
3.54	10	-	3	70	6	A	321580
3.55	10	-	3	70	6	A	321581
3.56	10	-	3	70	6	A	321582
3.57	10	-	3	70	6	A	321583
3.58	10	-	3	70	6	A	321584
3.59	10	-	3	70	6	A	321585
3.60	10	-	3	70	6	A	321586
3.61	10	-	3	70	6	A	321587

D _{10/+0.003}	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
3.62	10	-	3	70	6	A	321588
3.63	10	-	3	70	6	A	321589
3.64	10	-	3	70	6	A	321590
3.65	10	-	3	70	6	A	321591
3.66	10	-	3	70	6	A	321592
3.67	10	-	3	70	6	A	321593
3.68	10	-	3	70	6	A	321594
3.69	10	-	3	70	6	A	321595
3.70	10	-	3	70	6	A	321596
3.71	10	-	3	70	6	A	321597
3.72	10	-	3	70	6	A	321598
3.73	10	-	3	70	6	A	321599
3.74	10	-	3	70	6	A	321600
3.75	10	-	3	70	6	A	321601
3.76	10	-	3	70	6	A	321602
3.77	10	-	3	70	6	A	321603
3.78	10	-	3	70	6	A	321604
3.79	10	-	3	70	6	A	321605
3.80	10	-	3	70	6	A	321606
3.81	10	-	3	70	6	A	321607
3.82	10	-	3	70	6	A	321608
3.83	10	-	3	70	6	A	321609
3.84	10	-	3	70	6	A	321610
3.85	10	-	3	70	6	A	321611
3.86	10	-	3	70	6	A	321612
3.87	10	-	3	70	6	A	321613
3.88	10	-	3	70	6	A	321614
3.89	10	-	3	70	6	A	321615
3.90	10	-	3	70	6	A	321616
3.91	10	-	3	70	6	A	321617
3.92	10	-	3	70	6	A	321618
3.93	10	-	3	70	6	A	321619
3.94	10	-	3	70	6	A	321620
3.95	10	-	3	70	6	A	321621
3.96	10	-	3	70	6	A	321622
3.97	10	-	3	70	6	A	321623
3.98	10	-	3	70	6	A	321624
3.99	10	-	3	70	6	A	321625
4.00	10	-	3	70	6	A	321626
4.01	10	-	3	70	6	A	321627
4.02	10	-	3	70	6	A	321628
4.03	10	-	3	70	6	A	321629
4.04	10	-	3	70	6	A	321630
4.05	10	-	3	70	6	A	321631
4.06	10	-	3	70	6	A	321632
4.07	10	-	3	70	6	A	321633
4.08	10	-	3	70	6	A	321634

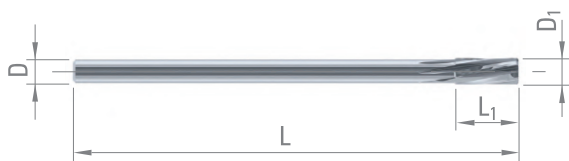




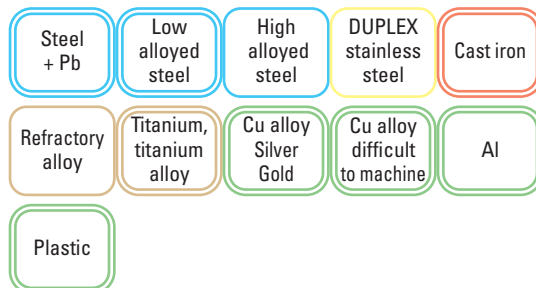
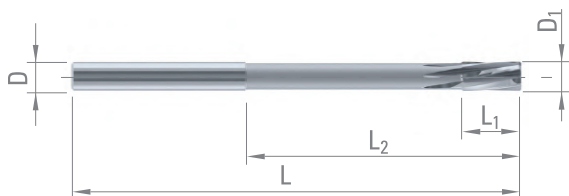
P. 370



Ref. A



Ref. B



$D_{10/+0.003}$	L_1	L_2	D_{h5}	L	Z	Ref.	CARBIDE
4.09	10	-	3	70	6	A	321635
4.10	12	-	4	80	6	A	321636
4.11	12	-	4	80	6	A	321637
4.12	12	-	4	80	6	A	321638
4.13	12	-	4	80	6	A	321639
4.14	12	-	4	80	6	A	321640
4.15	12	-	4	80	6	A	321641
4.16	12	-	4	80	6	A	321642
4.17	12	-	4	80	6	A	321643
4.18	12	-	4	80	6	A	321644
4.19	12	-	4	80	6	A	321645
4.20	12	-	4	80	6	A	321646
4.21	12	-	4	80	6	A	321647
4.22	12	-	4	80	6	A	321648
4.23	12	-	4	80	6	A	321649
4.24	12	-	4	80	6	A	321650
4.25	12	-	4	80	6	A	321651
4.26	12	-	4	80	6	A	321652
4.27	12	-	4	80	6	A	321653
4.28	12	-	4	80	6	A	321654
4.29	12	-	4	80	6	A	321655
4.30	12	-	4	80	6	A	321656
4.31	12	-	4	80	6	A	321657
4.32	12	-	4	80	6	A	321658
4.33	12	-	4	80	6	A	321659
4.34	12	-	4	80	6	A	321660
4.35	12	-	4	80	6	A	321661
4.36	12	-	4	80	6	A	321662
4.37	12	-	4	80	6	A	321663
4.38	12	-	4	80	6	A	321664
4.39	12	-	4	80	6	A	321665
4.40	12	-	4	80	6	A	321666
4.41	12	-	4	80	6	A	321667
4.42	12	-	4	80	6	A	321668
4.43	12	-	4	80	6	A	321669
4.44	12	-	4	80	6	A	321670
4.45	12	-	4	80	6	A	321671
4.46	12	-	4	80	6	A	321672
4.47	12	-	4	80	6	A	321673
4.48	12	-	4	80	6	A	321674
4.49	12	-	4	80	6	A	321675
4.50	12	-	4	80	6	A	321676
4.51	12	-	4	80	6	A	321677
4.52	12	-	4	80	6	A	321678
4.53	12	-	4	80	6	A	321679
4.54	12	-	4	80	6	A	321680
4.55	12	-	4	80	6	A	321681

$D_{10/+0.003}$	L_1	L_2	D_{h5}	L	Z	Ref.	CARBIDE
4.56	12	-	4	80	6	A	321682
4.57	12	-	4	80	6	A	321683
4.58	12	-	4	80	6	A	321684
4.59	12	-	4	80	6	A	321685
4.60	12	-	4	80	6	A	321686
4.61	12	-	4	80	6	A	321687
4.62	12	-	4	80	6	A	321688
4.63	12	-	4	80	6	A	321689
4.64	12	-	4	80	6	A	321690
4.65	12	-	4	80	6	A	321691
4.66	12	-	4	80	6	A	321692
4.67	12	-	4	80	6	A	321693
4.68	12	-	4	80	6	A	321694
4.69	12	-	4	80	6	A	321695
4.70	12	-	4	80	6	A	321696
4.71	12	-	4	80	6	A	321697
4.72	12	-	4	80	6	A	321698
4.73	12	-	4	80	6	A	321699
4.74	12	-	4	80	6	A	321700
4.75	12	-	4	80	6	A	321701
4.76	12	-	4	80	6	A	321702
4.77	12	-	4	80	6	A	321703
4.78	12	-	4	80	6	A	321704
4.79	12	-	4	80	6	A	321705
4.80	12	-	4	80	6	A	321706
4.81	12	-	4	80	6	A	321707
4.82	12	-	4	80	6	A	321708
4.83	12	-	4	80	6	A	321709
4.84	12	-	4	80	6	A	321710
4.85	12	-	4	80	6	A	321711
4.86	12	-	4	80	6	A	321712
4.87	12	-	4	80	6	A	321713
4.88	12	-	4	80	6	A	321714
4.89	12	-	4	80	6	A	321715
4.90	12	-	4	80	6	A	321716
4.91	12	-	4	80	6	A	321717
4.92	12	-	4	80	6	A	321718
4.93	12	-	4	80	6	A	321719
4.94	12	-	4	80	6	A	321720
4.95	12	-	4	80	6	A	321721
4.96	12	-	4	80	6	A	321722
4.97	12	-	4	80	6	A	321723
4.98	12	-	4	80	6	A	321724
4.99	12	-	4	80	6	A	321725
5.00	12	-	4	80	6	A	321726
5.01	12	-	4	80	6	A	321727
5.02	12	-	4	80	6	A	321728





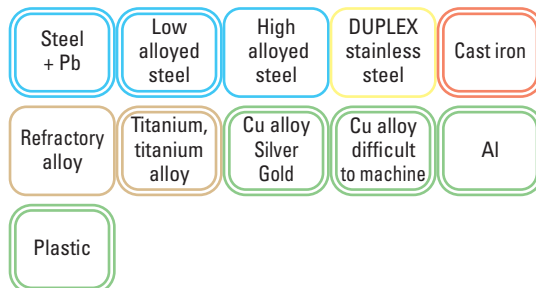
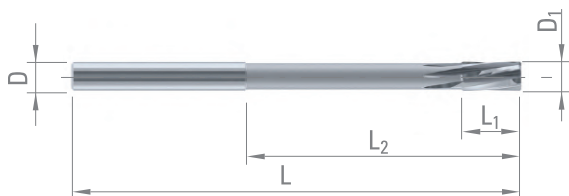
P. 370



Ref. A



Ref. B



$D_{10/+0.003}$	L_1	L_2	D_{h5}	L	Z	Ref.	CARBIDE
5.03	12	-	4	80	6	A	321729
5.04	12	-	4	80	6	A	321730
5.05	12	-	4	80	6	A	321731
5.06	12	-	4	80	6	A	321732
5.07	12	-	4	80	6	A	321733
5.08	12	-	4	80	6	A	321734
5.09	12	-	4	80	6	A	321735
5.10	12	-	4	80	6	A	321736
5.11	12	-	4	80	6	A	321737
5.12	12	-	4	80	6	A	321738
5.13	12	-	4	80	6	A	321739
5.14	12	-	4	80	6	A	321740
5.15	12	-	4	80	6	A	321741
5.16	12	-	4	80	6	A	321742
5.17	12	-	4	80	6	A	321743
5.18	12	-	4	80	6	A	321744
5.19	12	-	4	80	6	A	321745
5.20	12	-	4	80	6	A	321746
5.21	12	-	4	80	6	A	321747
5.22	12	-	4	80	6	A	321748
5.23	12	-	4	80	6	A	321749
5.24	12	-	4	80	6	A	321750
5.25	12	-	4	80	6	A	321751
5.26	12	-	4	80	6	A	321752
5.27	12	-	4	80	6	A	321753
5.28	12	-	4	80	6	A	321754
5.29	12	-	4	80	6	A	321755
5.30	12	-	4	80	6	A	321756
5.31	12	-	4	80	6	A	321757
5.32	12	-	4	80	6	A	321758
5.33	12	-	4	80	6	A	321759
5.34	12	-	4	80	6	A	321760
5.35	12	-	4	80	6	A	321761
5.36	12	-	4	80	6	A	321762
5.37	12	-	4	80	6	A	321763
5.38	12	-	4	80	6	A	321764
5.39	12	-	4	80	6	A	321765
5.40	12	-	4	80	6	A	321766
5.41	12	-	4	80	6	A	321767
5.42	12	-	4	80	6	A	321768
5.43	12	-	4	80	6	A	321769
5.44	12	-	4	80	6	A	321770
5.45	12	-	4	80	6	A	321771
5.46	12	-	4	80	6	A	321772
5.47	12	-	4	80	6	A	321773
5.48	12	-	4	80	6	A	321774
5.49	12	-	4	80	6	A	321775

$D_{10/+0.003}$	L_1	L_2	D_{h5}	L	Z	Ref.	CARBIDE
5.50	12	-	4	80	6	A	321776
5.51	12	-	4	80	6	A	321777
5.52	12	-	4	80	6	A	321778
5.53	12	-	4	80	6	A	321779
5.54	12	-	4	80	6	A	321780
5.55	12	-	4	80	6	A	321781
5.56	12	-	4	80	6	A	321782
5.57	12	-	4	80	6	A	321783
5.58	12	-	4	80	6	A	321784
5.59	12	-	4	80	6	A	321785
5.60	12	-	4	80	6	A	321786
5.61	12	-	4	80	6	A	321787
5.62	12	-	4	80	6	A	321788
5.63	12	-	4	80	6	A	321789
5.64	12	-	4	80	6	A	321790
5.65	12	-	4	80	6	A	321791
5.66	12	-	4	80	6	A	321792
5.67	12	-	4	80	6	A	321793
5.68	12	-	4	80	6	A	321794
5.69	12	-	4	80	6	A	321795
5.70	12	-	4	80	6	A	321796
5.71	12	-	4	80	6	A	321797
5.72	12	-	4	80	6	A	321798
5.73	12	-	4	80	6	A	321799
5.74	12	-	4	80	6	A	321800
5.75	12	-	4	80	6	A	321801
5.76	12	-	4	80	6	A	321802
5.77	12	-	4	80	6	A	321803
5.78	12	-	4	80	6	A	321804
5.79	12	-	4	80	6	A	321805
5.80	12	-	4	80	6	A	321806
5.81	12	-	4	80	6	A	321807
5.82	12	-	4	80	6	A	321808
5.83	12	-	4	80	6	A	321809
5.84	12	-	4	80	6	A	321810
5.85	12	-	4	80	6	A	321811
5.86	12	-	4	80	6	A	321812
5.87	12	-	4	80	6	A	321813
5.88	12	-	4	80	6	A	321814
5.89	12	-	4	80	6	A	321815
5.90	12	-	4	80	6	A	321816
5.91	12	-	4	80	6	A	321817
5.92	12	-	4	80	6	A	321818
5.93	12	-	4	80	6	A	321819
5.94	12	-	4	80	6	A	321820
5.95	12	-	4	80	6	A	321821
5.96	12	-	4	80	6	A	321822





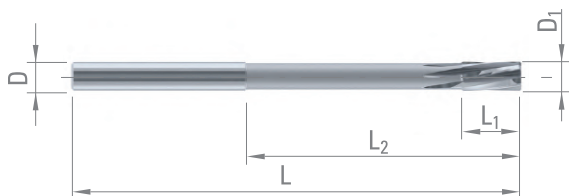
P. 370



Ref. A



Ref. B



Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D _{10/+0.003}	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
5.97	12	-	4	80	6	A	321823
5.98	12	-	4	80	6	A	321824
5.99	12	-	4	80	6	A	321825
6.00	12	-	4	80	6	A	321826
6.01	12	-	4	80	6	A	321827
6.02	12	-	4	80	6	A	321828
6.03	12	-	4	80	6	A	321829
6.04	12	-	4	80	6	A	321830
6.05	12	-	4	80	6	A	321831
6.06	12	-	4	80	6	A	321832
6.07	12	-	4	80	6	A	321833
6.08	12	-	4	80	6	A	321834
6.09	12	-	4	80	6	A	321835
6.10	12	-	4	80	6	A	321836
6.11	12	-	4	80	6	A	321837
6.12	12	-	4	80	6	A	321838
6.13	12	-	4	80	6	A	321839
6.14	12	-	4	80	6	A	321840
6.15	12	-	4	80	6	A	321841
6.16	12	-	4	80	6	A	321842
6.17	12	-	4	80	6	A	321843
6.18	12	-	4	80	6	A	321844
6.19	12	-	4	80	6	A	321845
6.20	16	-	6	101	6	A	342052
6.30	16	-	6	101	6	A	342062
6.40	16	-	6	101	6	A	342072
6.50	16	-	6	101	6	A	342082
6.51	16	-	6	101	6	A	342083
6.52	16	-	6	101	6	A	342084
6.60	16	-	6	101	6	A	342092
6.70	16	-	6	101	6	A	342102
6.80	16	-	6	101	6	A	342112
6.90	16	-	6	101	6	A	342122
7.00	16	-	6	101	6	A	342132
7.01	16	-	6	101	6	A	342133
7.02	16	-	6	101	6	A	342134
7.10	16	-	6	101	6	A	342142
7.20	16	-	6	101	6	A	342152
7.30	16	-	6	101	6	A	342162
7.40	16	-	6	101	6	A	342172
7.50	16	-	6	101	6	A	342182
7.51	16	-	6	101	6	A	342183
7.52	16	-	6	101	6	A	342184
7.60	16	-	6	101	6	A	342192
7.70	16	-	6	101	6	A	342202
7.80	16	-	6	101	6	A	342212
7.90	16	-	6	101	6	A	342222

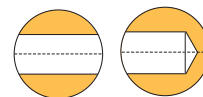
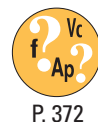
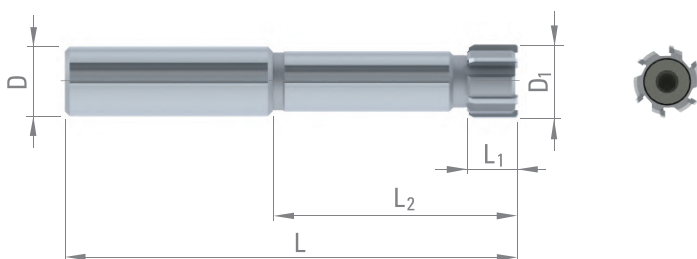
D _{10/+0.003}	L ₁	L ₂	D _{h5}	L	Z	Ref.	CARBIDE
7.98	16	-	6	101	6	A	342230
7.99	16	-	6	101	6	A	342231
8.00	16	-	6	101	6	A	342232
8.01	16	-	6	101	6	A	342233
8.02	16	-	6	101	6	A	342234
8.10	16	-	6	117	6	A	342242
8.20	16	-	6	117	6	A	342252
8.30	16	-	6	117	6	A	342262
8.40	16	-	6	117	6	A	342272
8.50	16	-	6	117	6	A	342282
8.51	16	-	6	117	6	A	342283
8.52	16	-	6	117	6	A	342284
8.70	16	-	6	117	6	A	342302
8.90	16	-	6	117	6	A	342322
9.00	16	-	6	117	6	A	342332
9.01	16	-	6	117	6	A	342333
9.02	16	-	6	117	6	A	342334
9.10	16	-	6	117	6	A	342342
9.50	16	-	6	117	6	A	342382
9.70	16	-	6	117	6	A	342402
10.00	16	-	6	117	6	A	342432
10.01	16	-	6	117	6	A	342433
10.02	19	87	10	133	6	B	200661
10.03	19	87	10	133	6	B	964048
10.10	19	87	10	133	6	B	200641
10.48	19	87	10	133	6	B	963732
10.49	19	87	10	133	6	B	963733
10.50	19	87	10	133	6	B	200642
10.51	19	87	10	133	6	B	963734
10.52	19	87	10	133	6	B	963735
10.60	19	87	10	133	6	B	200643
10.98	19	96	12	142	6	B	963736
10.99	19	96	12	142	6	B	963737
11.00	19	96	12	142	6	B	200644
11.01	19	96	12	142	6	B	963738
11.02	19	96	12	142	6	B	963739
11.48	19	96	12	142	6	B	963740
11.49	19	96	12	142	6	B	963741
11.50	19	96	12	142	6	B	200645
11.51	19	96	12	142	6	B	963742
11.52	19	96	12	142	6	B	963743
11.80	19	96	12	142	6	B	200646
11.98	19	105	12	151	6	B	963744
11.99	19	105	12	151	6	B	963745
12.00	19	105	12	151	6	B	200647
12.01	19	105	12	151	6	B	963746
12.02	19	105	12	151	6	B	200648



All Ø with tolerance $\pm 2\mu\text{m}$ available through our express-service

POLY 4361

EXPANSIBLE REAMERS



Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al

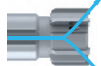
POLY 4361



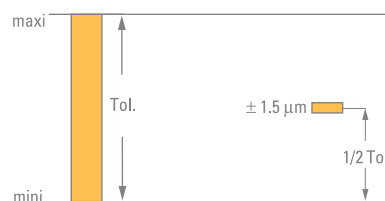
POLY 4361-TC



POLY 4361-FC



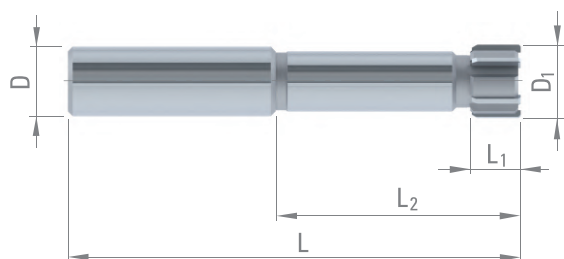
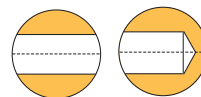
D nom. H7	D ₁ ± 1.5 μm	L	L ₁	L ₂	D _{h6}	Z	POLY	CARBIDE	TiAIN	CERMET
6.00 (6.006)		80	10	40	12	4	4361	61859	965576	963287
							4361-TC	61883	341107	964213
							4361-FC	326753	955517	955527
7.00 (7.007)		80	10	40	12	4	4361	63863	341096	341122
							4361-TC	341082	341108	964215
							4361-FC	977363	955518	955528
8.00 (8.007)		80	10	40	12	4	4361	61860	341097	61594
							4361-TC	61884	958621	62263
							4361-FC	966766	955519	955529
9.00 (9.007)		90	10	50	12	4	4361	954994	341098	341123
							4361-TC	974647	341109	61671
							4361-FC	969137	955520	955530
10.00 (10.007)		100	10	50	12	6	4361	61666	987470	971287
							4361-TC	61885	985270	305651
							4361-FC	970436	955521	955531
11.00 (11.009)		100	10	50	12	6	4361	953002	341099	341124
							4361-TC	341083	341110	952860
							4361-FC	341089	982623	957205
12.00 (12.009)		100	10	50	12	6	4361	61862	953717	956390
							4361-TC	61886	957400	61823
							4361-FC	961924	955522	955532
13.00 (13.009)		100	10	50	12	6	4361	953441	953899	341125
							4361-TC	951466	62899	951704
							4361-FC	956383	994806	341139
14.00 (14.009)		100	10	50	12	6	4361	61709	950932	341126
							4361-TC	61045	957939	64881
							4361-FC	965308	955523	955533
15.00 (15.009)		100	14	50	12	6	4361	952323	953408	66609
							4361-TC	955048	341111	62055
							4361-FC	964856	341118	961253
16.00 (16.009)		110	14	50	16	6	4361	61863	953900	990911
							4361-TC	61044	341112	60455
							4361-FC	959763	955524	955534



POLY 4361



P. 372

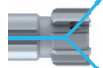


Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al

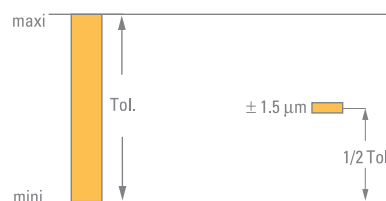
POLY 4361

POLY 4361-TC

POLY 4361-FC

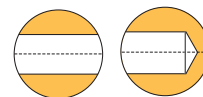
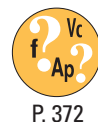
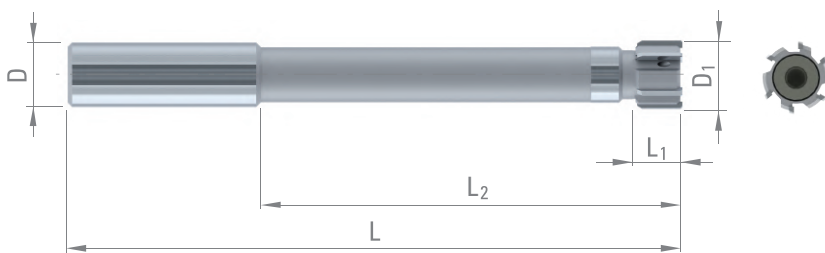


D nom. H7	D ₁ ± 1.5 μm	L	L ₁	L ₂	D _{h6}	Z	POLY	CARBIDE	TiAlN	CERMET
17.00 (17.010)		110	14	50	16	6	4361	67322	341100	341127
							4361-TC	320133	308083	341132
							4361-FC	341090	964572	959907
18.00 (18.010)		110	14	50	16	6	4361	61864	341101	965018
							4361-TC	61887	341113	341133
							4361-FC	964631	955525	955535
19.00 (19.010)		130	14	60	20	6	4361	971893	341102	341128
							4361-TC	341084	341114	341134
							4361-FC	341091	969769	985097
20.00 (20.010)		130	14	60	20	6	4361	61866	341103	965020
							4361-TC	61888	65708	341135
							4361-FC	965283	955526	955536
21.00 (21.010)		130	14	60	20	6	4361	959277	341104	341129
							4361-TC	341085	341115	341136
							4361-FC	983187	341119	959112
22.00 (22.010)		130	14	60	20	6	4361	61867	953901	965019
							4361-TC	341086	341116	341137
							4361-FC	341093	959097	965586
23.00 (23.010)		130	14	60	20	6	4361	956588	341105	341130
							4361-TC	341087	341117	341138
							4361-FC	341094	341120	341140
24.00 (24.010)		130	14	60	20	6	4361	61868	341106	341131
							4361-TC	341088	968505	969504
							4361-FC	341095	341121	962965



POLY 4371

EXPANSIBLE REAMERS

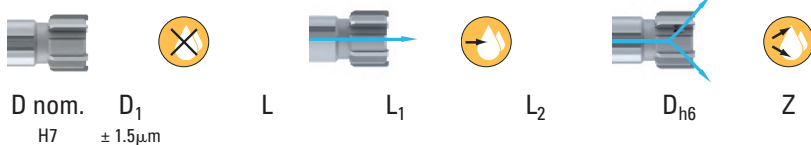


Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al

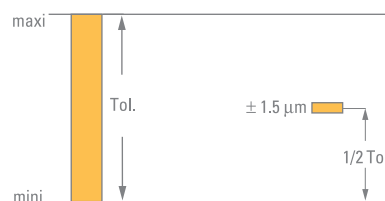
POLY 4371

POLY 4371-TC

POLY 4371-FC



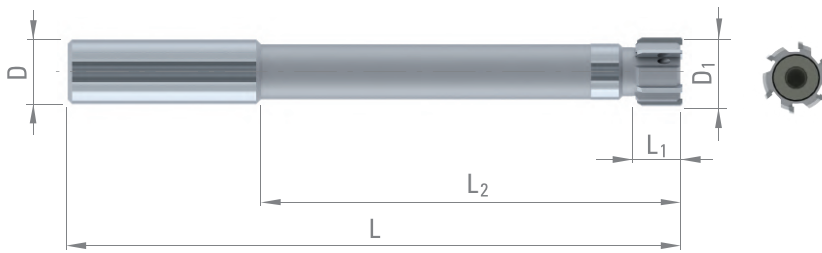
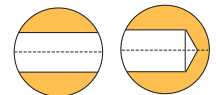
D nom. H7	D ₁ ± 1.5 μm	L	L ₁	L ₂	D _{h6}	Z	POLY	CARBIDE	TiAIN	CERMET
6.00 (6.006)		120	10	80	12	4	4371	61869	341156	341186
							4371-TC	958107	965969	341204
							4371-FC	976190	955537	955547
7.00 (7.007)		120	10	80	12	4	4371	950528	341157	341187
							4371-TC	968331	341166	341205
							4371-FC	956371	955538	955548
8.00 (8.007)		120	10	80	12	4	4371	61870	341158	341188
							4371-TC	341141	341167	967206
							4371-FC	973938	955539	955549
9.00 (9.007)		130	10	90	12	4	4371	954860	341159	341189
							4371-TC	950120	341168	341206
							4371-FC	976838	955540	955550
10.00 (10.007)		130	10	90	12	6	4371	61871	310374	341190
							4371-TC	341142	341169	341207
							4371-FC	962768	955541	955551
11.00 (11.009)		150	10	100	12	6	4371	972464	982208	341191
							4371-TC	341143	341170	341208
							4371-FC	312249	959071	341221
12.00 (12.009)		150	10	100	12	6	4371	61872	310375	341192
							4371-TC	962624	341171	341209
							4371-FC	986143	955542	955552
13.00 (13.009)		150	10	100	12	6	4371	952545	341160	341193
							4371-TC	341144	341172	341210
							4371-FC	972342	977697	341222
14.00 (14.009)		150	10	100	12	6	4371	61873	310950	965516
							4371-TC	341145	341173	341211
							4371-FC	964796	955543	955553
15.00 (15.009)		150	14	100	12	6	4371	64404	304409	341194
							4371-TC	341146	341174	341212
							4371-FC	965648	976749	341223
16.00 (16.009)		160	14	100	16	6	4371	61874	964387	341195
							4371-TC	977762	341175	341213
							4371-FC	982330	955544	955554



POLY 4371



P. 372

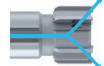
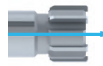


Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al

POLY 4371

POLY 4371-TC

POLY 4371-FC



D nom.
H7

D₁
± 1.5 μm

L

L₁

L₂

D_{h6}

Z

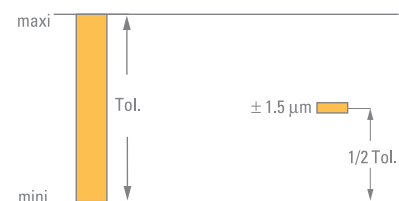
POLY

CARBIDE

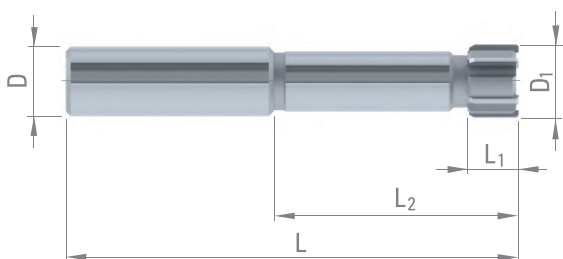
TiAlN

CERMET

17.00 (17.010)	160	14	100	16	6	4371	960993	59895	341196
						4371-TC	341147	341176	341214
						4371-FC	341152	341184	341224
18.00 (18.010)	160	14	100	16	6	4371	61875	310376	341197
						4371-TC	961483	341177	341215
						4371-FC	962767	955545	955555
19.00 (19.010)	190	14	120	20	6	4371	66588	341161	341198
						4371-TC	319972	341178	320656
						4371-FC	955676	967797	341225
20.00 (20.010)	190	14	120	20	6	4371	61876	341162	341199
						4371-TC	400483	341179	341216
						4371-FC	341153	955546	955556
21.00 (21.010)	190	14	120	20	6	4371	334784	341163	341200
						4371-TC	341148	341180	341217
						4371-FC	994332	310771	983957
22.00 (22.010)	190	14	120	20	6	4371	963583	964388	341201
						4371-TC	341149	341181	341218
						4371-FC	341154	965966	341226
23.00 (23.010)	190	14	120	20	6	4371	963174	341164	341202
						4371-TC	341150	341182	341219
						4371-FC	962757	310773	341227
24.00 (24.010)	190	14	120	20	6	4371	62827	341165	341203
						4371-TC	341151	341183	341220
						4371-FC	341155	341185	341228



SOLID REAMERS



P. 372

Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Steel Cast iron > 45 HRC
Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine
Al				

D ₁	L	L ₁	L ₂	D _{h6}	Z	CARBIDE	TiAIN	CERMET
5.80 - 7.60	80	10	40	12	4	☐	☒	☐
7.61 - 8.60	80	10	40	12	4	☐	☒	☐
8.61 - 9.60	90	10	50	12	4	☐	☒	☐
9.61 - 10.60	90	10	50	12	6	☐	☒	☐
10.61 - 14.60	100	10	50	12	6	☐	☒	☐
14.61 - 15.60	100	14	50	12	6	☐	☒	☐
15.61 - 18.60	110	14	50	16	6	☐	☒	☐
18.61 - 21.10	130	14	60	20	6	☐	☒	☐
21.11 - 25.10	130	14	60	20	6	☐	☒	☐
25.11 - 28.10	145	18	75	25	6	☐	☒	☐
28.11 - 33.10	145	18	75	25	6	☐	☒	☐
33.11 - 45.00	145	18	75	25	6	☐	☒	☐
45.00 - 120.00	160	18	90	32	8	☐	☒	☐

POLY 4261-TC



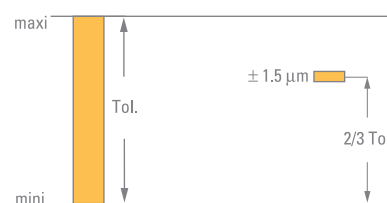
POLY 4261-FC



POLY 4264

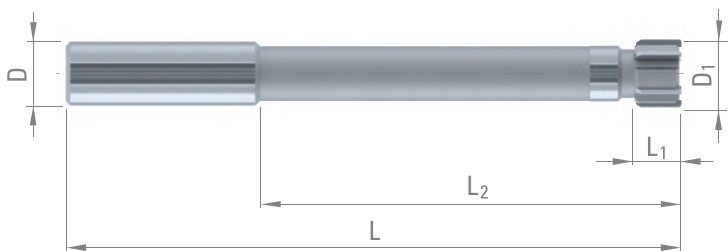


POLY 4264-FC



POLY 4271 - 4274 TOOLS ON REQUEST

SOLID REAMERS



P. 372

Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Steel Cast iron > 45 HRC
Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine
Al				

D ₁	L	L ₁	L ₂	D _{h6}	Z	CARBIDE	TiAIN	CERMET
5.80 - 7.60	120	10	80	12	4	☐	☒	☐
7.61 - 8.60	120	10	80	12	4	☐	☒	☐
8.61 - 9.60	120	10	90	12	4	☐	☒	☐
9.61 - 10.60	120	10	90	12	6	☐	☒	☐
10.61 - 14.60	150	10	100	12	6	☐	☒	☐
14.61 - 15.60	150	14	100	12	6	☐	☒	☐
15.61 - 18.60	160	14	100	16	6	☐	☒	☐
18.61 - 21.10	190	14	120	20	6	☐	☒	☐
21.11 - 25.10	190	14	120	20	6	☐	☒	☐
25.11 - 28.10	220	18	150	25	6	☐	☒	☐
28.11 - 33.10	220	18	150	25	6	☐	☒	☐
33.11 - 45.00	220	18	150	25	6	☐	☒	☐
45.00 - 120.00	250	18	180	32	8	☐	☒	☐

POLY 4271-TC



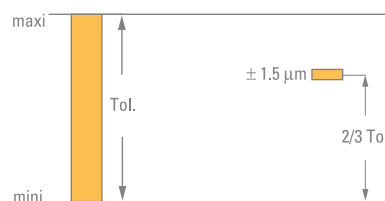
POLY 4271-FC



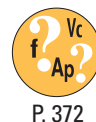
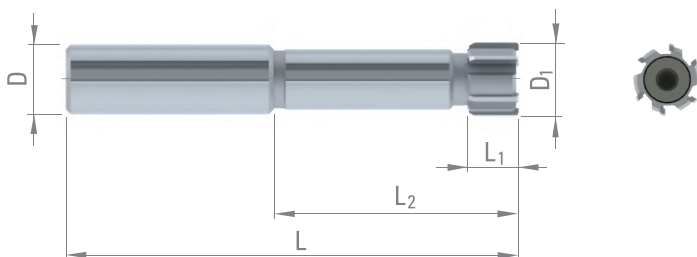
POLY 4274



POLY 4274-FC



EXPANSIBLE REAMERS



Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Steel Cast iron > 45 HRC
Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine
Al				

D ₁	L	L ₁	L ₂	D _{h6}	Z	CARBIDE	TiAIN	CERMET
5.80 - 7.60	80	10	40	12	4	☐	☒	☐
7.61 - 8.60	80	10	40	12	4	☐	☒	☐
8.61 - 9.60	90	10	50	12	4	☐	☒	☐
9.61 - 10.60	90	10	50	12	6	☐	☒	☐
10.61 - 14.60	100	10	50	12	6	☐	☒	☐
14.61 - 15.60	100	14	50	12	6	☐	☒	☐
15.61 - 18.60	110	14	50	16	6	☐	☒	☐
18.61 - 21.10	130	14	60	20	6	☐	☒	☐
21.11 - 25.10	130	14	60	20	6	☐	☒	☐
25.11 - 28.10	145	18	75	25	6	☐	☒	☐
28.11 - 45.00	145	18	75	25	6	☐	☒	☐
45.00 - 55.00	160	18	90	32	8	☐	☒	☐

POLY 4361-TC



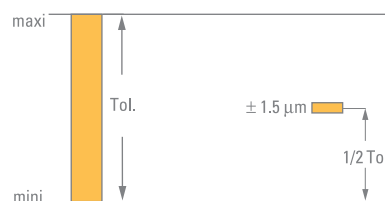
POLY 4361-FC



POLY 4364

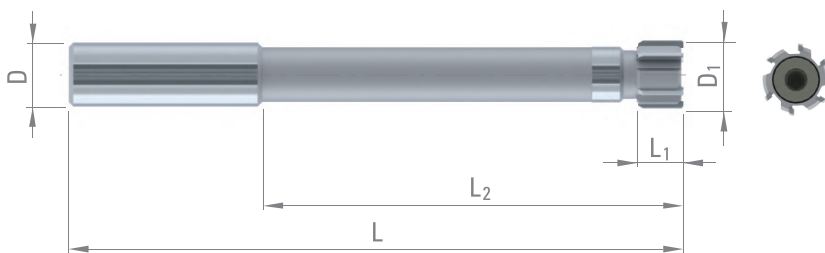


POLY 4364-FC



POLY 4371 - 4374 TOOLS ON REQUEST

EXPANSIBLE REAMERS



P. 372

Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Steel Cast iron > 45 HRC
Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine
Al				

D ₁	L	L ₁	L ₂	D _{h6}	Z	CARBIDE	TiAIN	CERMET
5.80 - 7.60	120	10	80	12	4	☐	☒	☐
7.61 - 8.60	120	10	80	12	4	☐	☒	☐
8.61 - 9.60	120	10	90	12	4	☐	☒	☐
9.61 - 10.60	120	10	90	12	6	☐	☒	☐
10.61 - 14.60	150	10	100	12	6	☐	☒	☐
14.61 - 15.60	150	14	100	12	6	☐	☒	☐
15.61 - 18.60	160	14	100	16	6	☐	☒	☐
18.61 - 21.10	190	14	120	20	6	☐	☒	☐
21.11 - 25.10	190	14	120	20	6	☐	☒	☐
25.11 - 28.10	220	18	150	25	6	☐	☒	☐
28.11 - 45.00	220	18	150	25	6	☐	☒	☐
45.00 - 55.00	250	18	180	32	8	☐	☒	☐

POLY 4371-TC



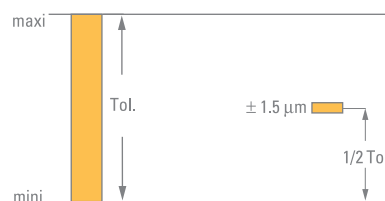
POLY 4371-FC



POLY 4374



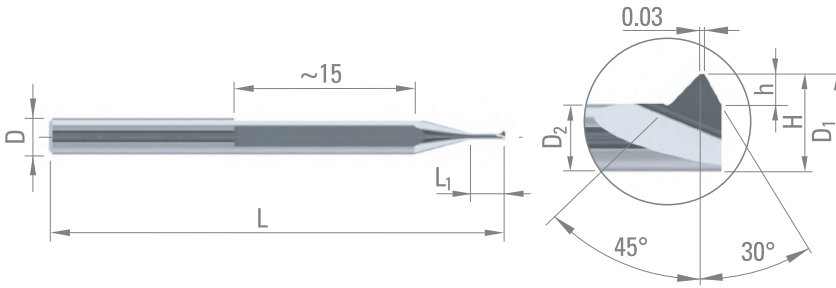
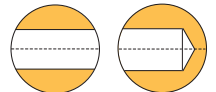
POLY 4374-FC



BORING AND CHAMFERING TOOLS



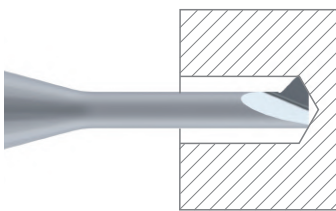
P. 369



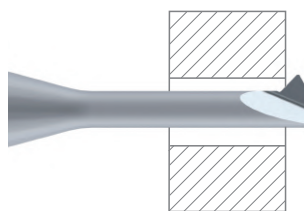
Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D_1	L_1	D_2	h	H	D_{h5}	L	for...	CARBIDE
0.26	0.84	0.14	0.06	0.20	3	46	S 0.30	968880
0.35	1.04	0.21	0.07	0.28	3	46	S 0.40	969086
0.44	1.35	0.28	0.08	0.36	3	46	S 0.50	969087
0.53	1.66	0.33	0.10	0.43	3	46	S 0.60	969088
0.66	2.04	0.36	0.15	0.51	3	46	S 0.70	969089
0.75	2.30	0.43	0.16	0.58	3	46	S 0.80	969090
0.86	2.72	0.46	0.20	0.66	3	46	S 0.90	969091

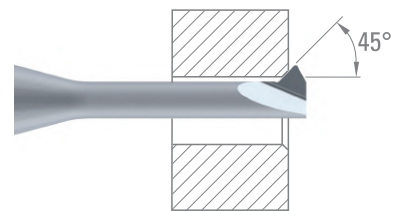
Blind hole reaming



Through hole reaming



Chamfering



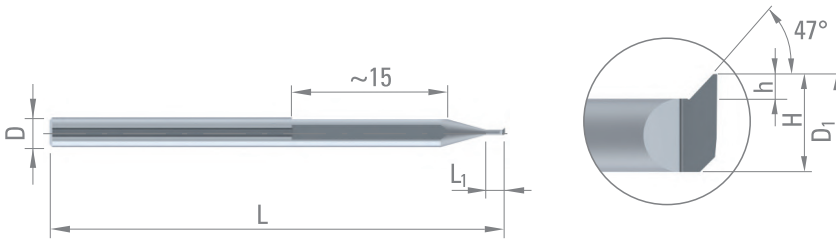
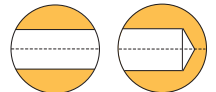
Tools holder p. 365



BORING AND CHAMFERING TOOLS



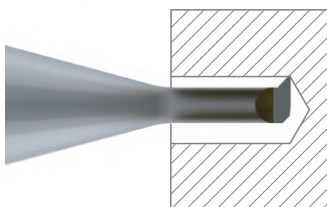
P. 369



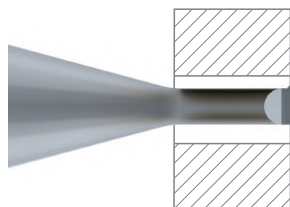
Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D_1	L_1	h	H	D_{h5}	L	CARBIDE
0.20	0.2 0.4	0.04	0.16	3	46	997972 997973
0.30	0.3 0.6	0.06	0.24	3	46	997974 997975
0.40	0.4 0.8	0.08	0.32	3	46	997976 997977
0.50	0.5 1.0	0.10	0.40	3	46	997978 997979
0.60	0.6 1.2	0.12	0.48	3	46	997980 997981
0.70	0.7 1.4	0.14	0.56	3	46	997982 997983
0.80	0.8 1.6	0.16	0.64	3	46	997984 997985
0.90	0.9 1.8	0.18	0.72	3	46	997986 997987
1.00	1.0 2.0	0.20	0.80	3	46	997988 997989

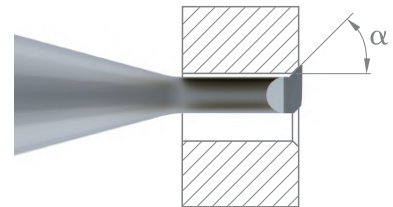
Blind hole reaming



Through hole reaming



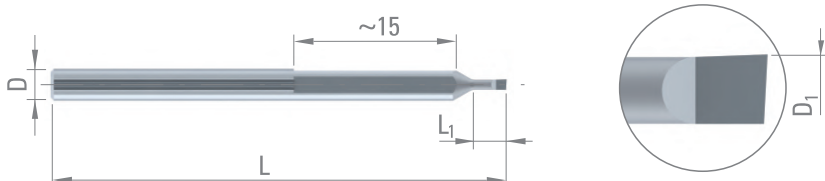
Chamfering



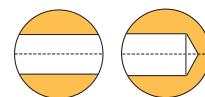
Tools holder p. 365

DIXI 2578

BORING TOOLS

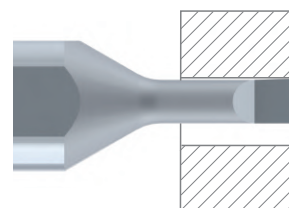
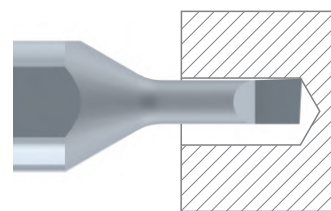


P. 369



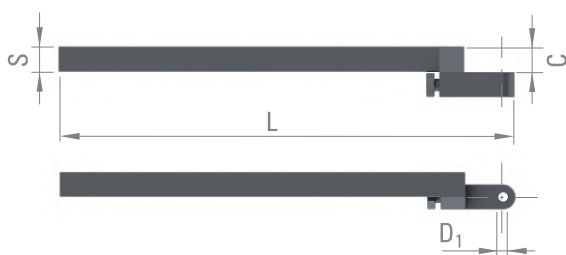
Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D ₁	L ₁	D _{h5}	L	CARBIDE
0.30	0.6	3	46	997948
	0.9			997949
	1.2			997950
0.40	0.8	3	46	997951
	1.2			997952
	1.6			997953
0.50	1.0	3	46	997954
	1.5			997955
	2.0			997956
0.60	1.2	3	46	997957
	1.8			997958
	2.4			997959
0.70	1.4	3	46	997960
	2.1			997961
	2.8			997962
0.80	1.6	3	46	997963
	2.4			997964
	3.6			997965
0.90	1.8	3	46	997966
	2.7			997967
	3.6			997968
1.00	2.0	3	46	997969
	3.0			997970
	4.0			997971



DIXI 2764

BORING TOOLS HOLDER



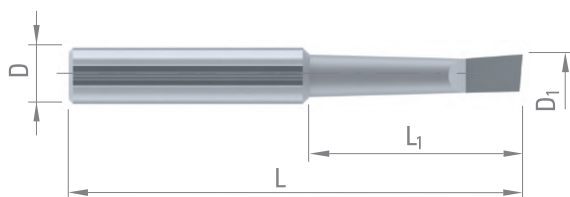
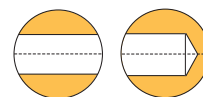
S	L	D ₁	C	Art.
7 x 7	146	3	7	305008
8 x 8	146	3	8	305009
10 x 10	150	3	10	305010



BORING TOOLS



P. 369



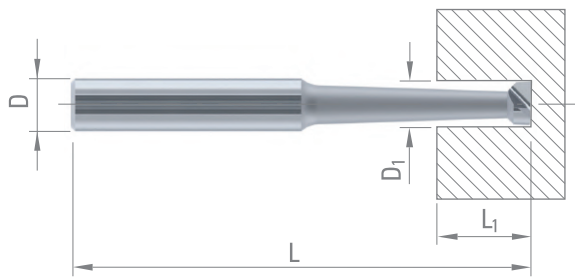
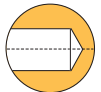
Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D_1	L_1	D_{h5}	L	CARBIDE
0.60	3	4	25	53197
0.80	4	4	25	53198
1.00	5	4	25	53199
1.20	6	4	25	53200
1.50	8	4	32	53201
1.80	9	4	32	53202
2.00	10	4	32	53203
2.50	12	4	32	53204
3.00	15	4	32	53205

BORING TOOLS BLIND HOLE



P. 369

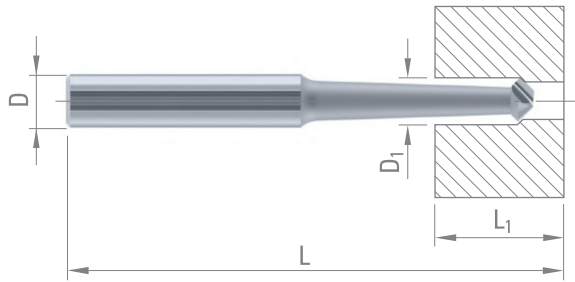


Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

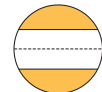
D ₁	L ₁	D _{h5}	L	CARBIDE
0.50	3	4	25	36091
0.80	4	4	25	36092
1.00	4	4	25	33855
1.20	6	4	25	33856
1.50	7	4	28	33857
1.70	7	4	28	33858
2.00	9	4	30	33859
2.20	9	4	30	33860
2.50	12	4	33	33861
3.00	14	4	35	33862
3.50	14	4	35	33863
4.00	17	4	38	33864
5.00	23	4	38	794
2.00	9	6	38	33865
2.50	12	6	40	33866
3.00	14	6	42	33867
4.00	17	6	45	33868
5.00	22	6	52	795
6.00	24	6	52	796
7.00	30	6	52	797
8.00	32	6	52	798
10.00	40	6	60	800
3.00	17	8	47	790
4.00	21	8	51	791
5.00	22	8	52	801
6.00	25	8	55	802
7.00	28	8	60	803
10.00	45	8	65	804
12.00	54	8	70	805
13.00	54	8	78	5603

D ₁	L ₁	D _{h5}	L	CARBIDE
3.00	17	10	45	792
4.00	21	10	49	793
5.00	22	10	50	806
6.00	25	10	54	807
7.00	28	10	56	808
9.00	32	10	65	809
10.00	32	10	65	810
12.00	45	10	70	811
13.00	55	10	80	812
15.00	75	10	100	813
18.00	75	10	100	814
8.00	30	12	70	815
10.00	40	12	80	816
13.00	60	12	90	817
15.00	70	12	100	818
18.00	70	12	100	819
13.00	60	16	115	820
15.00	60	16	115	821
18.00	75	16	115	822
20.00	75	16	115	824

BORING TOOLS THROUGH HOLE



P. 369



Steel + Pb	Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D ₁	L ₁	D _{h5}	L	CARBIDE
0.50	3	4	25	36093
0.80	4	4	25	36094
1.00	4	4	25	33869
1.20	6	4	25	33870
1.50	7	4	28	33871
1.70	7	4	28	33872
2.00	9	4	30	33873
2.20	9	4	30	33874
2.50	12	4	33	33875
3.00	14	4	35	33876
3.50	14	4	35	33877
4.00	17	4	38	33878
5.00	23	4	38	745
2.00	9	6	38	33879
2.50	12	6	40	33880
3.00	14	6	42	33881
4.00	17	6	45	33882
5.00	22	6	52	746
6.00	24	6	52	747
8.00	32	6	52	749
10.00	40	6	60	751
3.00	17	8	47	740
4.00	21	8	51	741
5.00	22	8	52	752
6.00	25	8	55	753
7.00	28	8	60	754
9.00	45	8	65	755
11.00	54	8	70	756
13.00	54	8	78	5661

D ₁	L ₁	D _{h5}	L	CARBIDE
3.00	17	10	45	742
4.00	21	10	49	743
5.00	22	10	50	757
6.00	25	10	54	758
7.00	28	10	56	759
9.00	32	10	65	760
10.00	32	10	65	761
12.00	45	10	70	762
13.00	55	10	80	763
15.00	75	10	100	764
18.00	75	10	100	765
8.00	30	12	70	766
10.00	40	12	80	767
13.00	60	12	90	768
15.00	70	12	100	769
18.00	70	12	100	770
20.00	80	12	110	825
13.00	60	16	115	771
15.00	60	16	115	772
18.00	75	16	115	773

CUTTING CONDITIONS

$$n \text{ [tr/min]} = \frac{V_c \text{ [m/min]} \times 1000}{\pi \times D_1 \text{ [mm]}}$$

$$V_f \text{ [mm/min]} = n \text{ [tr/min]} \times f \text{ [mm]}$$

Materials to be machined

			Stationary tool V _c [m/min]	Rotating tool V _c [m/min]	Feed f [mm/tr]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm ²	100 - 150	70 - 120	0.05 - 0.15
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm ²	70 - 120	50 - 90	0.04 - 0.10
P	Lead alloyed cutting steel		120 - 160	90 - 130	0.05 - 0.15
P	High alloyed steel	700 – 1500 N/mm ²	30 - 70	20 - 50	0.03 - 0.10
M	Stainless steel	400 – 700 N/mm ²	60 - 80	40 - 60	0.04 - 0.10
M	DUPLEX stainless steel	> 800 N/mm ²	30 - 70	20 - 50	0.03 - 0.10
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	60 - 150	40 - 120	0.05 - 0.15
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	20 - 80	15 - 50	0.04 - 0.10
K	Nodular ferritic cast iron / Malleable cast iron		30 - 90	20 - 60	0.03 - 0.10
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	10 - 20	8 - 15	0.03 - 0.10
S	Titanium, titanium alloys		15 - 30	10 - 25	0.03 - 0.10
N	Copper alloys - easy to machine (brass - bronze)		150 - 250	120 - 180	0.08 - 0.20
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	120 - 160	100 - 140	0.04 - 0.10
N	Aluminium alloys	Si < 8%	200 - 400	150 - 300	0.05 - 0.15
N	Cast aluminium	Si > 8%	180 - 350	150 - 250	0.05 - 0.155
N	Plastic		200 - 300	150 - 250	0.10 - 0.30
N	Gold, silver		150 - 250	120 - 180	0.08 - 0.20

CUTTING CONDITIONS

Materials to be machined

			CARBIDE
			Vc [m/min]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm ²	14
			16
			20
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm ²	12
			14
			16
P	Lead alloyed cutting steel		25
			50
			70
P	High alloyed steel	700 – 1500 N/mm ²	8
			10
			12
M	Stainless steel	400 – 700 N/mm ²	10
			12
			16
M	DUPLEX stainless steel	> 800 N/mm ²	8
			10
			12
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	20
			30
			40
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	12
			18
			24
K	Nodular ferritic cast iron / Malleable cast iron		14
			20
			32
S	Special alloys / Heat resistant stainless steel	Inconel	8
		Nimonic	10
		Hastelloy	12
S	Titanium, titanium alloys		10
			12
			16
N	Copper alloys - easy to machine (brass - bronze)		20
			30
			40
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe)	16
		(Ampco)	24
			30
N	Aluminium alloys	Si < 8%	20
			40
			60
N	Cast aluminium	Si > 8%	20
			36
			50
N	Plastic		20
			40
			60
N	Plastic with fibres		10
			20
			30
N	Gold, silver		20
			30
			40

$$n \text{ [tr/min]} = \frac{V_c \text{ [m/min]} \times 1000}{\pi \times D_1 \text{ [mm]}}$$

$$V_f \text{ [mm/min]} = n \text{ [tr/min]} \times f \text{ [mm]}$$

Feed per revolution **f [mm]**

Ø D ₁ < 2.00	Ø D ₁ 2.00 - 4.03	Ø D ₁ 4.03 - 7.51	Ø D ₁ 7.51 - 12.02	
0.05	0.10	0.30	0.40	
0.15	0.20	0.50	0.60	
0.20	0.30	0.70	0.80	
0.05	0.10	0.25	0.30	
0.15	0.20	0.40	0.50	
0.20	0.30	0.65	0.70	
0.05	0.20	0.40	0.60	
0.15	0.40	0.60	0.80	
0.20	0.50	0.80	1.00	
0.05	0.10	0.20	0.30	
0.15	0.15	0.30	0.40	
0.20	0.25	0.40	0.50	
0.05	0.10	0.20	0.30	
0.15	0.15	0.30	0.40	
0.20	0.20	0.40	0.50	
0.05	0.10	0.20	0.30	
0.15	0.15	0.30	0.40	
0.20	0.25	0.40	0.50	
0.05	0.10	0.40	0.60	
0.15	0.15	0.50	0.70	
0.20	0.25	0.60	0.80	
0.05	0.10	0.30	0.40	
0.15	0.15	0.40	0.50	
0.20	0.20	0.50	0.60	
0.05	0.10	0.30	0.40	
0.15	0.20	0.40	0.50	
0.20	0.30	0.50	0.60	
0.05	0.10	0.20	0.30	
0.15	0.15	0.30	0.40	
0.20	0.20	0.40	0.50	
0.05	0.10	0.20	0.30	
0.15	0.15	0.30	0.40	
0.20	0.20	0.40	0.50	
0.05	0.10	0.30	0.40	
0.15	0.20	0.40	0.50	
0.20	0.30	0.50	0.60	
0.05	0.10	0.40	0.60	
0.20	0.25	0.60	0.80	
0.30	0.40	0.80	1.00	
0.05	0.10	0.40	0.60	
0.20	0.25	0.60	0.80	
0.30	0.40	0.80	1.00	
0.05	0.10	0.40	0.50	
0.20	0.25	0.50	0.60	
0.30	0.40	0.60	0.70	
0.05	0.10	0.30	0.40	
0.20	0.25	0.40	0.50	
0.30	0.40	0.50	0.60	
0.05	0.10	0.40	0.60	
0.15	0.20	0.60	0.80	
0.20	0.30	0.80	1.00	
0.05	0.10	0.10	0.10	Reaming allowance Ø [mm]
0.10	0.15	0.15	0.15	
0.15	0.20	0.20	0.20	



CUTTING CONDITIONS

Materials to be machined

			CARBIDE	TiAIN	CERMET
			Vc [m/min]	Vc [m/min]	Vc [m/min]
P	Unalloyed steel / Low alloyed steel	< 600 N/mm ²	6	60	100
			8	90	130
			10	120	150
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm ²	6	60	80
			8	80	100
			10	100	120
P	Lead alloyed cutting steel		20	60	100
			40	80	130
			50	100	150
P	High alloyed steel	700 – 1500 N/mm ²	4	30	
			5	40	
			7	50	
M	Stainless steel	400 – 700 N/mm ²	5	30	
			6	40	
			8	50	
M	DUPLEX stainless steel	> 800 N/mm ²	4	10	
			5	20	
			6	30	
K	Grey cast iron	< 250 HB	12	90	
			15	120	
			18	140	
K	Alloyed grey cast iron	> 250 HB	10	50	
			12	60	
			15	80	
K	Nodular ferritic cast iron	< 600 HB	8	90	110
			12	120	140
			15	140	160
K	Nodular ferritic cast iron / pearlitic		6	90	110
			9	120	140
			12	140	160
K	Nodular pearlitic iron / Malleable cast iron	> 600 HB	10	90	100
			12	120	120
			15	140	140
K	Alloyed nodular cast iron		8	50	
			9	60	
			12	80	
K	Vermicular cast		8	50	
			9	60	
			12	80	
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy		10	
				15	
				20	
S	Titanium, titanium alloys		8		
			10		
			12		
N	Copper alloys - easy to machine (brass - bronze)		15	100	
			22	120	
			30	150	
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	12	60	
			16	80	
			20	100	
N	Aluminium alloys	Si < 8%	15		
			22		
			30		
N	Cast aluminium	Si > 8%	12		
			16		
			20		

$$n \text{ [tr/min]} = \frac{V_c \text{ [m/min]} \times 1000}{\pi \times D_1 \text{ [mm]}}$$

$$V_f \text{ [mm/min]} = n \text{ [tr/min]} \times f \text{ [mm]}$$

Feed per revolution **f [mm]**

Ø D ₁ < 2.00	Ø D ₁ 2.00 - 4.03	Ø D ₁ 4.03 - 7.51	Ø D ₁ 7.51 - 12.02	
0.20	0.40	0.60	0.80	
0.30	0.50	0.70	0.90	
0.50	0.70	0.90	1.10	
0.20	0.40	0.60	0.80	
0.30	0.50	0.70	0.90	
0.50	0.70	0.90	1.10	
0.20	0.40	0.60	0.80	
0.30	0.50	0.70	0.90	
0.50	0.70	0.90	1.10	
0.15	0.25	0.35	0.45	
0.20	0.30	0.40	0.50	
0.30	0.40	0.50	0.60	
0.20	0.30	0.40	0.50	
0.30	0.40	0.50	0.60	
0.40	0.50	0.60	0.70	
0.20	0.30	0.40	0.50	
0.30	0.40	0.50	0.60	
0.40	0.50	0.60	0.70	
0.30	0.50	0.70	0.90	
0.40	0.60	0.80	1.00	
0.50	0.70	0.90	1.10	
0.20	0.40	0.60	0.80	
0.30	0.50	0.70	0.90	
0.50	0.70	0.90	1.10	
0.30	0.50	0.70	0.90	
0.40	0.60	0.80	1.00	
0.50	0.70	0.90	1.10	
0.20	0.40	0.60	0.80	
0.30	0.50	0.70	0.90	
0.40	0.60	0.80	1.00	
0.20	0.30	0.40	0.50	
0.30	0.40	0.50	0.60	
0.40	0.50	0.60	0.70	
0.20	0.30	0.40	0.50	
0.30	0.40	0.50	0.60	
0.40	0.50	0.60	0.70	
0.15	0.25	0.35	0.45	
0.20	0.30	0.40	0.50	
0.30	0.40	0.50	0.60	
0.20	0.30	0.40	0.50	
0.30	0.40	0.50	0.60	
0.40	0.50	0.60	0.70	
0.30	0.50	0.70	0.90	
0.40	0.60	0.80	1.00	
0.50	0.70	0.90	1.10	
0.20	0.40	0.60	0.80	
0.30	0.50	0.70	0.90	
0.40	0.60	0.80	1.00	
0.30	0.50	0.70	0.90	
0.40	0.60	0.80	1.00	
0.50	0.70	0.90	1.10	
0.30	0.50	0.70	0.90	
0.40	0.60	0.80	1.00	
0.50	0.70	0.90	1.10	

0.10
0.15
0.20

0.15
0.20
0.30

0.15
0.20
0.30

0.20
0.30
0.40

Reaming allowance Ø [mm]





TOOLS ON REQUEST

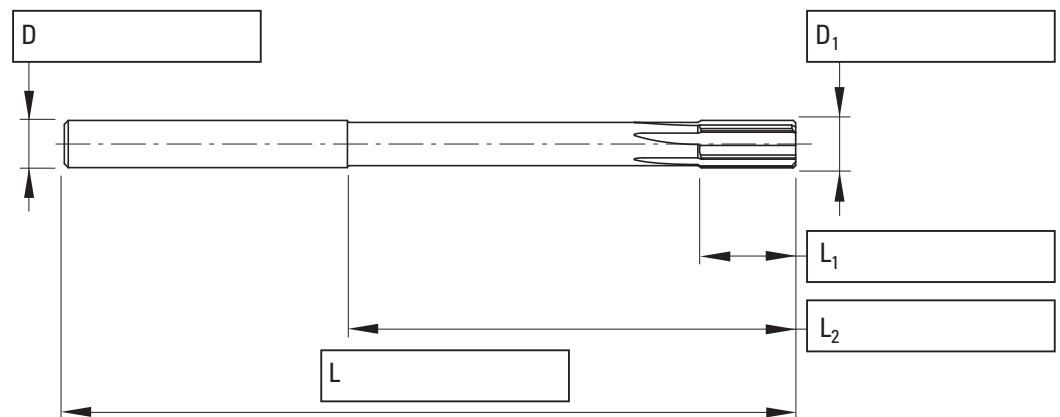
POLY 4001 SP

Z =

Quantity

Dimension and tolerance
of the hole to be machined

Material to be machined



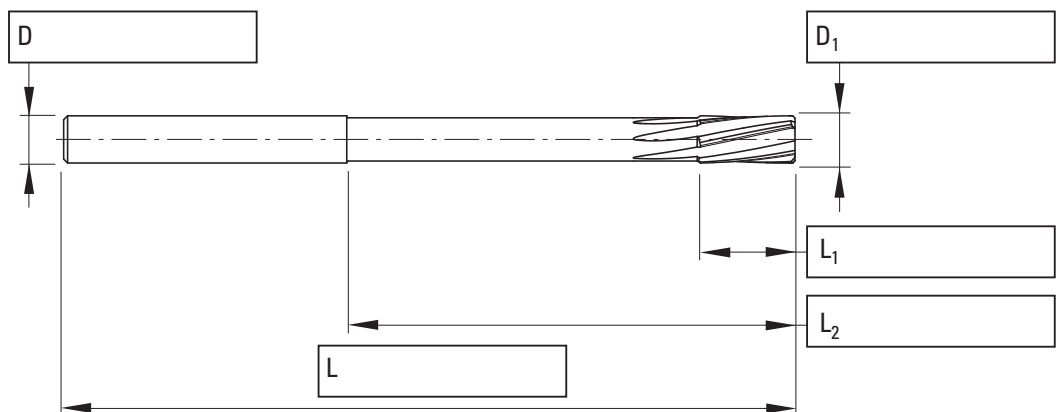
POLY 4007 SP

Z =

Quantity

Dimension and tolerance
of the hole to be machined

Material to be machined



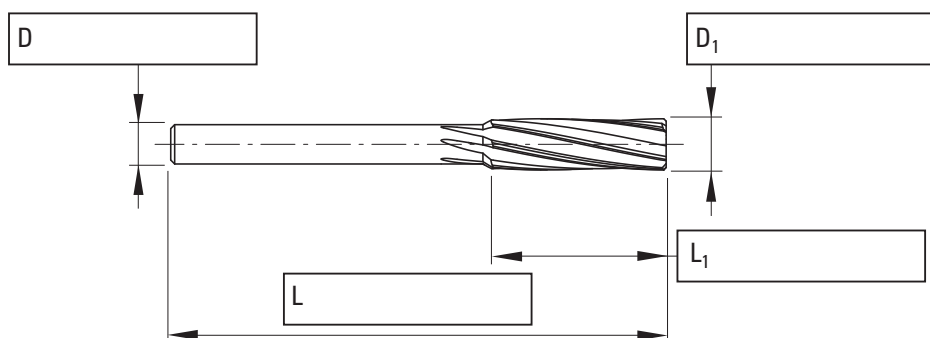
POLY 4005 SP

Z =

Quantity

Dimension and tolerance
of the hole to be machined

Material to be machined



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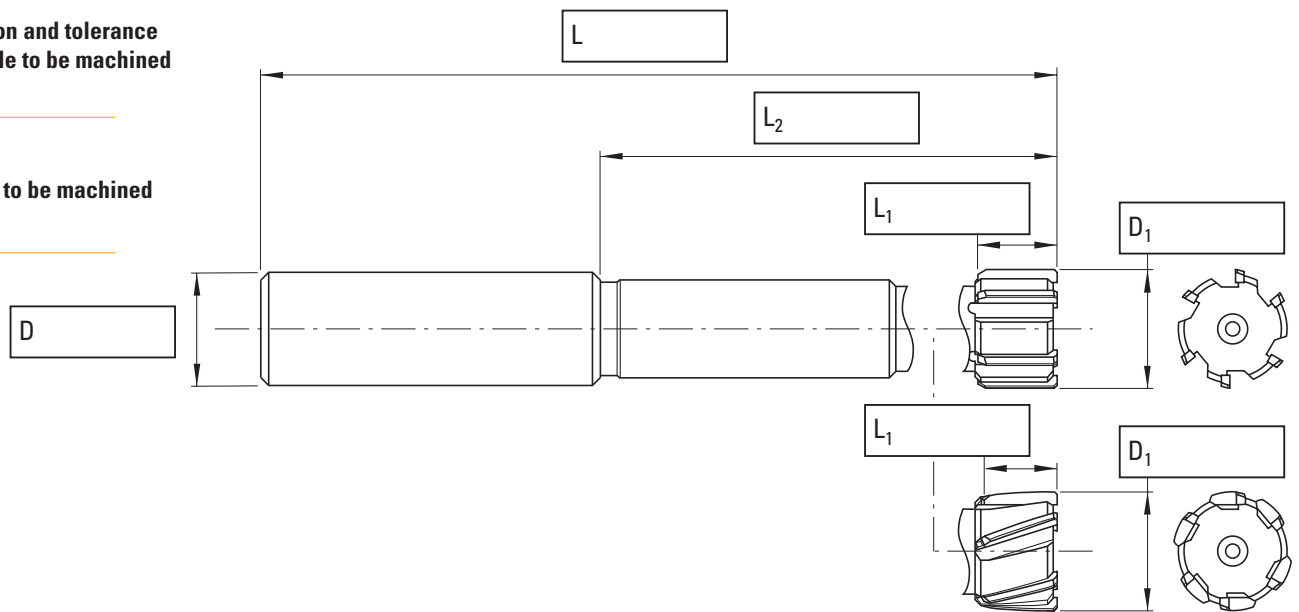
TOOLS ON REQUEST

REAMERS WITH INSERTS

Quantity

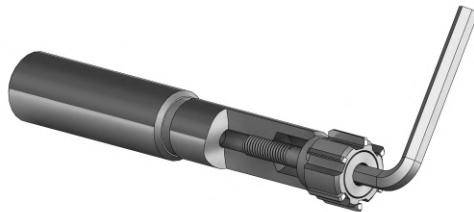
Dimension and tolerance
of the hole to be machined

Material to be machined



☐ Expansible

☐ Solid



D₁

Expansion

5.80 - 9.60

+10° = D₁ + 0.0025

9.61 - 21.10

+10° = D₁ + 0.0035

21.11 - 51.1

+10° = D₁ + 0.0050

Material to be machined

☐ HM

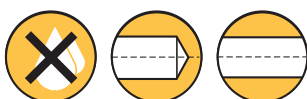
☐ HM + TiAlN

☐ CERMET

☐ Other: _____

Cooling

☐



☐



☐



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