

# SIDUR<sup>™</sup> 300

## WEAR-RESISTANT STEEL

**SIDUR 300** is a wear-resistant steel in hardness range 260–340 HB, supplied as quarto plates in as-rolled condition. It has good wear resistance and stable mechanical properties. SIDUR 300 plates have homogeneous through-thickness hardness, even at higher thicknesses. It is intended for use on components that require good wear resistance, such as dryers in asphalt production, clinker cooler plates and liners in cement plants, components for blast furnaces, equipment for power plants and liner plates and clinker hammers in crushers.

### STANDARDS

- General technical delivery requirements in accordance with EN 10021.
- Tolerances on dimensions and shape according to EN 10029.
- Delivery requirements for surface condition according to EN 10163-2.
- Ultrasonic testing according to EN 10160.
- Tensile testing at room temperature according to EN ISO 6892-1.
- Impact testing according to EN ISO 148-1.
- Brinell hardness testing according to ISO 6506-1.

### CHEMICAL COMPOSITION

SIDUR 300	C	Si	Mn	P	S	Cr	Ni	CEV*
Max. in %	0.24	0.8	1.8	0.015	0.005	1.5	0.6	0.76

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

### MECHANICAL PROPERTIES

Thickness [mm]	Surface hardness* HB <sub>10/3000</sub>
6–50	260–340

\* Measured on one plate per thickness per heat.

Thickness [mm]	Testing direction	Tensile properties*		
		R <sub>p0.2</sub> [MPa] min.	R <sub>m</sub> [MPa]	A <sub>5.65</sub> [%] min.
6–50	Transverse	500	950–1100	5

\* For transverse tensile flat test pieces.

Thickness [mm]	Impact toughness*		
	Testing direction	Temperature [°C]	KV <sub>2</sub> [J] min.
6–50	Transverse	–20	10

\* Measured on standard specimen 10 x 10 x 55 mm. The specified minimum value is the average of 3 tests. One individual value may be below the minimum average value specified, provided that it is not less than 70 % of that value. For plate thickness below 12 mm, subsize specimens shall be used. The minimum values of subsize specimens shall be reduced in direct proportion to the cross-sectional area of the test piece.

## DELIVERY CONDITION

- Hot-rolled quarto plates in as-rolled condition.

## DIMENSIONS

Thickness [mm]	Width* [mm] max.	Length [mm] max.
6–7.9	2000	12500
8–50	2500	12500

\* 2060/2560 – if plates are ordered with untrimmed rolling edges.

## SURFACE CONDITION

- Sandblasted
- Sandblasted and anti-corrosion painted\*

\* Maximum width of the anti-corrosion painted plates is 2000 mm. Thickness of the coating is 20–60 µm.

## 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.