Precision Steel

precidur® 11SMn30





Version 9/21

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.

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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.