

Datasheet: EN 1.4404/316L – Austenite Welded Tube - Stainless Steel Alumeco ApS 15-08-2025	Internal alloy name: 1.4404 Alloy type: Acid-resistance Austenite Chemical Symbol: X2CrNiMo17-12-2 EN: EN 1.4404 AISI: 316L UNS: S31603 SS: 2348 JIS: SUS316L GB: S31603
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Main usage: - Food processing industry - Petrochemical equipment - Chemical and pharmaceutical industry - Construction sector - Automotive and aerospace industry - Electronical equipment	Main properties: - Great weldability - High corrosion resistance to non-oxidising acids and chlorine-containing materials - Good formability, both cold and hot - Higher thermal expansion and lower heat conductivity compared to other carbon steels	Important norms and literature: General Standards EN 10088-1: List of stainless Steel Product standards: EN 10217-7: Welded steel tubes for pressure purposes- Technical delivery conditions-Part 7: Stainless steel tubes Geometric Tolerance: EN 1127 D3/T3: Stainless steel tubes - Dimensions, tolerances and conventional masses per unit length
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Chemical composition in %: EN 10088-1

C	Si	Mn	P	S	Cr	Mo	Ni	Remarks	Rest
≤ 0,030	≤ 1,00	≤ 2,00	≤ 0,045	≤ 0,030*	16,5 - 18,5	2,0 - 2,5	10,0 - 13,0	N ≤ 0,10	Fe

* For machinability, a controlled sulfur content of 0,015%-0,030% is recommended & permitted. For weldability a controlled sulfur content of 0,008%- 0,030% is recommended & permitted. For polishability, a controlled sulfur content of 0,015% is recommended.

Mechanical properties: EN 10217-7

Outer diameter (mm)	Wall thickness (mm)	R _m (MPa)	R _{p0,2} (MPa)	R _{p1,0} (MPa)	Elongation A%	Impact energy KV ₂	Hardness* HB
21,3 - 600	1,3 - 3	530 - 680	Min. 240	Min. 270	40	100	Max. 215

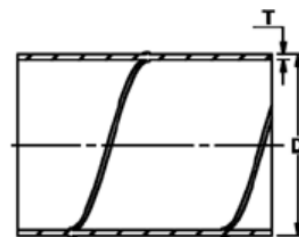
* Information values only;

Physical properties:

Density g/cm ³	Electrical resistivity Ω mm ² / m	Thermal conductivity W/m K	Thermal expansion (μm m ⁻¹ K ⁻¹)	Specific heat (J kg ⁻¹ K ⁻¹)	E - modulus (N / mm ²)	Magnetizable	PREN (Min.)
8,0	0,75	15	16,0	500	200.000	No	16,5

Product Overview:

Material Nr.	DN	Diameter D (mm)	Thickness T (mm)	Length (mm)	Tolerance Norm	Weight (kg)	
1361995	10	17,2	1,6	6000	D ₃ /T ₃	0,62	
1358428	15	21,3	2,00	6000	D ₃ /T ₃	0,97	
1358430	20	26,9	2,00	6000	D ₃ /T ₃	1,25	
1358532	25	33,7	2,00	6000	D ₃ /T ₃	1,59	
1358533	32	42,4	2,00	6000	D ₃ /T ₃	2,02	
1358534	40	48,3	2,00	6000	D ₃ /T ₃	2,32	
1358535	50	60,3	2,00	6000	D ₃ /T ₃	2,92	
1358537	65	76,1	2,00	6000	D ₃ /T ₃	3,71	
1358538	80	88,9	2,00	6000	D ₃ /T ₃	4,35	
1358539	100	114,3	2,00	6000	D ₃ /T ₃	5,62	
1358540	125	139,7	2,00	6000	D ₃ /T ₃	6,90	
1358541	150	168,3	2,00	6000	D ₃ /T ₃	8,33	
1358542	200	219,1	2,00	6000	D ₂ /T ₃	10,87	
1358543	250	273,0	3,00	6000	D ₂ /T ₃	20,28	
1358546	300	323,9	3,00	6000	D ₂ /T ₃	24,11	
1358547	350	355,6	3,00	6000	D ₂ /T ₃	26,49	
1358549	400	406,4	3,00	6000	D ₂ /T ₃	30,30	



Tolerances for welded steel tubes for EN 1.4404:

Tolerances on outside diameter	
Tolerance class	Tolerance on outside diameter
D ₂	± 1% with min. ± 0,5 mm
D ₃	± 0,75% with min. ± 0,3 mm

* Values are referred from Table 1 of EN 1127:1992

Tolerances on thickness	
Tolerance class	Tolerance on thickness
T ₃	± 10% with min. ± 0,2 mm

* Values are referred from Table 2 of EN 1127:1992

Tolerances on exact lengths	
Length L (mm)	Tolerance on exact length (mm)
L ≤ 6000	+ 5 0

* Values are referred from Table 12 of EN 10217-7:2014