Precision Steel

precidur® 11SMn30





Version 11/24

Free-cutting steel

Free-cutting steel made from precision strip is used in particular in the production of keys, levers and pins. Depending on the intended purpose, lead-alloy variants of these steels can also be supplied. Free-cutting steels are characterized by their outstanding machinability. Close analysis ranges tailored to specific purposes and precisely controlled rolling parameters guarantee consistent and outstanding processability. We supply free-cutting steels in accordance with DIN EN 10277-3.

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.

Contents

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

Technical features

Allgemeiner Baustahl

Material number: 1.0715 Material name: 11SMn30

Proprietary brand: precidur® 11SMn30

Delivery specification: DIN EN ISO 683-4, DIN EN 10277-3

Application: Steels for demanding parts in machinery and steel construction

Chemical composition						
Ladle analysis mass percentages	C [%]	Si [%]	Mn [%]	P [%]	S [%]	Pb [%]*
min.	-	-	0.90	-	0.27	-
max.	0.14	0.05	1.25	0.03	0.33	-

Further special analyses available *Lead-alloyed variant available

Mechanical properties				
Longitudinal to rolling direction	Yield strength Rp _{0,2} [MPa]	Tensile strength R _m [MPa]	Elongation A ₅ [%]	A ₈₀ [%]
precidur® 11SMn30	min. 235	380 - 520	min. 22	min. 18

Possible delivery options						
Options	Mill edge (NK) Cut edge (GK)	pickled	unpickled	slit	trimmed	cut to length
precidur® 11SMn30	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.