



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

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

Job No	: 50/2022-2023(Steel)	Copy No	: 02
Name of Client	: GE (Army) Sylhet	Sample Specimen	: Length 600mm , Dia 12mm
Ref.ltr.No	: CEA/16 of 2021-2022/29/E-6 Dt.22 Aug'2022	Sample Grade	: 60
Project Name	: Construction of Water Reservoir & Pump House.	Frog Mark	: BSRM Ultima 420 D
Dt. of Sample Collection: 30 Aug '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		8inch	5d	8inch	5d
1	0.472	0.467	0.175	0.584	0.584	13017.22	74256	72276	17408.55	99307	97577	1.34	21.5			
	12.00	11.872	113.097	0.869		57.90	512		77.44	685						
2	0.472	0.467	0.175	0.584	0.869	12541.61	71543	498	16942.18	96646	673	1.35	22.5			
	12.00	11.872	113.097	0.869		55.79	493		75.36	667						
3	0.472	0.467	0.175	0.584	0.869	12451.56	71030	490	16965.26	96778	667	1.36	22.5			
	12.00	11.872	113.097	0.869		55.39	490		75.46	667						

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):

1. Diameter & Unit weight of 12 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 Requirments(ASTM A615/A616M-96a)											
				ASTM A 615 M			ASTM A 615 M			ASTM A 615/A 615 M					
Grade	Y/strength	Ult.Str	Elongation	Grade	Y/strength	Ult.Str	Grade	Y/strength	Ult.Str	Minimum Elongation in 8"(203.2 mm) GL (%)					
	Mpa	Mpa	%		(kg/cm2)	psi		Mpa	(kg/cm2)	(kg/cm2)	10	13,16,19	mm	22,25	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