Precision Steel

precidur® 100Cr6 / 102Cr6

Product information for hot-rolled precision strip made in Hohenlimburg



Version 9/21

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.

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Technical features

Tool steel

Material number: 1.3505 / 1.2067 Material name: 100Cr6 / 102Cr6

Proprietary brand: precidur® 100Cr6 / 102Cr6

Delivery specification: DIN EN ISO 4957, DIN EN ISO 683-17

Application: Tool steels for use in ball and roller bearings, rotary cutters and machining tools

Chemical composition										
Ladle analysis mass percentages	C [%]	Si [%]	Mn [%]	P [%]	S [%]	Cr [%]	AI [%]	Ni [%]	Mo [%]	Cu [%]
min.	0.95	0.15	0.25	-	-	1.40	-	-	-	-
max.	1.05	0.35	0.40	0.020	0.008	1.60	0.050	0.20	0.05	0.15

Further special analyses available

Mechanical properties		
Longitudinal to rolling direction	Tensile strength R_m [MPa]	Elongation A ₅ [%]
Rolled condition	Ø 1250	-
GKZ annealed	max. 660	min. 26

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® 100Cr6/102Cr6	NK or GK	✓ or	✓	✓	✓	✓	✓	✓

General thickness	tolerances	5						
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.