



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 : 35/2025-2026 (Steel).

Copy No : 01

Name of Client : GE (Navy) Patuakhali.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : EinC/93 of 2024-2025/19/E-6 Dt.07 Aug'2025.

Sample Grade : 72.5

Project Name : Construction of 4 x Sentry post with 1 x Main Gate.

Frog Mark : AKS B-500 DWR.

Dt. of Sample Collection : 10 Aug'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	0.397 10.08	0.1217 78.5398	0.421 0.627	0.421 0.627	16312.51 72.56	133998 924	134163 925	19016.75 84.59	156212 1077	156928 1082	1.17	18.5		18	
2	0.394 10.00	0.397 10.08	0.1217 78.5398	0.421 0.627		16331.02 72.64	134150 925		19157.86 85.22	157371 1085		1.17	17			
3	0.394 10.00	0.397 10.08	0.1217 78.5398	0.421 0.627		16354.15 72.75	134340 926		19137.04 85.13	157200 1084		1.17	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 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	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	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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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 : 35/2025-2026 (Steel).

Copy No : 02

Name of Client : GE (Navy) Patuakhali.

Sample Specimen : Length 600mm , Dia 12mm

Ref.ltr.No : EinC/93 of 2024-2025/19/E-6 Dt.07 Aug'2025.

Sample Grade : 72.5

Project Name : Construction of 4 x Sentry post with 1 x Main Gate.

Frog Mark : AKS B-500 DWR.

Dt. of Sample Collection: 10 Aug'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	0.472 12.00	0.470 11.95	0.175 113.097	0.592 0.880	0.592 0.880	20430.18 90.88	116543 804	112233 774	24607.99 109.46	140375 968	137362 947	1.20	18.5		20	
2	0.472 12.00	0.470 11.95	0.175 113.097	0.592 0.880		20270.56 90.17	115633 797		24547.84 109.19	140032 966		1.21	19.5			
3	0.472 12.00	0.470 11.95	0.175 113.097	0.592 0.880		18322.76 81.50	104522 721		23083.52 102.68	131679 908		1.26	21.5			

Cautions:

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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):

1. Diameter & Unit weight of 12 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)									
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 (%)			
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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TEST RESULT FOR TENSILE STRENGTH OF PLAIN/DEFORMED/RIBBED COLD TWISTED M.S BARS

Job No : 35/2025-2026 (Steel).

Copy No : 03

Name of Client : GE (Navy) Patuakhali.

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : EinC/93 of 2024-2025/19/E-6 Dt.07 Aug'2025.

Sample Grade : 72.5

Project Name : Construction of 4 x Sentry post with 1 x Main Gate.

Frog Mark : AKS B-500 DWR.

Dt. of Sample Collection: 10 Aug'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	0.631 16.03	0.312 201.062	1.065 1.585	1.065 1.585	30874.70 137.34	99070 683	98926 682	37770.63 168.01	121197 836	121289 836	1.22	21		22	
2	0.630 16.00	0.631 16.03	0.312 201.062	1.065 1.585		30809.93 137.05	98862 682		37728.99 167.83	121063 835		1.22	22			
3	0.630 16.00	0.631 16.03	0.312 201.062	1.065 1.585		30805.30 137.03	98847 682		37897.87 168.58	121605 839		1.23	22			

Cautions:

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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.

Ovbservation 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 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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