



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 : 04
Name of Client : AGE (Navy) Kaptai.	Sample Specimen : Length 600mm , Dia 20mm
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-500 DWR.
Dt. of Sample Collection: 04 Dec"2022	

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	0.783	0.4869	1.638	1.638 2.437	43034.26	88375	88567 611	54112.63	111126	111693 770	1.26	20.5	21		
	20.00	19.882	314.1593	2.437		191.43	609		240.70	766						
2	0.787	0.783	0.4869	1.638		43221.63	88760		54707.14	112347						
	20.00	19.882	314.1593	2.437		192.26	612		243.35	775						
3	0.787	0.783	0.4869	1.638		43126.79	88566		54346.27	111606						
	20.00	19.882	314.1593	2.437		191.84	611		241.74	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 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.

Ovservation on Specimen(if any):

1. Diameter & Unit weight of 20 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/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