



## 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 : 02  
 Sample Specimen : Length 600mm , Dia 12mm  
 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 (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	0.472 12.00	0.464 11.785	0.175 113.097	0.575 0.856	0.575 0.856	10800.77 48.04	61613 425	62372 430	15693.12 69.81	89521 617	89547 618	1.45	16.5	19		
2	0.472 12.00	0.464 11.785	0.175 113.097	0.575 0.856		11031.65 49.07	62930 434		15545.35 69.15	88678 612		1.41	20.5			
3	0.472 12.00	0.464 11.785	0.175 113.097	0.575 0.856		10969.31 48.79	62574 432		15854.73 70.53	90443 624		1.45	19.5			

**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 12 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