



GUHRING

RT 100
INOXPRO

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

MAXIMUM PRODUCTIVITY IN STAINLESS STEELS

The drilling specialist for stainless steels

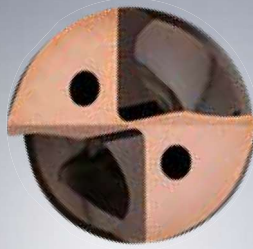
If you want to drill in stainless steels and titanium alloys, you will have to contend with high tool wear. Our new solid carbide drill RT 100 InoxPro has overcome this challenge, delivering an exceptional performance thanks to its combination of carbide, geometry and coating specifically tailored to this material group.

- 50 % higher feed rate compared to conventional stainless steel drills
- 60 % longer tool life compared to conventional stainless steel drills
- process reliability even with deep holes up to 7xD
- optimal chip formation and evacuation

RT 100
INOXPRO

**OPTIMISED SICKLE-SHAPED
CUTTING EDGE**

for optimal chip formation
in stainless steel



**ULTRA-SMOOTH
PERROX COATING**

increases wear resistance

LENGTHS

3xD
5xD
7xD

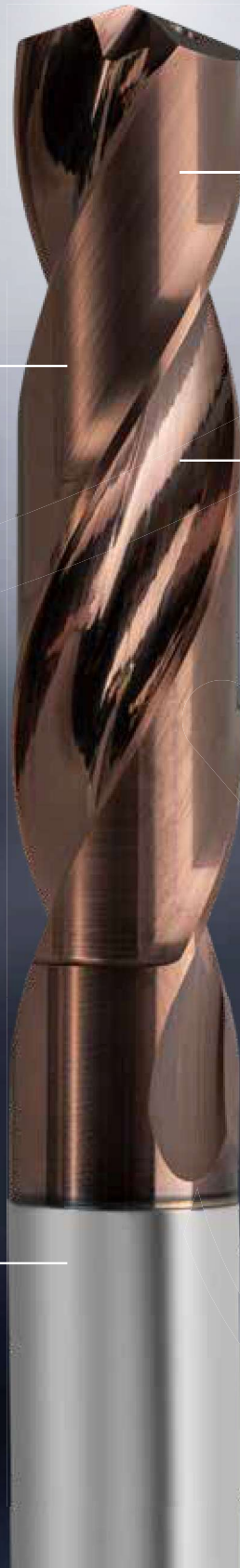
**PREMIUM SURFACES
IN THE FLUTE**

improve chip removal and
prevent built-up edges



OPTIMISED CARBIDE

with improved combination of
hardness and toughness prevents
chipping at the cutting edge





RT 100 InoxPro

Series

8513



Tool material

Solid Carbide

Surface



Shank form

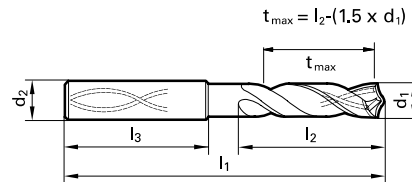
HA

Material		Suitability
P	Steel	○
M	Stainless steel	●
K	Cast iron	
N	Aluminum	
S	Ni / Ti alloys	●
H	Hardened steel	

● = Optimal ○ = Limited

Web thinning $\geq \varnothing 3.000$ • maximum performance • optimized cutting geometry • main cutting edge is slightly concave • exceptional hole quality

stainless/acid-/heat-resistant steels • Titanium and Titanium alloys • Inconel, Hastelloy, Monel



Diameter (d1)			d2 h6 mm	l1 mm	tmax mm	l2 mm	l3 mm	EDP #
inch	wire/ltr	mm						
0.1181		3.00	6.00	66.00	23.50	28.00	36.00	9085130030000
0.1220		3.10	6.00	66.00	23.35	28.00	36.00	9085130031000
0.1248	1/8	3.17	6.00	66.00	23.25	28.00	36.00	9085130031700
0.1260		3.20	6.00	66.00	23.20	28.00	36.00	9085130032000
0.1280		3.25	6.00	66.00	23.13	28.00	36.00	9085130032500
0.1299		3.30	6.00	66.00	23.05	28.00	36.00	9085130033000
0.1339		3.40	6.00	66.00	22.90	28.00	36.00	9085130034000
0.1378		3.50	6.00	66.00	22.75	28.00	36.00	9085130035000
0.1406	9/64 #28	3.57	6.00	66.00	22.65	28.00	36.00	9085130035700
0.1417		3.60	6.00	66.00	22.60	28.00	36.00	9085130036000
0.1457		3.70	6.00	66.00	22.45	28.00	36.00	9085130037000
0.1496	#25	3.80	6.00	74.00	30.30	36.00	36.00	9085130038000
0.1535		3.90	6.00	74.00	30.15	36.00	36.00	9085130039000
0.1563	5/32	3.97	6.00	74.00	30.05	36.00	36.00	9085130039700
0.1575		4.00	6.00	74.00	30.00	36.00	36.00	9085130040000
0.1591	#21	4.04	6.00	74.00	29.94	36.00	36.00	9085130040400
0.1614		4.10	6.00	74.00	29.85	36.00	36.00	9085130041000
0.1654		4.20	6.00	74.00	29.70	36.00	36.00	9085130042000
0.1693	#18	4.30	6.00	74.00	29.55	36.00	36.00	9085130043000
0.1720	11/64	4.37	6.00	74.00	29.45	36.00	36.00	9085130043700
0.1732		4.40	6.00	74.00	29.40	36.00	36.00	9085130044000
0.1772	#16	4.50	6.00	74.00	29.25	36.00	36.00	9085130045000
0.1811		4.60	6.00	74.00	29.10	36.00	36.00	9085130046000
0.1831		4.65	6.00	74.00	29.03	36.00	36.00	9085130046500
0.1850	#13	4.70	6.00	74.00	28.95	36.00	36.00	9085130047000
0.1874	3/16	4.76	6.00	82.00	36.86	44.00	36.00	9085130047600
0.1890	#12	4.80	6.00	82.00	36.80	44.00	36.00	9085130048000
0.1929		4.90	6.00	82.00	36.65	44.00	36.00	9085130049000
0.1969		5.00	6.00	82.00	36.50	44.00	36.00	9085130050000
0.2008		5.10	6.00	82.00	36.35	44.00	36.00	9085130051000
0.2012	#7	5.11	6.00	82.00	36.34	44.00	36.00	9085130051100
0.2031	13/64	5.16	6.00	82.00	36.26	44.00	36.00	9085130051600
0.2047		5.20	6.00	82.00	36.20	44.00	36.00	9085130052000
0.2087		5.30	6.00	82.00	36.05	44.00	36.00	9085130053000
0.2126		5.40	6.00	82.00	35.90	44.00	36.00	9085130054000
0.2130	#3	5.41	6.00	82.00	35.89	44.00	36.00	9085130054100



Diameter (d1)			d2 h6 mm	l1 mm	tmax mm	l2 mm	l3 mm	EDP #
inch	wire/ltr	mm						
0.2165	7/32	5.50	6.00	82.00	35.75	44.00	36.00	9085130055000
0.2185		5.55	6.00	82.00	35.68	44.00	36.00	9085130055500
0.2189		5.56	6.00	82.00	35.66	44.00	36.00	9085130055600
0.2205	15/64	5.60	6.00	82.00	35.60	44.00	36.00	9085130056000
0.2244		5.70	6.00	82.00	35.45	44.00	36.00	9085130057000
0.2283		5.80	6.00	82.00	35.30	44.00	36.00	9085130058000
0.2323	15/64	5.90	6.00	82.00	35.15	44.00	36.00	9085130059000
0.2343		5.95	6.00	82.00	35.08	44.00	36.00	9085130059500
0.2362		6.00	6.00	82.00	35.00	44.00	36.00	9085130060000
0.2402	1/4	6.10	8.00	91.00	43.85	53.00	36.00	9085130061000
0.2441		6.20	8.00	91.00	43.70	53.00	36.00	9085130062000
0.2480		6.30	8.00	91.00	43.55	53.00	36.00	9085130063000
0.2500	1/4	E	6.35	8.00	91.00	43.48	53.00	9085130063500
0.2520			6.40	8.00	91.00	43.40	53.00	9085130064000
0.2559			6.50	8.00	91.00	43.25	53.00	9085130065000
0.2571	F		6.53	8.00	91.00	43.21	53.00	9085130065300
0.2579			6.55	8.00	91.00	43.18	53.00	9085130065500
0.2598			6.60	8.00	91.00	43.10	53.00	9085130066000
0.2638	17/64	H	6.70	8.00	91.00	42.95	53.00	9085130067000
0.2657			6.75	8.00	91.00	42.88	53.00	9085130067500
0.2677			6.80	8.00	91.00	42.80	53.00	9085130068000
0.2717	I		6.90	8.00	91.00	42.65	53.00	9085130069000
0.2756			7.00	8.00	91.00	42.50	53.00	9085130070000
0.2795			7.10	8.00	91.00	42.35	53.00	9085130071000
0.2811	9/32	K	7.14	8.00	91.00	42.29	53.00	9085130071400
0.2835			7.20	8.00	91.00	42.20	53.00	9085130072000
0.2874			7.30	8.00	91.00	42.05	53.00	9085130073000
0.2913	19/64		7.40	8.00	91.00	41.90	53.00	9085130074000
0.2953			7.50	8.00	91.00	41.75	53.00	9085130075000
0.2969			7.54	8.00	91.00	41.69	53.00	9085130075400
0.2972			7.55	8.00	91.00	41.68	53.00	9085130075500
0.2992			7.60	8.00	91.00	41.60	53.00	9085130076000
0.3012			7.65	8.00	91.00	41.53	53.00	9085130076500
0.3031			7.70	8.00	91.00	41.45	53.00	9085130077000
0.3071			7.80	8.00	91.00	41.30	53.00	9085130078000
0.3110			7.90	8.00	91.00	41.15	53.00	9085130079000
0.3126	5/16		7.94	8.00	91.00	41.09	53.00	9085130079400
0.3150			8.00	8.00	91.00	41.00	53.00	9085130080000
0.3189			8.10	10.00	103.00	48.85	61.00	9085130081000
0.3228	21/64	P	8.20	10.00	103.00	48.70	61.00	9085130082000
0.3268			8.30	10.00	103.00	48.55	61.00	9085130083000
0.3280			8.33	10.00	103.00	48.51	61.00	9085130083300
0.3307			8.40	10.00	103.00	48.40	61.00	9085130084000
0.3346			8.50	10.00	103.00	48.25	61.00	9085130085000
0.3386			8.60	10.00	103.00	48.10	61.00	9085130086000
0.3425	11/32		8.70	10.00	103.00	47.95	61.00	9085130087000
0.3437			8.73	10.00	103.00	47.91	61.00	9085130087300
0.3465			8.80	10.00	103.00	47.80	61.00	9085130088000
0.3504			8.90	10.00	103.00	47.65	61.00	9085130089000
0.3543			9.00	10.00	103.00	47.50	61.00	9085130090000
0.3583			9.10	10.00	103.00	47.35	61.00	9085130091000
0.3594	23/64		9.13	10.00	103.00	47.31	61.00	9085130091300
0.3622			9.20	10.00	103.00	47.20	61.00	9085130092000
0.3642			9.25	10.00	103.00	47.13	61.00	9085130092500
0.3661	U		9.30	10.00	103.00	47.05	61.00	9085130093000
0.3677			9.34	10.00	103.00	46.99	61.00	9085130093400
0.3701			9.40	10.00	103.00	46.90	61.00	9085130094000
0.3740	3/8		9.50	10.00	103.00	46.75	61.00	9085130095000
0.3748			9.52	10.00	103.00	46.72	61.00	9085130095200



Diameter (d1)			d2 h6 mm	l1 mm	tmax mm	l2 mm	l3 mm	EDP #
inch	wire/ltr	mm						
0.3760	W	9.55	10.00	103.00	46.68	61.00	40.00	9085130095500
0.3780		9.60	10.00	103.00	46.60	61.00	40.00	9085130096000
0.3819		9.70	10.00	103.00	46.45	61.00	40.00	9085130097000
0.3858		9.80	10.00	103.00	46.30	61.00	40.00	9085130098000
0.3898		9.90	10.00	103.00	46.15	61.00	40.00	9085130099000
0.3906		9.92	10.00	103.00	46.12	61.00	40.00	9085130099200
0.3937		10.00	10.00	103.00	46.00	61.00	40.00	9085130100000
0.3976	25/64	10.10	12.00	118.00	55.85	71.00	45.00	9085130101000
0.4016		10.20	12.00	118.00	55.70	71.00	45.00	9085130102000
0.4055		10.30	12.00	118.00	55.55	71.00	45.00	9085130103000
0.4063	13/32	10.32	12.00	118.00	55.52	71.00	45.00	9085130103200
0.4094		10.40	12.00	118.00	55.40	71.00	45.00	9085130104000
0.4134		10.50	12.00	118.00	55.25	71.00	45.00	9085130105000
0.4173	27/64	10.60	12.00	118.00	55.10	71.00	45.00	9085130106000
0.4213		10.70	12.00	118.00	54.95	71.00	45.00	9085130107000
0.4220		10.72	12.00	118.00	54.92	71.00	45.00	9085130107200
0.4252		10.80	12.00	118.00	54.80	71.00	45.00	9085130108000
0.4291		10.90	12.00	118.00	54.65	71.00	45.00	9085130109000
0.4331		11.00	12.00	118.00	54.50	71.00	45.00	9085130110000
0.4370	7/16	11.10	12.00	118.00	54.35	71.00	45.00	9085130111000
0.4374		11.11	12.00	118.00	54.34	71.00	45.00	9085130111100
0.4409		11.20	12.00	118.00	54.20	71.00	45.00	9085130112000
0.4449		11.30	12.00	118.00	54.05	71.00	45.00	9085130113000
0.4488		11.40	12.00	118.00	53.90	71.00	45.00	9085130114000
0.4528		11.50	12.00	118.00	53.75	71.00	45.00	9085130115000
0.4531	29/64	11.51	12.00	118.00	53.74	71.00	45.00	9085130115100
0.4547		11.55	12.00	118.00	53.68	71.00	45.00	9085130115500
0.4567		11.60	12.00	118.00	53.60	71.00	45.00	9085130116000
0.4606		11.70	12.00	118.00	53.45	71.00	45.00	9085130117000
0.4646		11.80	12.00	118.00	53.30	71.00	45.00	9085130118000
0.4685		11.90	12.00	118.00	53.15	71.00	45.00	9085130119000
0.4689	15/32	11.91	12.00	118.00	53.14	71.00	45.00	9085130119100
0.4724		12.00	12.00	118.00	53.00	71.00	45.00	9085130120000
0.4764		12.10	14.00	124.00	58.85	77.00	45.00	9085130121000
0.4803	31/64	12.20	14.00	124.00	58.70	77.00	45.00	9085130122000
0.4843		12.30	14.00	124.00	58.55	77.00	45.00	9085130123000
0.4882		12.40	14.00	124.00	58.40	77.00	45.00	9085130124000
0.4921	1/2	12.50	14.00	124.00	58.25	77.00	45.00	9085130125000
0.4961		12.60	14.00	124.00	58.10	77.00	45.00	9085130126000
0.5000		12.70	14.00	124.00	57.95	77.00	45.00	9085130127000
0.5039		12.80	14.00	124.00	57.80	77.00	45.00	9085130128000
0.5079		12.90	14.00	124.00	57.65	77.00	45.00	9085130129000
0.5118		13.00	14.00	124.00	57.50	77.00	45.00	9085130130000
0.5157	33/64	13.10	14.00	124.00	57.35	77.00	45.00	9085130131000
0.5197		13.20	14.00	124.00	57.20	77.00	45.00	9085130132000
0.5236		13.30	14.00	124.00	57.05	77.00	45.00	9085130133000
0.5276	17/32	13.40	14.00	124.00	56.90	77.00	45.00	9085130134000
0.5311		13.49	14.00	124.00	56.77	77.00	45.00	9085130134900
0.5315		13.50	14.00	124.00	56.75	77.00	45.00	9085130135000
0.5354		13.60	14.00	124.00	56.60	77.00	45.00	9085130136000
0.5394		13.70	14.00	124.00	56.45	77.00	45.00	9085130137000
0.5433		13.80	14.00	124.00	56.30	77.00	45.00	9085130138000
0.5469	35/64	13.89	14.00	124.00	56.17	77.00	45.00	9085130138900
0.5472		13.90	14.00	124.00	56.15	77.00	45.00	9085130139000
0.5512		14.00	14.00	124.00	56.00	77.00	45.00	9085130140000
0.5551	9/16	14.10	16.00	133.00	61.85	83.00	48.00	9085130141000
0.5591		14.20	16.00	133.00	61.70	83.00	48.00	9085130142000
0.5626		14.29	16.00	133.00	61.57	83.00	48.00	9085130142900
0.5630		14.30	16.00	133.00	61.55	83.00	48.00	9085130143000



Diameter (d1)			d2 h6 mm	l1 mm	tmax mm	l2 mm	l3 mm	EDP #
inch	wire/ltr	mm						
0.5669		14.40	16.00	133.00	61.40	83.00	48.00	9085130144000
0.5709		14.50	16.00	133.00	61.25	83.00	48.00	9085130145000
0.5748		14.60	16.00	133.00	61.10	83.00	48.00	9085130146000
0.5780	37/64	14.68	16.00	133.00	60.98	83.00	48.00	9085130146800
0.5787		14.70	16.00	133.00	60.95	83.00	48.00	9085130147000
0.5827		14.80	16.00	133.00	60.80	83.00	48.00	9085130148000
0.5866		14.90	16.00	133.00	60.65	83.00	48.00	9085130149000
0.5906		15.00	16.00	133.00	60.50	83.00	48.00	9085130150000
0.5937	19/32	15.08	16.00	133.00	60.38	83.00	48.00	9085130150800
0.5945		15.10	16.00	133.00	60.35	83.00	48.00	9085130151000
0.5984		15.20	16.00	133.00	60.20	83.00	48.00	9085130152000
0.6024		15.30	16.00	133.00	60.05	83.00	48.00	9085130153000
0.6063		15.40	16.00	133.00	59.90	83.00	48.00	9085130154000
0.6094	39/64	15.48	16.00	133.00	59.78	83.00	48.00	9085130154800
0.6102		15.50	16.00	133.00	59.75	83.00	48.00	9085130155000
0.6122		15.55	16.00	133.00	59.68	83.00	48.00	9085130155500
0.6142		15.60	16.00	133.00	59.60	83.00	48.00	9085130156000
0.6181		15.70	16.00	133.00	59.45	83.00	48.00	9085130157000
0.6220		15.80	16.00	133.00	59.30	83.00	48.00	9085130158000
0.6248	5/8	15.87	16.00	133.00	59.20	83.00	48.00	9085130158700
0.6260		15.90	16.00	133.00	59.15	83.00	48.00	9085130159000
0.6299		16.00	16.00	133.00	59.00	83.00	48.00	9085130160000
0.6406	41/64	16.27	18.00	143.00	68.60	93.00	48.00	9085130162700
0.6417		16.30	18.00	143.00	68.55	93.00	48.00	9085130163000
0.6496		16.50	18.00	143.00	68.25	93.00	48.00	9085130165000
0.6563	21/32	16.67	18.00	143.00	68.00	93.00	48.00	9085130166700
0.6575		16.70	18.00	143.00	67.95	93.00	48.00	9085130167000
0.6654		16.90	18.00	143.00	67.65	93.00	48.00	9085130169000
0.6693		17.00	18.00	143.00	67.50	93.00	48.00	9085130170000
0.6720	43/64	17.07	18.00	143.00	67.40	93.00	48.00	9085130170700
0.6874	11/16	17.46	18.00	143.00	66.81	93.00	48.00	9085130174600
0.6890		17.50	18.00	143.00	66.75	93.00	48.00	9085130175000
0.6909		17.55	18.00	143.00	66.68	93.00	48.00	9085130175500
0.6969		17.70	18.00	143.00	66.45	93.00	48.00	9085130177000
0.7031	45/64	17.86	18.00	143.00	66.21	93.00	48.00	9085130178600
0.7087		18.00	18.00	143.00	66.00	93.00	48.00	9085130180000
0.7189	23/32	18.26	20.00	153.00	73.61	101.00	50.00	9085130182600
0.7283		18.50	20.00	153.00	73.25	101.00	50.00	9085130185000
0.7362		18.70	20.00	153.00	72.95	101.00	50.00	9085130187000
0.7441		18.90	20.00	153.00	72.65	101.00	50.00	9085130189000
0.7480		19.00	20.00	153.00	72.50	101.00	50.00	9085130190000
0.7500	3/4	19.05	20.00	153.00	72.43	101.00	50.00	9085130190500
0.7579		19.25	20.00	153.00	72.13	101.00	50.00	9085130192500
0.7598		19.30	20.00	153.00	72.05	101.00	50.00	9085130193000
0.7657		19.45	20.00	153.00	71.83	101.00	50.00	9085130194500
0.7677		19.50	20.00	153.00	71.75	101.00	50.00	9085130195000
0.7697		19.55	20.00	153.00	71.68	101.00	50.00	9085130195500
0.7756		19.70	20.00	153.00	71.45	101.00	50.00	9085130197000
0.7795		19.80	20.00	153.00	71.30	101.00	50.00	9085130198000
0.7811	25/32	19.84	20.00	153.00	71.24	101.00	50.00	9085130198400
0.7874		20.00	20.00	153.00	71.00	101.00	50.00	9085130200000



Material group	Hardness		SFM	Feed Rate - IPR								
	HRC	BHN		1/8 in. 3.170 mm	5/32 in. 3.970 mm	1/4 in. 6.350 mm	5/16 in. 7.920 mm	3/8 in. 9.525 mm	1/2 in. 12.700 mm	9/16 in. 14.290 mm	5/8 in. 15.870 mm	3/4 in. 19.050 mm
Common structural steels	-	≤ 150	460	0.006	0.007	0.010	0.013	0.015	0.017	0.019	0.022	0.026
	≤ 32	≤ 301	460	0.006	0.007	0.010	0.013	0.015	0.017	0.019	0.022	0.026
Free-cutting steels	≤ 25	≤ 255	460	0.006	0.007	0.010	0.013	0.015	0.017	0.019	0.022	0.026
	≤ 32	≤ 301	410	0.006	0.007	0.009	0.011	0.014	0.016	0.018	0.019	0.023
Unalloyed heat-treatable steels	≤ 20	≤ 220	395	0.005	0.006	0.009	0.011	0.013	0.015	0.017	0.018	0.022
	≤ 25	≤ 255	395	0.005	0.006	0.009	0.011	0.013	0.015	0.017	0.018	0.022
	≤ 32	≤ 301	345	0.005	0.006	0.008	0.010	0.011	0.013	0.015	0.016	0.019
Alloyed heat-treatable steels	≤ 32	≤ 301	375	0.005	0.006	0.008	0.010	0.012	0.014	0.016	0.017	0.020
	≤ 43	≤ 402	330	0.004	0.005	0.007	0.009	0.010	0.012	0.013	0.015	0.017
Unalloyed case hardened steels	≤ 25	≤ 255	410	0.006	0.007	0.009	0.011	0.014	0.016	0.018	0.019	0.023
Alloyed case hardened steels	≤ 32	≤ 301	375	0.005	0.006	0.008	0.010	0.012	0.014	0.016	0.017	0.020
	≤ 43	≤ 402	375	0.005	0.006	0.008	0.010	0.012	0.014	0.016	0.017	0.020
Nitriding steels	≤ 32	≤ 301	330	0.004	0.005	0.007	0.009	0.010	0.012	0.013	0.015	0.017
	≤ 43	≤ 402	280	0.004	0.005	0.006	0.008	0.009	0.010	0.012	0.013	0.015
Tool steels	≤ 25	≤ 255	375	0.005	0.006	0.008	0.010	0.012	0.014	0.016	0.017	0.020
	≤ 43	≤ 402	280	0.004	0.005	0.006	0.008	0.009	0.010	0.012	0.013	0.015
High speed steels	≤ 43	≤ 402	245	0.004	0.005	0.006	0.008	0.009	0.011	0.012	0.014	0.016
Spring steels	≤ 38	≤ 354	215	0.003	0.004	0.006	0.007	0.008	0.009	0.010	0.011	0.014
Hardened steels	≤ 48	≤ 460										
	≤ 66	-										
Stainless steels, sulphured	≤ 28	≤ 273	230	0.003	0.003	0.004	0.006	0.006	0.007	0.008	0.009	0.011
	≤ 36	≤ 337	280	0.003	0.004	0.005	0.006	0.007	0.009	0.010	0.011	0.013
	≤ 46	≤ 435	295	0.003	0.004	0.006	0.007	0.008	0.009	0.010	0.011	0.014
Cast iron	≤ 23	≤ 242										
	≤ 38	≤ 354										
Spheroidal graphite iron and malleable cast iron	≤ 23	≤ 242										
	≤ 38	≤ 354										
Chilled cast iron	≤ 38	≤ 354										
New cast materials GGV	≤ 20	≤ 220										
	≤ 32	≤ 301										
New cast materials ADI	≤ 32	≤ 301										
	≤ 43	≤ 402										
Special alloys	≤ 54	≤ 549	165	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009	0.010
Ti and Ti-alloys	≤ 25	≤ 255	195	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009	0.010
	≤ 43	≤ 402	150	0.002	0.002	0.003	0.004	0.005	0.006	0.006	0.007	0.008
Aluminium and Al-alloys	-	≤ 120										
Al wrought alloys	-	≤ 200										
Al cast alloys ≤ 10 % Si	-	≤ 180										
	≤ 24 % Si	≤ 180										
Magnesium alloys	-	≤ 120										
Copper, low-alloyed	-	≤ 150										
Brass, short-chipping	-	≤ 180										
	-	≤ 180										
Bronze, short-chipping	-	≤ 180										
	≤ 25	≤ 255										
Bronze, long-chipping	≤ 25	≤ 255										
	≤ 32	≤ 301										
Duroplastics												
Thermoplastics												
Reinforced plastics - Kevlar												
Reinforced plastics - GFK / CFK												