



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

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

Job No : 177/2022-2023(Steel)	Copy No : 01
Name of Client : AGE (Navy) Kaptai.	Sample Specimen : Length 600mm , Dia 10mm
Ref.ltr.No : CEN/218 of 2021-2022/25/E-6 Dt. 01 Dec'2022.	Sample Grade : 60
Project Name : Construction of Mosque.	Frog Mark : BSRM B-420 D.
Dt. of Sample Collection : 04 Dec"2022	

Sample No	Nominal Dia	Actual Dia	Area Under Test	Actual Unit Weight	Average Actual 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	0.394	0.390	0.1217	0.407	0.407	13229.77	108675	108271	16227.80	133302	133536	1.23	20			
	10.00	9.909	78.5398	0.605		58.84865	749		72.1845	919						
2	0.394	0.390	0.1217	0.407	0.605	13511.08	110986	753	16334.21	134176	921	1.21	18.5		20	
	10.00	9.909	78.5398	0.605		58.5914	765		72.6578	925						
3	0.394	0.390	0.1217	0.407	0.605	13127.98	107839	744	16206.98	133131	918	1.23	20.5			
	10.00	9.909	78.5398	0.605		58.39589	744		72.0919	918						

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.

Oservation on Specimen(if any):

1. Diameter & Unit weight of 10 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/mm ² or Mpa	Ult.Str N/mm ² or Mpa	Elongation %	ASTM A 615 M			ASTM A 615 M			ASTM A 615/A 615 M				
				Grade	Y/strength psi (kg/cm ²)	Ult.Str psi (kg/cm ²)	Grade	Y/strength Mpa (kg/cm ²)	Ult.Str Mpa (kg/cm ²)	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

