



SPECIAL STEEL FOR THE WORLD'S TOP PERFORMERS

Böhler International GmbH

COMPLEMENTARY PROGRAMME

January 2014

Dear colleagues !

In addition to the product portfolio produced within our group, Böhler International offers you grades from external sources, both from stock and/or new production (industrial lots). This should allow you to offer to your customers a wider choice of materials that we source predominantly from European producers.

We are always there to answer any questions or provide you with additional information.

Sincerely yours,

Your Böhler International team

Engineering & component business

Case hardening, heat treatable steels and others

Mat. No.	DIN	Grades				on stock	
		AISI-SAE-ASTM	AFNOR	GOST	Grade	round	flat
1.7131/1.7139	16MnCr5/16MnCrS5+TH	~ 5115	16 MC 5	16XГ/16XГ-Y	E410/E411	x	x
1.6587	18CrNiMo7-6+FP	-		18X2ГH2M	E110	x	-
1.5918 / 1.5919	15CrNi6+A/17CrNi6+A	~ 3115	16 NC 6		~ E230	x	-
1.5920	18CrNi8+A	-			E220	x	-
1.7218	25CrMo4+QT	~ 4130	25 CD 4	25XM	V340	x	-
1.6580	30CrNiMo8+QT	-	30 CND 8	30X2H2M	V145	x	-
1.8519	31CrMoV9+QT+SR	-			V350	x	-
1.6582	34CrNiMo6+QT	~ 4340		34X2H2M	V155	x	-
1.8550	34CrAlNi7 QT+SR	-			V820	x	-
1.7225 /1.7227	42CrMo4/MoS4+QT	~ 4140	42 CD 4	42XM/42XM-Y	V320	x	x
1.5752	15NiCr13+A	-		17XH3	E200	x	x
1.3505	100Cr6+AC	52100	100 C 6	ШX15	R100	x	-
1.4104	X 12CrMoS 17+A or QT, g h9 resp. p EN 10060	~430F			N310	x	-



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Food & chemical industry

Corrosion resistant steels

Mat. No.	Grades					on stock	
	DIN	AISI-SAE-ASTM	AFNOR	GOST	Grade	round	flat
1.4034	X 40Cr13+A, g h9 resp. p EN 10060	420	Z40 C 13	46X13	N540	x	unmach.
1.4112	X 90 CrMoV 18+A, d h9 resp. p EN 10060	~440B	Z90 CDV 18	90X18MΦ	N685	x	-
1.4122	X 35 CrMo 17+QT, d h9 resp. p EN 10060	-	Z35 CD 17	39X17M	N335	x	-
1.4404	X 2 CrNiMo 18 10+A, d h9 resp. p EN 10060	316L		03X17H13M2	A200	x	unmach.
1.4006	X10Cr13+QT, p EN 10060	410	Z12 C 13	12X13	N100	x	-
1.4104	X 12CrMoS 17+A or QT, g h9 resp. p EN 10060	~430F			N310	x	-



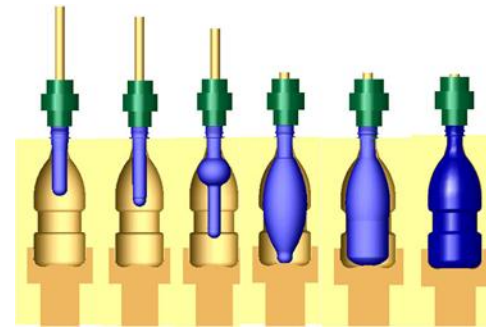
Glass industry

Grades						on stock		
Mat. No.	DIN	AISI-SAE-ASTM	AFNOR	GOST	Grade	round	flat	plates/cuts
1.4057	X 20CrNi 17 2+QT, p EN 10060	431	Z6 CNU 17.04	17X16H2	N350	x	-	-



Aluminium

Mat. No.	Grades					on stock		
	DIN	AISI-SAE-ASTM	AFNOR	GOST	Grade	round	flat	plates/cuts
3.2315	AlSi1MgMn - EN AW 6082					x	x	x
3.4365	AlZn5,5MgCu - EN AW 7075					x	-	x
3.3547	AlMg4,5Mn0,7 - EN AW 5083 H111					-	-	x



Industrial knives, piston rods, pump rods

- **Industrial knives** for wood, paper, plastics and metals manufactured acc to customer specifications



- Chrome plated **piston rods**

Grades						on stock	
Mat. No.	DIN	AISI-SAE-ASTM	AFNOR	GOST	Grade	round	flat
1.5217	20MnV6F7					x	-
1.0503	C45	1043	AF 65 C 45	~Сталь 45	V945	x	-
1.7225	42CrMo4	~4140	42 CD 4	42XM	V320	x	-
natural hard or hardened, ground, polished f7, hard chromed f7							



- **Pump rods**

Grades						on stock	
Mat. No.	DIN	AISI-SAE-ASTM	AFNOR	GOST	Grade	round	flat
1.4021	X 20Cr13+QT, p EN 10060	~420	Z20 C 13	20X13	N320	x	unmach.



Mining & design sheets

- Wear resistant sheets

Grades						on stock
Mat. No.	DIN	AISI-SAE-ASTM	AFNOR	GOST	Grade	plates
~ 1.8974	plates HARDOX 450					x
1.8714	plates 400 HB (e.g. XAR, Miilux)					x
1.8734	plates 500 HB (e.g. XAR)					x



- Design sheets

Grades						on stock
Mat. No.	DIN	AISI-SAE-ASTM	AFNOR	GOST	Grade	plates
1.8946	Corten A black					x



Tooling

Complementary tool steels

Mat. No.	Grades					on stock
	DIN	AISI-SAE-ASTM	AFNOR	GOST	Grade	
1.2210	115CrV3, A g polished h8	L2			K510	x
1.2714	56NiCrMoV7, A	~L6		5XH2MΦ	W500	x
1.2083	X 40Cr14, A			40X13	~M310	x



Legend

TH	treated to hardness
FP	isothermal annealed
A	annealed
QT	quenched and tempered
SR	stress relieved
AC	spheroidising
g	ground
d	drawn
p	peeled EN 10060