

TECHNICAL DATA SHEET

ASTM A193 GR.B16

CHEMICAL COMPOSITION (FOR GR. B16)

Elements		C %	Mn %	P %	S %	Si %	Cr %	Mo %	Ni %	B%
Min Max		0.36	0.45			0.15	0.80	0.50	-	-
		0.47	0.70	0.035	0.040	0.35	1.15	0.65	-	-

MECHANICAL PROPERTIES(METRICPRODUCT)

GRADE	DIAMETER (mm)	TENSILE STRENGTH MPa (Min)	YIELD STRENGTH 0.2% Mpa (Min)	ELONGATION IN % (Min)	REDUCTION AREA% (Min)	HARDNESS HRC/HBW Max	HT Tempering Temp °C (Min)
B16	M64 &Under	860	725	18	50	35 HRC or321 HBW	650
	Over M64to M100	760	655	17	45	35 HRC or321 HBW	650
	Over M100to M200	690	585	16	45	35 HRC or321 HBW	650

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	HT Tempering Temp °C (Min)
B16	2 1/2" &Under	125	105	18	50	35 HRC or321 HBW	650
	Over 2 1/2" to 4"	110	95	17	45	35 HRC or321 HBW	650
	Over 4" to 8"	100	85	16	45	35 HRC or321 HBW	650

NOTE:

Material Spec : ASTM A193 GR.B16

Dimension STD : As per approved DRG.

Heat Treatment type : Hardning & Tempering

Prepared by:

Approved by: