

## ROC 500

ROC 500 is wear-resistant steel supplied in quenched condition. Quenching and strictly designed chemical analysis provide very hard martensitic microstructure. ROC 500 is 2.5 times harder than mild steel, which gives opportunity to increase working time of wear parts up to 3.0 – 3.5 times.

### CHEMICAL COMPOSITION % (maximum values)

C	Mn	Ni	Cr	B	S	P	Si
≤ 0.3	≤ 1.60	≤ 1.0	≤ 1.50	≤ 0.005	≤ 0.01	≤ 0.025	≤ 0.70

### MECHANICAL PROPERTIES (typical values)

Hardness (HBW)	Yield strength (MPa)	Tensile strength (MPa)	A5 (%)	Impact strength KV -40 °C (J)
500	1400	1600	8	20

**Hardness range** (delivery condition): 460-540 HBW\*

\* Brinell hardness, HBW, according to EN ISO 6506-1, on a milled surface below surface typically 0.5 – 3 mm depending on plate thickness”

### PROCESSING REQUIREMENTS

#### BENDING

Should be performed using recommended upper tool radius and die width regarding plate thickness and rolling direction.

Rolling direction	Minimum bending radius (r)	Minimum die width (w)
Transversal	7 × t	16 × t
Longitudinal	9 × t	20 × t

#### WELDING AND FLAME CUTTING

Can be performed with all available methods. It is recommended to use soft welding consumables. Processes should be performed in room temperature with suitable preheating and heat input depending on plate thickness to avoid cold cracking.

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## DIMENSIONS & TOLERANCES

### DIMENSIONS

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ROC 500 is available in thickness range 4 – 60 mm and typical widths and lengths as well as special dimensions required by customer at the time of delivery.

### TOLERANCES

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According to EN 10029 for plate products.

According to EN 10051 for strip products.

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## CONTACT

### TECHNICAL SUPPORT

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