



# MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

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

Job No : 65/2022-2023(Steel)  
 Name of Client : GE (Air) Chattogram  
 Ref.ltr.No : CE (Air)/204 of 2021-2022/06/E-6 Dt. 04 Sep'2022.  
 Project Name : Construction of Store Room.  
 Dt. of Sample Collection: 05 Sep'2022

Copy No : 03  
 Sample Specimen : Length 600mm , Dia 16mm  
 Sample Grade : 60  
 Frog Mark : GPH B-500 CWR

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	0.630	0.626	0.312	1.046	1.046 1.557	25346.20	81330	81577 563	31963.22	102562	103241 712	1.26	19	20		
	16.00	15.891	201.062	1.557		112.75	561		142.18	707						
2	0.630	0.626	0.312	1.046		25346.20	81330		31984.00	102629						
	16.00	15.891	201.062	1.557		112.75	561		142.27	708						
3	0.630	0.626	0.312	1.046		25577.08	82071		32577.36	104533						
	16.00	15.891	201.062	1.557		113.77	566		144.91	721						

**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 asecured 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 16 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