

TECHNICAL DATA SHEET

ASTM A193 GR.B8R & B8RA - UNS S20910 (1C, 1D)

CHEMICAL COMPOSITION

Elements	C %	Mn %	P %	S %	Si %	Cr %	Mo %	Ni %	Nb%	V%	N%
Min		4.00				20.50	1.50	11.50	0.10	0.10	0.20
Max	0.06	6.00	0.045	0.030	1.00	23.50	3.00	13.50	0.30	0.30	0.40

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)
B8R CL.1C & 1D	All Diameters	690	380	35	55	271 HBW or 28 HRC	Carbide Solution Treated
B8RA CL.1C	All Diameters	690	380	35	55	271 HBW or 28 HRC	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)
B8R CL.1C & 1D	All Diameters	100	55	35	55	271 HBW or 28 HRC	Carbide Solution Treated
B8RA CL.1C	All Diameters	100	55	35	55	271 HBW or 28 HRC	Carbide Solution Treated in the Finish Condition

NOTE:

Material Spec : ASTM A193 GR.B8R & B8RA

Dimension STD : As per approved DRG.

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

Prepared by:

Approved by: