



# MATERIAL TESTING LABORATORY

## MILITARY ENGINEER SERVICES (MES)

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

Job No : 122/19-20(Steel)  
 Name of Client : AGE (Air) Cox'sbazar.  
 Ref Itr No : CE Air/227 of 2017-2018/15/E-6 Dt. 04 September'2019.  
 Project Name : CE Air/227 of 2017-2018  
 Date of Collection : Thursday, 05 September, 2019

Copy No. : 02  
 Sample Specimen : Length 600 mm Dia 12mm  
 Sample Grade : 60  
 Frog Mark : Baizid 400+

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	0.472 12	0.485 12.314	0.1753 113.0973	0.628 0.935	0.628 0.935	12485.95 55.54	71226 491	70640 487	18877.3 83.97	107685 742	108788 750	18.5		19	
2	0.472 12	0.485 12.314	0.1753 113.0973	0.628 0.935		12589.36 56	71816 495		19178.54 85.31	109404 754		18.5			
3	0.472 12	0.485 12.314	0.1753 113.0973	0.628 0.935		12074.55 53.71	68879 475		19156.06 85.21	109275 753		20.5			

#### Cautions:

1. Samples as supplied to the laboratory have been tested. The laboratory authority does not bear any responsibility as to the representative character 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 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 (%)			
300	300	330	16	40	40000(2810)	70000(4910)	300	300(3050)	500(5090)	10 mm	11,16,19 mm	22,25 mm	29,32,36 mm
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