



# MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

## TEST RESULT FOR TENSILE STRENGTH OF PLAIN/DEFORMED/RIBBED COLD TWISTED M.S BARS

Job No : 240/2022-2023(Steel).	Copy No : 01
Name of Client : GE (Army) Savar.	Sample Specimen : Length 600mm , Dia 10mm
Ref.Itr.No : EinC/173 of 2021-2022/20/E-6 Dt.05 Feb'2023.	Sample Grade : 72
Project Name : Construction of 1 x Staff Building.	Frog Mark : GPH B-500 CWR.
Dt. of Sample Collection : 06 Feb'2023	

Sample No	Nominal Dia	Actual Dia	Area Under Test	Actual Unit Weight	Average Actual Unit Weight	Yield or Proof load	Yield or Proof Strength	Average Yield or Proof load	Ultimate load	Ultimate Strength	Average Ultimate Strength	Ratio (Fult/Fy)	Elongation% (gauge length)		Average Elongation% (gauge length)	
	inch mm	inch mm	sq.inch sq.mm	lb/ft kg/m	lb/ft kg/m	lb kn	psi Mpa	psi Mpa	lb kn	psi Mpa	psi Mpa	(Fult/Fy)	8inch	5d	8inch	5d
1	0.394	0.393	0.1217	0.413	0.413 0.614	10264.69	84319	84319 582	12366.20	101581	102001 703	1.20	17			
	10.00	9.979	78.5398	0.614		45.66	582		55.01	701						
2	0.394	0.393	0.1217	0.413		10264.69	84319		84319	12366.20						
	10.00	9.979	78.5398	0.614	45.66	582	582	55.01	701	703	1.20	16			17	
3	0.394	0.393	0.1217	0.413	0.413 0.614	10264.69	84319	84319 582	12519.53	102841	102001 703	1.22	18			
	10.00	9.979	78.5398	0.614		45.66	582		55.69	709						

**Cautions:**

1. Samples as supplied to the laboratory have been tested. The laboratory authority does not bear any responsibility as to the representative charecture of the samples to be tested.
2. It is recommended that samples are Sent in asecuried and sealed cover/packet/container under signature of the competent authority.
3. In order to avoid fraudulent of the test results,it is recommended that all test reports should be collected by duly authorised person and not by contractor/supplier.

**Ovservation on Specimen(if any):**

1. Diameter & Unit weight of 10 mm bar is less than the standard value but within tolerance limit according to MES Schedule of Rates-2016.

Minimum Standard Requirements (BDS/ISO 6935-2:1991(E))				Minimum Standard Requirements(ASTM A615/A616M-96a)									
Grade	Y/strength N/mm2 or Mpa	Ult.Str N/mm2 or Mpa	Elongation %	ASTM A 615 M		ASTM A 615 M		ASTM A 615/A 615 M					
				Grade	Y/strength psi (kg/cm2)	Ult.Str psi (kg/cm2)	Grade	Y/strength Mpa (kg/cm2)	Ult.Str Mpa (kg/cm2)	Minimum Elongation in 8"(203.2 mm) GL (%)			
									10 mm	13,16,19 mm		22,25 mm	29,32,36 mm
300	300	330	16	40	40000(2810)	70000(4910)	300	300(3050)	500(5090)	11	12	..	..
400/400w	400	440	14	60	60000(4210)	90000(6310)	420	420(4275)	620(6295)	9	9	8	7
500/500w	500	550	14	75	75000(5255)	100000(7015)	520	520(5275)	690(7010)	..	7	7	6

Laboratory Technician

Test Performed By

Vetted By