

Docol 500LA

General Product Description

The Docol 500LA steels are high-strength low-alloy steels that offer consistent properties for modern, rapid production methods. Available both as hot rolled and cold rolled. 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

Docol 500LA / UC: thickness 0.50-2.10 mm, width up to 1527mm, length up to 8500 mm.

Docol HR500LA / UC: thickness 2.00-6.00 mm, width up to 1610 mm, length up to 16000 mm.

Slitting to narrow coils and cutting to sheets are available upon request.

Mechanical Properties

Steelgrade	Thickness (mm)	Standards	Coating	Test direction	Yield strength $R_{p0.2}$ (MPa)	Tensile strength R_m (MPa)	Elongation A_{80} (min %)	Min. inner bending radius for 90°
Docol 500LA	0.5- 2.1	EN 10268	UC	Transversal	500- 620 ¹⁾	570- 710	14	0.5xt
Docol HR 500LA	2.00- 6.00	VDA 239-100:2016	UC	Longitudinal	500- 620	560- 700	14	0.8xt

¹⁾ If the yield strength is pronounced, the values apply to the lower yield point ReL.

Chemical Composition

Steelgrade	C (max %)	Si (max %)	Mn (max %)	P (max %)	S (max %)	Al (min %)	Ti (max %)	Nb (max %)	V (max %)	Cu (max %)
Docol 500LA	0.10	0.60	1.80	0.025	0.010	0.015	0.15	0.09	-	0.20
Docol HR 500LA	0.10	0.10	1.60	0.025	0.010	0.015	0.15	0.10	0.20	0.20

Tolerances

Cold-rolled (UC): Tolerances in accordance to EN10131.

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

Customized dimensional and shape tolerances are available on request.

Coatings and surface treatments

All surface treatments are in accordance with RoHS directive (2011/65/EU) and do not contain Chromium VI (Cr6+). 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.

Surface coating	Available surface treatment
UC (Cold-rolled)	Oiled
UC (Cold-rolled)	Unprotected
UC (Hot-rolled)	Oiled (Only for pickled steel)
UC (Hot-rolled)	Unprotected

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