



# MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

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

Job No : 236/2022-2023(Steel).	Copy No : 04
Name of Client : GE (Air) Tejgaon, Dhaka.	Sample Specimen : Length 600mm , Dia 20mm
Ref.ltr.No : CE Air/206 of 2021-2022/50/E-6 Dt.29 Jan'2023	Sample Grade : 60
Project Name : Construction of BOQ & Officer's Mess Complex.	Frog Mark : RSM B-420 DWR.
Dt. of Sample Collection: 30 Jan'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	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	0.787	0.792	0.4869	1.676	1.676 2.495	39108.60	80314	78564 542	52287.44	107378	107859 744	1.34	19.5		20	
	20.00	20.115	314.1593	2.495		173.96	554		232.59	741						
2	0.787	0.792	0.4869	1.676		37244.08	76485		542	50887.89						
	20.00	20.115	314.1593	2.495	165.67	527	226.36	721								
3	0.787	0.792	0.4869	1.676	38416.92	78893	544	54390.22		111696	770	1.42	20.5		20	
	20.00	20.115	314.1593	2.495	170.89	544		241.94	770							

**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.

Observation on Specimen(if any):

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