MATERRIALS TESTING LABORATORY
MILITARY ENGINEER SERVICES(MES)

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

Job No : 37/2025-2026 (Steel).
Name of Client : GE (Navy) Patuakhali.
Ref.ltr.No : EinC/97 of 2022-2023/24/E-6 Dt.10 Aug'2025.
Project Name : Construction of 1 x Fuel Station.
Dt. of Sample Collection : 11 Aug'2025

Copy No : 01
Sample Specimen : Length 600mm , Dia 10mm
Sample Grade : 72.5
Frog Mark : Baizid 500 +

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	0.400 10.15	0.1217 78.5398	0.427 0.635		15782.77 70.20	129646 894		17841.60 79.36	146559 1011		1.13	12			
2	0.394 10.00	0.400 10.15	0.1217 78.5398	0.427 0.635	0.427 0.635	15715.68 69.91	129095 890	128646 887	17862.42 79.46	146730 1012	145805 1006	1.14	10.5		11	
3	0.394 10.00	0.400 10.15	0.1217 78.5398	0.427 0.635		15484.35 68.88	127195 877		17545.50 78.05	144126 994		1.13	10.5			

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/supplyer.

Ovservation on Specimen(if any):

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 N/mm2 or Mpa	Ult.Str N/mm2 or Mpa	Elongation %	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 Vetted By

MATERRIALS TESTING LABORATORY
MILITARY ENGINEER SERVICES(MES)

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

Job No : 37/2025-2026 (Steel).
Name of Client : GE (Navy) Patuakhali.
Ref.ltr.No : EinC/97 of 2022-2023/24/E-6 Dt.10 Aug'2025.
Project Name : Construction of 1 x Fuel Station.
Dt. of Sample Collection: 11 Aug'2025

Copy No : 02
Sample Specimen : Length 600mm , Dia 12mm
Sample Grade : 72.5
Frog Mark : Baizid 500 +

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	0.486 12.33	0.175 113.097	0.630 0.938		20545.84 91.39	117203 808		23890.86 106.27	136285 940		1.16	12.5			
2	0.472 12.00	0.486 12.33	0.175 113.097	0.630 0.938	0.630 0.938	21367.06 95.04	121888 841	117938 813	24527.02 109.10	139914 965	137107 946	1.15	15.5		14	
3	0.472 12.00	0.486 12.33	0.175 113.097	0.630 0.938		20110.94 89.46	114722 791		23687.29 105.37	135123 932		1.18	14.5			

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.
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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/supplyer.

Ovservation on Specimen(if any):

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 N/mm2 or Mpa	Ult.Str N/mm2 or Mpa	Elongation %	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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TEST RESULT FOR TENSILE STRENGTH OF PLAIN/DEFORMED/RIBBED COLD TWISTED M.S BARS

Job No : 37/2025-2026 (Steel).
Name of Client : GE (Navy) Patuakhali.
Ref.ltr.No : EinC/97 of 2022-2023/24/E-6 Dt.10 Aug'2025.
Project Name : Construction of 1 x Fuel Station.
Dt. of Sample Collection: 11 Aug'2025

Copy No : 03
Sample Specimen : Length 600mm , Dia 16mm
Sample Grade : 72.5
Frog Mark : Baizid 500 +

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	0.638 16.20	0.312 201.062	1.088 1.619		32611.99 145.06	104644 722		38779.23 172.50	124433 858		1.19	15			
2	0.630 16.00	0.638 16.20	0.312 201.062	1.088 1.619	1.088 1.619	32558.78 144.83	104473 721	103273 712	39024.44 173.59	125220 864	123481 852	1.20	16.5		15	
3	0.630 16.00	0.638 16.20	0.312 201.062	1.088 1.619		31383.63 139.60	100703 695		37643.40 167.45	120789 833		1.20	13.5			

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/supplyer.

Ovservation on Specimen(if any):

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

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

Job No : 37/2025-2026 (Steel).
Name of Client : GE (Navy) Patuakhali.
Ref.ltr.No : EinC/97 of 2022-2023/24/E-6 Dt.10 Aug'2025.
Project Name : Construction of 1 x Fuel Station.
Dt. of Sample Collection: 11 Aug'2025

Copy No : 04
Sample Specimen : Length 600mm , Dia 20mm
Sample Grade : 72.5
Frog Mark : Baizid 500 +

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		46713.83 207.79	95932 662		56746.59 252.42	116535 804		1.21	17.5			
2	0.787 20.00	0.790 20.06	0.4869 314.1593	1.667 2.481	1.667 2.481	45615.02 202.90	93675 646	94071 649	53924.37 239.87	110740 764	112366 775	1.18	19.5		19	
3	0.787 20.00	0.790 20.06	0.4869 314.1593	1.667 2.481		45094.53 200.59	92606 639		53477.91 237.88	109823 757		1.19	21			

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)										
				ASTM A 615 M			ASTM A 615 M			ASTM A 615/A 615 M				
Grade	Y/strength N/mm2 or Mpa	Ult.Str N/mm2 or Mpa	Elongation %	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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