



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 : 85/2025-2026 (Steel).

Copy No : 01

Name of Client : GE (Air) Jashore.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : CE Air/175 of 2024-2025/19/E-6 Dt.14 Dec'2025.

Sample Grade : 60

Project Name : Construction of RCC Road / Hardstanding.

Frog Mark : Purbachal B-420 DWR.

Dt. of Sample Collection : 17 Dec'2025

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	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	0.394 10.00	0.392 9.95	0.1217 78.5398	0.410 0.610	0.410 0.610	13915.94 61.90	114312 788	112836 778	15674.04 69.72	128753 888	128126 884	1.13	14.5		17	
2	0.394 10.00	0.392 9.95	0.1217 78.5398	0.410 0.610		13557.38 60.31	111366 768		15569.94 69.26	127898 882		1.15	17.5			
3	0.394 10.00	0.392 9.95	0.1217 78.5398	0.410 0.610		13735.50 61.10	112829 778		15549.12 69.17	127727 881		1.13	18.5			

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 samples are sent in a secured 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 authorized person and not by 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 Requirements (ASTM A615/A616M-96a)									
Grade	Y/strength N/mm ² or Mpa	Ult.Str N/mm ² or Mpa	Elongation %	ASTM A 615 M			ASTM A 615 M			ASTM A 615/A 615 M			
				Grade	Y/strength psi (kg/cm ²)	Ult.Str psi (kg/cm ²)	Grade	Y/strength Mpa (kg/cm ²)	Ult.Str Mpa (kg/cm ²)	Minimum Elongation in 8" (203.2 mm) GL (%)			
300	300	330	16	40	40000(2810)	70000(4910)	300	300(3050)	500(5090)	10 mm	13,16,19 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

Laboratory Technician

Test Performed By

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

Job No : 85/2025-2026 (Steel).

Copy No : 02

Name of Client : GE (Air) Jashore.

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : CE Air/175 of 2024-2025/19/E-6 Dt.14 Dec'2025.

Sample Grade : 60

Project Name : Construction of RCC Road / Hardstanding.

Frog Mark : Purbachal B-420 DWR.

Dt. of Sample Collection: 17 Dec'2025

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	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	0.630 16.00	0.632 16.04	0.312 201.062	1.066 1.586	1.066 1.586	26713.08 118.83	85716 591	85036 586	33026.07 146.91	105973 731	105478 727	1.24	23.5		22	
2	0.630 16.00	0.632 16.04	0.312 201.062	1.066 1.586		26861.14 119.48	86191 594		33102.40 147.25	106218 733		1.23	20.5			
3	0.630 16.00	0.632 16.04	0.312 201.062	1.066 1.586		25928.88 115.34	83200 574		32487.07 144.51	104243 719		1.25	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 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):

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	psi (kg/cm2)	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	13,16,19 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

Laboratory Technician

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