



# MATERIAL TESTING LABORATORY

## MILITARY ENGINEER SERVICES (MES)

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

Job No	: 07/2021-2022(Steel).	Copy No.	: 04
Name of Client	: GE (Army) North,Dhaka.	Sample Specimen	: Length 600 mm Dia 20mm
Ref Itr No	: CEA/357 of 2020-2021/11/E-6 Dt.13 July'2021.	Sample Grade	: 60
Project Name	: CEA/357 of 2020-2021.	Frog Mark	: SAS B 400+
Date of Collection	: Thursday, 15 July, 2021		

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 Strength	Ultimate Load	Ultimate Strength	Average Ultimate Strength	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	0.787 20	0.797 20.245	0.4869 314.1593	1.698 2.527	1.698 2.527	33442.74 148.76	68678 473	67153 463	47034.75 209.22	96591 666	95531 659	16.5		20	
2	0.787 20	0.797 20.245	0.4869 314.1593	1.698 2.527		31603.79 140.58	64902 447		45998.37 204.61	94463 651		23.5			
3	0.787 20	0.797 20.245	0.4869 314.1593	1.698 2.527		33053.81 147.03	67880 468		46522.18 206.94	95539 659		20			

#### Cautions:

1. Samples as supplied to the laboratory have been tested.The laboratory authority does not bear any responsibility as to the representative charecter of the samples to be tested.
2. It is recommended that the samples are sent in a secure and sealed cover/packet/container under signature of the competent authority.
3. In order to avoid fraudulent fabrication of the test results, it is recommended that all test reports should be collected by duly authorized person and not by the contractor/supplier.

#### Observation on Specimen(if any):

1.

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

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No signature is required

Note :[1 Mpa = 145 Psi, 1 kg/cm2 = 14.223 psi]

Laboratory Technician

Test Performed By

Vetted By