

MATERIAL GRADE DATA SHEET

ASTM A 193 Gr.B8MLN



CLASS 1

BOITING MATERIAL FOR LOW TEMPERATURE SERVICE

ASTM A193 Gr.B8MLN Class 1 is a lowcarbon, nitrogen-enhanced version of Type 316 molybdenum-bearing austenitic stainless steel. The Type 316 alloys are more resistant to general corrosion and pitting/crevice corrosion than the conventional chromium-nickel austenitic stainless steels such as Type 304. They also offer higher creep, stress-rupture and tensile strength at elevated temperature. The nitrogen in Type 316LN adds additional resistance to sensitization in some circumstances. ASTM A193 Gr. B8MLN Class 1 are also used for conveying fluids under extreme temperatures in heat transfer process equipment like boilers, heat exchangers, condensers and others.

Chemical Properties

С	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

Yeild strength	Tensile strength	Elongation	Reduction	Hardness
Min 0.2% Mpa	Min Mpa	Min %	Min %	HRB Max
205	515	30	50	96

Heat Treatment

Carbide Solution Treated

Equivalent Designation

UNS \$31653 Din X6 CrNiMoN 17 2 2 Werkstoff.No. 1.4406 Jis sus316 AFNOR Z 2 CND 17.12

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