

COLD WORK STEELS

Available Product Shapes

Plates

Product Description

K353 is a universal tool steel for cold working applications, characterized by high hardness, high wear resistance and excellent toughness. K353 is a conventionally produced 8% Cr steel which combines very good machinability, good EDM properties and good dimensional stability.

Properties

- excellent toughness
- very good wear resistance properties: improved adhesive wear resistance thanks to added Al content
- hardness up to 62 HRC (high hardness steel)
- hardening temperatures in the range of 1030 – 1060 °C (1885 – 1940 °F)
- secondary hardening steel with good dimensional stability
- well suited to salt bath or plasma nitriding
- high strength substrate steel for surface coatings
- good edge holding ability
- easy machinability
- good EDM properties
- good wire cutting properties

Chemical composition

C	Si	Mn	Cr	Mo	V	Al
0.82	0.70	0.40	8.00	1.60	0.60	+

Material characteristics

	Compressive strength	Dimensional stability during heat treatment	Toughness	Wear resistance abrasive	Wear resistance adhesive
BÖHLER K353	★★	★★★	★★	★★	★★
BÖHLER K100	★★	★★	★	★★★	★★
BÖHLER K105	★★	★★	★	★★	★★
BÖHLER K107	★★	★★	★	★★★	★★
BÖHLER K110	★★	★★★	★	★★★	★★
BÖHLER K190 MICROCLEAN®	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
BÖHLER K294 MICROCLEAN®	★★★★★	★★★★★	★★★	★★★★★	★★★★★
BÖHLER K340 ISODUR®	★★★	★★★★★	★★★	★★★	★★★★★
BÖHLER K340 ECOSTAR®	★★★	★★★	★★	★★	★★
BÖHLER K360 ISODUR®	★★★	★★★★★	★★★	★★★★★	★★★★★
BÖHLER K346	★★★	★★★	★★★	★★★★★	★★
BÖHLER K390 MICROCLEAN®	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
BÖHLER K890 MICROCLEAN®	★★★★★	★★★★★	★★★★★	★★★	★★★
BÖHLER K490 MICROCLEAN®	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
BÖHLER K497 MICROCLEAN®	★★★★★	★★★★★	★★★	★★★★★	★★★★★

Physical Properties at 20°C / 68°F
Thermal Expansions

Temperature (°C / °F)	100 / 212	200 / 392	300 / 572	400 / 752	500 / 932
Thermal expansion (10 ⁻⁶ m/(m.K) / 10 ⁻⁶ inch/(inch.F))	11 / 6.111	11.3 / 6.278	11.6 / 6.444	12 / 6.667	12.4 / 6.889

For more information see www.voestalpine.com/bohler-edelstahl

voestalpine BÖHLER Edelstahl GmbH & Co KG

Mariazeller Straße 25

8605 Kapfenberg, AT

T. +43/50304/20-0

E. info@bohler-edelstahl.at

www.voestalpine.com/bohler-edelstahl

ONE STEP AHEAD.