

Precision Steel

precidur[®] 105WCr6

Product information for hot-rolled precision strip made in Hohenlimburg



thyssenkrupp

Version 11/24

Alloyed tool steel

Hardenable tool steels made of precidur[®] are used in roller and ball bearings and a wide variety of saw and blade applications such as circular saw blades, cutting knives, scalpels, 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:	1.2419
Material name:	105WCr6
Proprietary brand:	precidur® 105WCr6
Application:	Tool steels for rotary cutters and cutting tools

Chemical composition

Ladle analysis mass percentages	C [%]	Si [%]	Mn [%]	P [%]	S [%]	Cr [%]	W [%]
min.	1.00	0.10	0.80	-	-	0.90	1.00
max.	1.10	0.40	1.10	0.025	0.025	1.10	1.30

Further special analyses available

Mechanical properties

Longitudinal to rolling direction	Tensile strength R _m [MPa]	Elongation A ₅ [%]
GKZ annealed	max. 750	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	
		✓	or	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
precidur® 105WCr6	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

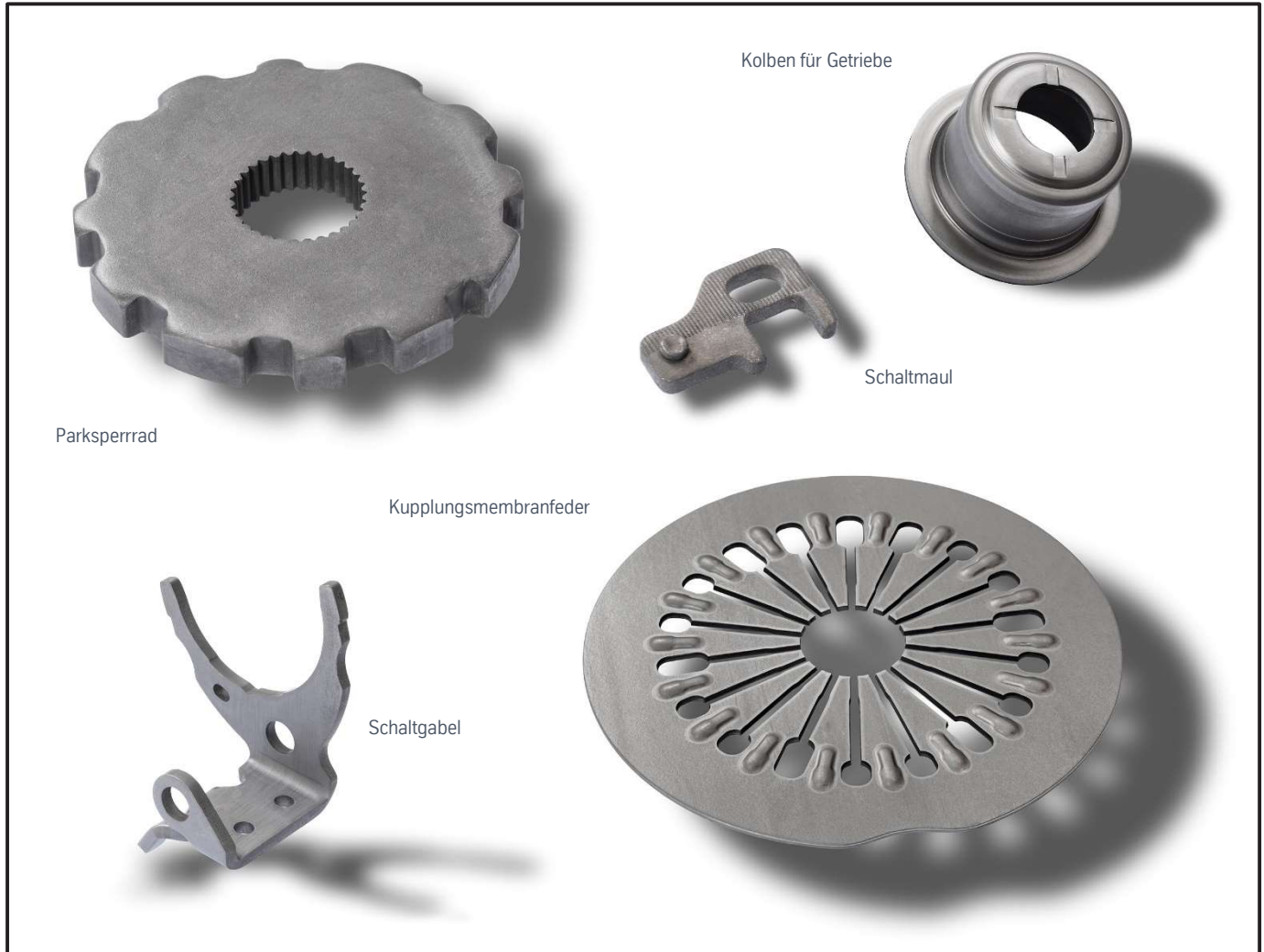
Strip width*: max. 720 mm

Strip thickness*: 1.5 – 16 mm

* May be subjected to restrictions.

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

Application examples for alloyed tool steel



Special mill grades feature unique thyssenkrupp properties. Other terms and conditions of supply not specified here will be based on the applicable specifications. The specifications used will be those valid on the date of publication of this product information.

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