

KNIFE STEELS AND SERVICES



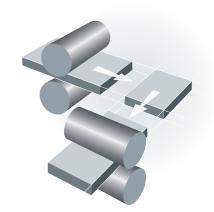
THE CROSS-ROLLING TECHNOLOGY THAT PUTS YOU IN POLE POSITION

OUR CROSS-ROLLING TECHNOLOGY IS SYNONYMOUS WITH SUPERIOR MACHINING QUALITY AND INCREASED USER SAFETY.

voestalpine BÖHLER Bleche manufactures quality knife steels that combine a constantly high standard with premium machining properties. The cross-rolling technology and state-of-the-art production facilities offer uniform material properties and minimize required machining allowances, thus satisfying the most stringent demands in the production and use of industrial knifes and tactical knifes. Prompt availability and technical support translate into crucial benefits for our customers, such as the ability to respond faster to new challenges.

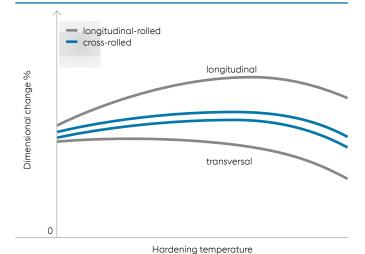
Your advantage by using BÖHLER sheet and plate - In processing and practice compared to conventional rolled material:

- » Optimized output
- » Tighter machining allowances
- » Higher safety in production
- » Improved processing properties
- » Less distortion

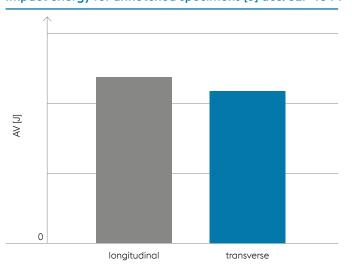


COLD WORK STEELS, HOT WORK STEELS, HIGH SPEED STEELS, CORROSION RESISTANT KNIFE STEELS AND HEAT TREATABLE STEELS ARE OUR STRENGTH.

Dimensional change during heat treatment



Impact energy for unnotched specimens [J] acc. SEP 1314





PROVIDING A WIDE VARIETY OF SHAPES AND FORMATS





Finish

- » hot-rolled, cross-rolled, annealed, shot-blasted, stress relieved
- » hot-rolled, cross-rolled, annealed, pickled

Delivery forms

- » Sheets and plates
- » Strips
- » Laser and water jet cut disks and blanks
- » Hot rolled bars

Finished or Semi-finished parts - passing savings on to the customer

- » Less scrap
- » No heat treatment
- » Reduced labor costs
- » Import as finished or semi-finished piece

Dimension: max. $2,000 \times 6,000$ mm [78.740 \times 236.220 inch] (width \times length) Thickness: 0.8 - 110 mm [0.031 - 4.330 inch] Unit of trading: minimum order quantity 800 kg [1.763 lb]

The cross-rolling technology – homogeneous properties over the whole sheet / plate in longitudinal and transverse direction.

OVERVIEW OF COMMON STEEL GRADES

Knife steels

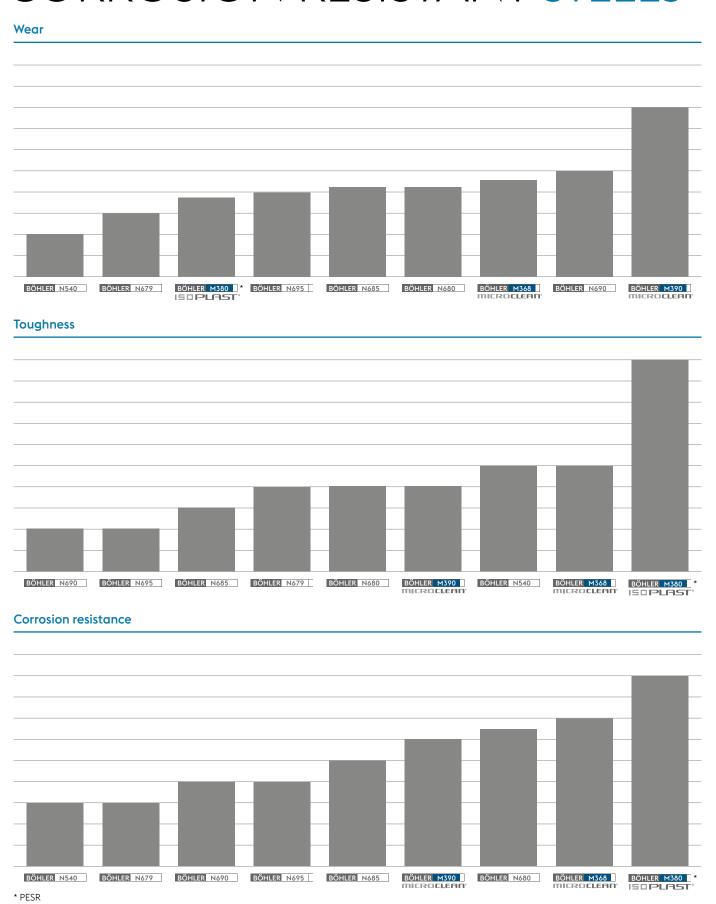
BÖHLER grade		Chemical composition (average %)								
		С	Si	Mn	Cr	Мо	٧	W	Со	Others
BÖHLER K110	1.2379 / D2	1.55	0.30	0.30	11.30	0.75	0.75	-	-	-
BÖHLER K294	A11	2.45	0.90	0.50	5.20	1.30	9.60	-	-	-
BÖHLER K340	-	1.10	0.90	0.40	8.25	2.10	0.50	-	-	Nb, Al
BÖHLER K390	-	2.45	0.50	0.40	4.20	3.75	9.00	1.00	2.00	-
BÖHLER K890	-	0.85	0.55	0.40	4.35	2.80	2.10	2.55	4.50	-
BÖHLER \$290	-	2.00	0.50	0.30	3.80	2.50	5.10	14.30	11.00	-
BÖHLER S390	~T15	1.60	0.50	0.30	4.75	2.00	4.80	10.40	8.00	-
BÖHLER S393	T15	1.55	0.30	0.30	4.50	-	4.80	12.50	5.00	-
BÖHLER S600	1.3343 / M2	0.90	0.30	0.30	4.00	5.00	1.75	6.20	-	-
BÖHLER S630	1.3330	0.95	-	-	4.00	4.00	2.00	4.00	-	AI 0.50
BÖHLER S693	M4	1.45	0.30	0.30	4.00	5,25	4.00	5.75	-	-
BÖHLER S790	1.3345 / M3	1.30	0.60	0.30	4.20	5.00	3.00	6.30	-	-

Corrosion resistant knife steels

BÖHLER grade		Chemical composition (average %)								
		С	Si	Mn	Cr	Мо	٧	W	Со	Others
BÖHLER N540	1.4034	0.46	0.40	0.40	13.00	-	-	-	-	-
BÖHLER N676	B-Cut	0.70	0.50	0.45	14.50	1.90	0.60	-	-	Nb 0.80
BÖHLER N678	1.4153	0.80	0.40	0.40	13.50	0.45	1.85	-	-	-
BÖHLER N679	M92	0.80	0.40	0.40	13.00	1.30	0.85	-	-	Nb 0.80
BÖHLER N680	-	0.55	0.40	0.40	17.30	1.10	0.10	-	-	N 0.20
BÖHLER N685	1.4112	0.90	0.40	0.40	17.50	1.10	0.10	-	-	-
BÖHLER N690	1.4528	1.08	0.40	0.40	17.30	1.10	0.10	-	1.50	-
BÖHLER N695	1.4125	1.05	0.40	0.40	16.70	0.50	-	-	-	-
BÖHLER M340 L	-	0.54	0.45	0.40	17.30	1.10	0.10	-	-	N 0.25
BÖHLER M380 *	1.4108	0.30	0.60	0.40	15.00	1.00	-	-	-	N 0.40
BÖHLER M368 I	-	0.55	0.40	0.40	17.30	1.10	0.10	-	-	-
BÖHLER M390 DERDELERIN	-	1.90	0.70	0.30	20.00	1.00	4.00	0.60	-	-
BÖHLER M398 DERDELEFIN	-	2.70	0.50	0.50	20.00	1.00	7.20	0.70	-	-

^{*} PESR

CORROSION RESISTANT STEELS



PRODUCTS AND SERVICES



MATERIALS

BÖHLER tool steels are exclusively distributed by EDRO in the USA.



MACHINING SERVICES

EDRO offers cutting, machining, grinding solutions.



PVD/DLC COATINGS

EDRO provides thin film PVD/DLC coatings to improve the quality, functionality, efficiency and durability of tools, specialized parts and mold components.



ADDITIVE MANUFACTURING

From powder to parts, EDRO offers high quality BÖHLER powders for your 3D metal printing needs, as well as complete additive manufacturing solutions.



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