



# MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

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

Job No : 37/2023-2024 (Steel).	Copy No : 04
Name of Client : GE (Army) Bogura.	Sample Specimen : Length 600mm , Dia 20mm
Ref.ltr.No : CEA/357 of 2022-2023/10/E-6 Dt.27 Aug'2023.	Sample Grade : 60
Project Name : Construction of 1 X SMBK Complex.	Frog Mark : BSRM 420 D
Dt. of Sample Collection: 29 Aug'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	0.787	0.789	0.4869	1.665	1.665	38374.40	78806	78949	51608.76	105984	106176	1.34	22.5			
	20.00	20.05	314.1593	2.478		170.70	543		229.57	731						
2	0.787	0.789	0.4869	1.665		2.478	38522.45		79110	544						
	20.00	20.05	314.1593	2.478	171.36	546	230.43	734								
3	0.787	0.789	0.4869	1.665	1.665	38434.55	78930	78949	51694.36	106160	106176	1.34	27.5			
	20.00	20.05	314.1593	2.478		170.96	544		229.95	732						

**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.

Oservation on Specimen(if any):

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					
				psi (kg/cm2)	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	40000(2810)	70000(4910)	300	300(3050)	500(5090)	11	12		..	..
400/400w	400	440	14	60000(4210)	90000(6310)	420	420(4275)	620(6295)	9	9		8	7
500/500w	500	550	14	75000(5255)	100000(7015)	520	520(5275)	690(7010)	..	7		7	6

Laboratory Technician

Test Performed By

Vetted By