

# SIQUAL<sup>™</sup> 8946

## STRUCTURAL STEEL

SIQUAL 8946 is a structural steel with improved atmospheric corrosion resistance.

### STANDARDS

Steel grade S355J2WP is produced in accordance with EN 10025-5: Hot rolled products of structural steels – Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance.

### CHEMICAL COMPOSITION

	C	Mn	Si	P	S	Cr	Cu	CEV*
Min. in %	-	-	-	0.06	-	0.30	0.25	-
Max. in %	0.12	1	0.75	0.15	0.030	1.25	0.55	0.52

The steel grade contains at least one of the following elements: Al tot. ≥ 0.020 %, Nb: 0.010–0.065 %, V: 0.01–0.14 %, Ti: 0.01–0.12 %. If these elements are used in combination, at least one of them shall be present with the minimum content indicated.

$$*CEV = C + \frac{Mn}{6} + \frac{Cr + Mo + V}{5} + \frac{Ni + Cu}{15}$$

### MECHANICAL PROPERTIES

Nominal thickness [mm]	R <sub>p0.2</sub> [MPa]
≤ 12	355

Nominal thickness [mm]	R <sub>m</sub> [MPa]
< 3	510–680
3–12	470–630

Nominal thickness [mm]	A <sub>5</sub> [%]
3–12	min. 20

Temperature [°C]	Notch Impact Energy – longitudinal [J]
–20	min. 27

Impact testing is performed on quarto plates thicker than 8 mm.

## DIMENSIONS

	Hot-rolled strip	Hot-rolled sheets	Hot-rolled quarto plates
Thickness [mm]	3–6	3–6	8–12
Width [mm]	100–1000	800–1000	1000–2500
Length [mm]	-	2000–6000	up to 12000
Internal coil diameter [mm]	610	-	-

## TOLERANCES ON DIMENSIONS

- Hot-rolled quarto plates: EN 10029
- Hot-rolled strips/sheets: EN 10051

## DELIVERY CONDITION

Hot-rolled quarto plates	Hot-rolled strip/sheet
normalising rolled (+ shot-blasted)	normalising rolled (+ shot-blasted)

## INSPECTION DOCUMENTS

The type of document shall be agreed upon at the time of enquiry and order. A test certificate according to EN 10204/3.1 is issued mandatorily.

The information and data in this product data sheet are intended for informative purpose only and may be revised at any time without notice. Presented typical properties of the materials are described only to help readers make their own evaluations and decisions. They are not guaranteed.