

Technical information

Minimum demand for Heléns – Mechanical characteristics

	Yield point $R_{p0.2}$ min MPa	Ultimate strength R_m min MPa	Rupture extension A_5 min %
Heléns 4003	320	450	10

Heléns 4003 – Chemical composition

	C % max.	Si % max.	Mn % max.	P % max.	S % max.	N % max.	Cr % max.	Ni % max.
Heléns 4003	0.030	1.00	1.50	0.040	0.015	0.030	10.50-12.50	0.30-1.00

* Fulfills the demand for steel type X2CrNi12 (1.4003) in accordance with EN 10088-2

Square and rectangular tubes

External size, W and H	$\pm 1\%$ at least ± 0.5 mm, when W, H < 100 mm $\pm 0.8\%$, when W, H ≥ 100 mm
Concavity / Convexity	$\pm 0.8\%$ of side length, at least ± 0.5 mm
Wall thickness, T	$\pm 10\%$ mm of nominal thickness
Side right-angularity	$90^\circ \pm 1$
External corner radius, R	2.0T – 3.0T, where T < 2 mm *) 1.6T – 2.4T, where T > 2 mm
Length, L	0/+50 mm
Straightness	0.15 % of tubes total length
Twisting	2 mm +0.5 mm/m

*) Deviation from demands in standard EN 10219-2