



## MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

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

Job No : 87/2023-2024 (Steel).  
 Name of Client : GE (Army) Bogura.  
 Ref.ltr.No : CEA/272 of 2022-2023/17/E-6 Dt.12 Oct'2023.  
 Project Name : Construction of 20 x Bay plant vehicle shed.  
 Dt. of Sample Collection: 16 Oct'2023

Copy No : 04  
 Sample Specimen : Length 600mm , Dia 20mm  
 Sample Grade : 60  
 Frog Mark : Purbachal 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	0.787 20.00	0.795 20.19	0.4869 314.1593	1.690 2.514	1.690 2.514	39188.68 174.32	80478 555	80296 554	49212.19 218.91	101063 697	101455 700	1.26	22	23		
2	0.787 20.00	0.795 20.19	0.4869 314.1593	1.690 2.514		39723.05 176.70	81576 563		49850.66 221.75	102374 706		1.25	24			
3	0.787 20.00	0.795 20.19	0.4869 314.1593	1.690 2.514		38388.28 170.76	78834 544		49147.42 218.62	100930 696		1.28	21.5			

**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.

**Oservation on Specimen(if any):**

Minimum Standard Requirements (BDS/ISO 6935-2:1991(E))				Minimum Standard Requirments(ASTM A615/A616M-96a)										
Grade	Y/strength	Ult.Str	Elongation	ASTM A 615 M			ASTM A 615 M			ASTM A 615/A 615 M				
	N/mm2 or Mpa	N/mm2 or Mpa	%	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