

## Docol PHS 1500

### General Product Description

Hardenable boron steel for the automotive industry. Available as both hot rolled and cold rolled. Docol PHS 1500 steels are 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 CR1500/ UC: thickness 0.70-3.00 mm, width up to 1500 mm, length up to 8500 mm.

Docol PHS HR1500/ UC: thickness 2.00-12.0 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	Product Type	Thickness (mm)	Coating	Yield strength R <sub>e</sub> Typical (MPa)	Tensile strength R <sub>m</sub> Typical (MPa)	Elongation A <sub>80</sub> Typical (%)
Docol PHS CR 1500	Annealed	0.70- 3.00	UC	340	480	28
Docol PHS CR 1500	Hot Stamping	0.70- 3.00	UC	1100	1500	6
Docol PHS HR 1500	Annealed	2.00- 12.00	UC	350	530	25
Docol PHS HR 1500	Hot Stamping	2.00- 12.00	UC	1100	1500	10

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

### Chemical Composition

Steelgrade	C (%)	Si (%)	Mn (%)	P (max %)	S (max %)	Cr (%)	B (%)
Docol PHS CR 1500	0.20- 0.25	0.20- 0.35	1.00- 1.35	0.030	0.010	0.14- 0.26	0.0015- 0.0050
Docol PHS HR 1500	0.20- 0.25	0.20- 0.35	1.00- 1.35	0.030	0.010	0.14- 0.26	0.0015- 0.0050

### 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.

### Fabrication and Other Recommendations

For information concerning fabrication, see SSAB's brochures on [www.ssab.com](http://www.ssab.com) or consult Tech Support, [techsupport@ssab.com](mailto: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](http://www.ssab.com/contact)