

## ASTM A 193 Gr.B8TA

# STAINLESS STEEL

### CLASS 1A

BOLTING MATERIAL FOR LOW TEMPERATURE SERVICE

ASTM A193 Gr.B8TA Class 1A is a titanium stabilized austenitic stainless steel with good general corrosion resistance. It has excellent resistance to intergranular corrosion after exposure to temperatures in the chromiumcarbide solution treated and strain hardened precipitation. range of 800 – 1500°F (427 – 816°C). The alloy resists oxidation to 1500°F (816°C) and has higher creep and stress rupture properties than alloys 304 and 304L. It also possesses good low temperature toughness. ASTM A193 Gr.B8TA Class 1A cannot be hardened by heat treatment, only by cold working. It can be easily welded and processed by standard shop fabrication practices.

#### Chemical Properties

C	Si	Mn	P	S	Cr	Ni
0.08 Max	1.00 Max	2.00 Max	0.045 Max	0.030 Max	18.0-20.0	8.0-11.0

#### Mechanical Properties

Yield strength	Tensile strength	Elongation	Reduction	Hardness
Min 0.2% Mpa	Min Mpa	Min %	Min %	HRB Max
205	515	30	50	90

#### Heat Treatment

Carbide Solution Treated in the finished condition.

#### Equivalent Designation

UNS S32100  
Gost 08X18H10T  
Din X6CrNiTi18-10  
Werkstoff.No. 1.4541  
AFNOR X6CrNiTi18-10  
BS 321 S 12

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