Designation system - tools

Solid carbide tools for reaming

HSC-SLR . UN . 0607 . 0397 H7

HSC-SLR	UN	0607	0397	H7
1	2	3	4	5

1

Tool group	
DR	– reamers for through holes
HSC-DR	– HSC reamers for through holes
SLR	– reamers for blind holes
HSC-SLR	– HSC reamers for blind holes

2

Material main application	
UN	– universal
ST	– steel
VA	– stainless steel
TI	– titanium
H	– hardened steel
AL	– aluminium
V	– composite materials

3

Type

4

Ø d_1
0397 ➢ Ød_1 = 3,97 mm

5

Tolerance d_1

. 29 . IK . HA | SCPP625

6 7 8 9

6

Working length l3

7

Int. coolant supply

8

Shank
HA
HB

9

Grade

Explanation of symbols

Solid carbide tools for reaming

UN	Material group, e.g. UN = universal
σ 120°	Point angle on the support point
HSC DR	Tool group, e.g. HSC-RA = HSC reamers for through-holes
B	Tool shape, e.g. B = helical flutes
H7	Drilling tolerance
	without through coolant
	with central through coolant

	with radial through coolant
E	Emulsion recommended
	Through hole
	Blind hole
HA	Shanks to DIN6535-HA
$\lambda_S = -7°$	Helix angle

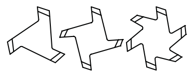
UN DR

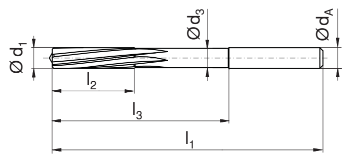
$\lambda_S = -7°$ | $d_1 = H7$ $d_A = h6$ | B | E | σ 120°

Application/ geometry

SCWP625

Grade





Shank type

d_1 [mm]	Type, description	d_A [mm]	d_3 [mm]	l_1 [mm]	l_2 [mm]	l_3 [mm]	z	HA Material
1.0	DR.UN.0602.0100H7.14.HA	4	0.9	50	6	16	3	W0602010000

Material short text | Dimensions | Material number

CUTTING SOLUTIONS BY CERATIZIT

Grade designation	Standard designation ISO	Standard designation ANSI	*Type of cutting material	Application range (01 05 10 15 20 25 30 35 40 45 50)	P Steel	M Stainless	K Cast iron	N Non-ferrous metals	S Heat-resistant	H Hard materials
SCPP625	HC-P25	C6	P	20–30	●	○	○	○	○	
SCWP625	HW-P25	C6	W	20–30	●		○	○	○	
SCPH605	HC-H05	C4	P	01–10	○	○	○			●

● Main application

○ Extended application

Grade description

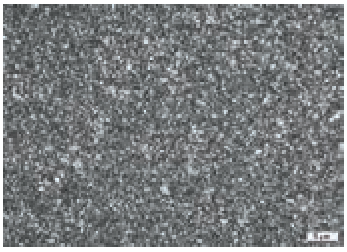
Solid carbide tools for reaming

SCPP625	HC-P25	● ○ ○ ○ ○

Specification:
Grain size: submicron / 0.5 μm | Hardness: HV_{30} 1620 | Type of coating: Ti Al C N | Coating specification: multi-layer

Recommended application:
Good combination of carbide and coating for universal application.

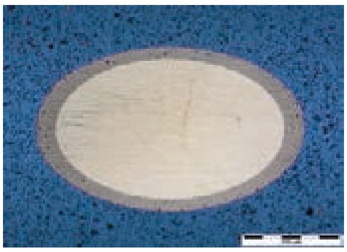
SCWP625	HW-P25	● ○ ○ ○



Specification:
Grain size: submicron / 0.7 μm | Hardness: HV_{30} 1600 | Coating specification: Ti Al C N | Coating structure: multi-layer

Recommended application:
Submicron carbide for the universal machining of alloyed and non alloyed steels, titanium alloys and nickel-base alloys.

SCPH605	HC-H05	○ ○ ○ ●

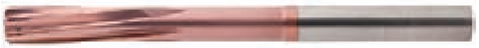


Specification:
Grain size: submicron / 0.7 μm | Hardness: HV_{30} 1600 | Coating specification: Ti Al Si N | Coating structure: multi-layer

Recommended application:
Good combination of carbide and diamond coating, for the machining of hard materials.

Overview

Solid carbide tools for reaming

Tool type	Type	Ø-range [mm]	Tolerance	Helix angle	Direction of helix	Number of teeth	Int. coolant supply	Shank	Hole standard	Page(s)
UN	DR	Reamers for through holes, uncoated								
W0602	 Similar to DIN 212	1.0 - 12.0	H7	$\lambda_s = -7°$	left-hand helix	3 - 6		HA		F454
UN	HSC DR	HSC reamers for through holes, coated								
W0606	 Factory standard	4.0 - 20.0	H7	$\lambda_s = -7°$	left-hand helix	6 - 6		HA		F458
UN	HSC SLR	HSC reamers for blind holes, coated								
W0607	 Factory standard	4.0 - 20.0	H7	$\lambda_s = 0°$	straight flutes	6 - 6		HA		F460
H	SLR	Reamers for blind holes, coated								
W0603	 Similar to DIN 212	3.0 - 12.0	H7	$\lambda_s = 0°$	straight flutes	4 - 6		HA		F462

CUTTING SOLUTIONS BY CERATIZIT

Solid carbide tools / Reaming

W0602, uncoated

Cutting data

Index	Material designation	V_c [m/min]	f [mm/rev] = Ø 1,0 = Ø 4,0	> Ø 4,0 = Ø 8,0	> Ø 8,0 = Ø 12,0
1.1.1	**Machining steels**	18	0,1	0,2	0,238
1.1.2		17	0,08	0,16	0,195
1.2.1	**Constructional steel**	14	0,1	0,2	0,238
1.2.2		12	0,08	0,16	0,195
1.2.3		10	0,075	0,15	0,175
1.3.1	**Spring steel**	12	0,075	0,15	0,175
1.3.2		10	0,075	0,15	0,175
1.3.3					
2.1.1	**Cementation steel**	14	0,1	0,2	0,238
2.1.2		13	0,08	0,16	0,195
2.1.3		12	0,08	0,16	0,195
2.2.1	**Nitriding steel**	14	0,1	0,2	0,238
2.2.2		10	0,075	0,15	0,175
2.3.1	**Tempered steel**	11	0,08	0,16	0,195
2.3.2		10	0,075	0,15	0,175
2.3.3		11	0,08	0,16	0,195
2.3.4		10	0,075	0,15	0,175
2.3.5		9	0,063	0,125	0,15
2.3.6		8	0,063	0,125	0,15
3.1.1	**Non alloyed tool steel**	9	0,075	0,15	0,175
3.2.1	**Tool steel for cold working**	11	0,08	0,16	0,195
3.2.2		10	0,08	0,16	0,195
3.2.3		9	0,075	0,15	0,175
3.2.4					
3.2.5					
3.3.1	**Tool steel for hot working**	10	0,08	0,16	0,195
3.3.2		9	0,075	0,15	0,175
3.3.3					
3.3.4					
3.3.5					
3.5.1	**Hardened tool steel** < 55 HRC				
3.5.2	55–58 HRC				
3.5.3	58–60 HRC				
3.5.4	60–62 HRC				
3.5.5	62–64 HRC				
4.1.1	**Stainless steel**				
4.1.2					
4.1.3					
4.1.4					
4.1.5					
4.2.1	**Heat-resistant alloys**				
4.2.2					
4.2.3					
4.2.4					
5.1.1	**Conventional cast steel**	14	0,063	0,125	0,15
5.1.2		13	0,08	0,16	0,195
5.1.3		9	0,063	0,125	0,15
5.2.1	**Stainless cast steel**				
5.2.2					
6.1.1	**Cast iron with lamellar graphite**	15	0,125	0,25	0,325
6.1.2		12	0,113	0,225	0,275
6.1.3		10	0,1	0,2	0,238
6.1.4					
6.2.1	**Spheroidal cast iron**	15	0,113	0,225	0,275
6.2.2		12	0,1	0,2	0,238
6.2.3		11	0,1	0,2	0,238
6.3.1	**GTW (white malleable cast iron)**	15	0,113	0,225	0,275
6.3.2		12	0,1	0,2	0,238
6.4.1	**GTS (black malleable cast iron)**	15	0,113	0,225	0,275
6.4.2		12	0,1	0,2	0,238
7.1.1	**Aluminium**	30	0,1	0,2	0,238
7.1.2		30	0,1	0,2	0,238
7.1.3		30	0,1	0,2	0,238
7.1.4		30	0,1	0,2	0,238
7.1.5		25	0,1	0,2	0,238
7.1.6		20	0,1	0,2	0,238
7.2.1	**Magnesium**	30	0,1	0,2	0,238
7.2.2		25	0,1	0,2	0,238
7.3.1	**Copper**	35	0,1	0,2	0,238
7.3.2		30	0,1	0,2	0,238
7.3.3		25	0,1	0,2	0,238
7.3.4					
7.3.5					
7.3.6					
7.4.1	**CuZn (brass)**	25	0,1	0,2	0,238
7.4.2		30	0,1	0,2	0,238
7.5.1	**CuSn (bronze)**	25	0,1	0,2	0,238
7.5.2		30	0,1	0,2	0,238
7.6.1	**CuAlFe (Ampco)**				
7.6.2					
7.8.1	**Titanium**	15	0,05	0,1	0,113
7.8.2		15	0,05	0,1	0,113
7.8.3		10	0,05	0,1	0,113

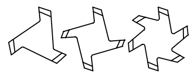
W0602, uncoated

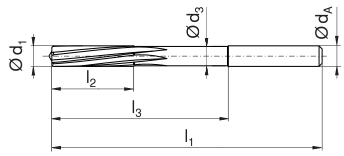
Reamers for through holes

UN | DR

$\lambda_S = -7°$ | $d_1 = H7$ $d_A = h6$ | B | E

SCWP625





d_1 [mm]	Type, description	d_A [mm]	d_3 [mm]	l_1 [mm]	l_2 [mm]	l_3 [mm]	z	HA Material
0.98	DR.UN.0602.0098H7.14.HA	4	0.9	50	6	16	3	W0602009800
0.99	DR.UN.0602.0099H7.14.HA	4	0.9	50	6	16	3	W0602009900
1.0	DR.UN.0602.0100H7.14.HA	4	0.9	50	6	16	3	W0602010000
1.01	DR.UN.0602.0101H7.14.HA	4	0.9	50	6	16	3	W0602010100
1.02	DR.UN.0602.0102H7.14.HA	4	0.9	50	6	16	3	W0602010200
1.03	DR.UN.0602.0103H7.14.HA	4	0.9	50	6	16	3	W0602010300
1.48	DR.UN.0602.0148H7.13.HA	4	1.4	50	9	16	3	W0602014800
1.49	DR.UN.0602.0149H7.13.HA	4	1.4	50	9	16	3	W0602014900
1.5	DR.UN.0602.0150H7.13.HA	4	1.4	50	9	16	3	W0602015000
1.51	DR.UN.0602.0151H7.13.HA	4	1.4	50	9	16	3	W0602015100
1.52	DR.UN.0602.0152H7.13.HA	4	1.4	50	9	16	3	W0602015200
1.97	DR.UN.0602.0197H7.13.HA	4	1.86	50	12	16	4	W0602019700
1.98	DR.UN.0602.0198H7.13.HA	4	1.86	50	12	16	4	W0602019800
1.99	DR.UN.0602.0199H7.13.HA	4	1.86	50	12	16	4	W0602019900
2.0	DR.UN.0602.0200H7.13.HA	4	1.86	50	12	16	4	W0602020000
2.01	DR.UN.0602.0201H7.13.HA	4	1.86	50	12	16	4	W0602020100
2.02	DR.UN.0602.0202H7.13.HA	4	1.86	50	12	16	4	W0602020200
2.03	DR.UN.0602.0203H7.13.HA	4	1.86	50	12	16	4	W0602020300
2.97	DR.UN.0602.0297H7.25.HA	4	2.81	64	17	30	4	W0602029700
2.98	DR.UN.0602.0298H7.25.HA	4	2.81	64	17	30	4	W0602029800
2.99	DR.UN.0602.0299H7.25.HA	4	2.81	64	17	30	4	W0602029900
3.0	DR.UN.0602.0300H7.25.HA	4	2.81	64	17	30	4	W0602030000
3.01	DR.UN.0602.0301H7.25.HA	4	2.96	64	17	30	4	W0602030100
3.02	DR.UN.0602.0302H7.25.HA	4	2.96	64	17	30	4	W0602030200
3.03	DR.UN.0602.0303H7.25.HA	4	2.96	64	17	30	4	W0602030300
3.97	DR.UN.0602.0397H7.37.HA	4	3.71	77	21	43	4	W0602039700
3.98	DR.UN.0602.0398H7.37.HA	4	3.71	77	21	43	4	W0602039800
3.99	DR.UN.0602.0399H7.37.HA	4	3.71	77	21	43	4	W0602039900
4.0	DR.UN.0602.0400H7.37.HA	4	3.71	77	21	43	4	W0602040000
4.01	DR.UN.0602.0401H7.37.HA	4	3.96	77	21	43	4	W0602040100
4.02	DR.UN.0602.0402H7.37.HA	4	3.96	77	21	43	4	W0602040200
4.03	DR.UN.0602.0403H7.37.HA	4	3.96	77	21	43	4	W0602040300
4.97	DR.UN.0602.0497H7.43.HA	6	4.46	93	26	51	6	W0602049700
4.98	DR.UN.0602.0498H7.43.HA	6	4.46	93	26	51	6	W0602049800
4.99	DR.UN.0602.0499H7.43.HA	6	4.46	93	26	51	6	W0602049900
5.0	DR.UN.0602.0500H7.43.HA	6	4.46	93	26	51	6	W0602050000
5.01	DR.UN.0602.0501H7.43.HA	6	4.96	93	26	51	6	W0602050100
5.02	DR.UN.0602.0502H7.43.HA	6	4.96	93	26	51	6	W0602050200
5.03	DR.UN.0602.0503H7.43.HA	6	4.96	93	26	51	6	W0602050300
5.97	DR.UN.0602.0597H7.42.HA	6	5.26	93	26	51	6	W0602059700
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5.99	DR.UN.0602.0599H7.42.HA	6	5.26	93	26	51	6	W0602059900
6.0	DR.UN.0602.0600H7.42.HA	6	5.26	93	26	51	6	W0602060000
6.01	DR.UN.0602.0601H7.42.HA	6	5.96	93	26	51	6	W0602060100
6.02	DR.UN.0602.0602H7.42.HA	6	5.96	93	26	51	6	W0602060200
6.03	DR.UN.0602.0603H7.42.HA	6	5.96	93	26	51	6	W0602060300
7.0	DR.UN.0602.0700H7.56.HA	8	6.66	109	31	67	6	W0602070000
7.97	DR.UN.0602.0797H7.63.HA	8	7.46	117	33	75	6	W0602079700

W0602, uncoated

Cutting data

Index	Material designation	V_c [m/min]	f [mm/rev] = Ø 1,0 = Ø 4,0	f [mm/rev] > Ø 4,0 = Ø 8,0	f [mm/rev] > Ø 8,0 = Ø 12,0
1.1.1	Machining steels	18	0,1	0,2	0,238
1.1.2		17	0,08	0,16	0,195
1.2.1	Constructional steel	14	0,1	0,2	0,238
1.2.2		12	0,08	0,16	0,195
1.2.3		10	0,075	0,15	0,175
1.3.1	Spring steel	12	0,075	0,15	0,175
1.3.2		10	0,075	0,15	0,175
1.3.3					
2.1.1	Cementation steel	14	0,1	0,2	0,238
2.1.2		13	0,08	0,16	0,195
2.1.3		12	0,08	0,16	0,195
2.2.1	Nitriding steel	14	0,1	0,2	0,238
2.2.2		10	0,075	0,15	0,175
2.3.1	Tempered steel	11	0,08	0,16	0,195
2.3.2		10	0,075	0,15	0,175
2.3.3		11	0,08	0,16	0,195
2.3.4		10	0,075	0,15	0,175
2.3.5		9	0,063	0,125	0,15
2.3.6		8	0,063	0,125	0,15
3.1.1	Non alloyed tool steel	9	0,075	0,15	0,175
3.2.1	Tool steel for cold working	11	0,08	0,16	0,195
3.2.2		10	0,08	0,16	0,195
3.2.3		9	0,075	0,15	0,175
3.2.4					
3.2.5					
3.3.1	Tool steel for hot working	10	0,08	0,16	0,195
3.3.2		9	0,075	0,15	0,175
3.3.3					
3.3.4					
3.3.5					
3.5.1	Hardened tool steel < 55 HRC				
3.5.2	55–58 HRC				
3.5.3	58–60 HRC				
3.5.4	60–62 HRC				
3.5.5	62–64 HRC				
4.1.1	Stainless steel				
4.1.2					
4.1.3					
4.1.4					
4.1.5					
4.2.1	Heat-resistant alloys				
4.2.2					
4.2.3					
4.2.4					
5.1.1	Conventional cast steel	14	0,063	0,125	0,15
5.1.2		13	0,08	0,16	0,195
5.1.3		9	0,063	0,125	0,15
5.2.1	Stainless cast steel				
5.2.2					
6.1.1	Cast iron with lamellar graphite	15	0,125	0,25	0,325
6.1.2		12	0,113	0,225	0,275
6.1.3		10	0,1	0,2	0,238
6.1.4					
6.2.1	Spheroidal cast iron	15	0,113	0,225	0,275
6.2.2		12	0,1	0,2	0,238
6.2.3		11	0,1	0,2	0,238
6.3.1	GTW (white malleable cast iron)	15	0,113	0,225	0,275
6.3.2		12	0,1	0,2	0,238
6.4.1	GTS (black malleable cast iron)	15	0,113	0,225	0,275
6.4.2		12	0,1	0,2	0,238
7.1.1	Aluminium	30	0,1	0,2	0,238
7.1.2		30	0,1	0,2	0,238
7.1.3		30	0,1	0,2	0,238
7.1.4		30	0,1	0,2	0,238
7.1.5		25	0,1	0,2	0,238
7.1.6		20	0,1	0,2	0,238
7.2.1	Magnesium	30	0,1	0,2	0,238
7.2.2		25	0,1	0,2	0,238
7.3.1	Copper	35	0,1	0,2	0,238
7.3.2		30	0,1	0,2	0,238
7.3.3		25	0,1	0,2	0,238
7.3.4					
7.3.5					
7.3.6					
7.4.1	CuZn (brass)	25	0,1	0,2	0,238
7.4.2		30	0,1	0,2	0,238
7.5.1	CuSn (bronze)	25	0,1	0,2	0,238
7.5.2		30	0,1	0,2	0,238
7.6.1	CuAlFe (Ampco)				
7.6.2					
7.8.1	Titanium	15	0,05	0,1	0,113
7.8.2		15	0,05	0,1	0,113
7.8.3		10	0,05	0,1	0,113

CUTTING SOLUTIONS BY CERATIZIT

Solid carbide tools / Reaming

W0602, uncoated

Reamers for through holes

UN DR

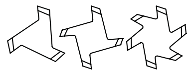
λ_S = −7°

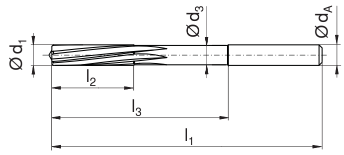
d_1 =H7
d_A=h6

B

E

SCWP625





d_1 [mm]	Type, description	d_A [mm]	d_3 [mm]	l_1 [mm]	l_2 [mm]	l_3 [mm]	z	HA Material
7.98	DR.UN.0602.0798H7.63.HA	8	7.46	117	33	75	6	W0602079800
7.99	DR.UN.0602.0799H7.63.HA	8	7.46	117	33	75	6	W0602079900
8.0	DR.UN.0602.0800H7.63.HA	8	7.46	117	33	75	6	W0602080000
8.01	DR.UN.0602.0801H7.63.HA	8	7.9	117	33	75	6	W0602080100
8.02	DR.UN.0602.0802H7.63.HA	8	7.9	117	33	75	6	W0602080200
8.03	DR.UN.0602.0803H7.63.HA	8	7.9	117	33	75	6	W0602080300
9.0	DR.UN.0602.0900H7.65.HA	10	8.4	125	36	79	6	W0602090000
9.97	DR.UN.0602.0997H7.72.HA	10	9.4	133	41	87	6	W0602099700
9.98	DR.UN.0602.0998H7.72.HA	10	9.4	133	41	87	6	W0602099800
9.99	DR.UN.0602.0999H7.72.HA	10	9.4	133	41	87	6	W0602099900
10.0	DR.UN.0602.1000H7.72.HA	10	9.4	133	41	87	6	W0602100000
10.01	DR.UN.0602.1001H7.72.HA	10	9.9	133	41	87	6	W0602100100
10.02	DR.UN.0602.1002H7.72.HA	10	9.9	133	41	87	6	W0602100200
10.03	DR.UN.0602.1003H7.72.HA	10	9.9	133	41	87	6	W0602100300
11.97	DR.UN.0602.1197H7.81.HA	12	11.6	150	44	99	6	W0602119700
11.98	DR.UN.0602.1198H7.81.HA	12	11.6	150	44	99	6	W0602119800
11.99	DR.UN.0602.1199H7.81.HA	12	11.6	150	44	99	6	W0602119900
12.0	DR.UN.0602.1200H7.81.HA	12	11.6	150	44	99	6	W0602120000
12.01	DR.UN.0602.1201H7.81.HA	12	11.6	150	44	99	6	W0602120100
12.02	DR.UN.0602.1202H7.81.HA	12	11.6	150	44	99	6	W0602120200
12.03	DR.UN.0602.1203H7.81.HA	12	11.6	150	44	99	6	W0602120300

W0606, coated

Cutting data

Index	Material designation		V_c [m/min]	f [mm/rev] = Ø 4,0 = Ø 4,0	> Ø 4,0 = Ø 8,0	> Ø 8,0 = Ø 16,0	> Ø 16,0 = Ø 20,0
1.1.1	Machining steels		150	0,3	0,6	1	1,2
1.1.2			100	0,3	0,6	1	1,2
1.2.1	Constructional steel		150	0,3	0,6	1	1,2
1.2.2			100	0,3	0,6	1	1,2
1.2.3			90	0,3	0,6	1	1,2
1.3.1	Spring steel		90	0,2	0,4	0,7	0,9
1.3.2			80	0,2	0,4	0,7	0,9
1.3.3							
2.1.1	Cementation steel		120	0,3	0,6	1	1,2
2.1.2			100	0,3	0,6	1	1,2
2.1.3			100	0,3	0,6	1	1,2
2.2.1	Nitriding steel		100	0,3	0,6	1	1,2
2.2.2			130	0,2	0,4	0,7	0,9
2.3.1	Tempered steel		100	0,3	0,6	1	1,2
2.3.2			130	0,2	0,4	0,7	0,9
2.3.3			120	0,2	0,4	0,7	0,9
2.3.4			100	0,2	0,4	0,7	0,9
2.3.5			100	0,2	0,4	0,7	0,9
2.3.6							
3.1.1	Non alloyed tool steel		80	0,3	0,6	1	1,2
3.2.1	Tool steel for cold working		130	0,2	0,4	0,7	0,9
3.2.2			100	0,2	0,4	0,7	0,9
3.2.3			80	0,2	0,4	0,7	0,9
3.2.4			60	0,2	0,4	0,7	0,9
3.2.5			60	0,2	0,4	0,7	0,9
3.3.1	Tool steel for hot working		100	0,2	0,4	0,7	0,9
3.3.2			80	0,2	0,4	0,7	0,9
3.3.3			60	0,2	0,4	0,7	0,9
3.3.4			60	0,2	0,4	0,7	0,9
3.3.5							
3.5.1	Hardened tool steel	< 55 HRC					
3.5.2		55–58 HRC					
3.5.3		58–60 HRC					
3.5.4		60–62 HRC					
3.5.5		62–64 HRC					
4.1.1	Stainless steel		30	0,08	0,16	0,195	0,23
4.1.2			25	0,08	0,16	0,195	0,23
4.1.3			20	0,08	0,16	0,195	0,23
4.1.4			20	0,08	0,16	0,195	0,23
4.1.5			30	0,08	0,16	0,195	0,23
4.2.1	Heat-resistant alloys						
4.2.2							
4.2.3							
4.2.4							
5.1.1	Conventional cast steel		100	0,2	0,4	0,7	0,9
5.1.2			95	0,2	0,4	0,7	0,9
5.1.3			90	0,2	0,4	0,7	0,9
5.2.1	Stainless cast steel		25	0,08	0,16	0,195	0,23
5.2.2			20	0,08	0,16	0,195	0,23
6.1.1	Cast iron with lamellar graphite		80	0,3	0,6	1	1,2
6.1.2			80	0,3	0,6	1	1,2
6.1.3			70	0,3	0,6	1	1,2
6.1.4							
6.2.1	Spheroidal cast iron		70	0,3	0,6	1	1,2
6.2.2			65	0,3	0,6	1	1,2
6.2.3			55	0,3	0,6	1	1,2
6.3.1	GTW (white malleable cast iron)		70	0,3	0,6	1	1,2
6.3.2			65	0,3	0,6	1	1,2
6.4.1	GTS (black malleable cast iron)		70	0,3	0,6	1	1,2
6.4.2			65	0,3	0,6	1	1,2
7.1.1	Aluminium		200	0,3	0,6	1	1,2
7.1.2			200	0,3	0,6	1	1,2
7.1.3			200	0,3	0,6	1	1,2
7.1.4			200	0,3	0,6	1	1,2
7.1.5			180	0,3	0,6	1	1,2
7.1.6			170	0,3	0,6	1	1,2
7.2.1	Magnesium		200	0,3	0,6	1	1,2
7.2.2			180	0,3	0,6	1	1,2
7.3.1	Copper		220	0,3	0,6	1	1,2
7.3.2			200	0,3	0,6	1	1,2
7.3.3			180	0,3	0,6	1	1,2
7.3.4							
7.3.5							
7.3.6							
7.4.1	CuZn (brass)		140	0,3	0,6	1	1,2
7.4.2			200	0,3	0,6	1	1,2
7.5.1	CuSn (bronze)		120	0,3	0,6	1	1,2
7.5.2			200	0,3	0,6	1	1,2
7.6.1	CuAlFe (Ampco)						
7.6.2							
7.8.1	Titanium		60	0,2	0,4	0,7	0,9
7.8.2			60	0,2	0,4	0,7	0,9
7.8.3			30	0,15	0,25	0,45	0,6

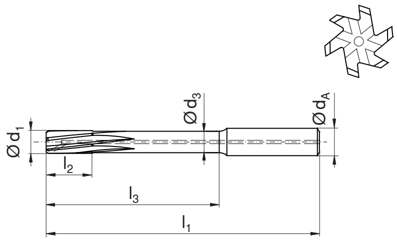
W0606, coated

HSC reamers for through holes

UN | HSC DR

$\lambda_S = -7°$ | $d_1 = H7$, $d_A = h6$ | B | E

SCPP625



d_1 [mm]	Type, description	d_A [mm]	d_3 [mm]	l_1 [mm]	l_2 [mm]	l_3 [mm]	z	HA Material
3.97	HSC-DR.UN.0606.0397H7.29.IK.HA	6	3.73	75	12	35	6	W0606039750
3.98	HSC-DR.UN.0606.0398H7.29.IK.HA	6	3.74	75	12	35	6	W0606039850
3.99	HSC-DR.UN.0606.0399H7.29.IK.HA	6	3.75	75	12	35	6	W0606039950
4.0	HSC-DR.UN.0606.0400H7.29.IK.HA	6	3.76	75	12	35	6	W0606040050
4.01	HSC-DR.UN.0606.0401H7.29.IK.HA	6	3.77	75	12	35	6	W0606040150
4.02	HSC-DR.UN.0606.0402H7.29.IK.HA	6	3.78	75	12	35	6	W0606040250
4.03	HSC-DR.UN.0606.0403H7.29.IK.HA	6	3.79	75	12	35	6	W0606040350
4.97	HSC-DR.UN.0606.0497H7.27.IK.HA	6	4.67	75	12	35	6	W0606049750
4.98	HSC-DR.UN.0606.0498H7.27.IK.HA	6	4.68	75	12	35	6	W0606049850
4.99	HSC-DR.UN.0606.0499H7.27.IK.HA	6	4.69	75	12	35	6	W0606049950
5.0	HSC-DR.UN.0606.0500H7.27.IK.HA	6	4.7	75	12	35	6	W0606050050
5.01	HSC-DR.UN.0606.0501H7.27.IK.HA	6	4.71	75	12	35	6	W0606050150
5.02	HSC-DR.UN.0606.0502H7.27.IK.HA	6	4.72	75	12	35	6	W0606050250
5.03	HSC-DR.UN.0606.0503H7.27.IK.HA	6	4.73	75	12	35	6	W0606050350
5.97	HSC-DR.UN.0606.0597H7.26.IK.HA	6	5.61	75	12	35	6	W0606059750
5.98	HSC-DR.UN.0606.0598H7.26.IK.HA	6	5.62	75	12	35	6	W0606059850
5.99	HSC-DR.UN.0606.0599H7.26.IK.HA	6	5.63	75	12	35	6	W0606059950
6.0	HSC-DR.UN.0606.0600H7.26.IK.HA	6	5.64	75	12	35	6	W0606060050
6.01	HSC-DR.UN.0606.0601H7.26.IK.HA	6	5.65	75	12	35	6	W0606060150
6.02	HSC-DR.UN.0606.0602H7.26.IK.HA	6	5.66	75	12	35	6	W0606060250
6.03	HSC-DR.UN.0606.0603H7.26.IK.HA	6	5.67	75	12	35	6	W0606060350
7.0	HSC-DR.UN.0606.0700H7.49.IK.HA	8	6.58	100	16	60	6	W0606070050
7.97	HSC-DR.UN.0606.0797H7.48.IK.HA	8	7.49	100	16	60	6	W0606079750
7.98	HSC-DR.UN.0606.0798H7.48.IK.HA	8	7.5	100	16	60	6	W0606079850
7.99	HSC-DR.UN.0606.0799H7.48.IK.HA	8	7.51	100	16	60	6	W0606079950
8.0	HSC-DR.UN.0606.0800H7.48.IK.HA	8	7.52	100	16	60	6	W0606080050
8.01	HSC-DR.UN.0606.0801H7.48.IK.HA	8	7.53	100	16	60	6	W0606080150
8.02	HSC-DR.UN.0606.0802H7.48.IK.HA	8	7.54	100	16	60	6	W0606080250
8.03	HSC-DR.UN.0606.0803H7.48.IK.HA	8	7.55	100	16	60	6	W0606080350
9.97	HSC-DR.UN.0606.0997H7.61.IK.HA	10	9.37	120	20	76	6	W0606099750
9.98	HSC-DR.UN.0606.0998H7.61.IK.HA	10	9.38	120	20	76	6	W0606099850
9.99	HSC-DR.UN.0606.0999H7.61.IK.HA	10	9.39	120	20	76	6	W0606099950
10.0	HSC-DR.UN.0606.1000H7.61.IK.HA	10	9.4	120	20	76	6	W0606100050
10.01	HSC-DR.UN.0606.1001H7.61.IK.HA	10	9.41	120	20	76	6	W0606100150
10.02	HSC-DR.UN.0606.1002H7.61.IK.HA	10	9.42	120	20	76	6	W0606100250
10.03	HSC-DR.UN.0606.1003H7.61.IK.HA	10	9.43	120	20	76	6	W0606100350
11.97	HSC-DR.UN.0606.1197H7.53.IK.HA	12	11.25	120	20	71	6	W0606119750
11.98	HSC-DR.UN.0606.1198H7.53.IK.HA	12	11.26	120	20	71	6	W0606119850
11.99	HSC-DR.UN.0606.1199H7.53.IK.HA	12	11.27	120	20	71	6	W0606119950
12.0	HSC-DR.UN.0606.1200H7.53.IK.HA	12	11.28	120	20	71	6	W0606120050
12.01	HSC-DR.UN.0606.1201H7.53.IK.HA	12	11.29	120	20	71	6	W0606120150
12.02	HSC-DR.UN.0606.1202H7.53.IK.HA	12	11.3	120	20	71	6	W0606120250
12.03	HSC-DR.UN.0606.1203H7.53.IK.HA	12	11.31	120	20	71	6	W0606120350
14.0	HSC-DR.UN.0606.1400H7.60.IK.HA	14	13.16	130	22	81	6	W0606140050
16.0	HSC-DR.UN.0606.1600H7.74.IK.HA	16	15.04	150	25	98	6	W0606160050
18.0	HSC-DR.UN.0606.1800H7.71.IK.HA	18	16.92	150	25	98	6	W0606180050
20.0	HSC-DR.UN.0606.2000H7.66.IK.HA	20	18.8	150	25	96	6	W0606200050

W0607, coated

Cutting data

Index	Material designation	V_c [m/min]	f [mm/rev] = Ø 4,0 = Ø 4,0	f [mm/rev] > Ø 4,0 = Ø 8,0	f [mm/rev] > Ø 8,0 = Ø 16,0	f [mm/rev] > Ø 16,0 = Ø 20,0
1.1.1	Machining steels	150	0,3	0,6	1	1,2
1.1.2		100	0,3	0,6	1	1,2
1.2.1	Constructional steel	150	0,3	0,6	1	1,2
1.2.2		100	0,3	0,6	1	1,2
1.2.3		90	0,3	0,6	1	1,2
1.3.1	Spring steel	90	0,2	0,4	0,7	0,9
1.3.2		80	0,2	0,4	0,7	0,9
1.3.3						
2.1.1	Cementation steel	120	0,3	0,6	1	1,2
2.1.2		100	0,3	0,6	1	1,2
2.1.3		100	0,3	0,6	1	1,2
2.2.1	Nitriding steel	100	0,3	0,6	1	1,2
2.2.2		130	0,2	0,4	0,7	0,9
2.3.1	Tempered steel	100	0,3	0,6	1	1,2
2.3.2		130	0,2	0,4	0,7	0,9
2.3.3		120	0,2	0,4	0,7	0,9
2.3.4		100	0,2	0,4	0,7	0,9
2.3.5		100	0,2	0,4	0,7	0,9
2.3.6						
3.1.1	Non alloyed tool steel	80	0,3	0,6	1	1,2
3.2.1	Tool steel for cold working	130	0,2	0,4	0,7	0,9
3.2.2		100	0,2	0,4	0,7	0,9
3.2.3		80	0,2	0,4	0,7	0,9
3.2.4		60	0,2	0,4	0,7	0,9
3.2.5		60	0,2	0,4	0,7	0,9
3.3.1	Tool steel for hot working	100	0,2	0,4	0,7	0,9
3.3.2		80	0,2	0,4	0,7	0,9
3.3.3		60	0,2	0,4	0,7	0,9
3.3.4		60	0,2	0,4	0,7	0,9
3.3.5						
3.5.1	Hardened tool steel < 55 HRC					
3.5.2	55–58 HRC					
3.5.3	58–60 HRC					
3.5.4	60–62 HRC					
3.5.5	62–64 HRC					
4.1.1	Stainless steel	30	0,08	0,16	0,195	0,23
4.1.2		25	0,08	0,16	0,195	0,23
4.1.3		20	0,08	0,16	0,195	0,23
4.1.4		20	0,08	0,16	0,195	0,23
4.1.5		30	0,08	0,16	0,195	0,23
4.2.1	Heat-resistant alloys					
4.2.2						
4.2.3						
4.2.4						
5.1.1	Conventional cast steel	100	0,2	0,4	0,7	0,9
5.1.2		95	0,2	0,4	0,7	0,9
5.1.3		90	0,2	0,4	0,7	0,9
5.2.1	Stainless cast steel	25	0,08	0,16	0,195	0,23
5.2.2		20	0,08	0,16	0,195	0,23
6.1.1	Cast iron with lamellar graphite	80	0,3	0,6	1	1,2
6.1.2		80	0,3	0,6	1	1,2
6.1.3		70	0,3	0,6	1	1,2
6.1.4						
6.2.1	Spheroidal cast iron	70	0,3	0,6	1	1,2
6.2.2		65	0,3	0,6	1	1,2
6.2.3		55	0,3	0,6	1	1,2
6.3.1	GTW (white malleable cast iron)	70	0,3	0,6	1	1,2
6.3.2		65	0,3	0,6	1	1,2
6.4.1	GTS (black malleable cast iron)	70	0,3	0,6	1	1,2
6.4.2		65	0,3	0,6	1	1,2
7.1.1	Aluminium	200	0,3	0,6	1	1,2
7.1.2		200	0,3	0,6	1	1,2
7.1.3		200	0,3	0,6	1	1,2
7.1.4		200	0,3	0,6	1	1,2
7.1.5		180	0,3	0,6	1	1,2
7.1.6		170	0,3	0,6	1	1,2
7.2.1	Magnesium	200	0,3	0,6	1	1,2
7.2.2		180	0,3	0,6	1	1,2
7.3.1	Copper	220	0,3	0,6	1	1,2
7.3.2		200	0,3	0,6	1	1,2
7.3.3		180	0,3	0,6	1	1,2
7.3.4						
7.3.5						
7.3.6						
7.4.1	CuZn (brass)	140	0,3	0,6	1	1,2
7.4.2		200	0,3	0,6	1	1,2
7.5.1	CuSn (bronze)	120	0,3	0,6	1	1,2
7.5.2		200	0,3	0,6	1	1,2
7.6.1	CuAlFe (Ampco)					
7.6.2						
7.8.1	Titanium	60	0,2	0,4	0,7	0,9
7.8.2		60	0,2	0,4	0,7	0,9
7.8.3		30	0,15	0,25	0,45	0,6

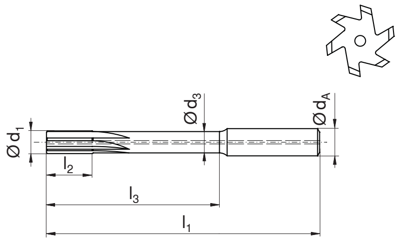
W0607, coated

HSC reamers for blind holes

UN | HSC SLR

$\lambda_S = 0°$ | $d_1 = H7$, $d_A = h6$ | A | E

SCPP625



d_1 [mm]	Type, description	d_A [mm]	d_3 [mm]	l_1 [mm]	l_2 [mm]	l_3 [mm]	z	HA Material
3.97	HSC-SLR.UN.0607.0397H7.29.IK.HA	6	3.73	75	12	35	6	W0607039750
3.98	HSC-SLR.UN.0607.0398H7.29.IK.HA	6	3.74	75	12	35	6	W0607039850
3.99	HSC-SLR.UN.0607.0399H7.29.IK.HA	6	3.75	75	12	35	6	W0607039950
4.0	HSC-SLR.UN.0607.0400H7.29.IK.HA	6	3.76	75	12	35	6	W0607040050
4.01	HSC-SLR.UN.0607.0401H7.29.IK.HA	6	3.77	75	12	35	6	W0607040150
4.02	HSC-SLR.UN.0607.0402H7.29.IK.HA	6	3.78	75	12	35	6	W0607040250
4.03	HSC-SLR.UN.0607.0403H7.29.IK.HA	6	3.79	75	12	35	6	W0607040350
4.97	HSC-SLR.UN.0607.0497H7.27.IK.HA	6	4.67	75	12	35	6	W0607049750
4.98	HSC-SLR.UN.0607.0498H7.27.IK.HA	6	4.68	75	12	35	6	W0607049850
4.99	HSC-SLR.UN.0607.0499H7.27.IK.HA	6	4.69	75	12	35	6	W0607049950
5.0	HSC-SLR.UN.0607.0500H7.27.IK.HA	6	4.7	75	12	35	6	W0607050050
5.01	HSC-SLR.UN.0607.0501H7.27.IK.HA	6	4.71	75	12	35	6	W0607050150
5.02	HSC-SLR.UN.0607.0502H7.27.IK.HA	6	4.72	75	12	35	6	W0607050250
5.03	HSC-SLR.UN.0607.0503H7.27.IK.HA	6	4.73	75	12	35	6	W0607050350
5.97	HSC-SLR.UN.0607.0597H7.26.IK.HA	6	5.61	75	12	35	6	W0607059750
5.98	HSC-SLR.UN.0607.0598H7.26.IK.HA	6	5.62	75	12	35	6	W0607059850
5.99	HSC-SLR.UN.0607.0599H7.26.IK.HA	6	5.63	75	12	35	6	W0607059950
6.0	HSC-SLR.UN.0607.0600H7.26.IK.HA	6	5.64	75	12	35	6	W0607060050
6.01	HSC-SLR.UN.0607.0601H7.26.IK.HA	6	5.65	75	12	35	6	W0607060150
6.02	HSC-SLR.UN.0607.0602H7.26.IK.HA	6	5.66	75	12	35	6	W0607060250
6.03	HSC-SLR.UN.0607.0603H7.26.IK.HA	6	5.67	75	12	35	6	W0607060350
7.97	HSC-SLR.UN.0607.0797H7.48.IK.HA	8	7.49	100	16	60	6	W0607079750
7.98	HSC-SLR.UN.0607.0798H7.48.IK.HA	8	7.5	100	16	60	6	W0607079850
7.99	HSC-SLR.UN.0607.0799H7.48.IK.HA	8	7.51	100	16	60	6	W0607079950
8.0	HSC-SLR.UN.0607.0800H7.48.IK.HA	8	7.52	100	16	60	6	W0607080050
8.01	HSC-SLR.UN.0607.0801H7.48.IK.HA	8	7.53	100	16	60	6	W0607080150
8.02	HSC-SLR.UN.0607.0802H7.48.IK.HA	8	7.54	100	16	60	6	W0607080250
8.03	HSC-SLR.UN.0607.0803H7.48.IK.HA	8	7.55	100	16	60	6	W0607080350
9.97	HSC-SLR.UN.0607.0997H7.61.IK.HA	10	9.37	120	20	76	6	W0607099750
9.98	HSC-SLR.UN.0607.0998H7.61.IK.HA	10	9.38	120	20	76	6	W0607099850
9.99	HSC-SLR.UN.0607.0999H7.61.IK.HA	10	9.39	120	20	76	6	W0607099950
10.0	HSC-SLR.UN.0607.1000H7.61.IK.HA	10	9.4	120	20	76	6	W0607100050
10.01	HSC-SLR.UN.0607.1001H7.61.IK.HA	10	9.41	120	20	76	6	W0607100150
10.02	HSC-SLR.UN.0607.1002H7.61.IK.HA	10	9.42	120	20	76	6	W0607100250
10.03	HSC-SLR.UN.0607.1003H7.61.IK.HA	10	9.43	120	20	76	6	W0607100350
11.97	HSC-SLR.UN.0607.1197H7.53.IK.HA	12	11.25	120	20	71	6	W0607119750
11.98	HSC-SLR.UN.0607.1198H7.53.IK.HA	12	11.26	120	20	71	6	W0607119850
11.99	HSC-SLR.UN.0607.1199H7.53.IK.HA	12	11.27	120	20	71	6	W0607119950
12.0	HSC-SLR.UN.0607.1200H7.53.IK.HA	12	11.28	120	20	71	6	W0607120050
12.01	HSC-SLR.UN.0607.1201H7.53.IK.HA	12	11.29	120	20	71	6	W0607120150
12.02	HSC-SLR.UN.0607.1202H7.53.IK.HA	12	11.3	120	20	71	6	W0607120250
12.03	HSC-SLR.UN.0607.1203H7.53.IK.HA	12	11.31	120	20	71	6	W0607120350
16.0	HSC-SLR.UN.0607.1600H7.74.IK.HA	16	15.04	150	25	98	6	W0607160050
18.0	HSC-SLR.UN.0607.1800H7.71.IK.HA	18	16.92	150	25	98	6	W0607180050
20.0	HSC-SLR.UN.0607.2000H7.66.IK.HA	20	18.8	150	25	96	6	W0607200050

W0603, coated

Cutting data

Index	Material designation		V_c [m/min]	f [mm/rev] = Ø 3,0 = Ø 4,0	f [mm/rev] > Ø 4,0 = Ø 8,0	f [mm/rev] > Ø 8,0 = Ø 12,0
1.1.1	Machining steels		20	0,1	0,2	0,238
1.1.2			19	0,08	0,16	0,195
1.2.1	Constructional steel		16	0,1	0,2	0,238
1.2.2			14	0,08	0,16	0,195
1.2.3			12	0,075	0,15	0,175
1.3.1	Spring steel		14	0,075	0,15	0,175
1.3.2			12	0,075	0,15	0,175
1.3.3						
2.1.1	Cementation steel		16	0,1	0,2	0,238
2.1.2			15	0,08	0,16	0,195
2.1.3			14	0,08	0,16	0,195
2.2.1	Nitriding steel		16	0,1	0,2	0,238
2.2.2			12	0,075	0,15	0,175
2.3.1	Tempered steel		13	0,08	0,16	0,195
2.3.2			12	0,075	0,15	0,175
2.3.3			13	0,08	0,16	0,195
2.3.4			12	0,075	0,15	0,175
2.3.5			11	0,063	0,125	0,15
2.3.6			10	0,063	0,125	0,15
3.1.1	Non alloyed tool steel		11	0,075	0,15	0,175
3.2.1	Tool steel for cold working		13	0,08	0,16	0,195
3.2.2			12	0,08	0,16	0,195
3.2.3			11	0,075	0,15	0,175
3.2.4			10	0,063	0,125	0,15
3.2.5			9	0,063	0,125	0,15
3.3.1	Tool steel for hot working		12	0,08	0,16	0,195
3.3.2			11	0,075	0,15	0,175
3.3.3			10	0,063	0,125	0,15
3.3.4			9	0,063	0,125	0,15
3.3.5			9	0,063	0,125	0,15
3.5.1	Hardened tool steel	< 55 HRC	8	0,075	0,15	0,175
3.5.2		55–58 HRC	8	0,063	0,125	0,15
3.5.3		58–60 HRC	7	0,063	0,125	0,15
3.5.4		60–62 HRC	6	0,05	0,1	0,113
3.5.5		62–64 HRC	5	0,05	0,1	0,113
4.1.1	Stainless steel		11	0,063	0,125	0,15
4.1.2			8	0,05	0,1	0,113
4.1.3			9	0,063	0,125	0,15
4.1.4						
4.1.5			11	0,063	0,125	0,15
4.2.1	Heat-resistant alloys					
4.2.2						
4.2.3						
4.2.4						
5.1.1	Conventional cast steel		16	0,063	0,125	0,15
5.1.2			15	0,08	0,16	0,195
5.1.3			11	0,063	0,125	0,15
5.2.1	Stainless cast steel					
5.2.2			11	0,063	0,125	0,15
6.1.1	Cast iron with lamellar graphite		17	0,125	0,25	0,325
6.1.2			14	0,113	0,225	0,275
6.1.3			12	0,1	0,2	0,238
6.1.4						
6.2.1	Spheroidal cast iron		17	0,113	0,225	0,275
6.2.2			14	0,1	0,2	0,238
6.2.3			13	0,1	0,2	0,238
6.3.1	GTW (white malleable cast iron)		17	0,113	0,225	0,275
6.3.2			14	0,1	0,2	0,238
6.4.1	GTS (black malleable cast iron)		17	0,113	0,225	0,275
6.4.2			14	0,1	0,2	0,238
7.1.1	Aluminium					
7.1.2						
7.1.3						
7.1.4						
7.1.5						
7.1.6						
7.2.1	Magnesium					
7.2.2						
7.3.1	Copper					
7.3.2						
7.3.3						
7.3.4						
7.3.5						
7.3.6						
7.4.1	CuZn (brass)					
7.4.2						
7.5.1	CuSn (bronze)					
7.5.2						
7.6.1	CuAlFe (Ampco)					
7.6.2						
7.8.1	Titanium					
7.8.2						
7.8.3						

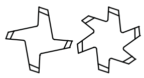
W0603, coated

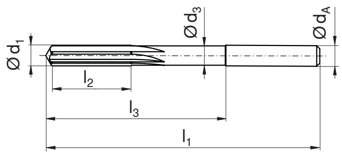
Reamers for blind holes

H | SLR

$\lambda_s = 0°$ | d_1 = H7, d_A = h6 | A | E

SCPH605





d_1 [mm]	Type, description	d_A [mm]	d_3 [mm]	l_1 [mm]	l_2 [mm]	l_3 [mm]	z	HA Material
2.97	SLR.H.0603.0297H7.25.HA	4	2.81	64	17	30	4	W0603029770
2.98	SLR.H.0603.0298H7.25.HA	4	2.81	64	17	30	4	W0603029870
2.99	SLR.H.0603.0299H7.25.HA	4	2.81	64	17	30	4	W0603029970
3.0	SLR.H.0603.0300H7.25.HA	4	2.81	64	17	30	4	W0603030070
3.01	SLR.H.0603.0301H7.25.HA	4	2.96	64	17	30	4	W0603030170
3.02	SLR.H.0603.0302H7.25.HA	4	2.96	64	17	30	4	W0603030270
3.03	SLR.H.0603.0303H7.25.HA	4	2.96	64	17	30	4	W0603030370
3.97	SLR.H.0603.0397H7.37.HA	4	3.71	77	21	43	4	W0603039770
3.98	SLR.H.0603.0398H7.37.HA	4	3.71	77	21	43	4	W0603039870
3.99	SLR.H.0603.0399H7.37.HA	4	3.71	77	21	43	4	W0603039970
4.0	SLR.H.0603.0400H7.37.HA	4	3.71	77	21	43	4	W0603040070
4.01	SLR.H.0603.0401H7.37.HA	4	3.96	77	21	43	4	W0603040170
4.02	SLR.H.0603.0402H7.37.HA	4	3.96	77	21	43	4	W0603040270
4.03	SLR.H.0603.0403H7.37.HA	4	3.96	77	21	43	4	W0603040370
4.97	SLR.H.0603.0497H7.43.HA	6	4.46	93	26	51	6	W0603049770
4.98	SLR.H.0603.0498H7.43.HA	6	4.46	93	26	51	6	W0603049870
4.99	SLR.H.0603.0499H7.43.HA	6	4.46	93	26	51	6	W0603049970
5.0	SLR.H.0603.0500H7.43.HA	6	4.46	93	26	51	6	W0603050070
5.01	SLR.H.0603.0501H7.43.HA	6	4.96	93	26	51	6	W0603050170
5.02	SLR.H.0603.0502H7.43.HA	6	4.96	93	26	51	6	W0603050270
5.03	SLR.H.0603.0503H7.43.HA	6	4.96	93	26	51	6	W0603050370
5.97	SLR.H.0603.0597H7.42.HA	6	5.26	93	26	51	6	W0603059770
5.98	SLR.H.0603.0598H7.42.HA	6	5.26	93	26	51	6	W0603059870
5.99	SLR.H.0603.0599H7.42.HA	6	5.26	93	26	51	6	W0603059970
6.0	SLR.H.0603.0600H7.42.HA	6	5.26	93	26	51	6	W0603060070
6.01	SLR.H.0603.0601H7.42.HA	6	5.96	93	26	51	6	W0603060170
6.02	SLR.H.0603.0602H7.42.HA	6	5.96	93	26	51	6	W0603060270
6.03	SLR.H.0603.0603H7.42.HA	6	5.96	93	26	51	6	W0603060370
7.0	SLR.H.0603.0700H7.56.HA	8	6.66	109	31	67	6	W0603070070
7.97	SLR.H.0603.0797H7.63.HA	8	7.46	117	33	75	6	W0603079770
7.98	SLR.H.0603.0798H7.63.HA	8	7.46	117	33	75	6	W0603079870
7.99	SLR.H.0603.0799H7.63.HA	8	7.46	117	33	75	6	W0603079970
8.0	SLR.H.0603.0800H7.63.HA	8	7.46	117	33	75	6	W0603080070
8.01	SLR.H.0603.0801H7.63.HA	8	7.9	117	33	75	6	W0603080170
8.02	SLR.H.0603.0802H7.63.HA	8	7.9	117	33	75	6	W0603080270
8.03	SLR.H.0603.0803H7.63.HA	8	7.9	117	33	75	6	W0603080370
9.0	SLR.H.0603.0900H7.65.HA	10	8.4	125	36	79	6	W0603090070
9.97	SLR.H.0603.0997H7.72.HA	10	9.4	133	41	87	6	W0603099770
9.98	SLR.H.0603.0998H7.72.HA	10	9.4	133	41	87	6	W0603099870
9.99	SLR.H.0603.0999H7.72.HA	10	9.4	133	41	87	6	W0603099970
10.0	SLR.H.0603.1000H7.72.HA	10	9.4	133	41	87	6	W0603100070
10.01	SLR.H.0603.1001H7.72.HA	10	9.9	133	41	87	6	W0603100170
10.02	SLR.H.0603.1002H7.72.HA	10	9.9	133	41	87	6	W0603100270
10.03	SLR.H.0603.1003H7.72.HA	10	9.9	133	41	87	6	W0603100370
11.97	SLR.H.0603.1197H7.81.HA	12	11.6	150	44	99	6	W0603119770
11.98	SLR.H.0603.1198H7.81.HA	12	11.6	150	44	99	6	W0603119870
11.99	SLR.H.0603.1199H7.81.HA	12	11.6	150	44	99	6	W0603119970
12.0	SLR.H.0603.1200H7.81.HA	12	11.6	150	44	99	6	W0603120070

W0603, coated

Cutting data

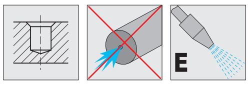
Index	Material designation	V_c [m/min]	f [mm/rev] = Ø 3,0 = Ø 4,0	> Ø 4,0 = Ø 8,0	> Ø 8,0 = Ø 12,0
1.1.1	**Machining steels**	20	0,1	0,2	0,238
1.1.2		19	0,08	0,16	0,195
1.2.1	**Constructional steel**	16	0,1	0,2	0,238
1.2.2		14	0,08	0,16	0,195
1.2.3		12	0,075	0,15	0,175
1.3.1	**Spring steel**	14	0,075	0,15	0,175
1.3.2		12	0,075	0,15	0,175
1.3.3					
2.1.1	**Cementation steel**	16	0,1	0,2	0,238
2.1.2		15	0,08	0,16	0,195
2.1.3		14	0,08	0,16	0,195
2.2.1	**Nitriding steel**	16	0,1	0,2	0,238
2.2.2		12	0,075	0,15	0,175
2.3.1	**Tempered steel**	13	0,08	0,16	0,195
2.3.2		12	0,075	0,15	0,175
2.3.3		13	0,08	0,16	0,195
2.3.4		12	0,075	0,15	0,175
2.3.5		11	0,063	0,125	0,15
2.3.6		10	0,063	0,125	0,15
3.1.1	**Non alloyed tool steel**	11	0,075	0,15	0,175
3.2.1	**Tool steel for cold working**	13	0,08	0,16	0,195
3.2.2		12	0,08	0,16	0,195
3.2.3		11	0,075	0,15	0,175
3.2.4		10	0,063	0,125	0,15
3.2.5		9	0,063	0,125	0,15
3.3.1	**Tool steel for hot working**	12	0,08	0,16	0,195
3.3.2		11	0,075	0,15	0,175
3.3.3		10	0,063	0,125	0,15
3.3.4		9	0,063	0,125	0,15
3.3.5		9	0,063	0,125	0,15
3.5.1	**Hardened tool steel** < 55 HRC	8	0,075	0,15	0,175
3.5.2	55–58 HRC	8	0,063	0,125	0,15
3.5.3	58–60 HRC	7	0,063	0,125	0,15
3.5.4	60–62 HRC	6	0,05	0,1	0,113
3.5.5	62–64 HRC	5	0,05	0,1	0,113
4.1.1	**Stainless steel**	11	0,063	0,125	0,15
4.1.2		8	0,05	0,1	0,113
4.1.3		9	0,063	0,125	0,15
4.1.4					
4.1.5		11	0,063	0,125	0,15
4.2.1	**Heat-resistant alloys**				
4.2.2					
4.2.3					
4.2.4					
5.1.1	**Conventional cast steel**	16	0,063	0,125	0,15
5.1.2		15	0,08	0,16	0,195
5.1.3		11	0,063	0,125	0,15
5.2.1	**Stainless cast steel**				
5.2.2		11	0,063	0,125	0,15
6.1.1	**Cast iron with lamellar graphite**	17	0,125	0,25	0,325
6.1.2		14	0,113	0,225	0,275
6.1.3		12	0,1	0,2	0,238
6.1.4					
6.2.1	**Spheroidal cast iron**	17	0,113	0,225	0,275
6.2.2		14	0,1	0,2	0,238
6.2.3		13	0,1	0,2	0,238
6.3.1	**GTW (white malleable cast iron)**	17	0,113	0,225	0,275
6.3.2		14	0,1	0,2	0,238
6.4.1	**GTS (black malleable cast iron)**	17	0,113	0,225	0,275
6.4.2		14	0,1	0,2	0,238
7.1.1	**Aluminium**				
7.1.2					
7.1.3					
7.1.4					
7.1.5					
7.1.6					
7.2.1	**Magnesium**				
7.2.2					
7.3.1	**Copper**				
7.3.2					
7.3.3					
7.3.4					
7.3.5					
7.3.6					
7.4.1	**CuZn (brass)**				
7.4.2					
7.5.1	**CuSn (bronze)**				
7.5.2					
7.6.1	**CuAlFe (Ampco)**				
7.6.2					
7.8.1	**Titanium**				
7.8.2					
7.8.3					

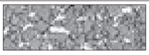
W0603, coated

Reamers for blind holes

H | SLR

$\lambda_S = 0°$ | d_1 = H7, d_A = h6 | A





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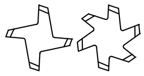

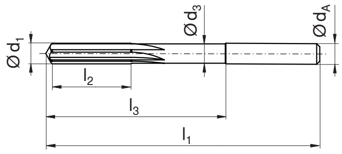

d_1 [mm]	Type, description	d_A [mm]	d_3 [mm]	l_1 [mm]	l_2 [mm]	l_3 [mm]	z	HA Material
12.01	SLR.H.0603.1201H7.81.HA	12	11.6	150	44	99	6	W0603120170
12.02	SLR.H.0603.1202H7.81.HA	12	11.6	150	44	99	6	W0603120270
12.03	SLR.H.0603.1203H7.81.HA	12	11.6	150	44	99	6	W0603120370

Technical information

Materials

Material main group	Material sub-group	Quality	StNr	DIN	AFNOR	UNI	BS	JIS	SS	GOST	UNS	USA
1 Machining, constructional and spring steel	1.1 Machining steels	1.1.1 up to 500 N/mm^2	1.0711	9 S 20		CF 9 S 22	220 M 07	SUM 21			G 12120	1212
			1.0715	9 SMn 28	S 250	CF 9 SMn 28	230 M 07	SUM 22	1912		G 12130	1213
			1.0718	9 SMnPb 28	S 250 Pb	CF 9 SMnPb 28		SUM 22 L	1914		G 12134	12 L 13
			1.0721	10 S 20	10 F 1	CF 10 S 20	210 M 15					1108
			1.0722	10 SPb 20	10 PbF 2	CF 10 SPb 20						11 L 08
			1.0723	15 S 20			210 A 15	SUM 32	1922			
			1.0736	9 SMn 36	S 300	CF 9 SMn 36	240 M 07				G 12150	1215
			1.0737	9 SMnPb 36	S 300 Pb	CF 9 SMnPb 36			1926		G 12144	12 L 14
		1.1.2 above 500 N/mm^2	1.0726	35 S 20	35 MF 4		212 M 36		1957		G 11400	1140
			1.0727	45 S 20	45 MF 4		212 M 44		1973		G 11460	1146
			1.0728	60 S 20	60 MF 4							
	1.2 Constructional steel	1.2.1 non alloyed up to 500 N/mm^2	1.0037	St 37-2				STKM 12 C				
			1.0044	St 44-2	E 28-2	Fe 430 B FN	4360-43 B	SM 41 B	1412			A 570 Gr. 40
			1.0116	St 37-3	E 24-3; E 24-4	Fe 360 D FF	4360-40 C		1312; 1313	St 3 kp; ps; sp		A 573 Gr. 58
			1.0144	St 44-3	E 28-3; E 28-4	Fe 430 D FF	4360-43 C	SM 41 C	1412; 1414	St 4 kp; ps; sp		A 573 Gr. 70
		1.2.2 non alloyed above 500 N/mm^2	1.0050	St 50-2	A 50-2	Fe 490	4360-50 B	SS 50	2172	BSt 5 ps; sp		A 570 Gr. 50
			1.0060	St 60-2	A 60-2	Fe 590; Fe 60-2	4360-SSE; SSC	SM 58		St 6 ps; sp		
			1.0570	St 52-3	E 36-3; E 36-4	Fe 510 B; C; D	4360-50 B	SM 50 YA	2132	17 GS		
		1.2.3 alloyed	1.5415	15 Mo 3	15 D 3	16 Mo 3	1501-240		2912			A 204 Gr. A
			1.5423	16 Mo 5		16 Mo 5	1503-245-420				G 45200	4520
			1.5622	14 Ni 6	16 N 6	14 Ni 6						A 350-LF 5
			1.5680	12 Ni 19	Z 18 N 5							2515
			1.7335	13 CrMo 4 4	15 CD 3.5	14 CrMo 4 5	1501-620 Gr. 27		2216	12ChM; 15ChM		A 182-F11; F12
			1.7337	16 CrMo 4 4	15 CD 4.5	14 CrMo 4 5	1501-620 Gr. 27		2216	15ChM		A 387 Gr. 12 Cl. 2
			1.7380	10 CrMo 9 10	10 CD 9.10	12 CrMo 9 10	1501-622 Gr. 31; 45		2218		J 21890	A 182-F22
			1.7709	21 CrMoV 5 7								
			1.7715	14 MoV 6 3			1503-660-440					
			1.7735	14 CrMoV 6 9	15 CDV 6							
	1.3 Spring steel	1.3.1 annealed (up to 250 HB)	1.0904	55 Si 7	55 S 7	55 Si 8	250 A 53		2085; 2090	55S2		9255
			1.0961	60 SiCr 7	60 SC 7	60 SiCr 8		SUP 7				9262
			1.1231	Ck 67	XC 68	C 70	060 A 67		1770	70	G 10700	1070
			1.1248	Ck 75	XC 75	C 75	060 A 78		1774; 1778	75	G 10780	1078; 1080
			1.1274	Ck 101	XC 100		060 A 96	SUP 4	1870		G 10950	1095
			1.2101	62 SiMnCr 4								
			1.2103	58 SiCr 8								
			1.7103	67 SiCr 5								
			1.7176	55 Cr 3	55 C 3	55 Cr 3	527 A 60	SUP 9 (A)	2253	50ChGA	G 51550	5155
			1.8159	50 CrV 4	50 CV 4	51 CrV 4	735 A 50	SUP 10	2230	50ChGFA	G 61500	6150
		1.3.2 naturally hard materials	1.0904	55 Si 7	55 S 7	55 Si 8	250 A 53		2085; 2090	55S2		9255
			1.0961	60 SiCr 7	60 SC 7	60 SiCr 8		SUP 7				9262
			1.1231	Ck 67	XC 68	C 70	060 A 67		1770	70	G 10700	1070
			1.1248	Ck 75	XC 75	C 75	060 A 78		1774; 1778	75	G 10780	1078; 1080
			1.1274	Ck 101	XC 100		060 A 96	SUP 4	1870		G 10950	1095
			1.2101	62 SiMnCr 4								
			1.2103	58 SiCr 8								
			1.7103	67 SiCr 5								
			1.7176	55 Cr 3	55 C 3	55 Cr 3	527 A 60	SUP 9 (A)	2253	50ChGA	G 51550	5155
			1.8159	50 CrV 4	50 CV 4	51 CrV 4	735 A 50	SUP 10	2230	50ChGFA	G 61500	6150
		1.3.3 hard materials for spring steel	1.0904	55 Si 7	55 S 7	55 Si 8	250 A 53		2085; 2090	55S2		9255
			1.0961	60 SiCr 7	60 SC 7	60 SiCr 8		SUP 7				9262
			1.1231	Ck 67	XC 68	C 70	060 A 67		1770	70	G 10700	1070
			1.1248	Ck 75	XC 75	C 75	060 A 78		1774; 1778	75	G 10780	1078; 1080
			1.1274	Ck 101	XC 100		060 A 96	SUP 4	1870		G 10950	1095

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Material main group	Material sub-group	Quality	StNr	DIN	AFNOR	UNI	BS	JIS	SS	GOST	UNS	USA
1 Machining, constructional and spring steel	1.3 Spring steel	hard materials for spring steel	1.2101	62 SiMnCr 4								
			1.2103	58 SiCr 8								
			1.7103	67 SiCr 5								
			1.7176	55 Cr 3	55 C 3	55 Cr 3	527 A 60	SUP 9 (A)	2253	50ChGA	G 51550	5155
			1.8159	50 CrV 4	50 CV 4	51 CrV 4	735 A 50	SUP 10	2230	50ChGFA	G 61500	6150
2 Cementation, nitriding and tempered steel	2.1 Cementation steel	2.1.1 up to 150 HB	1.0301	C 10	AF 34 C 10; XC 10	C 10	045 M 10	S 10 C		10	G 10100	1010
			1.0401	C 15	AF3 7 C 12; XC 18	C 15; C 16	080 M 15		1350		G 10170	1015
			1.1121	Ck 10	XC 10	C 10	045 M 10	S 10 C; S 9 CK	1265	08; 10	G 10100	1010
			1.1141	Ck 15	XC 15; XC 18	C 15; C 16	080 M 15	S 15 C; S 15 CK	1370	15	G 10170	1015
		2.1.2 150 - 200 HB	1.7012	13 Cr 2								
			1.7015	15 Cr 3	12 C 3		523 M 15	SCr 415 (H)		15Ch	G 50150	5015
		2.1.3 above 200 HB	1.5732	14 NiCr 10	14 NC 11	16 NiCr 11		SNC 415 (H)				3415
			1.5752	14 NiCr 14	12 NC 15		655 M 13	SNC 815 (H)			G 33106	3310; 9314
			1.5860	14 NiCr 18								
			1.5919	15 CrNi 6	16 NC 6	16 CrNi 4	S 107					
			1.5920	18 CrNi 8	20 NC 6							
			1.6523	21 NiCrMo 2	20 NCD 2	20 NiCrMo 2	805 M 20	SNCM 220 (H)	2506		G 86170	8620
			1.6587	17 CrNiMo 6	18 NCD 6	18 NiCrMo 7	820 A 16					
			1.7131	16 MnCr 5	16 MC 4	16 MnCr 5	527 M 17	SCR 415	2511	18ChG	G 51170	5115
			1.7139	16 MnCrS 5								
			1.7147	20 MnCr 5	20 MC 5	20 MnCr 5		SMnC 420 (H)		18ChG	G 51200	5120
			1.7149	20 MnCrS 5								
			1.7262	15 CrMo 5	12 CD 4	12 CrMo 4		SCM 415 (H)				
			1.7264	20 CrMo 5	18 CD 4			SCM 421				
			1.7271	23 CrMoB 3 3								
			1.7311	20 CrMo 2								
			1.7321	20 MoCr 4								
			1.7323	20 MoCrS 4								
			1.7325	25 MoCr 4								
			1.7326	25 MoCrS 4								
	2.2 Nitriding steel	2.2.1 up to 1000 N/mm^2	1.8504	34 CrAl 6								
			1.8506	34 CrAlS 5							K 23745	
			1.8507	34 CrAlMo 5	30 CAD 6.12	34 CrAlMo 7	905 M 31				K 23545	A 355 Cl. D
			1.8509	41 CrAlMo 7	40 CAD 6.12	41 CrAlMo 7	905 M 39	SACM 645	2940	38ChMJuA	K 24065	A 355 Cl. A
		2.2.2 above 1000 N/mm^2	1.8515	31 CrMo 12	30 CD 12	31 CrMo 12	722 M 24		2240			
			1.8519	31 CrMoV 9								
			1.8521	15 CrMoV 5 9								
			1.8523	39 CrMoV 13 9		36 CrMoV 13 9	897 M 39					
			1.8550	34 CrAlNi 7							K 52440	
	2.3 Tempered steel	2.3.1 non alloyed up to 800 N/mm^2	1.0402	C 22	AF 42 C 20	C 20; C 21	050 A 20		1450	20	G 10200	1020
			1.0406	C 25	AF 50 C 30	C 25	070 M 26					1025
			1.0501	C 35	AF 55 C 35	C 35	060 A 35		1550	35	G 10350	1035
			1.0503	C 45	AF 65 C 45	C 45	080 M 46		1650	45	G 10430	1045
			1.0511	C 40	AF 60 C 40	C 40						1040
			1.0528	C 30								
			1.1151	Ck 22	XC 25; XC 18	C 20	050 A 20	S 20 C; S 20 CK		20		1023
			1.1158	Ck 25	XC 25	C 25	070 M 26	S 25 C		25	G 10250	1025
			1.1178	Ck 30								
			1.1181	Ck 35	XC 38 H1:XC 32	C 35	080 M 36	S 35 C	1572	35	G 10340	1035
			1.1186	Ck 40	XC 42 H1	C 40	080 M 40	S 40 C		40		1040
			1.1191	Ck 45	XC 42	C 45	080 M 46	S 45 C	1672	45	G 10420	1045

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2 Cementation, nitriding and tempered steel	2.3 Tempered steel	2.3.2 non alloyed 800 - 1000 N/mm²	1.0535	C 55	AF 70 C55	C 55	070 M 55		1655	55		1055
			1.0540	C 50								
			1.0601	C 60	CC 55	C 60	080 A 62			60	G 10600	1060
			1.1203	Ck 55	XC 55	C50	070 M 55	S 55 C		55		1055
			1.1206	Ck 50	XC 48 H1		080 M 50			50		1050
			1.1221	Ck 60	XC 60	C60	080 A 62	S 58 C	1665; 1678	60; 60G	G 10640	1060
		2.3.3 alloyed up to 800 N/mm²	1.1133	20 Mn 5	20 M 5	G 22 Mn 3	120 M 19	SMnC 420			G 10220	1022; 1518
			1.3505	100 Cr 6	100 C 6	100 Cr 6	534 A 99	SUJ 2	2258	SchCh 15	G 52986	52100
			1.5120	38 MnSi 4								
			1.5121	46 MnSi 4								
			1.5141	53 MnSi 4								
			1.5710	36 NiCr 6	35 NC 6		640 A 35	SNC 236				3135
			1.6546	40 NiCrMo 2 2	40 NCD 2	40 NiCrMo 2 (KB)	311-Type 7	SNCM 240		38ChGNM	G 87400	8740
			1.6565	40 NiCrMo 6			311-Type 6	SNCM 439		40Ch2N2MA		4340
			1.7003	38 Cr 2	38 C 2	38 Cr 2						
			1.7006	46 Cr 2	42 C 2	45 Cr 2						5045
			1.7020	32 Cr 2								
			1.7030	28 Cr 4			530 A 30			30Ch		5130
			1.7033	34 Cr 4	32 C 4	34 Cr 4 (KB)	530 A 32	SCr 430 (H)		35Ch	G 51320	5132
			1.7218	25 CrMo 4	25 CD 4	25 CrMo 4 (KB)	1717 CDS 110	SCM 420; SCM 430	2225	30ChM	G 41300	4130
			1.7220	34 CrMo 4	35 CD 4	35 CrMo 4	708 A 37	SCM 432; SCCrM 3	2234	AS38ChGM	G 41350	4135; 4137
			1.7223	41 CrMo 4	42 CD 4 TS	41 CrMo 4	708 M 40	SCM 440	2244	40 ChFA	G 41420	4142; 4140
			1.7225	42 CrMo 4	42 CD 4	42 CrMo 4	708 M 40	SCM 440 (H)	2244		G 41400	4142; 4140
			1.7228	50 CrMo 4	50 CR MO4		708 A 47	SCM 445 (H)		50ChFA	G 41470	4150
			1.8159	50 CrV 4	50 CV 4	51 CrV 4	735 A 50	SUP 10	2230	50ChGFA	G 61500	6150
		2.3.4 alloyed 800 - 1000 N/mm²	1.1157	40 Mn 4	35 M 5		150 M 36			40G	G 10390	1039
			1.1165	30 Mn 5	35 M 5		120 M 36	SMn 433 H; SCMn 2		30GSL		1330
			1.1167	36 Mn 5	40 M 5		150 M 36	SMn 438 (H); SCMn 3	2120	35G2; 35GL	G 13350	1335
			1.1170	28 Mn 6	20 M 5	C 28 Mn	150 M 28	SCMn 1		30G		1330
			1.3561	44 Cr 2								
			1.3563	43 CrMo 4								
			1.3565	48 CrMo 4			817 M 40	SNC 836				
			1.5120	38 MnSi 4								
			1.5121	46 MnSi 4								
			1.5122	37 MnSi 4								
			1.5131	50 MnSi 4								
			1.5141	53 MnSi 4								
			1.5223	42 MnV 7								
			1.5710	36 NiCr 6	35 NC 6		640 A 35	SNC 236				3135
			1.5736	36 NiCr 10	30 NC 11	35 NiCr 9		SNC 631 (H)				3435
			1.5755	31 NiCr 14	18 NC 13		653 M 31	SNC 836				
			1.6511	36 CrNiMo 4	40 NCD 3	38 NiCrMo 4 (KB)	816 M 40			40 ChN2MA	G 98400	9840
			1.6513	28 NiCrMo 4								
			1.7003	38 Cr 2	38 C 2	38 Cr 2						
			1.7006	46 Cr 2	42 C 2	45 Cr 2						5045
			1.7030	28 Cr 4			530 A 30			30Ch		5130
			1.7033	34 Cr 4	32 C 4	34 Cr 4 (KB)	530 A 32	SCr 430 (H)		35Ch	G 51320	5132
			1.7034	37 Cr 4	38 C 4	38 Cr 4	530 A 36	SCr 435 H		40Ch		5135
			1.7035	41 Cr 4	42 C 4	41 Cr 4	530 M 40	SCr 440 (H)		40Ch	G 51400	5140
			1.7218	25 CrMo 4	25 CD 4 S	25 CrMo 4 (KB)	1717 CDS 110	SCM 420; SCM 430	2225	30ChM	G 41300	4130
			1.7220	34 CrMo 4	35 CD 4	35 CrMo 4	708 A 37	SCM 432; SCCrM 3	2234	AS38ChGM	G 41350	4135; 4137
			1.7223	41 CrMo 4	42 CD 4 TS	41 CrMo 4	708 M 40	SCM 440	2244	40 ChFA	G 41420	4142; 4140
			1.7225	42 CrMo 4	42 CD 4	42 CrMo 4	708 M 40	SCM 440 (H)	2244		G 41400	4142; 4140

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2 Cementation, nitriding and tempered steel	2.3 Tempered steel	2.3.4 alloyed 800 - 1000 N/mm^2	1.7228	50 CrMo 4	50 CR MO4		708 A 47	SCM 445 (H)		50ChFA	G 41470	4150
			1.7561	42 CrV 6								
			1.7735	14 CrMoV 6 9								
			1.8159	50 CrV 4	50 CV 4	51 CrV 4	735 A 50	SUP 10	2230	50ChGFA	G 61500	6150
		2.3.5 alloyed 1000 - 1300 N/mm^2	1.3563	43 CrMo 4								
			1.3565	48 CrMo 4			817 M 40	SNC 836				
			1.5120	38 MnSi 4								
			1.5121	46 MnSi 4								
			1.5122	37 MnSi 4								
			1.5223	42 MnV 7								
			1.5710	36 NiCr 6	35 NC 6		640 A 35	SNC 236				3135
			1.5736	36 NiCr 10	30 NC 11	35 NiCr 9		SNC 631 (H)				3435
			1.5864	35 NiCr 18								
			1.6511	36 CrNiMo 4	40 NCD 3	38 NiCrMo 4 (KB)	816 M 40			40 ChN2MA	G 98400	9840
			1.6580	30 CrNiMo 8	30 CND 8	30 NiCrMo 8	823 M 30	SNCM 431				
			1.6582	34 CrNiMo 6	35 NCD 6	35 NiCrMo 6 (KW)	817 M 40	SNCM 447	2541	38Ch2N2MA		4340
			1.7033	34 Cr 4	32 C 4	34 Cr 4 (KB)	530 A 32	SCr 430 (H)		35Ch	G 51320	5132
			1.7034	37 Cr 4	38 C 4	38 Cr 4	530 A 36	SCr 435 H		40Ch		5135
			1.7035	41 Cr 4	42 C 4	41 Cr 4	530 M 40	SCr 440 (H)		40Ch	G 51400	5140
			1.7045	42 Cr 4	42 C 4 TS	41 Cr 4	530 A 40	SCr 440	2245	40Ch		5140
			1.7218	25 CrMo 4	25 CD 4 S	25 CrMo 4 (KB)	1717 CDS 110	SCM 420; SCM 430	2225	30ChM	G 41300	4130
			1.7220	34 CrMo 4	35 CD 4	35 CrMo 4	708 A 37	SCM 432; SCCrM 3	2234	AS38ChGM	G 41350	4135; 4137
			1.7223	41 CrMo 4	42 CD 4 TS	41 CrMo 4	708 M 40	SCM 440	2244	40 ChFA	G 41420	4142; 4140
			1.7225	42 CrMo 4	42 CD 4	42 CrMo 4	708 M 40	SCM 440 (H)	2244		G 41400	4142; 4140
			1.7228	50 CrMo 4	50 CR MO4		708 A 47	SCM 445 (H)		50ChFA	G 41470	4150
			1.7361	32 CrMo 12	30 CD 12	32 CrMo 12	722 M 24		2240			
			1.7561	42 CrV 6								
			1.7707	30 CrMoV 9								
			1.7735	14 CrMoV 6 9								
			1.8159	50 CrV 4	50 CV 4	51 CrV 4	735 A 50	SUP 10	2230	50ChGFA	G 61500	6150
			1.8161	58 CrV 4								
		2.3.6 alloyed 1000 - 1600 N/mm^2	1.1273	90 Mn 4								
			1.5864	35 NiCr 18								
			1.6580	30 CrNiMo 8	30 CND 8	30 NiCrMo 8	823 M 30	SNCM 431				
			1.6582	34 CrNiMo 6	35 NCD 6	35 NiCrMo 6 (KW)	817 M 40	SNCM 447	2541	38Ch2N2MA		4340
			1.6746	32 NiCrMo 14 5	35 NCD 14		830 M 31					
			1.7361	32 CrMo 12	30 CD 12	32 CrMo 12	722 M 24		2240			
			1.7707	30 CrMoV 9								
			1.7735	14 CrMoV 6 9								
			1.8161	58 CrV 4								
3 Tool steel	3.1 Non alloyed tool steel	3.1.1 general	1.1520	C 70 W1								
			1.1525	C 80 W1	Y1 90; Y1 80	C 80 KU				U8A	T 72301	W 108
			1.1620	C 70 W2								
			1.1625	C 80 W2		C 80 KU	BW 1 B	SKC 3; SK 5; SK 6		U8; 80	T 72301	W 1
			1.1645	C 105 W2	Y2 105	C 100 KU		SK 3		U10	T 72301	
			1.1654	C 110 W								
			1.1663	C 125 W	Y2 120	C 120 KU		SK 2		U13	T 72301	W 112
			1.1673	C 135 W	Y2 140	C 140 KU		SK 1				
			1.1730	C 45 W	Y3 42							
			1.1740	C 60 W	Y3 55			SK 7				
			1.1744	C 67 W								
			1.1750	C 75 W			BW 1A			75		W 1
			1.1820	C 55 W								

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3 Tool steel	3.1 Non alloyed tool steel	3.1.1 general	1.1830	C 85 W	Y3 90			SK 5				
			1.1545	C 105 W1	Y1 105	C 100 KU			1880	U10A	T 72301	W 110
	3.2 Tool steel for cold working	3.2.1 low alloyed up to 1000 N/mm²	1.2067	100 Cr 6	Y 100 C 6		BL 3				T 61203	L 3
			1.2101	62 SiMnCr 4								
			1.2103	58 SiCr 8								
			1.2108	90 CrSi 5								
			1.2162	21 MnCr 5	20 NC 5			SCR 420 H				
			1.2210	115 CrV 3	100 C 3	107 CrV 3 KU					T 61202	L 2
			1.2330	35 CrMo 4	34 CD 4	35 CrMo 4	708 A 37		2234	35 HM	T 51620	4135
			1.2332	47 CrMo 4	42 CD 4	40 CrMo 4	708 M 40		2244			4142
			1.2369	81 CrMov 42 16								
			1.2419	105 WCr 6	105 WC 13	107 WCr 5 KU		SKS 31		ChWG		
			1.2510	100 MnCrW 4	90 MWCV 5	95 MnWCr 5 KU	BO 1	SKS 3	2140		T 31501	O 1
			1.2516	120 WV 4	110 WC 20	110 W 4 KU	BF 1					
			1.2542	45 WCrV 7		45 WCrV 8 KU	BS 1		2710		T 41901	S 1
			1.2550	60 WCrV 7	55 WC 20	55 WCrV 8 KU						
			1.2721	50 NiCr 13								
			1.2735	15 NiCr 14	10 NC 12			SNC 22			T 51606	
			1.2762	75 CrMoNiW 6 7								
			1.2826	60 MnSiCr 4								
			1.2833	100 V 1	Y1 105 V	102 V 2 KU	BW 2	SKS 43			T 72302	W 210
			1.2842	90 MnCrV 8	90 MV 8	90 MnVCr 8 KU	BO 2				T 31502	O 2
		3.2.2 low alloyed up to 1200 N/mm²	1.2312	40 CrMnMoS 8 6								
			1.2711	54 NiCrMoV 6	55 NCDV 6							
		3.2.3 low alloyed up to 1500 N/mm²	1.2713	55 NiCrMoV 6	55 NCDV 7			SKT 4		5ChNM	T 61206	L 6
		3.2.4 high alloyed annealed	1.2080	X 210 Cr 12	Z 200 C 12	X 210 Cr 13 KU	BD 3	SKD 1		Ch12	T 30403	D 3
			1.2083	X 42 Cr 13	Z 40 C 14	X 41 Cr 13 KU		SUS 420 J 2				
			1.2341	X 6 CrMo 4								
			1.2363	X 100 CrMoV 5 1	Z 100 CDV 5	X 100 CrMoV 5 1 KU	BA 2	SKD 12	2260		T 30102	A 2
			1.2379	X 155 CrVMo 12 1	Z 160 CDV 12	X 155 CrVMo 12 1 KU	BD 2	SKD 11			T 30402	D 2
			1.2436	X 210 CrW 12	Z 200 CW 12	X 215 CrW 12 1 KU		SKD 2	2312			
			1.2601	X 165 CrMoV 12		X 165 CrMoW 12 KU			2310			
			1.2764	X 19 NiCrMo 4								
			1.2767	X 45 NiCrMo 4	Y 35 NCD 16	42 NiCrMo 15 7						
			1.2885	X 32 CrMoCoV 3 3 3	30 DCKV 28							
		3.2.5 high alloyed tempered	1.2316	X 36 CrMo 17		X 38 CrMo 16 1 KU						
			1.6356	X 2 NiCoMoTi 18 12 4								
			1.6358	X 2 NiCoMoTi 18 9 5								
	3.3 Tool steel for hot working	3.3.1 low alloyed up to 1200 N/mm²	1.2311	40 CrMnMo 7								
			1.2738	40 CrMnNiMo 8								
			1.2744	57 NiCrMoV 7 7								
		3.3.2 low alloyed up to 1500 N/mm²	1.2713	55 NiCrMoV 6	55 NCDV 7			SKT 4		5ChNM	T 61206	L 6
		3.3.3 high alloyed annealed	1.2343	X 38 CrMoV 5 1	Z 38 CDV 5	X 37 CrMoV 5 1 KU	BH 11	SKD 6		4Ch5MFS	T 28811	H 11
			1.2344	X 40 CrMoV 5 1	Z 40 CDV 5	X 40 CrMo 5 1 1 KU	BH 13	SKD 61	2242	4Ch5MF1S	T 20813	H 13
			1.2365	X 32 CrMoV 3 3	32 DCV 28	30 CrMoV 12 27 KU	BH 10	SKD 7		3Ch3M3F	T 20810	H 10
			1.2367	X 38 CrMoV 5 3								
			1.2567	X 30 WCrV 5 3	Z 32 WCV 5	X 30 WCrV 5 3 KU		SKD 4				
			1.2581	X 30 WCrV 9 3	Z 30 WCV 9	X 30 WCrV 9 3 KU	BH 21	SKD 5		3Ch2W8F	T 20821	H 21
			1.2706	X 3 NiCrMo 18 8 5	E-Z 2 NKD 18						K 93120	
		3.3.4 high alloyed tempered	1.2709	X 2 NiCoMoTi 18 9 5								
				tempered								

Material main group	Material sub-group	Quality	StNr	DIN	AFNOR	UNI	BS	JIS	SS	GOST	UNS	USA
3 Tool steel	3.4 High speed steel	3.4.1 general	1.3202	S 12-1-4-5							T 12015	T15
			1.3207	S 10-4-3-10	Z 130 WKCDV 10-10-04	HS 10-4-3-10	BT 42	SKH 57				
			1.3243	S 6-5-2-5	Z 85 WDKCV 06-05-05-	HS 6-5-2-5		SKH 55	2723	R6M5K5		
			1.3246	S 7-4-2-5	Z 110 WKCDV 07-05-04	HS 7-4-2-5					T 11341	M 41
			1.3247	S 2-10-1-8	Z 110 DKCWV 09-08-04	HS 2-9-1-8	BM 42	SKH 51			T 11342	M 42
			1.3249	S 2-9-2-8			BM 34				T 11333	M 33; M 34
			1.3255	S 18-1-2-5	Z 80 WKCV 18-05-04-0	HS 18-1-1-5	BT 4	SKH 3			T 12004	T 4
			1.3257	S 18-1-2-15								
			1.3265	S 18-1-2-10		HS 18-0-1-10	BT 5	SKH 4 A			T 12005	T 5
			1.3302	S 12-1-4								
			1.3318	S 12-1-2								
			1.3333	S 3-3-2		HS 3-3-2						
			1.3343	S 6-5-2	Z 85 WDCV 06-05-04-0	HS 6-5-2	BM 2	SKH 9; SKH 51	2722	R6AM5	T 11302	M 2
			1.3344	S 6-5-3	Z 120 WDCV 06-05-04-	HS 6-5-3	BM 4	SKH 52; SKH 53			T 11323	M 3 Cl. 2
			1.3346	S 2-9-1	Z 85 DCWV 08-04-02-0	HS 1-8-1	BM 1			H41	T 11301	H 41; M 1
			1.3348	S 2-9-2	Z 100 DCWV 09-04-02-	HS 2-9-2			2782		T 11307	M 7
			1.3355	S 18-0-1	Z 80 WCV 18-04-01	HS 18-0-1	BT 1	SKH 2		R18	T 12001	T 1
	3.5 Hardened tool steel	3.5.1 < 55 HRC		hardened								
		3.5.2 55 – 58 HRC		hardened								
		3.5.3 58 – 60 HRC		hardened								
		3.5.4 60 – 62 HRC		hardened								
		3.5.5 62 – 64 HRC		hardened								
4 Stainless steel, heat resistant alloys	4.1 Stainless steel	4.1.1 ferritic	1.4000	X 6 Cr 13	Z 6 C 13	X 6 Cr 13	403 S 17	SUS 403	2301	08Ch13	S 40300	403
			1.4002	X 6 CrAl 13	Z 6 CA 13	X 6 CrAl 13	405 S 17	SUS 405	2302		S 40500	405
			1.4016	X 6 Cr 17	Z 8 C 17	X 8 Cr 17	430 S 15	SUS 430	2320	12Ch17	S 43000	430
			1.4113	X 6 CrMo 17	Z 8 CD 17.01	X 8 CrMo 17	434 S 17	SUS 434	2325		S 43400	434
			1.4313	X 5 CrNi 13 4	Z 5 CN 13.4	X 6 CrNi 13 04	425 C 11	SCS 5	2385			CA 6-NM
			1.4510	X 6 CrTi 17	Z 8 CT 17	X 6 CrTi 17		SUS 430 LX		08Ch17T	S 43036	XM 8; 430 Ti
			1.4511	X 8 CrNb 17	Z 8 CNb 17	X 6 CrNb 17		SUS 430 LX				
			1.4512	X 5 CrTi 12	Z 6 CT 12	X 6 CrTi 12	409 S 19	SUH 409			S 40900	409
		4.1.2 martensitic	1.4006	X 10 Cr 13	Z 12 C 13	X 12 Cr 13	410 S 21	SUS 410	2302	12Ch13	S 41000	410; CA-15
			1.4021	X 20 Cr 13	Z 20 C 13	X 20 Cr 13	420 S 37	SUS 420 J 1	2303	20Ch13	S 42000	420
			1.4024	X 15 Cr 13	Z 13 C 13		420 S 29	SUS 410 J 1				
			1.4028	X 30 Cr 13	Z 30 C 13	X 30 Cr 13	420 S 45	SUS 420 J 2	2304	30Ch13		
			1.4031	X 38 Cr 13	Z 40 C 14	X 40 Cr 14		SUS 420 J 2	2304	40Ch13		
			1.4034	X 46 Cr 13	Z 40 C 14	X 40 Cr 14	420 S 45			40Ch13		
			1.4057	X 20 CrNi 17 2	Z 15 CN 16.02	X 16 CrNi 16	431 S 29	SUS 431	2321	20Ch17N2	S 43100	431
			1.4108	X 100 CrMo 13								
			1.4109	X 65 CrMo 14								
			1.4112	X 90 CrMoV 18							S 44003	
			1.4113	X 6 CrMo 17	Z 8 CD 17.01	X 8 CrMo 17	434 S 17	SUS 434	2325		S 43400	434
			1.4116	X 45 CrMoV 15								
			1.4125	X 105 CrMo 17	Z 100 CD 17	X 105 CrMo 17		SUS 440 C			S 44004	440 C
		4.1.3 austenitic A5 < 40%	1.4311	X 2 CrNiN 18 10	Z 2 CN 18 .10	X 2 CrNiN 18 11	304 S 62	SUS 304 LN	2371		S 30453	304 LN
			1.4401	X 5 CrNiMo 18 10	Z 6 CND 17.11	X 5 CrNiMo 17 12	316 S 16	SUS 316	2347		S 31600	316
			1.4404	X 2 CrNiMo 17 13 2	Z 2 CND 17.12	X 2 CrNiMo 17 12	316 S 11	SUS 316 L	2348		S 31603	316 L
			1.4406	X 2 CrNiMoN 17 12 2	Z 2 CND 17.12 Az	X 2 CrNiMoN 17 12	316 S 61	SUS 316 LN			S 31653	316 LN
			1.4429	X 2 CrNiMoN 17 13 3	Z 2 CND 17.13 Az	X 2 CrNiMoN 17 13	316 S 62	SUS 316 LN	2375		S 31653	316 LN
			1.4435	X 2 CrNiMo 18 14 3	Z 2 CND 17.13	X 2 CrNiMo 17 13	316 S 12	SCS 16; SUS 316 L	2353	03Ch17N14M2	S 31603	316 L
			1.4436	X 5 CrNiMo 17 13 3	Z 6 CND 17.12	X 5 CrNiMo 17 13	316 S 16	SUS 316	2343		S 31600	316

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4 Stainless steel, heat resistant alloys	4.1 Stainless steel	4.1.3 austenitic A5 < 40%	1.4438	X 2 CrNiMo 18 16 4	Z 2 CND 19.15	X 2 CrNiMo 18 15	317 S 12	SUS 317 L	2367		S 31703	317 L
			1.4460	X 8 CrNiMo 27 5	Z 5 CND 27.05 Az			SUS 329 J 1	2324		S 32900	329
			1.4462	X 2 CrNiMoN 22 5	Z 2 CND 22 5 Az						S 31803	
			1.4539	X 2 NiCrMoCu 25 20 5	Z 1 CNDU 25 20						N 08904	
			1.4541	X 6 CrNiTi 18 10	Z 6 CNT 18.10	X 6 CrNiTi 18 11	321 S 12	SUS 321	2337	12Ch18N10T	S 32100	321
			1.4542	X 5 CrNiCuNb 17 14	Z 5 CNU 17.4			SCS 24; SUS 630			S 17400	630
			1.4546	X 5 CrNiNb 18 10		X 6 CrNiNb 18 11	347 S 18				S 34800	348
			1.4550	X 6 CrNiNb 18 10	Z 6 CNNb 18.10	X 6 CrNiNb 18 11	347 S 17	SUS 347	2338	08Ch18N12B	S 34700	347
			1.4571	X 6 CrNiMoTi 17 12 2	Z 6 CNT 17.12	X 6 CrNiMoTi 17 12	320 S 31		2350	10Ch17N13M2T	S 31635	316 Ti
			1.4580	X 6 CrNiMoNb 17 12 2	Z 6 CNDNb 17.12	X 6 CrNiMoNb 17 12	318 S 17			08Ch16N13M2B	S 31640	316 Cb
		4.1.4 austenitic A5 > 40%	1.4301	X 5 CrNi 18 9	Z 6 CN 18.09	X 5 CrNi 18 10	304 S 15	SUS 304	2332; 2333	08Ch18N10	S 30400	304; 304 H
			1.4303	X 5 CrNi 18 12	Z 8 CN 18.12	X 8 CrNi 19 10	305 S 19	SUS 305		06Ch18N11	S 30500	308; 305
			1.4306	X 2 CrNi 19 11	Z 2 CN 18.10	X 2 CrNi 18 11	304 S 12	SCS 19	2352; 2333	03Ch18N11	S 30403	304 L
			1.4310	X 12 CrNi 17 7	Z 12 CN 17.07	X 12 CrNi 17 07	301 S 21	SUS 301			S 30100	301
			1.4573	X 10 CrNiMoTi 18 12		X 6 CrNiMoTi 17 13	320 S 33			10Ch17N13M3T	S 31635	316 Ti
			1.4583	X 10 CrNiMoNb 18 12		X 6 CrNiMoNb 17 13						318
		4.1.5 martensitic	1.4005	X 12 CrS 13	Z 12 CF 13	X 12 CrS 13	416 S 21	SUS 416	2380		S 41600	416
			1.4104	X 12 CrMoS 17	Z 10 CF 17	X 10 CrS 17		SUS 430 F	2383		S 43020	430 F
		4.1.6 austenitic A5 > 40%	1.4305	X 10 CrNiS 18 9	Z 10 CNF 18.09	X 10 CrNi 18 09	303 S 21	SUS 303	2346		S 30300	303
		4.1.7 sulphured		sulphured								
	4.2 Heat-resistant alloys	4.2.1 Fe alloys	1.4718	X 45 CrSi 9 3	Z 45 CS 9	X 45 CrSi 8	401 S 45	SUH 1		40Ch9S2	S 65007	HNV 3
			1.4724	X 10 CrAl 13	Z 10 C 13	X 10 CrAl 12	403 S 17			10Ch13SJu		
			1.4742	X 10 CrAl 18	Z 10 CAS 18	X 8 Cr 17	430 S 15	SUS 430; SUH21				430
			1.4747	X 80 CrNiSi 20	Z 80 CSN 20.02	X 80 CrSiNi 20	443 S 65	SUH 4			S 65006	HNV 6
			1.4762	X 10 CrAl 24	Z 10 CAS 24	X 16 Cr 26					S 44600	446
			1.4828	X 15 CrNiSi 20 12	Z 15 CNS 20.12		309 S 24	SUH 309		20Ch20N14S2	S 30900	309
			1.4841	X 15 CrNiSi 25 20	Z 15 CNS 25.20	X 16 CrNiSi 25 20		SUH 310		20Ch25N20S2	S 31000	314; 310
			1.4845	X 12 CrNi 25 21	Z 12 CN 25.20	X 6 CrNi 26 20	310 S24	SUH 310; SUS 310 S	2361		S 31008	310 S
			1.4864	X 12 NiCrSi 36 16	Z 12 NCS 37.18		NA 17	SUH 330			N 08330	330
			1.4871	X 53 CrMnNiN 21 9	Z 52 CMN 21.09	X 53 CrMnNiN 21 9	349 S 54	SUH 35; SUH 36		55Ch20G9AN4	S 63008	EV 8
			1.4873	X 45 CrNiW 18 9	Z 35 CNWS 20.09	X 45 CrNiW 18 9	331 S 40	SUH 31				
			1.4876	X 10 NiCrAlTi 33 20	Z 8 NC 32.21		NA 15 (H)	NCF 800				B 163
			1.4878	X 12 CrNiTi 18 9	Z 6 CNT 18.12 (B)	X 6 CrNiTi 18 11	321 S 20	SUS 321	2337	12Ch18N10T		321
			1.4923	X 22 CrMoV 12 1			762					
			1.4935	X 20 CrMoWV 12 1							S 42200	
			1.4943	X 4 NiCrTi 25 15	Z 6 NCTDV 25.15 B		HR 251; HR 52; HR 51	SUH 660				
			1.4945	X 6 CrNiWNb 16 16								
			1.4962	X 12 CrNiWTi 16 3								
			1.4980	X 5 NiCrTi 26 15							S66286	
		4.2.2 Ni alloys, non hardened	1.4876	X 10 NiCrAlTi 32 20	Incoloy 800							
			2.4360	NiCu30Fe	Monel 400							
			2.4375	NiCu30Al	Monel K 500							
			2.4603	NiCr30FeMo	Hastelloy X							
			2.4617		Hastelloy B-2							
			2.4640	NiCr15Fe	Inconel 600							
			2.4668	NiCr19Fe18Nb5Mg	Inconel 718							
			2.4812		Hastelloy C							
			2.4816	NiCr15Fe	Inconel 600		NA 14	NCF 600			N 06600	
			2.4856	NiCr22Mo9Nb	Inconel 625							
			2.4858	NiCr21Mo			NA 16	NCF 825			N 08825	
			2.4983		Udimet 500							

Material main group	Material sub-group	Quality	StNr	DIN	AFNOR	UNI	BS	JIS	SS	GOST	UNS	USA
4 Stainless steel, heat resistant alloys	4.2 Heat-resistant alloys	4.2.3 Ni alloys, hardened	2.4630	NiCr20Ti	Nimonic 75		HR 5					
			2.4631	NiCr20TiAl	Nimonic 80 A		HR 401; 601	NCF 80 A			N 07080	
			2.4632	NiCr20Co18Ti	Nimonic 90							
			2.4634	NiCo20Cr15MoAlTi	Nimonic 105							
			2.4662	NiCr13Mo6Ti3	Nimonic 901							
			2.4670		Nimocast 713							
			2.4674		Nimocast PK 24							
			2.4951	NiCr20Ti	Nimonic 75		HR 5					
			2.4952	NiCr20TiAl	Nimonic 80 A							
			2.4969	NiCr20Co18Ti	Nimonic 90							
			2.4973	NiCr19Co11MoTi								
			2.6554		Waspaloy							
		4.2.4 Co alloys	2.4711	CoCr20Ni15Mo								
			2.4964	CoCr20W15Ni								
			2.4979	CoCr28MoNi								
			2.4989	CoCr20NiW								
5 Cast steel	5.1 Conventional cast steel	5.1.1 non alloyed	1.0420	GS-38								
			1.0446	GS-45								
			1.0552	GS-52								
			1.0558	GS-60								
			1.0619	GS-C 25								
			1.1142	GS-Ck 16								
			1.1155	GS-Ck 25								
			1.1191	GS-Ck 45								
		5.1.2 low alloyed	1.1118	GS-24 Mn 6								
			1.1120	GS-20 Mn 5								
			1.1131	GS-16 Mn 5								
			1.1136	GS-24 Mn 4								
			1.1138	GS-21 Mn 5								
			1.1159	GS-46 Mn4								
			1.1165	GS-30 Mn 5								
			1.1167	GS-36 Mn 5								
			1.1168	GS-40 Mn 5								
			1.2311	GS-40 CrMnMo 7								
			1.2323	GS-48 CrMoV 6 7								
			1.2713	GS-55 NiCrMoV 6								
			1.2728	GS-20 MoNi 33 13								
			1.2887	GS-34 CoCrMoV 19 12								
			1.5015	GS-8 Mn 7								
			1.5120	GS-38 MnSi 4								
			1.5121	GS-46 MnSi 4								
			1.5122	GS-37 MnSi 5								
			1.5418	GS-20 MnMo 5 3								
			1.5419	GS-22 Mo 4								
			1.5430	GS-8 MnMo 7 4								
			1.5431	GS-12 MnMo 7 4								
			1.5475	GS-20 MnNb 5								
			1.5485	GS-20 MnNiTi 5 3								
			1.5621	GS-10 Ni 6								
			1.5633	GS-24 Ni 8								
			1.5638	GS-10 Ni 14								
			1.5681	GS-10 Ni 19								
			1.5919	GS-15 CrNi 6								

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5 Cast steel	5.1 Conventional cast steel	5.1.2 low alloyed	1.6219	GS-22 MnNi 5								
			1.6221	GS-13 MnNi 6 4								
			1.6309	GS-20 MnMoNi 5 5								
			1.6511	GS-36 CrNiMo 4								
			1.6515	GS-25 CrNiMo 4								
			1.6552	GS-24 CrNiMo 3 2 5								
			1.6570	GS-30 NiCrMo 8 5								
			1.6582	GS-34 CrNiMo 6								
			1.6740	GS-33 NiCrMo 7 4 4								
			1.6741	GS-38 NiCrMo 8 4 4								
			1.6748	GS-40 NiCrMo 6 5 6								
			1.6750	GS-20 NiCrMo 3 7								
			1.6759	GS-18 NiMoCr 3 6								
			1.6760	GS-22 NiMoCr 5 6								
			1.6779	GS-14 NiCrMo 10 6								
			1.6781	GS-18 NiCrMo 12 6								
			1.6783	GS-19 NiCrMo 12 6								
			1.6916	GS-12 MnNiCrMo 5 3								
			1.7131	GS-16 MnCr 5								
			1.7147	GS-20 MnCr 5								
			1.7218	GS-25 CrMo 4								
			1.7219	GS-26 CrMo 4								
			1.7220	GS-34 CrMo 4								
			1.7225	GS-42 CrMo 4								
			1.7228	GS-50 CrMo 4								
			1.7341	GS-34 CrMo 4 4								
			1.7354	GS-22 CrMo 5 4								
			1.7354	GS-17 CrMnMo 5 5								
			1.7357	GS-17 CrMo 5 5								
			1.7363	GS-12 CrMo 19 5								
			1.7377	GS-17 CrMo 9 10								
			1.7379	GS-18 CrMo 9 10								
			1.7380	GS-12 CrMo 9 10								
			1.7382	GS-19 CrMo 9 10								
			1.7706	GS-17 CrMoV 5 11								
			1.7725	GS-30 CrMoV 6 4								
			1.7755	GS-35 CrMoV 10 4								
			1.7756	GS-36 CrMoV 10 4								
			1.7903	GS-18 MnCrMo 6 3								
			1.7906	GS-19 MnCrMo 6 3								
			1.7909	GS-20 MnCrMo 6 3								
			1.8159	GS-50 CrV 4								
		5.1.3 high alloyed	1.2201	G-X 165 CrV 12								
			1.2343	G-X 38 CrMoV 5 1	Z 38 CDV 5							
			1.2363	G-X 100 CrMoV 5 1	Z 100 CDV 5							
			1.2365	G-X 32 CrMoV 3 3	32 DCV 28							
			1.2367	G-X 40 CrMoV 5 3	Z 40 CDV 5							
			1.2392	G-X 28 CrMoV 5 1								
			1.2601	G-X 165 CrMoV 12								
			1.2606	G-X 37 CrMoW 5 1								
			1.2880	G-X 165 CrCoMo 12								
			1.3401	G-X 120 Mn 12	Z 120 M 12	XG 120 Mn 12	Z 120 M 12	SCMnH 1		110G13L		A 128 (A)
			1.3966	G-X 25 MnCrNi 8 8 6								

Material main group	Material sub-group	Quality	StNr	DIN	AFNOR	UNI	BS	JIS	SS	GOST	UNS	USA
5 Cast steel	5.1 Conventional cast steel	5.1.3 high alloyed	1.4710	G-X 30 CrSi 6								
			1.4718	G-X 45 CrSi 9 3								
			1.5662	G-X 8 Ni 9								
			1.6351	G-X 2 NiCoMoTi 17 10								
			1.7389	G-X 12 CrMo 10 1								
	5.2 Stainless cast steel	5.2.1 ferritic / martensitic	1.4001	G-X 7 Cr 13	Z 8 C 13 FF							
			1.4006	G-X 10 Cr 13	Z 10 C 13							
			1.4008	G-X 8 CrNi 13	Z 12 CN 13 M							
			1.4027	G-X 20 Cr 14	Z 20 C 13 M		420 C 29	SCS 2		20Ch13L		
			1.4034	G-X 46 Cr 13	Z 40 C 14							
			1.4059	G-X 22 CrNi 17								
			1.4085	G-X 70 Cr 29								
			1.4086	G-X 120 Cr 29								
			1.4107	G-X 8 CrNi 12								
			1.4120	G-X 20 CrMo 13								
			1.4122	G-X 35 CrMo 17								
			1.4136	G-X 70 CrMo 29 2								
			1.4138	G-X 120 CrMo 29 2								
			1.4313	G-X 5 CrNi 13 4								
			1.4339	G-X 32 CrNi 28 10								
			1.4340	G-X 40 CrNi 27 4								
			1.4405	G-X 5 CrNiMo 16 5								
			1.4407	G-X 5 CrNiMo 13 4								
			1.4414	G-X 4 CrNiMo 13 4								
			1.4464	G-X 40 CrNiMo 27 5								
			1.4540	G-X 4 CrNiCuNb 16 4								
			1.4729	G-X 40 CrSi 13								
			1.4740	G-X 40 CrSi 17								
			1.4743	G-X 160 CrSi 18								
			1.4745	G-X 40 CrSi 23								
			1.4761	G-X 120 CrSi 23								
			1.4776	G-X 40 CrSi 29								
			1.4777	G-X 130 CrSi 29								
			1.4809	G-X 40 CrNi 23 14								
			1.4820	G-X 12 CrNi 26 5								
			1.4822	G-X 40 CrNi 24 5								
			1.4823	G-X 40 CrNiSi 27 4								
			1.4825	G-X 25 CrNiSi 18 9								
			1.4826	G-X 40 CrNiSi 22 9								
			1.4832	G-X 25 CrNiSi 20 14								
			1.4837	G-X 40 CrNiSi 25 12								
			1.4840	G-X 15 CrNi 25 20								
			1.4848	G-X 40 CrNiSi 25 20								
			1.4849	G-X 40 NiCrSiNb 38 1								
			1.4852	G-X 40 NiCrNb 35 25								
			1.4855	G-X 30 CrNiSiNb 24 2								
			1.4857	G-X 40 NiCrSi 35 25								
			1.4859	G-X 10 NiCrNb 32 20								
			1.4865	G-X 40 NiCrSi 38 18		GX 50 NiCr 39 19	330 C 40	SCH 15; SCH 16				
			1.4868	G-X 50 CrNi 30 30								
			1.4873	G-X 45 CrNiW 18 9								
			1.4928	G-X 12 CrNiMoCoVN 12								
			1.4930	G-X 14 CrCoMo 13 10								

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Material main group	Material sub-group	Quality	StNr	DIN	AFNOR	UNI	BS	JIS	SS	GOST	UNS	USA
5 Cast steel	5.2 Stainless cast steel	5.2.1 ferritic / martensitic	1.4931	G-X 22 CrMoV 12 1								
			1.4957	G-X 15 CrNiCo 21 20								
			1.4968	G-X 7 CrNiNb 16 13								
			1.4988	G-X 8 CrNiMoVNb 16 1								
			1.6982	G-X 3 CrNi 13 4								
		5.2.2 austenitic	1.3941	G-X 4 CrNi 18 13								
			1.3944	G-X 5 CrNi 18 11								
			1.3951	G-X 4 CrNiMoN 22 15								
			1.3952	G-X 4 CrNiMoN 18 14								
			1.3953	G-X 2 CrNiMo 18 15								
			1.3955	G-X 12 CrNi 18 11								
			1.3959	G-X 10 CrNiNb 16 13								
			1.3964	G-X 4 CrNiMnMoN 19 1								
			1.4306	G-X 2 CrNi 18 9								
			1.4308	G-X 6 CrNi 18 9	Z 6 CN 18.10 M		304 C 15	SCS 13	2333	07Ch18N9L		CF-8
			1.4312	G-X 10 CrNi 18 8								
			1.4347	G-X 8 CrNi 26 7								
			1.4404	G-X 2 CrNiMo 18 10								
			1.4408	G-X 6 CrNiMo 18 10								
			1.4410	G-X 10 CrNiMo 18 9								
			1.4437	G-X 6 CrNiMo 18 12								
			1.4439	G-X 3 CrNiMo 17 13 5								
			1.4446	G-X 2 CrNiMo 17 13 4								
			1.4448	G-X 6 CrNiMo 17 13								
			1.4463	G-X 6 CrNiMo 24 8 2								
			1.4465	G-X 2 CrNiMoN 25 25								
			1.4500	G-X 7 NiCrMoCuNb 25								
			1.4531	G-X 2 NiCrMoCuN 20 1								
			1.4536	G-X 2 NiCrMoCuN 25 2								
			1.4552	G-X 5 CrNiNb 18 9								
			1.4580	G-X 10 CrNiMoNb 18 1								
			1.4581	G-X 5 CrNiMoNb 18 10	Z 4 CNDNb 18.12 M	GX 6 CrMoNb 20 11	318 C 17	SCS 22				
			1.4585	G-X 7 CrNiMoCuNb 18								
			1.4815	G-X 8 CrNi 19 10								
			1.4927	G-X 5 CrNi 22 10								
			1.6901	G-X 8 CrNi 18 10								
			1.6902	G-X 6 CrNi 18 10								
			1.6905	G-X 5 CrNiNb 18 10								
6 Cast iron	6.1 Cast iron with lamellar graphite	6.1.1 non alloyed up to 180 HB	0.6010	GG-10	Ft 10 D	G 10		FC 10	01 10-00	Sc 10		A48-20 B
			0.6015	GG-15	Ft 15 D	G 15	Grade 150	FC 15	01 15-00	Sc 15		A48-25 B
			0.6020	GG-20	Ft 20 D	G 20	Grade 220	FC 20	01 20-00	Sc 20		A48-30 B
		6.1.2 non alloyed above 180 HB	0.6025	GG-25	Ft 25 D	G 25	Grade 260	FC 25	01 25-00	Sc 25		A48-40 B
			0.6030	GG-30	Ft 30 D	G 30	Grade 300	FC 30	01 30-00	Sc 30		A48-45 B
			0.6035	GG-35	Ft 35 D	G 35	Grade 350	FC 35	01 35-00	Sc 35		A48-50 B
			0.6040	GG-40	Ft 40 D		Grade 400		01 40-00	Sc 40		A48-60 B
		6.1.3 alloyed	0.6652	GGL-NiMn 13 7	L- NM 13 7		L-NiMn 13 7					
			0.6655	GGL-NiCuCr 15 6 2	L-NUC 15 6 2		L-NiCuCr 15 6 2					A 436 Type 1
			0.6656	GGL-NiCuCr 15 6 3	L-NUC 15 6 3		L-NiCuCr 15 6 3					A 436 Type 1b
			0.6660	GGL-NiCr 20 2	L-NC 20 2		L-NiCr 20 2		05 23-00			A 436 Type 2
			0.6661	GGL-NiCr 20 3	L-NC 20 3		L-NiCr 20 3					A 436 Type 2b
			0.6667	GGL-NiSiCr 20 5 3	L-NSC 20 5 3		L-NiSiCr 20 5 3					
			0.6676	GGL-NiCr 30 3	L-NC 30 3		L-NiCr 30 3					A 436 Type 3
			0.6680	GGL-NiSiCr 30 5 5	L-NSC 30 5 5		L-NiSiCr 30 5 5					A 436 Type 4

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6 Cast iron	6.1 Cast iron with lamellar graphite	6.1.4 high alloyed	0.9620	G-X 260 NiCr 4 2			Grade 2 A		0512-00			A 532 I B NiCr-LC
			0.9625	G-X 330 NiCr 4 2			Grade 2 B		0513-00			A 532 I A NiCr-HC
			0.9630	G-X 300 CrNiSi 9 5 2			Grade 2 C; D; E		0457-00			A 532 I D Ni-HiCr
			0.9635	G-X 330 CrMo 15 3			Grade 3 A; B					A 532 II C 15% CrMo-
			0.9640	G-X 300 CrMoNi 15 2			Grade 3 A; B					
			0.9645	G-X 260 CrMoNi 20 2			Grade 3 C					A 532 II D 20% CrMo-
			0.9650	G-X 260 Cr 27			Grade 3 D		0466-00			A 532 III A 25% Cr
			0.9655	G-X 300 CrMo 27 1			Grade 3 E					A 532 III A 25% Cr
	6.2 Spheroidal cast iron	6.2.1 non alloyed up to 180 HB	0.7033	GGG-35.3								
			0.7040	GGG-40	FGS 400-12	GS 400-12	SNG 420/12	FCD 40	0717-02	VC 42-12		60-40-18
			0.7043	GGG-40.3	FGS 370-17	GSO 42/17	SNG 370/17		0717-15	VC 42-12		
		6.2.2 non alloyed above 180 HB	0.7050	GGG-50	FGS 500-7	GS 500/7	SNG 500/7	FCD 50	0727-02	VC 50-2		65-45-12
			0.7060	GGG-60	FGS 600-3	GS 600/3	SNG 600/3	FCD 60	0732-03	VC 60-2		80-55-06
			0.7070	GGG-70	FGS 700-2	GS 700-2	SNG 700/2	FCD 70	0737-01	VC 70-2		100-70-03
			0.7080	GGG-80	FGS 800-2	GS 800-2	SNG 800/2			VC 80-2		120-90-02
		6.2.3 alloyed	0.7652	GGG-NiMn 13 7	S-NM 13 7		S-NiMn 13 7					
			0.7660	GGG-NiCr 20 2	S-NC 20 2		S-NiCr 20 2					A 439 Type D-2
			0.7661	GGG-NiCr 20 3	S-NC 20 3		S-NiCr 20 3					A 439 Type D-2B
			0.7665	GGG-NiSiCr 20 5 2	S-NSC 20 5 2		S-NiSiCr 20 5 2					
			0.7670	GGG-Ni 22	S-N 22		S-Ni 22					A 439 Type D-2C
			0.7673	GGG-NiMn 23 4	S-NM 23 4		S-NiMn 23 4					A 439 Type D-2M
			0.7676	GGG-NiCr 30 3	S-NC 30 3		S-NiCr 30 3					A 439 Type D-3
			0.7677	GGG-NiCr 30 1	S-NC 30 1		S-NiCr 30 1					A 439 Type D-3A
			0.7680	GGG-NiSiCr 30 5 5	S-NSC 30 5 5		S-NiSiCr 30 5 5					A 439 Type D-4
			0.7683	GGG-Ni 35	S-N 35		S-Ni 35					A 439 Type D-5
			0.7685	GGG-NiCr 35 3	S-NC 35 3		S-NiCr 35 3					A 439 Type D-5B
	6.3 GTW (white malleable cast iron)	6.3.1 up to 180 HB	0.8035	GTW-35-04								
			0.8040	GTW-40-05								
			0.8045	GTW-45-07								
		6.3.2 above 180 HB	0.8055	GTW-55								
			0.8065	GTW-65								
	6.4 GTS (black malleable cast iron)	6.4.1 up to 180 HB	0.8135	GTS-35-10	MN 35-10		B 340/12					
		6.4.2 above 180 HB	0.8145	GTS-45-06			P 440/7					
			0.8155	GTS-55-04	MP 50-5		P 510/4					
			0.8165	GTS-65-02	MP 60-3		P 570/3					
			0.8170	GTS-70-02	IP 70-2		P 690/2					
7 Non-ferrous metal	7.1 Aluminium	7.1.1 non alloyed	3.0205	Al99								
			3.0255	Al99.5	1050 A							
			3.0275	Al99.7								
			3.0285	Al99.8								
			3.0305	Al99.9								
		7.1.2 aluminium wrought alloys, non hardened	3.0505	AlMn0.5Mg0.5								
			3.0515	AlMn1								
			3.0517	AlMnCu								
			3.0525	AlMn1Mg0.5	3005							
			3.0526	AlMn1Mg1								
			3.0915	AlFeSi								
			3.3307	Al99.85Mg0.5								
			3.3308	Al99.5Mg0.5								
			3.3315	AlMg1	5005							
			3.3316	AlMg1.5								
			3.3317	Al99.85Mg1								

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7 Non-ferrous metal	7.1 Aluminium	7.1.2 aluminium wrought alloys, non hardened	3.3318	Al99.9Mg1								
			3.3326	AlMg1.8								
			3.3345	AlMg4.5								
			3.3523	AlMg2.5								
			3.3525	AlMg2Mn0.3								
			3.3527	AlMg2Mn0.8								
			3.3535	AlMg3	5754							
			3.3537	AlMg2.7Mn								
			3.3545	AlMg4Mn	5086							
			3.3547	AlMg4.5Mn	5087							
			3.3549	AlMg5Mn								
			3.3555	AlMg5	5056 A							
			3.0506	AlMn0.6								
		7.1.3 aluminium wrought alloys, hardened	3.0615	AlMgSiPb								
			3.1255	AlCuSiMn	2014							
			3.1305	AlCu2.5Mg0.5								
			3.1325	AlCuMg1	2017 A							
			3.1355	AlCuMg2	2024							
			3.1645	AlCuMgPb	2030							
			3.1655	AlCuBiPb	2011							
			3.2307	Al99.85MgSi								
			3.2315	AlMgSi1	6082							
			3.3206	AlMgSi0.5	6060							
			3.3208	Al99.9MgSi								
			3.3210	AlMgSi0.7	6005 A							
			3.3211	AlMg1SiCu	6061							
			3.4335	AlZn4.5Mg1	7020							
			3.4337	Al99.8ZnMg								
			3.4345	AlZnMgCu0.5								
			3.4365	AlZnMgCu1.5	7075							
		7.1.4 aluminium cast alloys up to 6% Si	3.1371	G-AlCu4TiMg								
			3.1841	G-AlCu4Ti								
			3.2134	G-AlSi5Cu1Mg								
			3.3241	G-AlMg3Si								
			3.3261	G-AlMg5Si								
			3.3292	GD-AlMg9								
			3.3541	G-AlMg3								
			3.3543	G-AlMg3(Cu)								
			3.3561	G-AlMg5								
			3.3591	G-AlMg10								
		7.1.5 aluminium cast alloys 6-12% Si	3.2151	G-AlSi6Cu4								
			3.2161	G-AlSi8Cu3								
			3.2341	G-AlSi5Mg								
			3.2371	G-AlSi7Mg								
			3.2373	G-AlSi9Mg								
			3.2381	G-AlSi10Mg								
			3.2383	G-AlSi10Mg(Cu)								
			3.2581	G-AlSi12								
			3.2583	G-AlSi12(Cu)								
		7.1.6 aluminium cast alloys above 12% Si		G-AlSi18								
	7.2 Magnesium	7.2.1 wrought alloys	3.5200	MgMn2								
			3.5312	MgAl3Zn								

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7 Non-ferrous metal	7.2 Magnesium	7.2.1 wrought alloys	3.5612	MgAl6Zn								
			3.5812	MgAl8Zn								
		7.2.2 cast alloys	3.5101	G-MgZn4SE1Zr1								
			3.5102	G-MgZn5Th2Zr1								
			3.5103	G-MgSE3Zn2Zr1								
			3.5105	G-MgTh3Zn2Zr1								
			3.5106	G-MgAg3Se2Zr1								
			3.5470	GD-MgAl4Si1								
			3.5612	GD-MgAl6Zn1								
			3.5662	G-MgAl6								
			3.5812	G-MgAl8Zn1								
			3.5912	G-MgAl9Zn1								
	7.3 Copper	7.3.1 non alloyed	2.0040	OF-Cu								
			2.0060	E-Cu57								
			2.0065	E-Cu58								
			2.0070	SE-Cu								
			2.0076	SW-Cu								
			2.0090	SF-Cu								
		7.3.2 wrought alloys, non hardened	2.0205	CuZn0.5								
			2.1160	CuPb1P								
			2.1191	CuAg0.1P								
			2.1203	CuAg0.1								
			2.1265	CuCd0.5								
			2.1266	CuCd1								
			2.1310	CuFe2P								
			2.1322	CuMg0.4								
			2.1323	CuMg0.7								
			2.1356	CuMn3								
			2.1363	CuMn2								
			2.1366	CuMn5								
			2.1491	CuAsP								
			2.1498	CuSP								
			2.1522	CuSuMnF34								
			2.1522	CuSi2Mn								
			2.1525	CuSi3Mn								
			2.1546	CuTeP								
		7.3.3 wrought alloys, hardened	2.0850	CuNi2Be								
			2.0853	CuNi1.5Si								
			2.0855	CuNi2Si								
			2.0857	CuNi3Si								
			2.1245	CuBe1.7								
			2.1247	CuBe2								
			2.1248	CuBe2Pb								
			2.1285	CuCo2Be								
			2.1293	CuCrZr								
			2.1580	CuZr								
		7.3.4 CuNi alloys	2.0830	CuNi25								
			2.0842	CuNi44Mn1								
			2.0872	CuNi10Fe1Mn								
			2.0875	CuNi9Sn2								
			2.0882	CuNi30Mn1Fe								
			2.0883	CuNi30Fe2Mn2								

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7 Non-ferrous metal	7.3 Copper	7.3.5 CuNiZn alloys, long-chipping	2.0730	CuNi12Zn24								
			2.0740	CuNi18Zn20								
			2.0742	CuNi18Zn27								
		7.3.6 CuNiZn alloys, short-chipping	2.0771	CuNi7Zn39Mn5Pb3								
			2.0780	CuNi12Zn30Pb1								
			2.0790	CuNi18Zn19Pb1								
	7.4 CuZn (brass)	7.4.1 long-chipping	2.0220	CuZn5								
			2.0230	CuZn10								
			2.0240	CuZn15								
			2.0250	CuZn20								
			2.0261	CuZn28								
			2.0265	CuZn30								
			2.0280	CuZn33								
			2.0321	CuZn37								
			2.0332	CuZn37Pb0.5								
			2.0335	CuZn36								
			2.0360	CuZn40								
			2.0372	CuZn39Pb0.5								
		7.4.2 short-chipping	2.0331	CuZn36Pb1.5								
			2.0371	CuZn38Pb1.5								
			2.0375	CuZn36Pb3								
			2.0380	CuZn39Pb2								
			2.0401	CuZn39Pb3								
			2.0402	CuZn40Pb2								
			2.0410	CuZn44Pb2								
			2.0460	CuZn20Al2								
			2.0470	CuZn28Sn1								
			2.0490	CuZn31Si1								
			2.0500	CuZn23Al6Mn4Fe3								
			2.0510	CuZn37Al1								
			2.0525	CuZn38SnAl								
			2.0530	CuZn38Sn1								
			2.0540	CuZn35Ni2								
			2.0550	CuZn40Al2								
			2.0561	CuZn40Al1								
			2.0572	CuZn40Mn1								
			2.0580	CuZn40Mn1Pb								
	7.5 CuSn (bronze)	7.5.1 long-chipping	2.1016	CuSn4								
			2.1020	CuSn6								
			2.1030	CuSn8								
			2.1080	CuSn6Zn6								
		7.5.2 short-chipping	2.1086	G-CuSn10Zn								
			2.1093	G-CuSn6ZnNi								
			2.1096	G-CuSn5ZnPb								
	7.6 CuAlFe (Ampco)	7.6.1 long-chipping	2.0918	CuAl5As								
			2.0920	CuAl8								
			2.0932	CuAl8Fe3								
			2.0936	CuAl10Fe3Mn2								
			2.0960	CuAl9Mn2								
			2.0966	CuAl10Ni5Fe4								
			2.0971	CuAl9Ni3Fe2								
			2.0978	CuAl11Ni6Fe5								
			Ampco 12	CuAl9Fe3								

Material main group	Material sub-group	Quality	StNr	DIN	AFNOR	UNI	BS	JIS	SS	GOST	UNS	USA
7 Non-ferrous metal	7.6 CuAlFe (Ampco)	7.6.1 long-chipping	Ampco 16	CuAl10Fe3								
			Ampco 18	CuAl10.5Fe3.5								
			Ampco 20	CuAl11Fe4								
			Ampco 21	CuAl13Fe4.5								
			Ampco 22	CuAl14Fe5								
			Ampco 25	Zn								
			Ampco 26	Zn								
			Ampco 45	CuAl10Fe2.5Ni5Mn1.5								
			Ampco 483	CuAl9Fe4Ni4.5Mn1								
			Ampco 8	CuAl6.5Fe2.5Sn								
			Ampco M-4	CuAl10.5Fe4Ni5Mn3.5								
		7.6.2 short-chipping		Amco 8								
	7.7 Nickel	7.7.1 non alloyed	2.1504	NiAlBz								
			2.4042	Ni99CSi								
			2.4060	Ni99.6								
			2.4062	Ni99.4Fe								
		7.7.2 alloyed		Nickel								
	7.8 Titanium	7.8.1 non alloyed	3.7024	Ti99.5								
			3.7034	Ti99.7								
			3.7055	Ti99.4								
			3.7064	Ti99.2								
		7.8.2 alloyed, soft annealed	3.7114	TiAl5Sn2								
			3.7124	TiCu2								
		7.8.3 alloyed, hardened	3.7144	TiAl6Sn2Zr4Mo2								
			3.7154	TiAl6Zr5								
			3.7165	TiAl6V4	T-A 6 V		TA 10 bis TA 13				R 56400	
			3.7174	TiAl6V6Sn2								
			3.7184	TiAl4Mo4Sn2			TA 45 bis TA 51					
8 Plastics	8.1 Thermoplastics	8.1.1 polyethylene	PE	Baylon	Lacqtène	Alkathene	Eraclene	Mirason				Alathon
			PE	Dekalen	Natène	Carlona	Fertene	Novatec				Bakelite
			PE	Ertalen		Escorene	Rumiten	Rexlon				Chemplex
			PE	Hostalen				Sholex				Dylan
			PE	Lupolen				Sumikathene				Fortiflex
			PE	Supralen				Suntec				Marlex
			PE	Symalen				Staflene				Microthene
			PE	Vestolen				Yukalon				Paxon
			PE									Petrothene
			PE									Poly-Eth
			PE									Rigidex
			PE									Rotothene
		8.1.2 polypropylene	PP	Daplen	Eltex P	Carlona P	Kastilen	Noblene				Pro-fax
			PP	Hostalen PP	Lacqtène P	Propathene	Moplen	Poly-Pro				Rexene
			PP	Luparen	Napryl	Procom		Sho-Allomer				Tenite
			PP	Novolen		Propyply						
			PP	Symalen PP		Propafoil						
			PP	Vestolen PP								
		8.1.3 polyvinyl chloride	PVC	Coroplast	Ekavyl	Breon	Raivinil	Nipeon	Pevikon			Dalvin
			PVC	Hostalit,		Carina	Sicron	Nipolit				Geon
			PVC	Mipolam		Corvic	Vipla	Vinika				Kohinor
			PVC	Opalon		Scon	Viplast	Vinichlon				Marvinol
			PVC	Rhodopas		Shell PVC						Pliovic
			PVC	Soflex		Welvic						Vygen

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8 Plastics	8.1 Thermoplastics	8.1.3 polyvinyl chloride	PVC	Solvec								
			PVC	Supradur								
			PVC	Trosiplast								
			PVC	Trovidur								
			PVC	Vestolit								
			PVC	Vinidur								
			PVC	Vinnol								
			PVC	Vinoflex								
			PVC	Vinylite								
		8.1.4 polystyrene	PS	Hostyron	Afcolène	Lustrex	Edistir	Diarex				Carinex
			PS	Lorkalen	Lacqrène		Lastirol	Esbrite				Dylene
			PS	Polystyrol	Gédex		Restirolo					Styron
			PS	Styropor								Toporex
			PS	Trolitul								
			PS	Vestyron								
		8.1.5 polymethyl methacrylate	PMMA	Acrylglas	Altulite	Diakon	Lacrilex	Delpet				Lucite
			PMMA	Daglas		Perspex	Vedril	Shinkolite				Oroglas
			PMMA	Degalan				Sumipex				Swedcast
			PMMA	Dewoglas								
			PMMA	Plexidur								
			PMMA	Plexiglas								
			PMMA	Resartglas								
		8.1.6 Polytetrafluo-rethylene	PTFE	Hostaflon	Soreflon	Fluon		Neoflon				Halon
			PTFE									Teflon
		8.1.7 polyamide	PA	Akulon	Orgamide	Maranyl	Latamid	Amilan				Amidel
			PA	Durethan	Rilsan	Verton	Nivionplast	Leona				Capron
			PA	Fabenyl	Technyl		Renyl	Toray				Fosta Nylon
			PA	Grilamid			Sniamid	Torayca				Minlon
			PA	Grilon			Vydyne					Plaskon
			PA	Nylon								
			PA	Trogamid								
			PA	Ultramid								
			PA	Vestamid								
		8.1.8 polycarbonate	PC	Makralon	Orgalan		Sinvet	Jupilon				Merlon
			PC	Nuclon				Novarex				Lexan
			PC	Plastocarbon				Panlite				
		8.1.9 polyamide, thermoplastic	PI		Kerimel							Torlon
			PI		Kinel							Ultem
			PI		Nolimid							PI 2080
	8.2 Thermosetting plastics	8.2.1 phenol formal-dehyde	PF	Alberit			Fenochem					Biralit
			PF	Bakelit			Formolo					Biratex
			PF	Bulitol			Moldesile					Birax
			PF	Durax			Vegetalite					
			PF	Durophen								
			PF	Faturan								
			PF	Geax								
			PF	Harex								
			PF	Luphen								
			PF	Pertinax								
			PF	Resinol								
			PF	Supraplast								
			PF	Trolitan								
			PF	Trolitax								

Material main group	Material sub-group	Quality	StNr	DIN	AFNOR	UNI	BS	JIS	SS	GOST	UNS	USA
8 Plastics	8.2 Thermosetting plastics	8.2.2 melamine formaldehyde	MF	Albanit		Melmex	Melbrite		Isomin			Biramin
			MF	Duropal		Formica	Melochem		Perstorp panel			Resimene
			MF	Getalit			Minitrack					
			MF	Homapal			Puriplast					
			MF	Hornit								
			MF	Madurit								
			MF	Maprenal								
			MF	Melan								
			MF	Melolam								
			MF	Melopas								
			MF	Nyhamin								
			MF	Pressal								
			MF	Resart								
			MF	Resopal								
			MF	Ricolor								
			MF	Supraplast								
			MF	Trespa-Duro								
			MF	Ultrapas								
		8.2.3 urea formalde-hyde	UF	Bakelite			Gabrite					
			UF	Carbalit			Urochem					
			UF	Cibamin								
			UF	Kaurit								
			UF	Melocol								
			UF	Pollopas								
			UF	Resamin								
			UF	Urecoll								
		8.2.4 polyurethane resin	PUR	Baydur								
			PUR	Bayfill								
			PUR	Bayfit								
			PUR	Bayflex								
			PUR	Baynat								
			PUR	Baypreg								
			PUR	Contilan								
			PUR	Desmodur								
			PUR	Elastolan								
			PUR	Elastolit								
			PUR	Elastopal								
			PUR	Elastopan								
			PUR	Elastopor								
			PUR	Moltopren								
			PUR	Vulkollan								
		8.2.5 silicone resin	SI	Baysilon								Silicone
			SI	Silastic								Textolite
			SI	Silopren								
		8.2.6 thermosetting polyimide	PI	Sintimid								Kapton
			PI									Vespel SP
		8.2.7 unsaturated polyester resin	UP	Alpolit	Norsomix	Crystic Impel	Shimoco	Rigolac	Sonoglas			Freeflow
			UP	Ampal	Stratyl	Uralam		Vyloglass				Haysite
			UP	Artrite								Hetron
			UP	Dobeckan								Rosite
			UP	Durapreg								Selectron
			UP	Durax								
			UP	Durodet								

Technical information

Materials

Material main group	Material sub-group	Quality	StNr	DIN	AFNOR	UNI	BS	JIS	SS	GOST	UNS	USA
8 Plastics	8.2 Thermosetting plastics	8.2.7 unsaturated polyester resin	UP	Hostaset								
			UP	Keripol								
			UP	Laminac								
			UP	Leguval								
			UP	Menzolit								
			UP	Oldapal								
			UP	Palatal								
			UP	Polydur								
			UP	Polyleit								
			UP	Resipol								
			UP	Setarol								
			UP	Synolite								
			UP	Vestopal								
			UP	Vetrophen								
			UP	Viapal								
		8.2.8 epoxy resin	EP	Araldit		Epikote	Eponac	Epodite				Conapoxy
			EP	Beckopox		Epon						Epiphan
			EP	Duroxyn								Epocast
			EP	Epoxin								Epolene
			EP	Eurepox								Epolite
			EP	Grilonit								Stycast
			EP	Lekutherm								
			EP	Rütapox								
			EP	Trolon								
	8.3 Fibre-reinforced plastics	8.3.1 aramid-fibre reinforced	AFK	Kevlar								
		8.3.2 boron-fibre reinforced	BFK									
		8.3.3 carbon-fibre reinforced	CFK									
		8.3.4 glass-fibre reinforced	GFK									
		8.3.5 metal-fibre reinforced	MFK									
		8.3.6 synthetic-fibre reinforced	SFK									
	8.4 Sandwich	8.4.1 plastic - metal - wood	P - M - H									
		8.4.2 honeycomb	honeycomb									
		8.4.3 metal	metal									
9 Graphite	9.1 Standard graphite	9.1.1 standard graphite	R8340	graphite								
			R8500X	graphite								
			Techno-graph 15	graphite								
			Techno-graph 30	graphite								
		9.1.2 wear-resistant graphite	R8510	graphite								
			R8650	graphite								
			Union Poco EDM C-3	graphite								
			Union Poco EDM1	graphite								
			Union Poco EDM3	graphite								