



ANANKA FASTENERS PVT LTD

MS No.	AKF/MS/01
Rev No	0
Date	01.04.2026

TECHNICAL DATA SHEET

ASTM A193 GR.B7 & B7M (FOR BOLT)

CHEMICAL COMPOSITION (FOR GR. B7 & B7M)

Elements		C %	Mn %	P %	S %	Si %	Cr %	Mo %	Ni %	B%
Min		0.38	0.75			0.15	0.80	0.15	-	-
Max		0.48	1.00	0.035		0.35	1.10	0.25	-	-

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)
B7	M64 & Under	860	720	16	50	35 HRC or 321 HBW	593
	Over M64 to M100	795	655	16	50	35 HRC or 321 HBW	593
	Over M100 to M180	690	515	18	50	35 HRC or 321 HBW	593
B7M	M100 & Under	690	550	18	50	235 HBW or 99 HRB	620
	Over M100 to M180	690	515	18	50	235 HBW or 99 HRB	620

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)
B7	2 1/2" & Under	125	105	16	50	35 HRC or 321 HBW	593
	Over 2 1/2" to 4"	115	95	16	50	35 HRC or 321 HBW	593
	Over 4" to 7"	100	75	18	50	35 HRC or 321 HBW	593
B7M	4" & Under	100	80	18	50	235 HBW or 99 HRB	622
	Over 4" to 7"	100	75	18	50	235 HBW or 99 HRB	622

NOTE:

Material Spec : ASTM A193 GR.B7 & B7M

Dimension STD : As per approved DRG.

Heat Treatment type : Hardning & Tempering

Prepared by:

Approved by: