Welded stainless construction tubes

Our stainless assortment is used in applications where extra high demands are placed on the tubes. Our tubes are available in the usual stainless grades: EN 1.4301, EN 1.4307, EN 1.4541, EN 1.4404 and EN 1.4571.

EN 1.4301, EN 1.4307, EN 1.4541, EN 1.4404, EN 1.457

Welded stainless construction tubes EN 10296-2, not annealed, in fabrication lengths of 6000 mm -0/+100 mm. Welded according to TIG or HF. Grinded G320 or G240. Untreated surface if other not stated.

PRODUCT INFORMATION

OD	WALL	KG/M	TYPE
8.00	1.00	0.175	TIG
8.00	1.50	0.244	TIG
10.00	1.00	0.225	TIG
10.00	1.50	0.319	TIG
12.00	1.00	0.275	TIG
12.00	1.50	0.394	TIG
12.00	2.00	0.501	TIG
13.00	1.50	0.432	TIG
14.00	1.00	0.326	TIG, K320
14.00	1.00	0.326	TIG
14.00	1.50	0.470	TIG
14.00	1.50	0.470	TIG, K320
14.00	2.00	0.601	TIG
14.00	2.00	0.601	TIG, K320
15.00	1.00	0.351	TIG
15.00	1.00	0.351	TIG, K320
15.00	1.50	0.507	TIG
15.00	1.50	0.507	TIG, K320
15.00	2.00	0.651	TIG
15.00	2.00	0.651	TIG, K320
16.00	1.00	0.376	TIG
16.00	1.00	0.376	TIG, K320
16.00	1.50	0.545	TIG
16.00	1.50	0.545	TIG
16.00	2.00	0.701	TIG

OD	WALL	KG/M	TYPE
16.00	2.00	0.701	TIG, K320
17.20	2.00	0.761	TIG
18.00	1.00	0.426	TIG
18.00	1.50	0.620	TIG
18.00	1.50	0.620	TIG, K320
18.00	2.00	0.801	TIG
18.00	2.00	0.801	TIG, K320
20.00	1.00	0.476	TIG
20.00	1.00	0.476	TIG, K320
20.00	1.50	0.695	TIG
20.00	1.50	0.695	TIG, K320
20.00	2.00	0.901	TIG
20.00	2.00	0.901	TIG
20.00	3.00	1.277	TIG
21.30	1.50	0.744	HF
21.30	2.00	0.967	HF
21.30	2.00	0.967	HF, K320
21.30	2.50	1.177	HF
21.30	2.50	1.177	HF, K320
22.00	1.00	0.526	TIG
22.00	1.20	0.625	TIG
22.00	1.50	0.770	TIG
22.00	1.50	0.770	TIG, K320
22.00	2.00	1.002	TIG
25.00	1.00	0.601	HF

OD	WALL	KG/M	TYPE
25.00	1.00	0.601	TIG, K320
25.00	1.20	0.715	TIG
25.00	1.20	0.715	TIG, K320
25.00	1.50	0.883	HF
25.00	1.50	0.883	HF, K320
25.00	1.50	0.883	TIG, K320
25.00	2.00	1.152	HF
25.00	2.00	1.152	TIG
25.00	2.00	1.152	HF, K320
25.00	2.50	1.409	HF
25.00	3.00	1.653	HF
26.90	1.50	0.954	HF
26.90	2.00	1.247	HF
26.90	2.00	1.247	HF, K320
26.90	2.50	1.527	HF
26.90	3.00	1.795	HF
28.00	2.00	1.302	TIG
30.00	1.00	0.726	TIG
30.00	1.00	0.726	HF
30.00	1.00	0.726	HF, K320
30.00	1.50	1.070	HF
30.00	1.50	1.070	HF, K320
30.00	1.50	1.070	TIG, K320
30.00	2.00	1.402	HF
30.00	3.00	2.028	HF
30.00	3.00	2.028	HF, K240
32.00	1.50	1.146	HF
32.00	2.00	1.502	HF
32.00	2.00	1.502	HF, K240
32.00	3.00	2.178	HF
33.70	1.50	1.209	HF
33.70	2.00	1.588	HF
33.70	2.00	1.588	HF, K320
33.70	2.50	1.953	HF
33.70	2.50	1.953	HF, K320
33.70	3.00	2.306	HF
33.70	3.00	2.306	HF/TIG
35.00	1.50	1.258	HF
35.00	1.50	1.258	HF, K320
35.00	1.50	1.258	TIG, K320
35.00	2.00	1.653	HF
38.00	1.50	1.371	HF
38.00	1.50	1.371	HF, K320
38.00	2.00	1.803	HF
38.00	2.00	1.803	HF, K320
38.00	2.50	2.222	HF
38.00	3.00	2.629	HF
40.00	2.00	1.903	HF
40.00	2.00	1.903	HF, K320
40.00	3.00	2.779	HF
40.00	3.00	2.779	HF, K320
42.40	1.50	1.536	HF
42.40	2.00	2.023	HF
42.40	2.00	2.023	HF, K320
42.40	2.50	2.498	HF
42.40	2.50	2.498	HF, K320
42.40	3.00	2.960	HF
42.40	3.00	2.960	HF, K320
42.40	3.00	2.960	HF/TIG
43.00	1.50	1.559	HF
45.00	1.50	1.634	HF
45.00	1.50	1.634	HF, K320
45.00	2.00	2.153	HF
45.00	2.00	2.153	HF, K320
48.30	2.00	2.319	HF
48.30	2.00	2.319	HF, K320
48.30	2.50	2.867	HF
48.30	2.50	2.867	HF, K320
48.30	3.00	3.403	HF
48.30	3.00	3.403	HF, K320
48.30	4.00	4.437	HF
50.00	1.50	1.822	HF
50.00	1.50	1.822	HF, K320
50.00	2.00	2.404	HF
50.00	2.00	2.404	HF, K320
50.00	3.00	3.531	HF
50.00	3.00	3.531	HF, K320
60.00	5.00	6.886	HF
60.30	1.50	2.209	HF
60.30	2.00	2.920	HF
60.30	2.00	2.920	HF, K320
60.30	2.50	3.618	HF
60.30	2.50	3.618	HF, K320
60.30	3.00	4.304	HF
60.30	3.00	4.304	HF, K320
60.30	4.00	5.639	HF
70.00	5.00	8.138	HF
76.10	1.50	2.802	HF
76.10	2.00	3.711	HF
76.10	3.00	5.491	HF
80.00	1.50	2.948	HF
80.00	2.00	3.906	HF
80.00	2.00	3.906	HF, K320
80.00	3.00	5.784	HF
80.00	4.00	7.612	HF
80.00	5.00	9.390	HF
88.90	1.50	3.283	HF
88.90	2.00	4.352	HF

OD	WALL	KG/M	TYPE
88.90	2.00	4.352	HF, K320
88.90	3.00	6.453	HF
88.90	4.00	8.504	HF
101.60	3.00	7.407	HF

OD	WALL	KG/M	TYPE
101.60	4.00	9.776	HF
108.00	2.00	5.308	HF, K400
114.30	2.00	5.624	HF
168.30	2.00	8.328	HF

CERTIFICATE, TESTING, MARKING

Agreements concerning certificate types as well as testing and marking to be made when ordering.

PACKAGING

Unless otherwise agreed, tubes is packaged in an adequate manner for material and labour costs only. Alternative packaging must be agreed when ordering. The following alternatives are available as standard.

- Bundled
- Holmenflex
- Wooden racks
- Wooden crates
- Plastic coated

DELIVERY CONDITION

Tubes can be delivered in the following conditions:

- Not annealed
- Not annealed, pickled

WELD SEAM

After welding, the outer welding bead is removed. The tolerances given for the wall thickness do not apply to the weld seam. If there are special requirements, these must be agreed when ordering.

SURFACE

Agreement on surface characteristics should be made when ordering. Tubes can be supplied with surfaces according to the table below.

SURFACE CHARACTERISTIC	EXPLANATION
Untreated	No processing after welding
Pickled	The tubes are pickled as the last stage of production
Brushed	The tubes are brushed as the last stage of production
Ground	The surface is ground Coarse grinding: Grain size 120 Normal grinding: Grain size 220 - 240 Fine grinding: Grain size 320 up to Mirror polished
Polished	After grinding, the surface is polished with grinding paste

TOLERANCE TABLE IN ACCORDANCE WITH EN - ISO 1127

OD	TOL. CLASS OD	PERMITTED DEVIATION OD	TOL. CLASS WALL	PERMITTED DEVIATION WALL
For seamless tubes independent of OD and for welded tubes with OD<168.3 mm	D2	+/-1.0% (min+/-0.5 mm)	T3	+/-10% (min+0.2 mm)
	D3	+/-0.75% (min+/-0.3 mm)		
	D4	+/-0.5% (min+/-0.1 mm)	T4	+/-7.5% (min+0.15 mm)
For welded tubes with OD ≥168.3 mm		+/-1.0% (max+/-3.0 mm)	T3	+/-10% (min+/0.2 mm)

STRAIGHTNESS FOR WELDED TUBES

OD MM	PERMITTED STRAIGHTNESS DEVIATION
Yd ≤ 17.2	
17.2 ≤ Yd ≤ 114.3	2.0 mm: 1000 mm
Yd ≤ 114.3	2.5 mm: 1000 mm
For welded tubes with OD≥ 168.3 mm	

CHEMICAL PROPERTIES

STEEL TYPES EN	ASTM	C%	N%	Cr%	Ni%	Mo%	OTHER	EN	
1.4512	409	0.02	-	12.00	-	-	Ti	1.4512	Ferritic
1.4003	S41050	0.02	-	11.50	0.40	-	-	1.4003	
1.4000	410S	0.04	-	12.00	-	-	-	1.4000	
1.4016	430	0.04	-	16.50	-	-	-	1.4016	
1.4021	S42010	0.20	-	13.00	-	-	-	1.4021	Mart.
1.4028	420	0.30	-	12.50	-	-	-	1.4028	
1.4418	-	0.03	0.04	16.00	5.00	1.0	-	1.4418	
1.4362	S32304	0.02	0.10	23.00	4.50	-	-	1.4362	
1.4462	S31803	0.02	0.17	22.00	5.50	3.0	-	1.4462	Duplex
1.4410	S32750	0.02	0.27	25.00	7.00	4.0	-	-	Austenitic
1.4372	201	0.05	0.15	17.00	5.00	-	Mn	-	Austenitic
1.4310	301	0.10	0.04	17.00	7.00	-	-	1.4310	Austenitic
1.4307	304L	0.02	0.06	18.30	9.20	-	-	-	Austenitic
1.4301	304	0.04	0.06	18.30	8.70	-	-	1.4301	Austenitic
1.4311	304LN	0.02	0.14	18.30	8.70	-	-	1.4311	Austenitic
1.4541	321	0.04	0.01	17.30	9.20	-	Ti	1.4541	Austenitic
1.4305	303	0.07	0.06	18.00	8.50	-	S	1.4305	Austenitic
1.4567	S30430	0.01	0.02	18.00	9.00	-	Cu	1.4567	Austenitic
1.4306	304L	0.02	0.06	18.30	10.20	-	-	1.4306	Austenitic
1.4303	305	0.02	0.02	18.00	11.50	-	-	1.4303	Austenitic
1.4404	316L	0.02	0.06	17.30	11.00	2.2	-	1.4404	Austenitic
1.4401	316	0.04	0.04	16.80	10.70	2.2	-	1.4401	Austenitic
1.4406	316LN	0.02	0.14	17.50	11.00	2.2	-	1.4406	Austenitic
1.4571	316Ti	0.04	0.01	17.00	11.00	2.2	TI	1.4571	Austenitic
1.4432	316L	0.02	0.06	17.00	11.70	2.7	-	-	Austenitic
1.4436	316	0.04	0.06	17.00	11.00	2.7	-	1.4436	Austenitic
1.4435	316L	0.02	0.06	17.30	12.70	2.7	-	1.4435	Austenitic
1.4438	317L	0.02	0.08	18.30	12.20	3.2	-	1.4438	Austenitic
1.4434	317LN	0.02	0.12	17.00	11.00	3.2	-	-	Austenitic
1.4439	S31726	0.02	0.14	17.30	12.70	4.2	-		Austenitic

STEEL TYPES EN	ASTM	C%	N%	Cr%	Ni%	Mo%	OTHER	EN	
1.4539	NO8904	0.01	0.06	20.00	25.00	4.5	Cu		Austenitic
1.4547	S31254	0.01	0.20	20.00	18.00	6.1	Cu	-	Austenitic
1.4652	S32654	0.01	0.50	24.00	22.00	7.3	Mn. Cu	-	Austenitic
1.4948	304H	0.05	0.06	18.30	8.70	-	-	1.4948	Austenitic
1.4878	321H	0.05	0.01	17.30	9.20	-	Ti	1.4878	Austenitic
1.4818	S30415	0.05	0.15	18.50	9.50	-	Si. Ce	-	Austenitic
1.4833	309S	0.06	0.08	22.50	12.50	-	-	1.4833	Austenitic
1.4828	-	0.04	0.04	20.00	12.00	-	Si	1.4828	Austenitic
1.4835	S30815	0.09	0.17	21.00	11.00	-	Si. Ce	-	Austenitic
1.4845	310S	0.05	0.06	25.00	20.00	-	-	1.4845	Austenitic
1.4854	S35315	0.05	0.15	25.00	35.00	-	Si. Ce	-	Austenitic
1.4439	S31726	0.02		17.3					