

**TECHNICAL DATA SHEET**

**ASTM A193 GR.B8MLN & B8MLNA - S31653 ( CL. 1,1A,1D)**

**CHEMICAL COMPOSITION**

Elements	C %	Mn %	P %	S %	Si %	Cr %	Mo %	Ni %	N%
Min						16.00	2.00	10.00	0.10
Max	0.030	2.00	0.045	0.030	1.00	18.00	3.00	13.00	0.16

**MECHANICAL PROPERTIES (METRIC PRODUCT)**

GRADE	DIAMETER (mm)	TENSILE STRENGTH MPa (Min)	YIELD STRENGTH 0.2% Mpa (Min)	ELONGATION IN % (Min)	REDUCTION AREA% (Min)	HARDNESS HRC/HBW/HRB	HT Tempering Temp °c (Min)
B8MLN CL.1 & 1D	All Diameters	515	205	30	50	223 HBW or 96 HRB	Carbide Solution Treated
B8MLNA CL.1A	All Diameters	515	205	30	50	192 HBW or 90 HRB	Carbide Solution Treated in the Finish Condition

**MECHANICAL PROPERTIES (INCH PRODUCT)**

GRADE	DIAMETER (mm)	TENSILE STRENGTH Ksi (Min)	YIELD STRENGTH 0.2% Ksi (Min)	ELONGATION IN % (Min)	REDUCTION AREA% (Min)	HARDNESS HRC/HBW/HRB	HT Tempering Temp °c (Min)
B8LN CL.1 & 1D	All Diameters	75	30	30	50	223 HBW or 96 HRB	Carbide Solution Treated
B8LNA CL.1A	All Diameters	75	30	30	50	192 HBW or 90 HRB	Carbide Solution Treated in the Finish Condition

**NOTE:**

Material Spec : ASTM A193 GR.B8MLN & B8MLNA

Dimension STD : As per approved DRG.

Heat Treatment type : Carbide Solution Treated / Carbide Solution Treated in the Finish Condition

Prepared by:

Approved by: