

Precision Steel

precidur[®] 80CrV2

Product information for hot-rolled precision strip made in Hohenlimburg



thyssenkrupp

Version 01/22

Tool steel

Hardenable tool steels from BU Precision Steel are used in roller and ball bearings and a wide variety of saw and blade applications such as circular saw blades, cutting knives, paper cutters and die plates.

The special advantages of the hot-rolled precision strip lie in its uniform properties and defined microstructure combined with optimum cleanness.

Close analysis ranges tailored to specific purposes and precisely controlled rolling parameters guarantee consistent and outstanding processability and optimum heat treatment results, yielding maximum wear resistance.

precidur[®]

- is used in virtually all industry sectors.
- offers close thickness tolerances similar to cold-rolled strip, optimum surface finishes and consistent material properties over the entire strip length and width.
- is characterized by its symmetrical strip profiles and mill edges.
- is the sum of all the experience we have gained in more than 100 years of manufacturing and processing steel.

Contents

Brief portrait
Technical features
Chemical composition
Mechanical properties
General thickness tolerances
Delivery options

Technical features

Tool steel

Material number:	based on 1.2235
Material name:	80CrV2
Proprietary brand:	precidur® 80CrV2
Delivery specification:	based on DIN EN 10132
Application:	Tool steel incl. for springs, circular saw blades and cutting tools

Chemical composition

Ladle analysis mass percentages	C [%]	Si [%]	Mn [%]	P [%]	S [%]	Cr [%]	V [%]	Ni [%]	Mo [%]
min.	0.75	0.20	0.35	-	-	0.40	0.15	-	-
max.	0.85	0.35	0.50	0.025	0.010	0.70	0.25	0.40	0.10

Further special analyses available

Mechanical properties

Longitudinal to rolling direction	Tensile strength R _m [MPa]	Elongation A ₅ [%]
Rolled condition	Ø 1050	-
GKZ annealed	max. 740	min. 20

Restricted strength ranges can be agreed on request

Possible delivery options

Options	Mill edge (NK) Cut edge (GK)	pickled	unpickled	slit	trimmed	Cut to length	annealed	not annealed
precidur® 80CrV2	NK or GK	✓ or	✓	✓	✓	✓	✓	✓

General thickness tolerances

Strip thickness [mm]	1.5 – 2.54	2.55 – 4.03	4.04 – 6.03	6.04 – 8.03	8.04 – 9.03	9.04 – 11.03	11.04 – 14.03	14.04 – 16.00
Standard tolerances [mm]	± 0.04	± 0.04	± 0.05	± 0.055	± 0.06	± 0.07	± 0.08	± 0.10
Special tolerances [mm]	± 0.03	± 0.035	± 0.04	± 0.045	± 0.05	± 0.055	± 0.06	± 0.07

General delivery options

Coil inner diameter:	standard 508 mm / optional 610 mm
Coil outer diameter:	max. 1,890 mm
Coil weight:	max. 20.5 kg/mm strip width
Strip width*:	max. 720 mm
Strip thickness*:	1.5 – 16 mm

* May be subjected to restrictions.

Please contact our sales/technical customer advice team for detailed information.