



Stainless hollow sections – technical information

Ferritic (1.4003)

A good alternative to mild steel:

- Good strength properties
- Structural corrosion resistance
- Low need for maintenance
- Low life-cycle cost

PHYSICAL PROPERTIES, TYPICAL VALUES, 20 °C

Density	kg/dm ³	7,7
Modulus of Elasticity	GPa	220
Thermal Conductivity	W/mK	25
Coefficient of Thermal Expansion	10 ⁻⁶ / K	10,4
Electrical Resistivity	μΩm	0,60

DELIVERY CONDITION

Forming	Cold formed (roll formed)
Welding	Laser
Weld condition	Grinded

SURFACE CONDITION

Standard	As welded
Optional	Polished, glass beat blasting

PROCESSING SERVICE

Length	4-18 m, standard length 6 m, tolerance 0/+20 mm
Precise cutting	20-9000 mm, tolerance ± 1 mm
Angle cutting	30-90°, tolerance ± 1°
Laser cutting	Perforating
Tailored components	Components ready for installation

CORROSION RESISTANCE COMPARISON OF STALATUBE STEEL GRADES (PRE, Cr% + 3,3Mo% + 16N%)

1.4003	11
1.4301, 1.4307 and 1.4541	19
1.4401, 1.4404 and 1.4571	23
1.4162	26

TUBE MARKING

Ink-jet marking on tube	Stalatable Oy made in Finland, steel grade, dimensions, coil number, production date, welding operator
Bundle tag	Dimensions, steel grade, surface, bundle size (pcs), length (m), bundle weight (kg), batch id, coil No., bundle No.

RECTANGULAR FERRITIC HOLLOW SECTIONS (1.4003)

Outside dimensions H x B [mm]	Weight [kg/m]			
	1,5	2,0	3,0	4,0
30 x 20	1,04	1,34	-	-
40 x 20	1,27	1,65	-	-
40 x 30	1,50	1,95	2,78	-
50 x 20	1,50	1,95	-	-
50 x 25	1,62	2,11	-	-
50 x 30	1,73	2,26	3,24	-
50 x 40	1,97	2,57	3,70	-
60 x 20	1,73	2,26	-	-
60 x 30	1,97	2,57	3,70	-
60 x 40	2,20	2,88	4,16	5,35
70 x 30	2,20	2,88	4,16	-
70 x 50	2,66	3,49	5,09	6,58
80 x 40	2,66	3,49	5,09	6,58
80 x 60	3,12	4,11	6,01	7,81
90 x 60	3,35	4,42	6,47	8,43
100 x 40	3,12	4,11	6,01	7,81
100 x 50	3,35	4,42	6,47	8,43
100 x 60	3,58	4,73	6,94	9,05
120 x 40	3,58	4,73	6,94	9,05

SQUARE FERRITIC HOLLOW SECTIONS (1.4003)

Outside dimensions H x B [mm]	Weight [kg/m]			
	1,5	2,0	3,0	4,0
25 x 25	1,04	1,34	-	-
30 x 30	1,27	1,65	2,32	-
35 x 35	1,50	1,95	2,78	-
38 x 38	1,64	2,14	3,06	-
40 x 40	1,73	2,26	3,24	-
50 x 50	2,20	2,88	4,16	5,35
60 x 60	2,66	3,49	5,09	6,58
70 x 70	3,12	4,11	6,01	7,81
75 x 75	3,35	4,42	6,47	8,43
80 x 80	3,58	4,73	6,94	9,05

Also other dimensions may be possible on request.

CHEMICAL COMPOSITION (EN 10088-2)

C % max	Si % max	Mn % max	P % max	S % max	N % max	Cr %	Ni %
0,030	1,00	1,50	0,040	0,015	0,030	10,50- 12,50	0,30- 1,00

MECHANICAL PROPERTIES (Measured from coil acc. to EN 10088-2)

Yield strength $R_{p0,2}$ min N/mm ²	Tensile strength R_m min N/mm ²	Elongation $A^{1)}$ min %
320	450	20 / 10 ²⁾

¹⁾ A80 when thickness $T < 3$ mm, A5 when thickness $T \geq 3$ mm

²⁾ Measured from tube in longitudinal direction (only on request)

TOLERANCES (EN 10219-2)

Characteristic	Tolerance
Outside dimensions, B and H	$\pm 1\%$ with a minimum of $\pm 0,5$ mm, when $B, H < 100$ mm. $\pm 0,8\%$, when $B, H \geq 100$ mm
Concavity/convexity	max 0,8% with a minimum 0,5 mm
Wall thickness, T	$\pm 10\%$
Squareness of side	$90^\circ \pm 1^\circ$
External corner profile (C1, C2 or R)	1,6 T - 2,4 T
Length, L	0 / + 20 mm ¹⁾
Straightness	0,15% of total length
Twist	2 mm + 0,5 mm/m
Weld position	Narrow side

¹⁾ Better than standard tolerance 0 / + 50 mm

We reserve the right to changes. Stalatube takes no responsibility for any errors in numerical information that might appear in this brochure.

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