

Precision Steel

precidur[®] S 235 JR/J0/J2

Product information for hot-rolled precision strip made in Hohenlimburg



thyssenkrupp

Version 9/21

Structural steel

General structural steels are standardized in accordance with DIN EN 10025. Through 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.

Contents

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

Technical features

General structural steel

Material number:	1.0038 / 1.0114 / 1.0117
Material name:	S235JR / S235J0 / S235J2
Proprietary brand:	precidur® S235JR/J0/J2
Old name:	St 37-2
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 [%]	Al [%]
min.	0.05	-	0.20	-	-	-	-	0.015
max.	0.14	0.10	0.80	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. 235	360 - 510	min. 26	min. 21

* The mechanical characteristics shown match the „JR“ variant (EN10025-2) in thickness ≥ 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
		✓	or	✓	✓	✓	✓
precidur® S235JR	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.

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