MATERRIALS TESTING LABORATORY
MILITARY ENGINEER SERVICES(MES)

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

Job No : 33/2025-2026 (Steel).
Name of Client : GE (Navy) Patuakhali.
Ref.ltr.No : EinC/40 of 2024-2025/09/E-6 Dt.07 Aug'2025.
Project Name : Construction of 1 x Combined Engineering workshop.
Dt. of Sample Collection : 10 Aug'2025

Copy No : 01
Sample Specimen : Length 600mm , Dia 10mm
Sample Grade : 72.5
Frog Mark : KSRM B-500 DWR.

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	0.395 10.03	0.1217 78.5398	0.417 0.620	0.417 0.620	16312.51 72.56	133998 924	137026 945	18436.12 82.01	151442 1044	153780 1061	1.13	16.5		17	
2	0.394 10.00	0.395 10.03	0.1217 78.5398	0.417 0.620		16779.80 74.64	137836 951		18843.25 83.82	154787 1067		1.12	16.5			
3	0.394 10.00	0.395 10.03	0.1217 78.5398	0.417 0.620		16950.98 75.40	139243 960		18882.58 83.99	155110 1070		1.11	17.5			

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 : 33/2025-2026 (Steel).
Name of Client : GE (Navy) Patuakhali.
Ref.ltr.No : EinC/40 of 2024-2025/09/E-6 Dt.07 Aug'2025.
Project Name : Construction of 1 x Combined Engineering workshop.
Dt. of Sample Collection: 10 Aug'2025

Copy No : 02
Sample Specimen : Length 600mm , Dia 12mm
Sample Grade : 72.5
Frog Mark : KSRM B-500 DWR.

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	0.475 12.06	0.175 113.097	0.603 0.897		20707.77 92.11	118127 815		23065.02 102.60	131574 907		1.11	19.5			
2	0.472 12.00	0.475 12.06	0.175 113.097	0.603 0.897	0.603 0.897	20966.86 93.26	119605 825	119306 823	23296.35 103.63	132893 917	132656 915	1.11	20.5		21	
3	0.472 12.00	0.475 12.06	0.175 113.097	0.603 0.897		21068.64 93.72	120185 829		23402.76 104.10	133500 921		1.11	21.5			

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 : 33/2025-2026 (Steel).
Name of Client : GE (Navy) Patuakhali.
Ref.ltr.No : EinC/40 of 2024-2025/09/E-6 Dt.07 Aug'2025.
Project Name : Construction of 1 x Combined Engineering workshop.
Dt. of Sample Collection: 10 Aug'2025

Copy No : 03
Sample Specimen : Length 600mm , Dia 16mm
Sample Grade : 72.5
Frog Mark : KSRM B-500 DWR.

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 16.06	0.312 201.062	1.068 1.590		32917.34 146.42	105624 728		37536.99 166.97	120447 831		1.14	21			
2	0.630 16.00	0.632 16.06	0.312 201.062	1.068 1.590	1.068 1.590	32498.63 144.56	104280 719	104793 723	37224.70 165.58	119445 824	120024 828	1.15	21.5		21	
3	0.630 16.00	0.632 16.06	0.312 201.062	1.068 1.590		32558.78 144.83	104473 721		37453.71 166.60	120180 829		1.15	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/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

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 : 33/2025-2026 (Steel).
Name of Client : GE (Navy) Patuakhali.
Ref.ltr.No : EinC/40 of 2024-2025/09/E-6 Dt.07 Aug'2025.
Project Name : Construction of 1 x Combined Engineering workshop.
Dt. of Sample Collection: 10 Aug'2025

Copy No : 04
Sample Specimen : Length 600mm , Dia 20mm
Sample Grade : 72.5
Frog Mark : KSRM B-500 DWR.

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	0.789 20.03	0.4869 314.1593	1.662 2.473		48104.12 213.98	98787 681		55599.20 247.32	114179 787		1.16	20.5			
2	0.787 20.00	0.789 20.03	0.4869 314.1593	1.662 2.473	1.662 2.473	46933.59 208.77	96383 665	96876 668	55388.69 246.38	113747 784	114079 787	1.18	25		23	
3	0.787 20.00	0.789 20.03	0.4869 314.1593	1.662 2.473		46482.50 206.76	95457 658		55663.97 247.60	114312 788		1.20	23			

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

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MATERRIALS TESTING LABORATORY
MILITARY ENGINEER SERVICES(MES)

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

Job No : 33/2025-2026 (Steel).
Name of Client : GE (Navy) Patuakhali.
Ref.ltr.No : EinC/40 of 2024-2025/09/E-6 Dt.07 Aug'2025.
Project Name : Construction of 1 x Combined Engineering workshop.
Dt. of Sample Collection: 10 Aug'2025

Copy No : 05
Sample Specimen : Length 600mm , Dia 25mm
Sample Grade : 72.5
Frog Mark : KSRM B-500 DWR.

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	0.984 25.00	0.7609 490.8739	2.589 3.852		69152.79 307.61	90888 627		82641.62 367.61	108617 749		1.20	23.5			
2	0.984 25.00	0.984 25.00	0.7609 490.8739	2.589 3.852	2.589 3.852	68215.91 303.44	89657 618	90277 623	81355.42 361.89	106926 737	107466 741	1.19	25		24	
3	0.984 25.00	0.984 25.00	0.7609 490.8739	2.589 3.852		68694.76 305.57	90286 623		81302.22 361.65	106856 737		1.18	24			

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/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

Laboratory Technician Test Performed By Vetted By