

Docol PHS 1800

General Product Description

Docol PHS 1800 is cold rolled and alloyed with a small percentage of boron to improve hardenability. This steel is specially developed for parts and components that are manufactured by both direct and indirect hot stamping. Applications include safety parts such as door impact beams, bumper systems and B-pillar reinforcements. Yield and tensile strengths below are approximate values after stamped/die-quenched.

Dimension range

Docol PHS CR1800/ UC: thickness 0.70-3.00 mm, width up to 1500 mm, length up to 8500 mm.
Slitting to narrow coils and cutting to sheets are available upon request.

Mechanical Properties

Steelgrade	Product Type	Thickness (mm)	Coating	Yield strength R _e Typical (MPa)	Tensile strength R _m Typical (MPa)	Elongation A ₈₀ Typical (%)
Docol PHS CR 1800	Cold rolled annealed	0.70- 3.00	UC	350	500	27
Docol PHS CR 1800	Hot Stamping	0.70- 3.00	UC	1300	1800	6

The mechanical properties are tested transverse to the direction of rolling.

Chemical Composition

C (%)	Si (%)	Mn (%)	P (max %)	S (max %)	Cr (%)	B (%)
0.27- 0.33	0.20- 0.35	1.00- 1.35	0.030	0.010	0.14- 0.26	0.0020- 0.0050

Tolerances

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

Customized dimensional and shape tolerances are available on request.

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