

ASTM B861 / ASME SB861

Gr.1 Gr.2 Gr.12 Titanium tubes



ASTM B861 ASME SB861 Gr.2 Titanium Tubes

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Standard: ASTM B861 / ASME SB861

Type: Seamless and Welded.

Description Name: ASME SB861 Titanium Gr.2 Tubes, ASME SB861 Gr.2 Titanium tubes, ASTM B861 Titanium Gr.2 seamless tubes, Titanium Alloy Grade 12 seamless pipes, Titanium Alloy Gr.12 tubes, Gr.2 Titanium alloy tubing.

Diameter range: 6-219mm.

Thickness range: 0.3-12mm.

Shape: Round.

Length: Single random length/ Double random length or as customer's actual request. Max length 12000mm.

ASTM B861 / ASME SB861 Gr.1 Gr.2 Gr12 Chemical

Composition:

Element	N	C	H	Fe	O	Al	V	Mo	Ni	Pd	Ti
Type											
GR.1	≤0.03	≤0.08	≤0.015	≤0.2	≤0.18						Residual
GR.2	≤0.03	≤0.08	≤0.015	≤0.3	≤0.25						Residual
GR.3	≤0.05	≤0.08	≤0.015	≤0.3	≤0.35						Residual
GR.7	≤0.03	≤0.08	≤0.015	≤0.3	≤0.25					0.12-0.25	Residual
GR.9	≤0.02	≤0.08	≤0.015	≤0.25	≤0.15	2.5-3.3	2.0-3.0				Residual
GR.12	≤0.03	≤0.08	≤0.015	≤0.3	≤0.25			0.2-0.4	0.6-0.9		Residual
GR.16	≤0.03	≤0.08	≤0.015	≤0.3	≤0.25					0.04-0.08	

ASTM B861 / ASME SB861 Gr.1 Gr.2 Gr12 Tensile

Requirements

Type	Tensile Testing		
GR.1	$\sigma_b \geq 240 \text{ Mp a}$	$138 \text{ Mp a} \leq \sigma_0.2 \leq 310 \text{ Mp a}$	$\delta \geq 24\%$
GR.2	$\sigma_b \geq 345 \text{ Mp a}$	$275 \text{ Mp a} \leq \sigma_0.2 \leq 450 \text{ Mp a}$	$\delta \geq 20\%$
GR.3	$\sigma_b \geq 450 \text{ Mp a}$	$380 \text{ Mp a} \leq \sigma_0.2 \leq 550 \text{ Mp a}$	$\delta \geq 18\%$
GR.7	$\sigma_b \geq 345 \text{ Mp a}$	$275 \text{ Mp a} \leq \sigma_0.2 \leq 450 \text{ Mp a}$	$\delta \geq 20\%$
GR.9A	$\sigma_b \geq 620 \text{ Mp a}$	$483 \text{ Mp a} \leq \sigma_0.2$	$\delta \geq 15\%$
GR.9B	$\sigma_b \geq 860 \text{ Mp a}$	$725 \text{ Mp a} \leq \sigma_0.2$	$\delta \geq 10\%$
GR.12	$\sigma_b \geq 483 \text{ Mp a}$	$345 \text{ Mp a} \leq \sigma_0.2$	$\delta \geq 18\%$
GR.16	$\sigma_b \geq 345 \text{ Mp a}$	$275 \text{ Mp a} \leq \sigma_0.2 \leq 450 \text{ Mp a}$	$\delta \geq 20\%$



Flattening Test

Tubing shall withstand, without cracking, flattening under a load applied gradually at room temperature until the distance between the load platens is not more than H in. H is calculated as SB861 standard.

Flaring Test

For tube 3 1/2 in.(88mm) in outside diameter and smaller, and 0.134 in.(3.4mm) in wall thickness and thinner, a section of tube approximately 4 in.(102mm) in length shall withstand being flared with a tool having a 60°included angle until the tube at the mouth of the flare has been expanded in accordance with table4 the flared end shall show no cracking or rupture visible to the unaided eye. Flaring tests on larger diameter tube or tubing outside the range of standard shall be as agreed upon between the manufacturer and the purchaser.

Hydrostatic or Nondestructive Testing

Welded tubing shall be tested using both a nondestructive electromagnetic test and an ultrasonic test as described in standard. Seamless and welded/cold worked tubing shall be tested using an ultrasonic test as described in standard.

Welded or seamless tubing shall be tested with a hydrostatic or pneumatic test as described in standard. Other requirements details can check standard.

Markings

Each length of tube 1/2 in. (13mm) in outside diameter and larger, manufactured in accordance with this specification, shall be legibly marked, either by stenciling, stamping, or rolling, with the manufacture's private identifying mark, the ASTM designation, the tube class, the grade, and heat number. On smaller than 1/2 in. outside diameter tubing that is bundled, the same information may be legibly stamped on a metal tag securely attached to each bundle.



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ASTM B861 / ASME SB861 Gr.2 Titanium Tubes photo



ASTM B861 ASME SB861 Gr.1 Titanium Tubes Size Inspection



ASTM B 861 ASME SB861 GR.2 Titanium Tubes OD. Inspection



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ASTM B 861 ASME SB861 GR.2 Titanium Pipes

ASTM B861 / ASME SB861 GR.1 Titanium tube Packaging

Packed in ply wooden box wrapped in plastic, and suitably protected for sea-worthy delivery or as requested.



ASTM B861 ASME SB861 GR.2 Titanium Tubes Packaging by Wooden Box



Read more information of this product

- [ASTM B861 ASME SB861 Gr.2 Titanium Tubes](#)

Related products

Titanium Alloy Tubes

- [ASTM B338 GR.1 GR.2 GR.3 Titanium Alloy Tubes](#)
- [Seamless and Welded Titanium Alloy tubes](#)
- [Heat Exchanger and Condenser tubes](#)

Cold Drawn precision tubes

- [JIS G3445 STKM11A, STKM12C, STKM12A Steel Tubes](#)
- [EN10305-1 Seamless Cold Drawn Tubes](#)
- [DIN2391 Seamless Precision Steel tubes](#)

Carbon steel

- [ASTM A519 ASME SA519 SAE1010 Seamless tubes and pipes](#)
- [ASTM A519 ASME SA519 SAE1020 seamless tubes and pipes](#)
- [ASTM A519 ASME SA519 SAE1026 seamless tubes and pipes](#)
- [ASTM A519 ASME SA519 SAE1035 seamless tubes and pipes](#)
- [ASTM A519 ASME SA519 SAE1045 seamless tubes and pipes](#)
- [ASTM A519 ASME SA519 SAE4130 seamless tubes and pipes](#)
- [ASTM A179 / ASME SA179 Seamless tubes](#)
- [ASTM A192 / ASME SA192 Seamless boiler tubes](#)
- [ASTM A210 / ASME SA210 GRADE A1 Seamless tubes](#)
- [ASTM A210 / ASME SA210 GRADE C Seamless tubes](#)

Alloy steel

- [ASTM A213 T11 T12 T22 Seamless alloy tubes](#)
- [ASTM A 213/A 213M T2, T5, T5b, T9, T91 Seamless Alloy Steel tubes](#)
- [ASTM A335 P1, P2, P5, P9 Seamless alloy pipes](#)
- [ASTM A335 P11, P12, P22, P91 seamless alloy pipes](#)
- [ASTM A209 ASME SA209 T1 tubes](#)

Stainless steel and Duplex

- [ASTM A269 Stainless Steel Tubes](#)
- [ASTM A213 Stainless Steel Tubes](#)



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- [ASTM A249 Stainless Steel Tubes](#)
- [ASTM A270 Sanitary Stainless Tubing](#)
- [ASTM A312 Stainless Steel Pipes](#)
- [ASTM A789 Duplex Stainless Tubing](#)

Copper and Brass

- [ASTM B111 Copper and Brass Tubes](#)

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- [Cold drawn precision steel tubes](#)
- [Seamless alloy steel tubes](#)
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- [Stainless steel tubes](#)
- [U bent heat exchanger tubes](#)
- [Fin tubes](#)
- [Bearing steel tubes](#)



About CTS TUBES

CTS TUBES provide a wide range of steel products as Steel Pipes, Seamless Tube and Seamless Pipes, Alloy Pipes, Pipe Fittings, Stainless Steel Pipe, Copper Tube and Titanium Alloy Tube used in the industry, construction etc. We are looking forward to getting in contact by phone or email and we hope that you enjoy our website. More than ten years of profound knowledge turn CTS TUBES to your partner as trading house for tubes, fittings and stainless steel. The name CTS TUBES stands for certified quality, because of that, all products of our wide range consist to demanding norms and the highest standards. CTS TUBES also stands for know-how, effective service, and best solutions for your profit. Our qualified team in our export department in China is always at your disposal and ready to help you. Get in touch if you are interested in our products or cooperation.



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Get in Touch



If you are interested in our products or cooperation with us, even having a comment or a suggestion, please contact us now for more detailed information.

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