

Docol 500LA

General Product Description

The Docol 500LA steels are high-strength low-alloy steels that offer consistent properties for modern, rapid production methods. Typical applications include bent profiles. Docol HR500LA-UC can after agreement be adapted and delivered as dual certified with S500MC according to EN 10149-2:2010.

Dimension Range

Hot rolled / UC: thickness 2.00-6.00 mm, width up to 1600 mm.

Slit strip and cut to length sheets are available upon request.

Grade and coating specific restrictions on available dimensions may occur.

Mechanical Properties

Steel grade	Standards	Coating	Test direction	Yield strength $R_{p0.2}$ (MPa)	Tensile strength R_m (MPa)	Elongation $A_{80}^{1)}$ (min %)	Elongation $A_5^{2)}$ (min %)	Min. inner bending radius for 90°
Docol HR 500LA	VDA 239-100:2016	UC	L	500 - 620	560 - 700	14	17	0.8 xt

¹⁾ A_{80} value applies for thicknesses < 3.00 mm.

²⁾ A_5 value applies for thicknesses ≥ 3.00 mm.

Chemical Composition (Ladle analysis)

Steel grade	Coating	C (max %)	Si (max %)	Mn (max %)	P (max %)	S (max %)	Al (min %)	Ti (max %)	Nb (max %)	V (max %)
Docol HR 500LA	UC	0.10	0.50	1.60	0.025	0.010	0.015	0.15	0.10	0.20

Tolerances

Hot rolled (UC): Tolerances in accordance to EN10051.

Customized dimensional and shape tolerances are available upon request.

Surface Treatments

Uncoated (UC): available as oiled.

All surface treatments are in accordance with RoHS directive (2011/65/EU) and do not contain Chromium VI (Cr^{6+}). Surface treatments provide only temporary surface protection during transportation and storage. In order to avoid corrosion damages, care must be taken to keep the products dry during transportation and storage. If they become wet, they must be separated and situated so that they are dried quickly.

Fabrication and Other Recommendations

For information concerning fabrication, see SSAB's brochures on www.ssab.com or consult Tech Support, techsupport@ssab.com.

Appropriate health and safety precautions must be taken when bending, welding, cutting, grinding or otherwise working on the product.

Contact Information

www.ssab.com/contact