



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 : 117/2024-2025 (Steel).

Copy No : 01

Name of Client : GE (Army) Jashore.

Sample Specimen : Length 600mm , Dia 20mm

Ref.ltr.No : CEA/281 of 2022-2023/110/E-6 Dt.28 Jun'2025.

Sample Grade : 60

Project Name : Construction of 1 x 72 Married OR's Qtr.

Frog Mark : Baizid B-420 DWR.

Dt. of Sample Collection: 29 Jun'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	0.787 20.00	0.790 20.06	0.4869 314.1593	1.667 2.481	1.667 2.481	37828.47 168.27	77685 536	75593 521	48342.39 215.04	99276 685	97197 670	1.28	22		22	
2	0.787 20.00	0.790 20.06	0.4869 314.1593	1.667 2.481		36285.50 161.41	74516 514		46727.71 207.85	95960 662		1.29	22.5			
3	0.787 20.00	0.790 20.06	0.4869 314.1593	1.667 2.481		36315.57 161.54	74578 514		46919.72 208.71	96355 665		1.29	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 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 (%)			
										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

Laboratory Technician

Test Performed By

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Page no: 370

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

Job No : 117/2024-2025 (Steel).

Copy No : 02

Name of Client : GE (Army) Jashore.

Sample Specimen : Length 600mm , Dia 25mm

Ref.ltr.No : CEA/281 of 2022-2023/110/E-6 Dt.28 Jun'2025.

Sample Grade : 60

Project Name : Construction of 1 x 72 Married OR's Qtr.

Frog Mark : Baizid B-420 DWR.

Dt. of Sample Collection: 29 Jun'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	0.984 25.00	1.004 25.50	0.7609 490.8739	2.694 4.009	2.694 4.009	62906.90 279.82	82679 570	82476 569	80536.52 358.24	105850 730	104919 724	1.28	21.5		22	
2	0.984 25.00	1.004 25.50	0.7609 490.8739	2.694 4.009		62444.24 277.76	82071 566		79446.95 353.40	104418 720		1.27	23.5			
3	0.984 25.00	1.004 25.50	0.7609 490.8739	2.694 4.009		62906.90 279.82	82679 570		79500.16 353.63	104488 721		1.26	20.5			

Cautions:

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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	Y/strength psi (kg/cm2)	Ult.Str psi (kg/cm2)	Grade	Y/strength psi (kg/cm2)	Ult.Str psi (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

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