

Precision Steel

precidur® C90S

Product information for hot-rolled precision strip made in Hohenlimburg



thyssenkrupp

Version 11/24

Unalloyed tool steel

Hardenable unalloyed tool steels made of precidur® are employed for the production of cold rolled springs steels in accordance with DIN EN 10132.

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.

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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.

Technical features

Heat treatable and spring steel

Material number: 1.1217

Material name: C90S

Proprietary brand: precidur® C90S

Delivery specification: -

Application: For the production of spring steel

Chemical composition

Ladle analysis mass percentages	C [%]	Si [%]	Mn [%]	P [%]	S [%]	Cr [%]	Mo [%]	Ni [%]	Al [%]	Cu [%]
min.	0.86	0.15	0.30	-	-	-	-	-	-	-
max.	0.94	0.30	0.50	0.025	0.015	0.25 *	0.05	0.20	0.040	0.20

* Cr-free variant available

Mechanical properties

Longitudinal to rolling direction	Tensile strength R_m [MPa]
Rolled condition	Ø 1030
GKZ annealed	max. 670

Possible delivery options

Options	Mill edge (NK) Cut edge (GK)	pickled	unpickled	slit	trimmed	Cut to length	annealed	not annealed
precidur® C90S	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

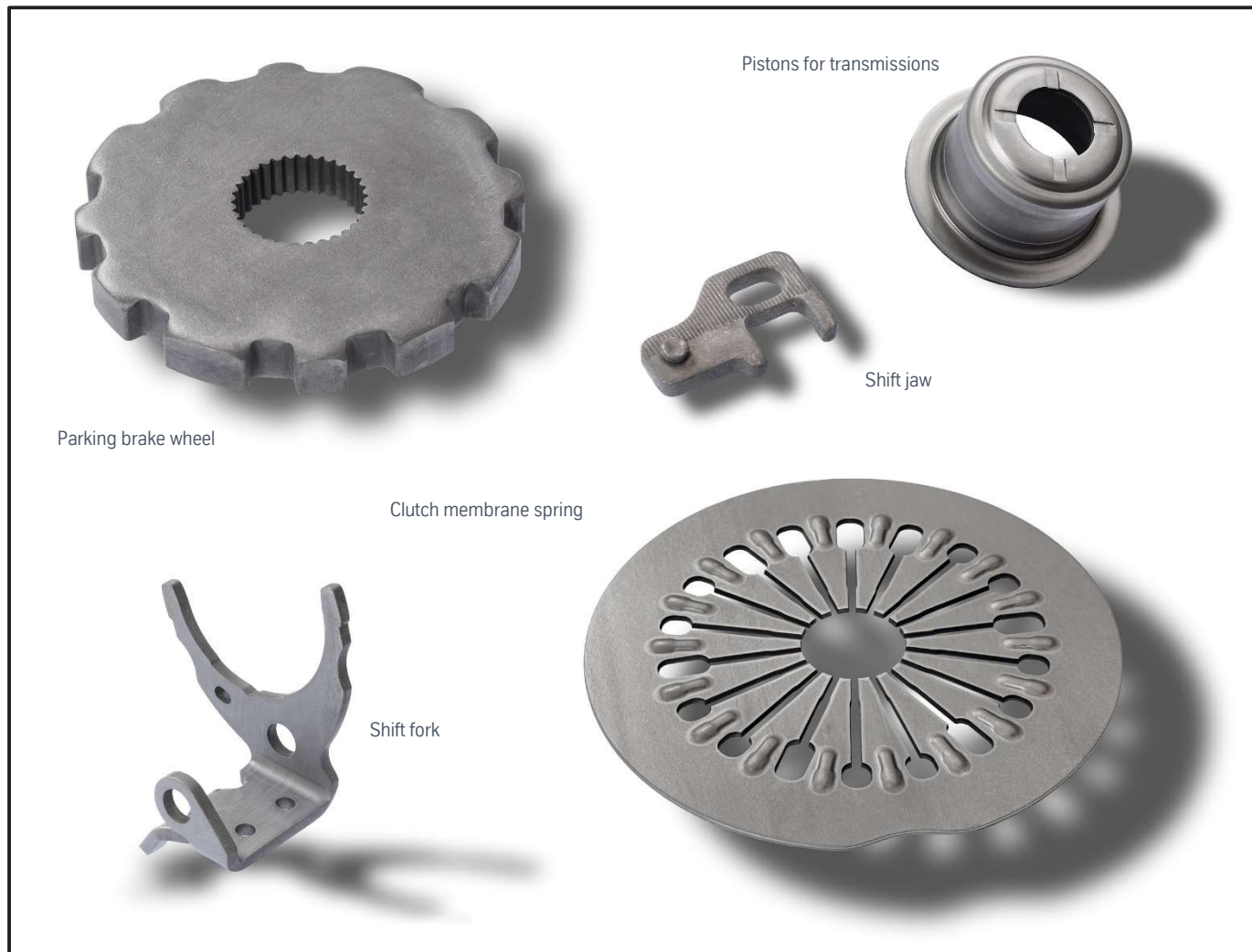
Coil weight: max. 20.5 kg/mm strip width

Strip width*: max. 720 mm

Strip thickness*: 1.5 – 16 mm

* May be subjected to restrictions.

Application examples for unalloyed 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.

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

thyssenkrupp Hohenlimburg GmbH, Oeger Str. 120, 58119 Hagen
T: +49 2334 91 0
www.thyssenkrupp-steel.com, info.precisionsteel@thyssenkrupp-steel.com

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