

# MATERIAL TESTING LABORATORY

## **MILITARY ENGINEER SERVICES (MES)**

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

Job No : 256/18-19(Steel). Copy No. : 01

Name of Client : GE (Air) Kurmitola. Sample Specimen : Length 600 mm Dia 10mm

Ref Itr No : 6409/32/E-6.Dt 14 Mar 2019. Sample Grade : 60

Project Name : CE(Air)/82 of 2017-2018. Frog Mark : Baizid 400 +.

Date of Collection : Thursday, 28 March, 2019

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	% (g	gation gauge gth)	Elong % (g	erage gation gauge gth)
	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	0.394 10	0.389 9.885	0.1217 78.5398	0.405 0.603		9262.17 41.2	76084 525		11164.06 49.66	91707 632		14			
2	0.394 10	0.389 9.885	0.1217 78.5398	0.405 0.603	0.405 0.603	9581.4 42.62	78706 543	77302 533	11505.78 51.18	94514 652	93227 643	16		15	
3	0.394 10	0.389 9.885	0.1217 78.5398	0.405 0.603		9388.07 41.76	77118 532		11377.63 50.61	93461 644		15			

#### **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.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 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 (%)			
	N/mm2 or Mpa	N/mm2 or Mpa	%		psi (kg/cm2)	psi (kg/cm2)		Mpa (kg/cm2)	Mpa (kg/cm2)	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

This is a computer genarated copy

No signature is required

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

Laboratory Technichian

Test Performed By

Vetted By