



## MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

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

Job No : 102/2022-2023(Steel)  
 Name of Client : GE (Army) Mirpur.  
 Ref.ltr.No : EinC/84 of 2021-2022/24/E-6 Dt. 27 Sep'2022.  
 Project Name : Construction of 1x 150 Officer's Mess & 1x 450 BOQ.  
 Dt. of Sample Collection : 02 Oct'2022

Copy No : 01  
 Sample Specimen : Length 600mm , Dia 10mm  
 Sample Grade : 60  
 Frog Mark : GPH B-420 DWR.

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	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 10.00	0.393 9.990	0.1217 78.5398	0.414 0.615	0.414 0.615	7644.64 34.00	62796 433	63511 438	10821.55 48.14	88893 613	87679 605	1.42	19	17		
2	0.394 10.00	0.393 9.990	0.1217 78.5398	0.414 0.615		7289.09 32.42	59876 413		10315.92 45.89	84739 584		1.42	18.5			
3	0.394 10.00	0.393 9.990	0.1217 78.5398	0.414 0.615		8261.09 36.75	67860 468		10883.89 48.41	89405 617		1.32	12			

**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 a secured 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/mm <sup>2</sup> or Mpa	Ult.Str N/mm <sup>2</sup> or Mpa	Elongation %	ASTM A 615 M		ASTM A 615 M		ASTM A 615/A 615 M						
				Grade	Y/strength psi (kg/cm <sup>2</sup> )	Ult.Str psi (kg/cm <sup>2</sup> )	Grade	Y/strength Mpa (kg/cm <sup>2</sup> )	Ult.Str Mpa (kg/cm <sup>2</sup> )	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