Precision Steel

precidur® S 275 JR/J0/J2





Version 9/21

Structural steel

General structural steels are standardized in accordance with DIN EN 10025. Trough appropriate temperature control during hot rolling BU Precision Steel supplies hot-rolled strip with a carbon content of less than 0.20% with a uniform, fine microstructure.

By ensuring very low sulfur contents and realizing other measures during steel production it is possible to supply general structural steels with good cold formability (flanging, roll forming).

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

General structural steel

 Material number:
 1.0044 / 1.0143 / 1.0145

 Material name:
 S275JR / S275J0 / S275J2

 Proprietary brand:
 precidur® S275JR/J0/J2

Old name: St 44-2

Delivery specification: DIN EN 10025-2

Application: Steels for general mechanical engineering and steel structures with physical properties

in accordance with DIN EN 10025-2.

Chemical composition								
Ladle analysis mass percentages	C [%]	Si [%]	Mn [%]	P [%]	S [%]	N [%]	Cu [%]	AI [%]
min.	0.08	-	0.60	-	-	-	-	0.015
max.	0.15	0.10	1.20	0.025	0.015	0.010	0.20	0.080

Further special analyses available

Mechanical properties				
Longitudinal to rolling direction	Yield strength R _{eH} [MPa]	Tensile strength R_m [MPa]	Elongation A ₅ [%]	A ₈₀ [%]
Rolled condition*	min. 275	410 - 560	min . 23	min. 19

^{*} The mechanical characteristics shown match the "JR" variant (EN10025-2) in thickness \geq 3.0 mm. Restricted mechanical property ranges can be agreed on request.

Possible delivery options							
Options	Mill edge (NK) Cut edge (GK)	pickled		unpickled	slit	trimmed	Cut to length
precidur® S275JR	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.