



SEAMLESS HOT FINISHED
STEEL TUBES & PIPES FOR
PRESSURE APPLICATIONS

voestalpine Tubulars GmbH & Co KG
www.voestalpine.com/tubulars

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ONE STEP AHEAD.

voestalpine Tubulars

YOUR SUPPLIER OF SEAMLESS TUBES AND PIPES

Carbon steel and low alloyed tubes and pipes are manufactured in size ranges between 26.7 to 193.7 mm (1.050 and 7⁵/₈ inch) in grades according to international standards as well as to customer specifications. The main standards for our products for pressure applications are ASTM and EN.

ASTM APPLICATIONS:

- » Seamless Carbon Steel Pipes for High Temperature Service acc. to ASTM A106/A106M & ASME SA 106
Available steel grades: GRADE A, GRADE B, GRADE C
- » Seamless Carbon Steel Pipes for Low-Temperature Service and Other Applications with Required Notch Toughness acc. to ASTM A333/A333M & ASME SA 333
Available steel grades: GRADE 6, GRADE 1
- » Seamless Ferritic Alloy-Steel Pipes for High-Temperature Service acc. to ASTM A335/A335M & ASME SA 335
Available steel grades: GRADE P1, GRADE P11, GRADE P12, GRADE P22, GRADE P5, GRADE P9
GRADE P91, GRADE P92 available soon
- » Seamless Carbon-Molybdenum Alloy-Steel Boiler and Superheater Tubes acc. ASTM A209/A209M & ASME SA 209
Available steel grades: GRADE T1, GRADE T1a
- » Seamless Medium-Carbon Steel Boiler and Superheater Tubes acc. ASTM A210/A210M & ASME SA 210
Available steel grades: GRADE A-1, GRADE C
- » Seamless Ferritic Alloy-Steel Boiler, Superheater and Heat-Exchanger Tubes acc. to ASTM A213/A213M & ASME SA 213
Available steel grades: GRADE T1, GRADE T11, GRADE T12, GRADE T22, GRADE T5, GRADE T9
GRADE T91, GRADE T92 available soon

EN 10216 APPLICATIONS:

- » Part 1: Non-alloy steel tubes with specified room temperature properties
Available steel grades: P235TR1, P235TR2
- » Part 2: Non-alloy and alloy steel tubes with specified elevated temperature properties
Available steel grades: P235GH, P265GH, 20MnNb6, 16Mo3, 13CrMo4-5, 10CrMo9-10, 25CrMo4
X11CrMo5, X11CrMo9-1, X10CrMoVNb9-1, X10CrWMoVNb9-2 available soon
- » Part 3: Alloy fine grain steel tubes
Available steel grades: P275*, P355*, P460*, P620*, P690* (* = all variations acc. to Table 2)
- » Part 4: Non-alloy and alloy steel tubes with specified low temperature properties
Available steel grades: P215NL, P255QL, P265NL

CERTIFICATIONS:



- » Pressure-Equipment-Directive: voestalpine Tubulars runs a quality management system which has undergone a specific assessment for materials of pressure equipment (PED 2014/68/EU Annex I, section 4.3) and is certified by a competent body (TUEV SUED).
- » Pressure components: TUEV AD 2000 W0 / TRD 100 and AD 2000 W4.

Latest edition of certificates available in the download area of our web page www.voestalpine.com/tubulars or in the Tubulars App (App Store, Google Play Store – App name: myTubulars)



SEAMLESS HOT FINISHED STEEL TUBES/PIPES ACC. TO ASTM-STANDARDS

PRODUCTION RANGE ACCORDING TO ASTM

NORMAL PIPE SIZE	OUTSIDE DIAMETER		WALL THICKNESS		PLAIN END WEIGHT					
					SCHEDULE STD / 40		SCHEDULE XS / 80		SCHEDULE 120	
	mm	inch	mm	inch	kg/m	ppf	kg/m	ppf	kg/m	ppf
3/4	26.70	1.050	2.87	0.113	1.69	1.13	2.20	1.47		
			3.91	0.154						
1	33.40	1.315	3.38	0.133	2.50	1.68	3.24	2.17		
			4.55	0.179						
			6.35	0.250						
1 1/4	42.20	1.660	3.56	0.140	3.39	2.27	4.47	3.00		
			4.85	0.191						
			6.35	0.250						
			9.70	0.382						
1 1/2	48.30	1.900	3.68	0.145	4.05	2.72	5.41	3.63		
			5.08	0.200						
			7.14	0.281						
			10.15	0.400						
2	60.30	2.375	3.91	0.154	5.44	3.66	7.48	5.03		
			5.54	0.218						
			8.74	0.344						
			11.07	0.436						
2 1/2	73.00	2.875	5.16	0.203	8.63	5.80	11.41	7.67		
			7.01	0.276						
			9.53	0.375						
			14.02	0.552						
3	88.90	3.500	5.49	0.216	11.29	7.58	15.27	10.26		
			7.62	0.300						
			11.13	0.438						
			15.24	0.600						
3 1/2	101.60	4.000	5.74	0.226	13.57	9.12	18.63	12.52		
			8.08	0.318						
			16.15	0.636						
4	114.30	4.500	6.02	0.237	16.07	10.80	22.32	15.00	28.32	19.02
			8.56	0.337						
			11.13	0.438						
			13.49	0.531						
			17.12	0.674						
5	141.30	5.563	6.55	0.258	21.77	14.63	30.97	20.80	40.28	27.06
			9.53	0.375						
			12.70	0.500						
			15.88	0.625						
			19.05	0.750						
6	168.30	6.625	7.11	0.280	28.26	18.99	42.56	28.60	54.20	36.43
			10.97	0.432						
			14.27	0.562						
			18.26	0.719						
			21.95	0.864						

SCHEDULE 160		SCHEDULE XXS	
kg/m	ppf	kg/m	ppf
4.24	2.85		
5.61	3.76		
		7.77	5.22
7.25	4.86		
		9.56	6.41
11.1	7.47		
		13.44	9.04
14.92	10.02		
		20.39	13.71
21.35	14.34		
		27.68	18.60
		34.03	22.87
33.54	22.53		
		41.03	27.57
49.11	32.99		
		57.43	38.59
67.56	45.39		
		79.22	53.21

DIMENSIONS & LENGTHS:

- » NPS ¾ - 1-1/2: Hot finished, as-rolled or normalized rolled steel grades in lengths of 4.0 – 17.0 m (approx. 14 – 56 ft)
- » NPS 2 – 6: Full or isothermal annealed and normalized and tempered steel grades in lengths of 4.0 – 14.2 m (approx. 14 – 46 ft)

Other pipe sizes, specialties and lengths may be furnished by agreement.

TESTING METHODS:

The following testing methods are available:

- » Hydrostatic test (hydraulic leak tightness)
- » Eddy-current examination of the pipe for the detection of discontinuities on external surface acc. to ASTM E 309
- » Electromagnetic non-destructive examination for the verification of the hydraulic leak tightness acc. to ASTM E309 or ASTM E570 (as an option of the manufacturer or upon clients' request)
- » Flux leakage examination for the detection of external surface and internal surface imperfections in longitudinal and transverse orientation acc. to ASTM E570
- » Ultrasonic examination of pipe body for the detection of external surface and internal surface imperfections in longitudinal and transverse orientation acc. to ASTM E213

Please note:

Not all tests are available for all sizes. Description of defects acc. to the relevant product specification. Other testing methods upon request.

SEAMLESS HOT FINISHED STEEL TUBES/PIPES FOR PRESSURE PURPOSES ACC. TO EN-10216-STANDARDS

PRODUCTION RANGE ACC. TO EN-STANDARDS

OD ... Outside Diameter
WT ... Wall Thickness



Standard production sizes, weight in kg/m



Special/intermediate production sizes (OD/WT) upon request

Please note for all sizes of this chart: Steel grades,
exact pipe lengths, tolerances and NDT upon request!

		Wall thickness												
mm		4.00	4.50	5.00	5.60	6.30	7.10	8.00	8.80	10.00	11.00	12.00	12.50	
inch		0.157	0.177	0.197	0.220	0.248	0.280	0.315	0.346	0.394	0.433	0.472	0.492	
Outside Diameter	38.00	1.496	3.35	3.72	4.07	4.47	4.93							
	42.40	1.669	3.79	4.21	4.61	5.08	5.61	6.18	6.79					
	44.50	1.752	4.00	4.44	4.87	5.37	5.94	6.55	7.20	7.75				
	48.30	1.902	4.37	4.86	5.34	5.90	6.53	7.21	7.95	8.57				
	51.00	2.008	4.64	5.16	5.67	6.27	6.94	7.69	8.48	9.16	10.11			
	54.00	2.126	4.93	5.49	6.04	6.68	7.41	8.21	9.08	9.81	10.85	11.66		
	57.00	2.244	5.23	5.83	6.41	7.10	7.88	8.74	9.67	10.46	11.59	12.48		
		Wall thickness												
mm		4.00	4.50	5.00	5.60	6.30	7.10	8.00	8.80	10.00	11.00	12.00	12.50	
inch		0.157	0.177	0.197	0.220	0.248	0.280	0.315	0.346	0.394	0.433	0.472	0.492	
Outside Diameter	60.30	2.374	5.55	6.19	6.82	7.55	8.39	9.32	10.32	11.18	12.40	13.37	14.29	
	63.50	2.500	5.87	6.55	7.21	8.00	8.89	9.88	10.95	11.87	13.19	14.24	15.24	
	70.00	2.756	6.51	7.27	8.01	8.89	9.90	11.01	12.23	13.28	14.80	16.01	17.16	
	73.00	2.874	6.81	7.60	8.38	9.31	10.36	11.54	12.82	13.93	15.54	16.82	18.05	
	76.10	2.996	7.11	7.95	8.77	9.74	10.84	12.08	13.44	14.61	16.30	17.66	18.97	
	82.50	3.248	7.74	8.66	9.56	10.62	11.84	13.20	14.70	15.99	17.88	19.40	20.86	
	88.90	3.500	8.38	9.37	10.35	11.50	12.83	14.32	15.96	17.38	19.46	21.13	22.76	
	95.00	3.740	8.98	10.04	11.10	12.35	13.78	15.39	17.16	18.71	20.96	22.79	24.56	
	101.60	4.000	9.63	10.78	11.91	13.26	14.81	16.55	18.47	20.14	22.59	24.58	26.52	
	108.00	4.252	10.26	11.49	12.70	14.14	15.80	17.67	19.73	21.53	24.17	26.31	28.41	
	114.30	4.500	10.88	12.19	13.48	15.01	16.78	18.77	20.97	22.90	25.72	28.02	30.27	
	121.00	4.764	11.54	12.93	14.30	15.94	17.82	19.94	22.29	24.35	27.37	29.84	32.26	
	127.00	5.000	12.13	13.59	15.04	16.77	18.75	20.99	23.48	25.65	28.85	31.47	34.03	
	133.00	5.236	12.73	14.26	15.78	17.59	19.69	22.04	24.66	26.95	30.33	33.10	35.81	
	139.70	5.500	13.39	15.00	16.61	18.52	20.73	23.22	25.98	28.41	31.99	34.91	37.79	
	146.00	5.748		15.70	17.39	19.39	21.70	24.32	27.23	29.78	33.54	36.62	39.66	
	152.40	6.000		16.41	18.18	20.27	22.70	25.44	28.49	31.16	35.12	38.36	41.55	
	159.00	6.260		17.15	18.99	21.19	23.72	26.60	29.79	32.60	36.75	40.15	43.50	
	165.10	6.500		17.82	19.74	22.03	24.67	27.67	30.99	33.92	38.25	41.80	45.31	
	168.30	6.626		18.18	20.14	22.47	25.17	28.23	31.63	34.61	39.04	42.67	46.26	
177.80	7.000			21.31	23.78	26.65	29.89	33.50	36.68	41.38	45.25	49.07		
193.70	7.626						32.67	36.64	40.13	45.30	49.56	53.77		
													55.86	

DIMENSIONS & LENGTHS:

- » OD 38.0-57.0 mm: Hot finished, as-rolled or normalized rolled steel grades in lengths of 4.0 – 17.0 m (approx. 14 - 56 ft)
- » OD 60.3-193.7 mm: Hot finished, as rolled or normalized rolled, full or isothermal annealed, normalized & tempered and quenched & tempered steel grades in lengths of 4.0 – 14.2 m (approx. 14 – 46 ft)

Other pipe sizes, specialties and lengths may be furnished by agreement.

TESTING METHODS:

The following testing methods are available:

- » Hydrostatic test (Hydraulic leak tightness)
- » Electromagnetic examination for the verification of the hydraulic leak tightness acc.to EN ISO 10893 Part 1 (as an option of the manufacturer or upon clients' request)

- » Eddy-current examination for the detection of imperfections acc. to EN ISO 10893 Part 2
- » Flux leakage examination for the detection of longitudinal and/or transverse imperfections acc. to EN ISO 10893 Part 3
- » Ultrasonic examination of the pipe body for the detection of laminar imperfections acc. to EN ISO 10893 Part 8
- » Ultrasonic examination of the pipe body for the detection of longitudinal and/or transverse imperfections acc. to EN ISO 10893 Part 10
- » Ultrasonic thickness testing acc. to EN ISO 10893 Part 12

Please note:

Not all tests are available for all sizes. Description of defects acc. to the relevant product specification (EN 10216 Part 1-4) and test category (TC1/TC2). Other testing methods upon request.

13.00	14.20	16.00	17.50	18.00	19.00	20.00	21.00	22.00	23.00	24.00	25.00	26.00	27.00	28.00
0.512	0.559	0.630	0.689	0.709	0.748	0.787	0.827	0.866	0.906	0.945	0.984	1.024	1.063	1.102

13.00	14.20	16.00	17.50	18.00	19.00	20.00	21.00	22.00	23.00	24.00	25.00	26.00	27.00	28.00
0.512	0.559	0.630	0.689	0.709	0.748	0.787	0.827	0.866	0.906	0.945	0.984	1.024	1.063	1.102

16.19														
18.27	19.54													
19.24	20.59													
20.23	21.68													
22.28	23.92	26.24												
24.33	26.16	28.77	30.81											
26.29	28.30	31.17	33.45	34.18	35.61									
28.41	30.61	33.78	36.30	37.11	38.70	40.25								
30.46	32.85	36.30	39.06	39.95	41.70	43.40	45.06	46.66						
32.48	35.05	38.79	41.78	42.75	44.65	46.51	48.32	50.08	51.79					
34.62	37.40	41.43	44.67	45.72	47.79	49.82	51.79	53.71	55.59	57.41				
36.55	39.50	43.80	47.26	48.39	50.61	52.78	54.90	56.97	58.99	60.96	62.89			
38.47	41.60	46.17	49.85	51.05	53.42	55.73	58.00	60.22	62.39	64.51	66.59			
40.62	43.95	48.81	52.74	54.02	56.56	59.04	61.47	63.86	66.19	68.48	70.72			
46.81	46.16	51.30	55.46	56.82	59.51	62.15	64.74	67.28	69.77	72.21	74.60			
46.81	48.40	53.82	58.22	59.66	62.51	65.30	68.05	70.75	73.40	76.00	78.55			
46.81	50.71	56.43	61.07	62.59	65.60	68.56	71.47	74.33	77.14	79.90	82.62			
48.76	52.84	58.83	63.70	65.30	68.46	71.57	74.63	77.64	80.60	83.51	86.38			
49.79	53.96	60.10	65.08	66.72	69.96	73.15	76.29	79.38	82.42	85.41	88.35			
52.83	57.29	63.84	69.18	70.94	74.41	77.83	81.21	84.53	87.80	91.03	94.21			
57.93	62.86	70.12	76.04	77.99	81.86	85.67	89.44	93.16	96.82					

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