

GENERAL INFORMATION

Steel grades - chemical and mechanical properties

CHEMICAL COMPOSITION (EN 10088-2 and EN 10088-4)											
(% by mass, maximum values unless indicated otherwise)											
Austenitic											
EN	C	Si	Mn	P	S	N	Cr	Mo	Ni	Others	PRE
1.4301	0.070	1.00	2.00	0.045	0.015	0.10	17.5-19.5		8.0-10.5		18
1.4307	0.030	1.00	2.00	0.045	0.015	0.10	17.5-19.5		8.0-10.5		18
1.4404	0.030	1.00	2.00	0.045	0.015	0.10	16.5-18.5	2.0-2.50	10.0-13.0		24
1.4571	0.080	1.00	2.00	0.045	0.015		16.5-18.5	2.0-2.50	10.5-13.5	Ti 5xC-0.70	24
Ferritic											
EN	C	Si	Mn	P	S	N	Cr	Mo	Ni	Others	PRE
1.4003	0.030	1.00	1.50	0.040	0.015	0.030	10.5-12.5		0.30-1.00		12
Lean Duplex and Duplex											
EN	C	Si	Mn	P	S	N	Cr	Mo	Ni	Others	PRE
1.4062 ¹⁾	0.030	1.00	2.00	0.040	0.010	0.16-0.28	21.5-24.0	0.45	1.00-2.90		26
1.4162	0.040	1.00	4.0-6.0	0.040	0.015	0.20-0.25	21.0-22.0	0.10-0.80	1.35-1.70	Cu 0.10-0.80	26
1.4362	0.030	1.00	2.0	0.035	0.015	0.05-0.20	22.0-24.0	0.10-0.60	3.5-5.5	Cu 0.10-0.60	28
1.4462	0.030	1.00	2.0	0.035	0.015	0.10-0.22	21.0-23.0	2.50-3.50	4.5-6.5		35

¹⁾ Fulfills the standard EN 10088-2

MECHANICAL PROPERTIES				
(Measured from coil, minimum values unless indicated otherwise)				
Austenitic				
Fulfills the standards EN 10088-2 and EN 10088-4				
EN	0,2 % - proof strength Rp0,2 MPa	Tensile strength Rm MPa	Elongation A* %	
1.4301	210	520-750	45	
1.4307	200	520-700	45	
1.4404	220	530-680	40	
1.4571	220	540-690	40	
Ferritic				
Fulfills the standards EN 10088-2 and EN 10088-4				
EN	0,2 % - proof strength Rp0,2 MPa	Tensile strength Rm MPa	Elongation A* %	
1.4003	320	450-650	20	
Lean Duplex and Duplex				
EN	0,2 % - proof strength Rp0,2 MPa	Tensile strength Rm MPa	Elongation A* %	
1.4062	480	680-900	20	¹⁾
1.4162	480	680-900	20	
1.4362	500	690	25	²⁾
1.4462	460	700-950	20	

¹⁾ Fulfills the standard EN 10088-2 ²⁾ EDX2304

* A80 when T < 3 mm, A5 when T ≥ 3 mm

Mechanical properties for Stalargo hollow sections are shown on page 10 and for I-beams on page 12.

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

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Stalargo press brake hollow sections

STEEL GRADES	
1.4301, 1.4307, 1.4404	
Press brake hollow sections in Duplex grades are available for dimensions with T=6-12 mm, B and H 150-500 mm	

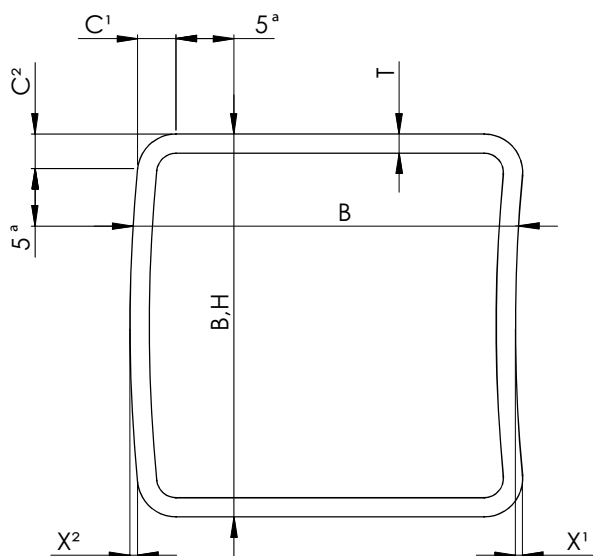
DELIVERY CONDITIONS	
Forming	Press braking, made of two U or J profiles
Welding process	Laser or MAG
Surface condition	As welded (unpol) and pickled

TUBE MARKING	
Marking on tube	Heat number
Bundle tag	Dimensions, steel grade, surface condition, bundle size, batch id, heat number, bundle number

SQUARE		Weight [kg/m]								
H x B [mm]		3	4	5	6	8	10	12	15	16
120	120	10.85	14.23	17.49	20.64					
140	140	12.74	16.76	20.65	24.43	31.63				
150	150	13.69	18.02	22.23	26.32	34.16	41.52	48.42		
160	160	14.64	19.28	23.81	28.22	36.69	44.68	52.21		
180	180	16.54	21.81	26.97	32.01	41.74	51.00	59.79		
200	200	18.43	24.34	30.13	35.80	46.80	57.32	67.38	81.58	86.07
250	250		30.66	38.03	45.28	59.44	73.12	86.34	105.28	111.35
300	300		36.98	45.93	54.76	72.08	88.92	105.30	128.98	136.63
400	400				73.72	97.36	120.52	143.22	176.38	187.19
500	500				92.68	122.64	152.12	181.14	223.78	237.75
600	600				111.64	147.92	183.72			
800	800					198.48	246.92			
1000	1000						310.12			

Tube weights (kg/m) are calculated for grades 1.4301 and 1.4307, for grades 1.4404 and 1.4571 the weight has to be multiplied by factor 8.0/7.9.

Intermediate dimensions within range are available by request f.ex. 122x122x4.0 418x418x6.0



^a This dimension is maximum when measuring B or H and minimum when measuring T

MECHANICAL PROPERTIES (EN 10088-2 and EN 10088-4)				
(Minimum values unless indicated otherwise)				
EN	0,2 % - proof strength Rp0,2 MPa	Tensile strength Rm MPa	Elongation A5 %	
1.4301	210	520-720	45	
1.4307	200	500-700	45	
1.4404	220	520-680	40	
1.4062	450	650-900	30	¹⁾
1.4162	450	650-900	30	
1.4362	420	630	25	²⁾
1.4462	460	640-950	25	

¹⁾ Fulfills the standard EN 10088-2 ²⁾ EDX2304

RECTANGULAR		Weight [kg/m]								
H x B [mm]		3	4	5	6	8	10	12	15	16
150	50	8.95	11.70	14.33	16.84					
150	80	10.37	13.60	16.70	19.69					
160	100	11.80	15.49	19.07	22.53	29.10				
180	100	12.74	16.76	20.65	24.43	31.63				
200	100	13.69	18.02	22.23	26.32	34.16				
250	150	18.43	24.34	30.13	35.80	46.80	57.32	67.38		
300	100	18.43	24.34	30.13	35.80	46.80				
300	200		30.66	38.03	45.28	59.44	73.12	86.34	105.28	111.35
350	150		30.66	38.03	45.28	59.44	73.12	86.34		
350	250		36.98	45.93	54.76	72.08	88.92	105.30	128.98	136.63
400	100		30.66	38.03	45.28	59.44				
400	300				64.24	84.72	104.72	124.26	152.68	161.91
450	150				54.76	72.08	88.92	105.30		
500	100				54.76	72.08				
500	200				64.24	84.72	104.72	124.26	152.68	161.91
500	300				73.72	97.36	120.52	143.22	176.38	187.19
500	400				83.20	110.00	136.32	162.18	200.08	212.47
600	200				73.72	97.36	120.52			
600	400				92.68	122.64	152.12			
700	200				83.20	110.00	136.32			
700	500				111.64	147.92	183.72			
800	200				92.68	122.64	152.12			
800	400				111.64	147.92	183.72			
800	600					173.20	215.32			
900	300					147.92	183.72			
900	500					173.20	215.32			
900	700					198.48	246.92			
1000	400					173.20	215.32			
1000	600					198.48	246.92			

Tube weights (kg/m) are calculated for grades 1.4301 and 1.4307, for grades 1.4404 and 1.4571 the weight has to be multiplied by factor 8.0/7.9.

Intermediate dimensions within range are available by request f.ex. 704x398x8.0
500x270x15.0

TOLERANCES	
Characteristic	Tolerance
Outside dimensions, B and H	+/- 1.0 %, min ± 1 mm
Concavity / Convexity	Included in outside dimensions
Wall thickness, T	± 10 %
Squareness of sides	90° ± 1°
External corner profile, C1, C2	Max 3T
Length	0/+10 mm
Straightness	1 mm/m
Twist	2 mm + 0.5 mm/m
External weld bead	Width: Max 2T Height: Max 2 mm

BUNDLE PACKING	
Plastic bands	
Corner protection	

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