Precision Steel

C100S

Product information for hot-rolled precision strip

thyssenkrupp

Version 1/18

Heat treatable and spring steel

Whether it's for wear parts, springs, chain links or safety components, heat treatable steels from BU Precision Steel offer the right solution for all requirements.Good fine blanking properties and formability in the annealed condition are combined with high strengths and good toughness in the quenched and tempered condition. Close analysis ranges tailored to specific purposes and precisely controlled rolling parameters guarantee consistent and outstanding processability and consistent heat treatment results.

We can supply a variety of unalloyed and alloyed heat treatable steels in accordance with DIN EN 10083 with carbon contents between 0.20% and 0.60%, and spring steels in accordance with DIN EN 10132-4.

Hohenlimburg precision strip:

– 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

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Technical features

Heat treatable and spring steel
Material number: 1.1274
Material name: C100S
Delivery specification: analogous to DIN EN 10132-4
Application: For the production of spring steel in accordance with DIN EN 10132-4

Chemical composition

Ladle analysis mass percentages	C [%]	Si [%]	Mn [%]	P [%]	S [%]	Cr [%]	Mo [%]	Ni [%]
min.	0.95	0.15	0.35	–	–	0.10	–	–
max.	1.05	0.35	0.45	0.020	0.008	0.40	0.10	0.20

Further special analyses available

Mechanical properties

Longitudinal to rolling direction	Tensile strength R_m [MPa]
Rolled condition	Ø 1,050
GKZ annealed	max. 680

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

Possible delivery options

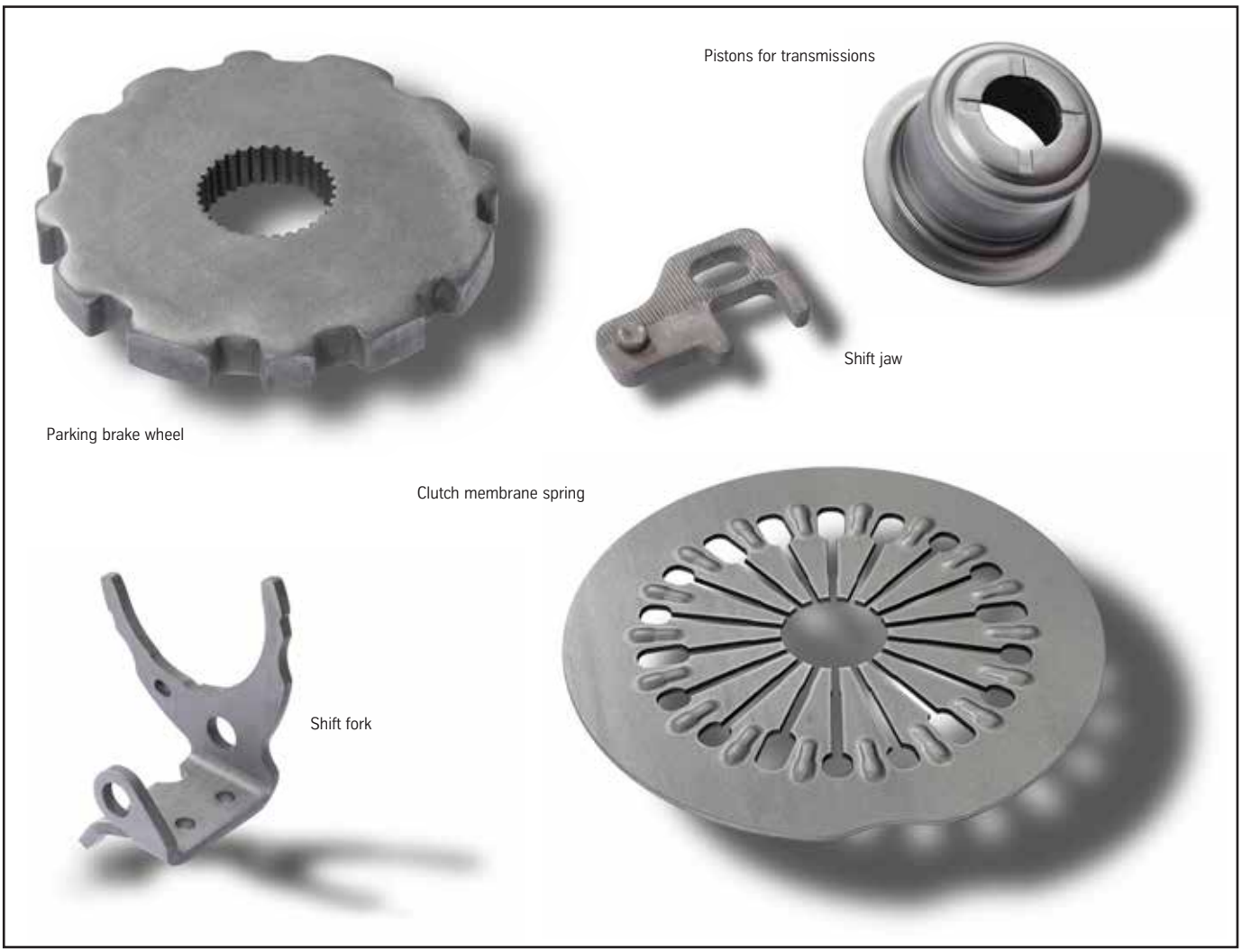
Options	Mill edge (NK) Cut edge (GK)	pickled	unpickled	slit	trimmed	cut to length	annealed	not annealed
C100S	NK or GK	√ or	√	√	√	√	√ or	√

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

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

Application examples for heat treatable and spring 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.

General information

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