

**DATASHEET IMPERIAL**

# Stainless hollow sections



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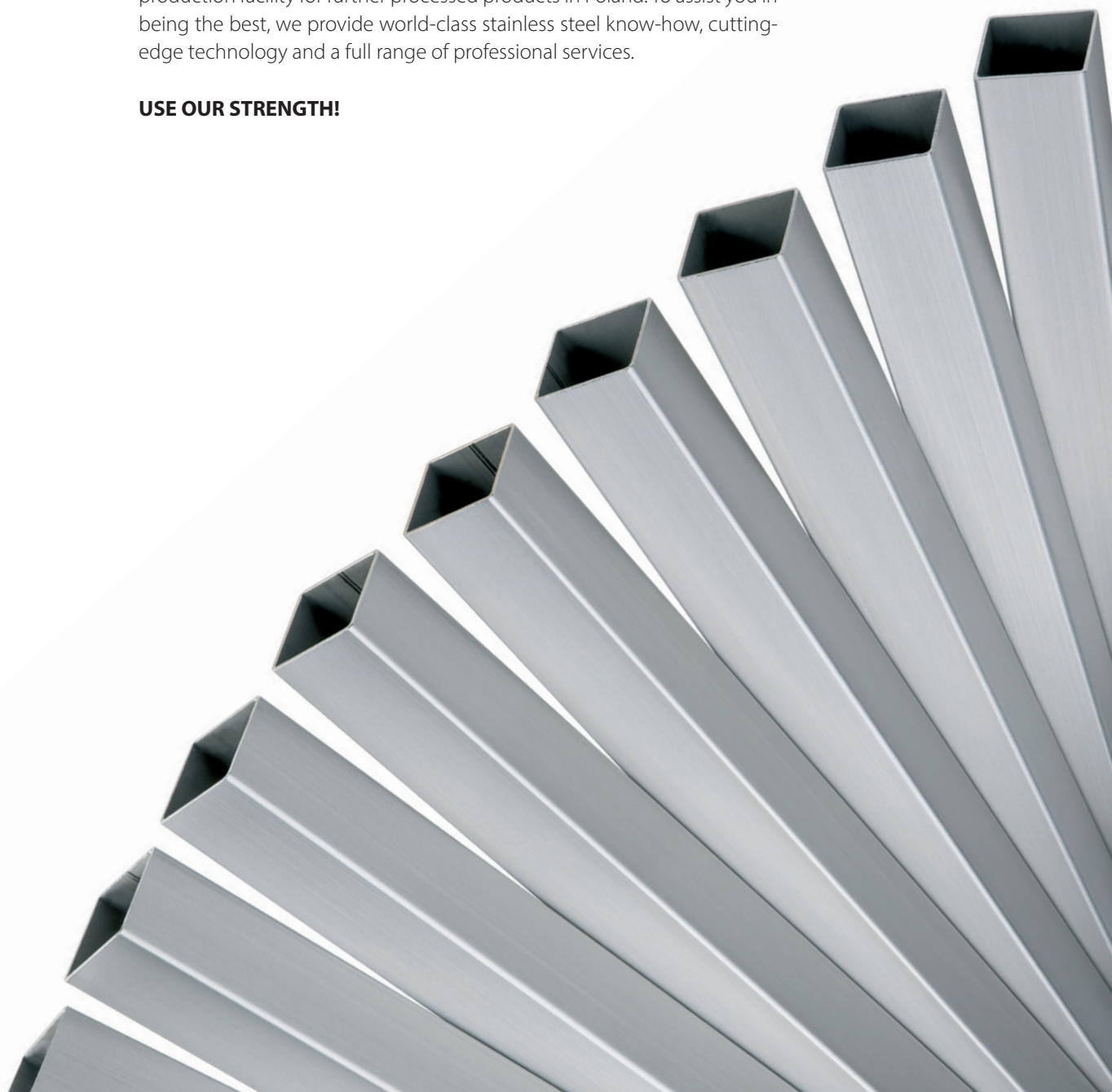
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# About Stalatube

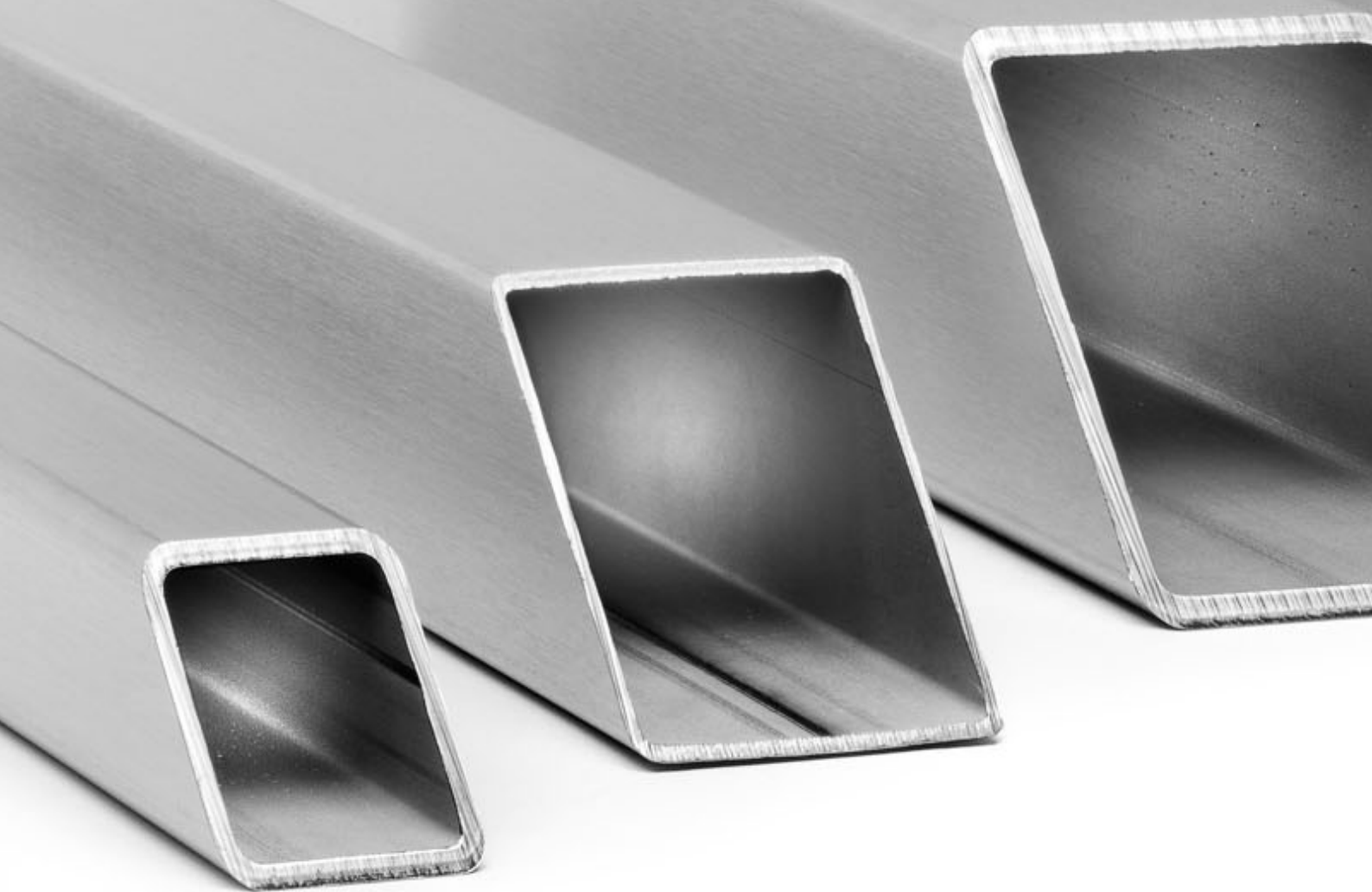
Stalatube is a manufacturer of highly developed stainless steel hollow sections, profiles and components. We are known worldwide as the leading provider of stainless steel solutions. With a global presence, in-depth material expertise and the world's widest product portfolio in stainless square and rectangular hollow sections, we help customers connect the most suitable product with their application or project - in even the most complex of cases. Our customizable, environmentally conscious solutions are here to build a better future. We believe that by working with customers and investing in R&D, anything is possible.

For over 50 years of pioneer work in the industry, we have built an international distribution network covering all continents and over 50 countries. Our head office and main production facility is in Finland, sales offices are in the USA and Netherlands, a R&D office in Türkiye, and a production facility for further processed products in Poland. To assist you in being the best, we provide world-class stainless steel know-how, cutting-edge technology and a full range of professional services.

**USE OUR STRENGTH!**







## Services

### Technical consultation

Our experienced staff have extensive know-how on all matters concerning stainless steel. If you have any doubts or questions about stainless steel materials, processing or welding, we are always willing to assist. Do not hesitate to contact us!

### Testing and certification

Get precise documentation, certifications, test reports or other statements for needed purpose. The traceability of our products is always accurate.

### Tolerances

<b>Cut to length service</b>	13 - 60 ft, tolerance -0"/+ .78"
<b>Precise cutting</b>	.78" - 29.5 ft, tolerance $\pm .04$ " $\geq 29.5$ ft, tolerance depends on the length
<b>Angle cutting</b>	30-90°, tolerance $\pm 1^\circ$
<b>Laser cutting</b>	$\pm .02$ "

### Surface enhancement

Surface finish is an essential part of the outlook, durability and functionality of a stainless steel structure. It is even possible to make surfaces more hygienic where necessary.

<b>Polishing</b>	<b>Ra [<math>\mu</math>in]</b>
Grit 180	59-75
Grit 220/240	39-55
Grit 320	24-35
Polished tubes are single-packed: for dimensions $\leq 2.5$ " x 2.5" packing in plastic sleeve and for $> 2.5$ " x 2.5" in plastic foil	
Bundles are packed with plastic foil, plastic bands and corner protections.	
<b>Pickling</b>	
Dip pickling	
Bundles are packed with plastic foil, plastic bands and corner protections	

### Other optional services

Corner polishing and special surfaces by request

# Chemical composition

(% by mass, maximum values unless indicated otherwise)

<b>Austenitic (fulfills the standards ASTM A554 and ASTM A240/240M)</b>											
MT	C	Mn	P	S	Si	Cr	Ni	Mo	N	Others	PRE
304	0.07	2.00	0.045	0.030	0.75	18.0-19.5	8.0-10.5		0.10		18
304L	0.03	2.00	0.045	0.030	0.75	18.0-19.5	8.0-12.0		0.10		18
316L	0.03	2.00	0.045	0.030	0.75	16.0-18.0	10.0-14.0	2.00-3.00	0.10		24
301LN <sup>1)</sup>	0.03	2.00	0.045	0.030	1.00	16.5 - 18.5	6.0 - 8.0		0.07-0.20		20
1.4678	0.20-0.40	14.0-18.0	0.045	0.015	1.00	12.0-16.0			0.20-0.40		
<b>Ferritic (fulfills the standard ASTM A240/240M)</b>											
UNS	C	Mn	P	S	Si	Cr	Ni	Mo	N	Others	PRE
S40977	0.03	1.50	0.040	0.015	1.00	10.5-12.5	0.3-1.0		0.03		12
<b>Lean Duplex and duplex (fulfills the standards ASTM A554 and ASTM A240/240M)</b>											
UNS	C	Mn	P	S	Si	Cr	Ni	Mo	N	Others	PRE
S32101	0.04	4.0-6.0	0.04	0.03	1.00	21.0-22.0	1.35-1.70	0.10-0.80	0.20-0.25	Cu 0.10-0.80	26
S32304	0.03	2.50	0.04	0.03	1.00	21.5-24.5	3.0-5.5	0.05-0.6	0.05-0.20	Cu 0.05-0.60	28
S32205	0.03	2.00	0.04	0.02	1.00	22.0-23.0	4.5-6.5	3.0-3.5	0.14-0.20		35

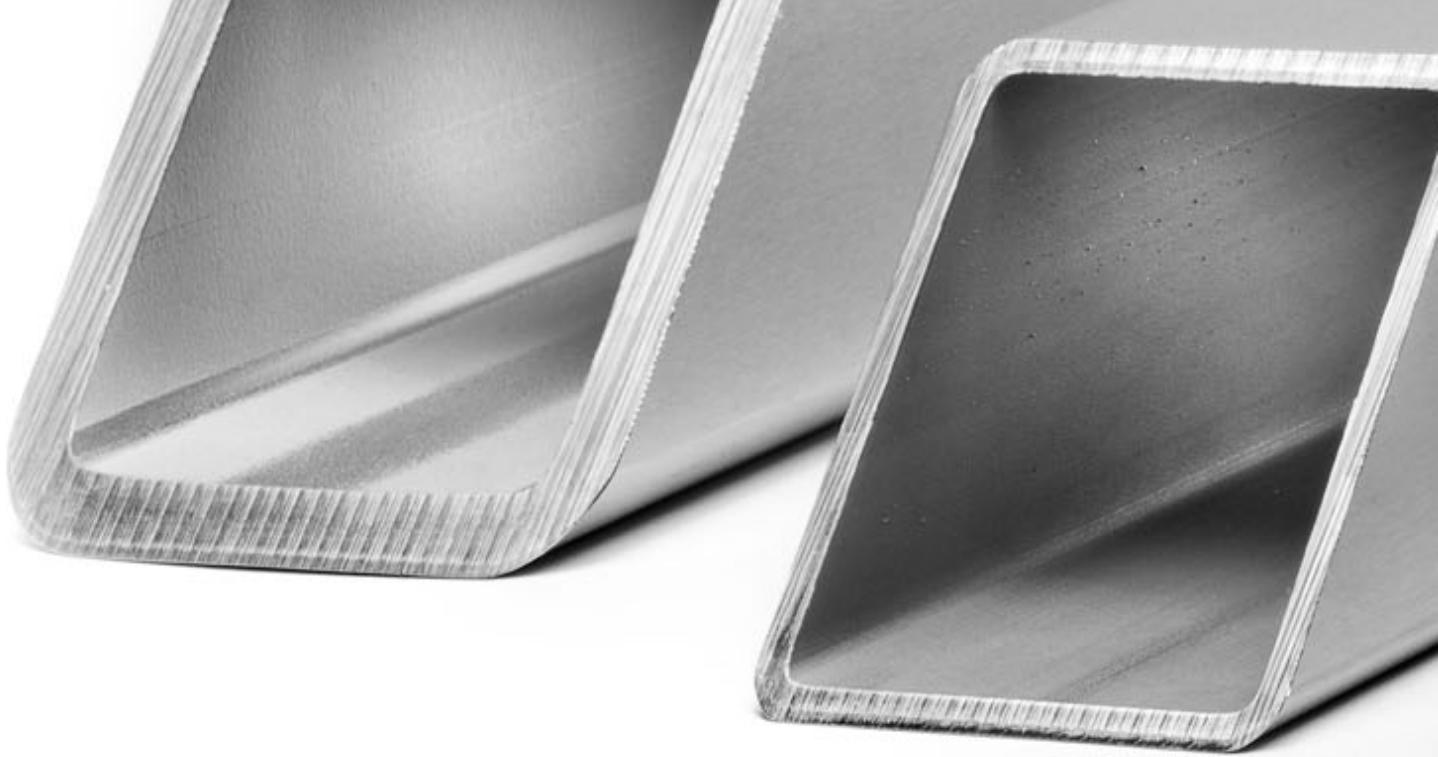
<sup>1)</sup> Fulfills the standard EN 10088-2 and ASTM A240

# Mechanical properties

## Roll-formed hollow sections | Standard strength class

Fulfills the standards EN 10088-2 and EN 10088-4 (Measured from coil, minimum values unless indicated otherwise)

<b>Austenitic</b>				
MT	0.2 % - proof strength Rp0.2 ksi (MPa)	Tensile strength Rm ksi (MPa)	Elongation A50 %	
304	30 (205)	75 (515)	40	
304L	25 (170)	70 (485)	40	
316L	25 (170)	70 (485)	40	
<b>High-strength austenitic</b>				
UNS / type	0.2 % - proof strength Rp0.2 ksi (MPa)	Tensile strength Rm ksi (MPa)	Elongation A50 %	
S30153 / 301LN	50 (350)	94 - 123 (650-850)	40	
<b>Ferritic</b>				
UNS	0.2 % - proof strength Rp0.2 ksi (MPa)	Tensile strength Rm ksi (MPa)	Elongation A50 %	
S40977	41 (280)	65 (450)	18	
<b>Lean Duplex and duplex</b>				
UNS	0.2 % - proof strength Rp0.2 ksi (MPa)	0.2 % - proof strength Rp0.2 ksi (MPa)	Tensile strength Rm ksi (MPa)	Elongation A50 %
S32101	T ≤ 0.187 in. (5 mm) T > 0.187 in. (5 mm)	77 (530) 65 (450)	101 (700) 94 (650)	30 30
S32304		58 (400)	87 (600)	25
S32205		65 (450)	95 (655)	25



## Roll-formed hollow sections | Enhanced strength class

Measured from tube, minimum values

<b>Austenitic</b>			
Available in steel grades 304, 304L and 316L			
Tube	0.2 % - proof strength Rp0.2 ksi (MPa)	Tensile strength Rm ksi (MPa)	Elongation A5 %
STALA350 <sup>1)</sup>	50 (350)	87 (600)	30
<b>High-strength austenitic</b>			
Available in steel grade 301LN			
Tube	0.2 % - proof strength Rp0.2 ksi (MPa)	Tensile strength Rm ksi (MPa)	Elongation A5 %
STALA350	50 (350)	87 (600)	30
STALA500	70 (500)	108 (750)	25
STALA 800	800	1000	25
<b>Ferritic</b>			
Available in steel grade UNS S40977			
Tube	0.2 % - proof strength Rp0.2 ksi (MPa)	Tensile strength Rm ksi (MPa)	Elongation A5 %
STALA400F <sup>2)</sup>	58 (400)	65 (450)	10
<b>Lean Duplex</b>			
Available in steel grade UNS S3210			
Tube	0.2 % - proof strength Rp0.2 ksi (MPa)	Tensile strength Rm ksi (MPa)	Elongation A5 %
STALA630D <sup>3)</sup>	91 (630)	108 (750)	20

<sup>1)</sup> Available for dimensions up to 4"x 4"x .25"/5"x 3"x .25"

<sup>2)</sup> Available for dimensions up to 4"x 4"x .18"/5"x 3"x .18"

<sup>3)</sup> Available for dimensions up to 4"x 4"x .12"/5"x 3"x .12"

# Roll-formed hollow sections

## Austenitic 304, 304L, 316L

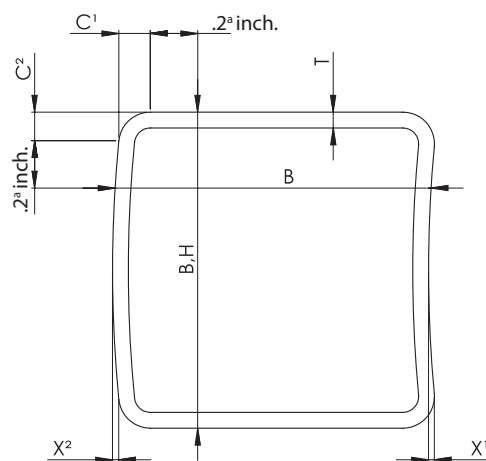
Delivery condition	
Forming	Cold formed (roll-formed)
Welding process	TIG/Plasma, Laser or HF
Weld condition	External weld bead removed

Tube marking	
Ink-jet marking on tube	Stalatable Oy made in Finland, steel grade, dimensions, coil number, production week/year, welding operator
Bundle tag	Dimensions, steel grade, surface condition, bundle size, batch id, coil number, bundle number

Bundle packing	
Plastic bands	
Plastic foil	

Surface condition	
Brushed (Stalazzo), when tube dimension is $\leq 4"x4"x0.25"$	
As welded (unpol), when tube dimension is $> 4"x4"x0.25"$	

Tolerances (according to ASTM A554)	
Outside dimensions h, b in. (mm)	
<b>Largest outside dimensions</b>	<b>Tolerance</b>
to 1 ¼ (31.8) incl.	+/- .015" (0.38 mm)
Over 1 ¼ to 2 ½ (31.8 to 63.5) incl.	+/- .020" (0.51 mm)
Over 2 ½ to 5 ½ (63.5 to 139.7) incl.	+/- .030" (0.76 mm)
Over 5 ½ to 8 (139.7 to 203.2) incl.	+/- .060" (1.52 mm)
Over 8 (203.2) <sup>1)</sup>	+/- .8 % x side length
<b>Thickness</b>	+/- 10 %
<b>Squareness</b>	.006 x longest side
<b>Concavity/convexity (X1 /X2 )</b>	Included in outside dimensions
<b>External corner radius</b>	
<b>Wall thickness in. (mm)</b>	<b>Max external corner radius in. (mm)</b>
Over .020 to .049 (0.51 to 1.24) incl.	3/32 (2.4)
Over .049 to .065 (1.24 to 1.65) incl.	1/8 (3.2)
Over .065 to .083 (1.65 to 2.11) incl.	9/64 (3.6)
Over .083 to .095 (2.11 to 2.42) incl.	3/16 (4.8)
Over .095 to .109 (2.42 to 2.77) incl.	13/64 (5.2)
Over .109 to .134 (2.77 to 3.40) incl.	7/32 (5.6)
Over .134 to .156 (3.40 to 3.96) incl.	1/4 (6.4)
Over .156 to .200 (3.96 to 5.08) incl.	3/8 (9.5)
Over .200 to .250 (5.08 to 6.35) incl.	1/2 (12.7)
Over .250 to .375 (6.35 to 9.53) incl.	3/4 (19.1)
Over .375 to .500 (9.53 to 12.70) incl. <sup>1)</sup>	6/5 (30.5)



<sup>a</sup> This dimension is maximum when measuring B or H and minimum when measuring T

<sup>1)</sup> Not included in ASTM A554

Square		Weight [LB/FT]							
H x B [in.]		.060	.080	.120	.180	.250	.312	.375	.500
1	1	<b>0.779</b>	<b>1.022</b>	<b>1.483</b>					
1.25	1.25	<b>0.984</b>	<b>1.294</b>	<b>1.891</b>					
1.5	1.5	<b>1.188</b>	<b>1.567</b>	<b>2.300</b>	<b>3.336</b>				
2	2	<b>1.597</b>	<b>2.111</b>	<b>3.117</b>	<b>4.562</b>	<b>5.931</b>			
2.5	2.5	2.005	<b>2.656</b>	<b>3.934</b>	<b>5.788</b>	<b>7.565</b>			
3	3		<b>3.201</b>	<b>4.751</b>	<b>7.013</b>	<b>9.199</b>			
3.5	3.5			<b>5.568</b>	<b>8.239</b>	<b>10.834</b>			
4	4			<b>6.385</b>	<b>9.465</b>	<b>12.468</b>	16.354	20.106	
5	5			8.020	11.917	15.737	20.713	25.554	
6	6				14.368	19.005	25.071	31.002	36.798
8	8				19.271	25.543	33.787	41.897	49.873
10	10					32.080	42.503	52.793	62.947
12	12					38.617	51.220	63.689	76.022

Sizes marked in **bold** are available in high-strength class STALA350.

Rectangular		Weight [LB/FT]							
H x B [in.]		.060	.080	.120	.180	.250	.312	.375	.500
1.5	1	<b>0.984</b>	<b>1.294</b>	<b>1.891</b>					
2	1	<b>1.188</b>	<b>1.567</b>	<b>2.300</b>					
2	1.5	<b>1.392</b>	<b>1.839</b>	<b>2.708</b>					
3	1	<b>1.597</b>	<b>2.111</b>	<b>3.117</b>					
3	1.5		<b>2.384</b>	<b>3.526</b>					
3	2		<b>2.656</b>	<b>3.934</b>	<b>5.788</b>	<b>7.565</b>			
4	2		<b>3.201</b>	<b>4.751</b>	<b>7.013</b>	<b>9.199</b>			
4	3			<b>5.568</b>	<b>8.239</b>	<b>10.834</b>			
5	2			<b>5.568</b>	<b>8.239</b>	<b>10.834</b>			
5	3			<b>6.385</b>	<b>9.465</b>	<b>12.468</b>			
6	2				9.465	12.468			
6	3				10.691	14.102			
6	4				11.917	15.737	20.713	25.554	
8	2				11.917	15.737			
8	4				14.368	19.005	25.071	31.002	
8	6				16.820	22.274	29.429	36.450	43.335
10	2				14.368	19.005			
10	4				16.820	22.274	29.429	36.450	
10	6					25.543	33.787	41.897	49.873
10	8					28.811	38.145	47.345	56.410
12	4				19.271	25.543	33.787	41.897	
12	6					28.811	38.145	47.345	
12	8					32.080	42.503	52.793	62.947
12	10					35.348	46.861	58.241	69.485
14	6					32.080	42.503	52.793	62.947
14	8					35.348	46.861	58.241	69.485
14	10					38.617	51.220	63.689	76.022
16	8					38.617	51.220	63.689	76.022

Other dimensions may also be possible on request. Sizes marked in **bold** are available in high-strength class STALA350.

Tolerances (according to ASTM A 554)	
<b>Twist</b>	
<b>Largest size, in. (mm)</b>	<b>Twist in 3 feet, max, in. (mm/m)</b>
Under 1/2 (12.7)	.050 (1.4)
1/2 to 1 1/2 (12.7 to 38.1) incl.	.075 (2.1)
Over 1 1/2 to 2 1/2 (38.1 to 63.5) incl.	.095 (2.6)
Over 2 1/2 to 4 (63.5 to 101.6) incl.	.125 (3.5)
Over 4 to 6 (101.6 to 152.4) incl.	.250 (6.9)
Over 6 (152.4)	.375 (10.4)
<b>Standard length</b>	20' (6.1 m)
Length tolerance	-0"/+ .78"(-0 mm/+20 mm)
<b>Straightness</b>	.075"/3 ft (2.1 mm/1 m)

# High-strength austenitic 301LN

Delivery condition	
Forming	Cold formed (roll-formed)
Welding process	TIG/Plasma, Laser or HF
Weld condition	External weld bead removed

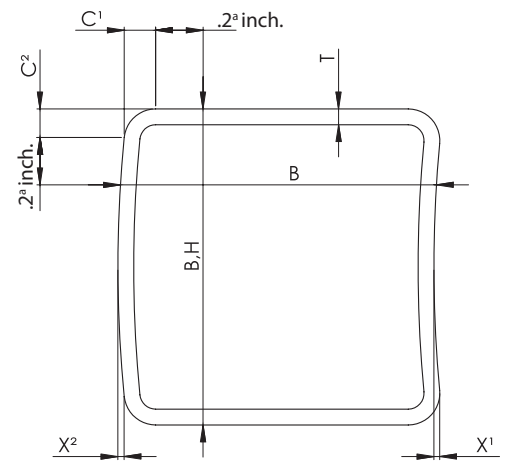
Tube marking	
Ink-jet marking on tube	Stalatube Oy made in Finland, steel grade, dimensions, coil number, production week/year, welding operator
Bundle tag	Dimensions, steel grade, surface condition, bundle size, batch id, coil number, bundle number

Bundle packing	
Plastic bands	
Plastic foil	

Surface condition	
Brushed (Stalazzo), when tube dimension is $\leq 4"x4"x0.25"$	
As welded (unpol), when tube dimension is $> 4"x4"x0.25"$	

Tolerances (according to ASTM A554)	
Outside dimensions h, b in. (mm)	
<b>Largest outside dimensions</b>	<b>Tolerance</b>
to 1 ¼ (31.8) incl.	+/- .015" (0.38 mm)
Over 1 ¼ to 2 ½ (31.8 to 63.5) incl.	+/- .020" (0.51 mm)
Over 2 ½ to 5 ½ (63.5 to 139.7) incl.	+/- .030" (0.76 mm)
Over 5 ½ to 8 (139.7 to 203.2) incl.	+/- .060" (1.52 mm)
Over 8 (203.2) <sup>1)</sup>	+/- .8 % x side length
<b>Thickness</b>	+/- 10 %
<b>Squareness</b>	.006 x longest side
<b>Concavity/convexity (X1 /X2 )</b>	Included in outside dimensions
<b>External corner radius</b>	
<b>Wall thickness in. (mm)</b>	<b>Max external corner radius in. (mm)</b>
Over .020 to .049 (0.51 to 1.24) incl.	3/32 (2.4)
Over .049 to .065 (1.24 to 1.65) incl.	1/8 (3.2)
Over .065 to .083 (1.65 to 2.11) incl.	9/64 (3.6)
Over .083 to .095 (2.11 to 2.42) incl.	3/16 (4.8)
Over .095 to .109 (2.42 to 2.77) incl.	13/64 (5.2)
Over .109 to .134 (2.77 to 3.40) incl.	7/32 (5.6)
Over .134 to .156 (3.40 to 3.96) incl.	1/4 (6.4)
Over .156 to .200 (3.96 to 5.08) incl.	3/8 (9.5)
Over .200 to .250 (5.08 to 6.35) incl.	1/2 (12.7)
Over .250 to .375 (6.35 to 9.53) incl.	3/4 (19.1)
Over .375 to .500 (9.53 to 12.70) incl. <sup>1)</sup>	6/5 (30.5)

<sup>1)</sup> Not included in ASTM A554



<sup>a</sup> This dimension is maximum when measuring B or H and minimum when measuring T

Square		Weight [LB/FT]			
H x B [in.]		.120	.180	.250	.312
2	2	<b>3.117</b>			
2.5	2.5	<b>3.934</b>			
3	3	<b>4.751</b>	<b>7.013</b>		
3.5	3.5	<b>5.568</b>	<b>8.239</b>		
4	4	<b>6.385</b>	<b>9.465</b>	<b>12.468</b>	16.354
5	5	8.020	11.917	15.737	20.713
6	6		14.368	19.005	25.071
8	8		19.271	25.543	33.787
10	10			32.080	42.503
12	12			38.617	51.220

Sizes marked in **bold** are available in high-strength class STALAS500.

Rectangular					
H x B [in.]		.120	.180	.250	.312
3	2	<b>3.934</b>			
4	2	<b>4.751</b>	<b>7.013</b>		
4	3	<b>5.568</b>	<b>8.239</b>		
5	2	<b>5.568</b>	<b>8.239</b>		
5	3	<b>6.385</b>	<b>9.465</b>	<b>12.468</b>	
6	4		11.917	15.737	20.713
8	4		14.368	19.005	25.071
8	6		16.820	22.274	29.429
10	4		16.820	22.274	29.429
10	6			25.543	33.787
10	8			28.811	38.145
12	4		19.271	25.543	33.787
12	6			28.811	38.145
12	8			32.080	42.503
12	10			35.348	46.861
14	6			32.080	42.503
14	8			35.348	46.861
14	10			38.617	51.220
16	8			38.617	51.220

Sizes marked in **bold** are available in high-strength class STAL4500.

Tolerances (according to ASTM A 554)	
Twist	
Largest size, in. (mm)	Twist in 3 feet, max, in. (mm/m)
Under 1/2 (12.7)	.050 (1.4)
1/2 to 1 1/2 (12.7 to 38.1) incl.	.075 (2.1)
Over 1 1/2 to 2 1/2 (38.1 to 63.5) incl.	.095 (2.6)
Over 2 1/2 to 4 (63.5 to 101.6) incl.	.125 (3.5)
Over 4 to 6 (101.6 to 152.4) incl.	.250 (6.9)
Over 6 (152.4)	.375 (10.4)
<b>Standard length</b>	20' (6.1 m)
Length tolerance	-0"/+ .78" (-0 mm/+20 mm)
<b>Straightness</b>	.075"/3 ft (2.1 mm/1 m)

# Ferritic S40977

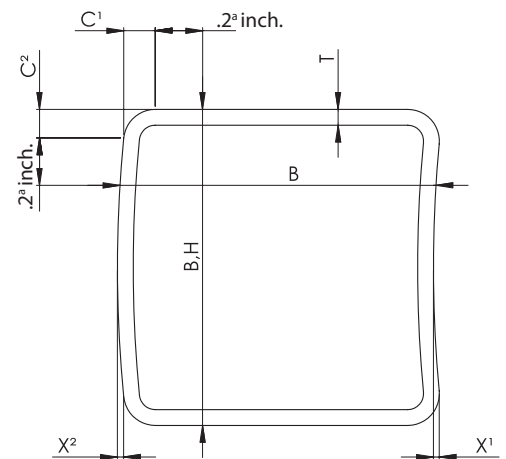
Delivery condition	
Forming	Cold formed (roll-formed)
Welding process	TIG/Plasma, Laser or HF
Weld condition	External weld bead removed

Bundle packing	
Plastic bands	

Tube marking	
Ink-jet marking on tube	Stalutube Oy made in Finland, steel grade, dimensions, coil number, production week/year, welding operator
Bundle tag	Dimensions, steel grade, surface condition, bundle size, batch id, coil number, bundle number

Surface condition	
As welded (unpol)	

Tolerances (according to EN 10219-2)	
Characteristic	Tolerance
Outside dimensions, B and H	B, H < 4": ± 1%, min ± .02" B, H ≥ 4": ± 0.8 %
Concavity / Convexity	Max. 0.8 % with minimum of .02"
Wall thickness, T	± 10 %
Squareness of side	90° ± 1°
External corner profile (C1, C2)	1.5T - 2.5T
Length	Standard length 20' tolerance -0"/+ .78"
Straightness	0.15 % of total length
Twist	.08" + .02"/ft



Square		Weight [LB/FT]				
H x B [in.]		.060	.080	.120	.180	.250
1	1	<b>0.722</b>	<b>0.928</b>			
1.25	1.25	<b>0.922</b>	<b>1.195</b>	<b>1.687</b>		
1.5	1.5	<b>1.123</b>	<b>1.462</b>	<b>2.087</b>		
2	2	1.523	<b>1.996</b>	<b>2.888</b>		
2.5	2.5			<b>3.690</b>	<b>5.297</b>	
3	3			<b>4.491</b>	<b>6.499</b>	
3.5	3.5			<b>5.292</b>	<b>7.701</b>	<b>10.311</b>
4	4			<b>6.093</b>	<b>8.902</b>	<b>11.980</b>

Sizes marked in **bold** are available in enhanced strength class STALA400F.

Rectangular		Weight [LB/FT]				
H x B [in.]		.060	.080	.120	.180	.250
1.5	1	<b>0.922</b>	<b>1.195</b>			
2	1	<b>1.123</b>	<b>1.462</b>			
2	1.5	<b>1.323</b>	<b>1.729</b>	<b>2.488</b>		
2.5	1	<b>1.323</b>	<b>1.729</b>			
2.5	1.5	<b>1.523</b>	<b>1.996</b>	<b>2.888</b>		
3	1	1.523	<b>1.996</b>			
3	2		2.530	<b>3.690</b>	<b>5.297</b>	
4	2		3.064	<b>4.491</b>	<b>6.499</b>	
4	3		3.598	<b>5.292</b>	<b>7.701</b>	<b>10.311</b>
5	3			6.093	<b>8.902</b>	<b>11.980</b>

Sizes marked in **bold** are available in high-strength class STALA400F.

## Lean Duplex and duplex S32101, S32304, S32205

Delivery condition	
Forming	Cold formed (roll-formed)
Welding process	TIG/Plasma, Laser or HF
Weld condition	External weld bead removed

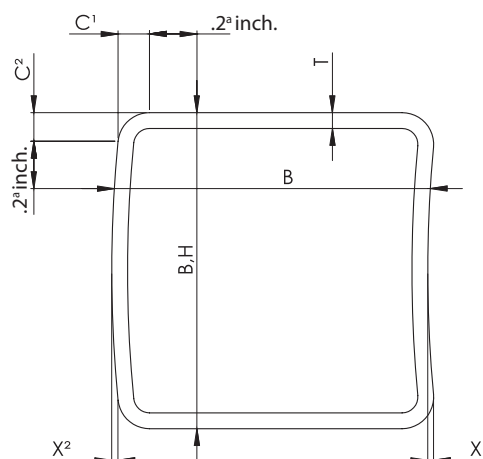
Tube marking	
Ink-jet marking on tube	Stalutube Oy made in Finland, steel grade, dimensions, coil number, production week/year, welding operator
Bundle tag	Dimensions, steel grade, surface condition, bundle size, batch id, coil number, bundle number

Bundle packing	
Plastic bands	
Plastic foil	

Surface condition	
Brushed (Stalazzo), when tube dimension is $\leq 4"x4"x0.25"$ (100x100x6 mm)	
As welded (unpol), when tube dimension is $> 4"x4"x0.25"$ (100x100x6 mm)	

All dimensions are available in steel grade S32101.  
 Maximum thickness for steel grade S32202 is .180".  
 Sizes marked in **bold** are available in high-strength class STALA630D.

Tolerances (according to EN 10219-2)	
Characteristic	Tolerance
Outside dimensions, B and H	"B,H < 4": $\pm 1\%$ , min $\pm .02"$ B,H $\geq 4$ : $\pm 0.8\%$ "
Concavity / Convexity	Max. 0.8 % with minimum of .02"
Wall thickness, T	$\pm 10\%$
Squareness of side	$90^\circ \pm 1^\circ$
External corner profile (C1, C2)	B + H $\leq 8$ ": 1.5T - 2.5T B + H $> 8$ " and T $\leq .16$ " 2T - 3T B + H $> 8$ " and T $> .16$ " 1.5T - 2.5T
Length	"Standard length 20' tolerance -0"/+ .78"
Straightness	0.15 % of total length
Twist	.08" + .02"/ft



<sup>a</sup> This dimension is maximum when measuring B or H and minimum when measuring T

Square	Weight [LB/FT]						
	H x B [in.]	.060	.080	.120	.180	.250	.312
1	1	<b>0.731</b>	<b>0.940</b>				
1.25	1.25	<b>0.934</b>	<b>1.210</b>				
1.5	1.5	<b>1.137</b>	<b>1.481</b>				
2	2	<b>1.543</b>	<b>2.022</b>	<b>2.926</b>			
2.5	2.5		<b>2.563</b>	<b>3.737</b>			
3	3		<b>3.104</b>	<b>4.549</b>			
3.5	3.5			<b>5.361</b>	<b>7.801</b>		
4	4			<b>6.172</b>	<b>9.018</b>	12.135	
5	5			7.795	11.453	15.517	
6	6			9.418	13.887	18.898	
8	8				18.757	25.662	31.95
10	10					32.425	40.035
12	12					39.188	48.476

Rectangular	Weight [LB/FT]						
	H x B [in.]	.060	.080	.120	.180	.250	.312
1.5	1	<b>0.934</b>	<b>1.210</b>				
2	1	<b>1.137</b>	<b>1.481</b>				
2	1.5	<b>1.340</b>	<b>1.751</b>	<b>2.520</b>			
3	1	<b>1.543</b>	<b>2.022</b>				
3	2		2.563	<b>3.737</b>			
4	2		3.104	<b>4.549</b>			
4	3		3.645	<b>5.361</b>			
6	4			7.795	11.453	15.517	
8	4			9.418	13.887	18.898	
10	6				18.757	25.662	
12	4				18.757	25.662	
12	8					32.425	40.035
16	8					39.188	48.476

All dimensions are available in steel grade S32101.  
 Sizes marked in **bold** are available in high-strength class STALA630D.

# Press brake hollow sections

## 304, 304L, 316L, S32101, S32304, S32205

Press brake hollow sections in duplex grades are available for dimensions with T= 0.25 -0.5" and H = 6 -20"

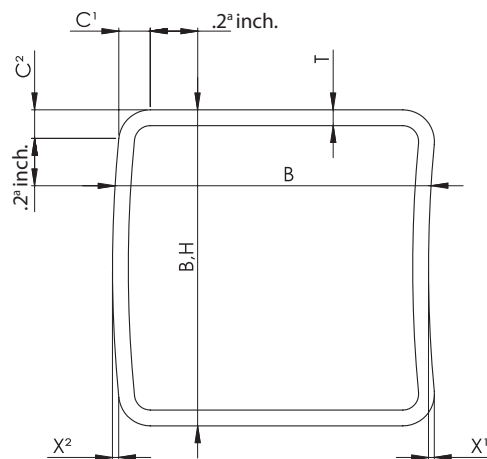
Delivery condition	
Forming	Press brake, made of two U or J profiles
Welding process	TIG, MAG or Laser

Bundle packing	
Plastic bands	
Corner protection	

Tube marking	
Marking on tube	Stalatube Oy made in EU, steel grade, dimensions, coil or plate number, production week / year
Bundle tag	Dimensions, steel grade, surface condition, bundle size, batch id, coil or plate number, bundle number

Surface condition	
As welded (unpol) and pickled	

Tolerances	
Characteristic	Tolerance
Outside dimensions, B and H	$\pm 1.0\%$ , min $\pm .004"$
Concavity / Convexity, X1, X2	Max. 0.8%
Wall thickness, T	$\pm 10\%$
Squareness of sides	$90^\circ \pm 1^\circ$
External corner profile, C1, C2	T $\leq 0.375"$ Max 3T T $\geq 0.50"$ Max 3.6T
Length (Standard 20 ft)	-0 / + .4"
Straightness	.04"/3 ft
Twist	.08" + .02"/3 ft
External weld bead	Width: Max 2T, Height: Max .08"



Square		Weight [LB/FT]					
H x B [in.]		.180	.250	0.312	.375	.500	.625
5	5	11.50	15.53	18.89			
6	6	13.97	18.96	23.17	27.24	34.73	
7	7	16.44	22.38	27.44	32.38	41.58	
8	8	18.90	25.81	31.71	37.52	48.43	
10	10	23.83	32.66	40.26	47.79	62.13	
12	12	28.77	39.51	48.81	58.06	75.83	92.79
14	14		46.36	57.36	68.34	89.53	109.92
16	16		53.21	65.91	78.61	103.23	127.04
20	20		66.90	83.00	99.16	130.62	161.29

**304, 304L, 316L, S32101, S32304, S32205**

Rectangular		Weight [LB/FT]					
H x B [in.]		.180	.250	.312	.375	.500	.625
6	3	10.27	13.82				
7	4	12.74	17.24	21.03			
8	4	13.97	18.96	23.17			
10	6	18.90	25.81	31.71	37.52	48.43	
12	4	18.90	25.81	31.71			
12	8	23.83	32.66	40.26	47.79	62.13	
14	6	23.83	32.66	40.26	47.79	62.13	
14	10	28.77	39.51	48.81	58.06	75.83	
16	4	23.83	32.66	40.26			
16	12		46.36	57.36	68.34	89.53	109.92
18	6		39.51	48.81	58.06	75.83	
20	4		39.51	48.81			
20	8		46.36	57.36	68.34	89.53	
20	12		53.21	65.91	78.61	103.23	127.04
20	16		60.06	74.46	88.89	116.93	144.17

Tube weights (lb/ft) are calculated for grades 304 and 304L, for grade 316L the weight has to be multiplied by factor 8.0/7.9. Intermediate dimensions within range are available by request f.ex. 8.5"x8.5"x .5"



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