



# MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

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

Job No : 234/2022-2023(Steel).  
 Name of Client : AGE (Army) Rajendrapur.  
 Ref.ltr.No : CEA/603 of 2021-2022/49/E-6 Dt.23 Jan'2023  
 Project Name : Construction of 1 x Composite Workshop.  
 Dt. of Sample Collection: 25 Jan'2023

Copy No : 03  
 Sample Specimen : Length 600mm , Dia 16mm  
 Sample Grade : 72  
 Frog Mark : Purbachal B-500 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	0.630	0.634	0.312	1.073	1.073	33089.40	106176	104365	40827.37	131005	128620	1.23	16			
	16.00	16.096	201.062	1.597		147.19	732		181.61	903						
2	0.630	0.634	0.312	1.073	1.597	32811.81	105285	720	39723.93	127465	887	1.21	13.5			
	16.00	16.096	201.062	1.597		145.95	726		176.70	879						
3	0.630	0.634	0.312	1.073	1.597	31673.67	101633	720	39700.80	127390	887	1.25	14.5			
	16.00	16.096	201.062	1.597		140.89	701		176.60	879						

**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					
				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