**Precision Steel** 

# precidur® S 355 JR/J0/J2

Product information for hot-rolled precision strip made in Hohenlimburg



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.

## **Contents**

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

#### **Technical features**

General structural steel

 Material number:
 1.0045 / 1.0553 / 1.0577

 Material name:
 S355JR / S355J0 / S355J2

 Proprietary brand:
 precidur® S355JR/J0/J2

Old name: St 52-2

Delivery specification: DIN EN 10025-2

Application: Steels for stressed parts in machinery and steel structures

Chemical composition								
Ladle analysis mass percentages	C [%]	Si [%]	Mn [%]	P [%]	S [%]	N [%]	Cu [%]	AI [%]
min.	0.15	-	-	-	-	-	-	0.015
max.	0.20	0.30	1.60	0.025	0.015	0.010	0.20	0.080

Further special analyses available

Mechanical properties					
Longitudinal to rolling direction	Yield strength R <sub>eH</sub> [MPa]	Tensile strength $R_m$ [MPa]	Elongation A <sub>5</sub> [%]	A <sub>80</sub> [%]	
Rolled condition*	min. 355	470 - 630	min . 22	min. 18	

<sup>\*</sup> 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
precidur® S355JR	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			

<sup>\*</sup> May be subjected to restrictions.