**Precision Steel** 

## 34CrMo4

Product information for hot-rolled precision strip



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**

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

### **Technical features**

Heat treatable steel

Material number: 1.7220 Material name: 34CrMo4

Delivery specification: DIN EN 10083-3

Application: Heat-treatable steel for parts in machinery and plant construction

Chemical composition							
Ladle analysis mass percentages	C [%]	Si [%]	Mn [%]	P [%]	S [%]	Cr [%]	Mo [%]
min.	0.32	0.10	0.60	_	_	0.90	0.15
max.	0.37	0.40	0.90	0.020	0.010	1.20	0.30

Further special analyses available

Mechanical properties		
Longitudinal to rolling direction	Tensile strength $R_m$ [MPa]	
Rolled condition	Ø 720	
GKZ annealed	_	

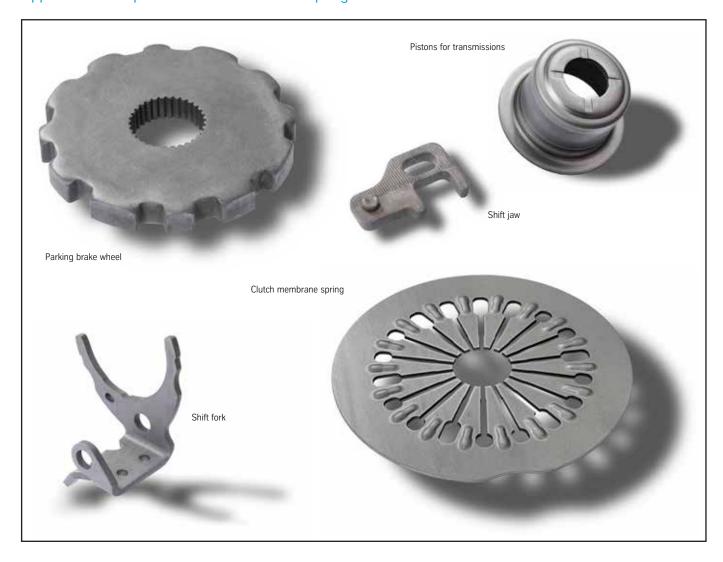
Restricted strength ranges can be agreed on request

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
34CrMo4	NK or GK	√ or √	√	√	√	√	$\checkmark$

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			

#### 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**

All statements as to the properties or utilization of materials and products are for the purposes of description only. Guarantees in respect of the existence of certain properties or utilization are only valid if agreed in writing. Subject to technical changes. Reprints, in whole or in part, only with the permission of thyssenkrupp Hohenlimburg GmbH. The latest version of this product information can be found at: https://www.thyssenkrupp-steel.com/en/publications.html