



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 : 101/2024-2025 (Steel).

Copy No : 01

Name of Client : GE (Navy) South Chattogram.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : CEN/228 of 2021-2022/85/E-6 Dt.22 May'2025.

Sample Grade : 72.5

Project Name : Construction of boundary wall.

Frog Mark : KSRM B-500 CWR.

Dt. of Sample Collection : 28 May'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	0.393 9.98	0.1217 78.5398	0.413 0.615	0.413 0.615	14297.63 63.60	117447 810	119455 824	16222.29 72.16	133257 919	135442 934	1.13	16		20	
2	0.394 10.00	0.393 9.98	0.1217 78.5398	0.413 0.615		14797.30 65.82	121551 838		16823.75 74.84	138198 953		1.14	26			
3	0.394 10.00	0.393 9.98	0.1217 78.5398	0.413 0.615		14531.27 64.64	119366 823		16418.92 73.03	134872 930		1.13	16.5			

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):

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 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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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 : 101/2024-2025 (Steel).

Copy No : 02

Name of Client : GE (Navy) South Chattogram.

Sample Specimen : Length 600mm , Dia 12mm

Ref.ltr.No : CEN/228 of 2021-2022/85/E-6 Dt.22 May'2025.

Sample Grade : 72.5

Project Name : Construction of boundary wall.

Frog Mark : KSRM B-500 CWR.

Dt. of Sample Collection: 28 May'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	0.472 11.98	0.175 113.097	0.595 0.885	0.595 0.885	19329.05 85.98	110262 760	109853 758	21980.08 97.77	125385 865	125301 864	1.14	17.5		18	
2	0.472 12.00	0.472 11.98	0.175 113.097	0.595 0.885		19199.50 85.40	109523 755		21938.44 97.59	125147 863		1.14	17.5			
3	0.472 12.00	0.472 11.98	0.175 113.097	0.595 0.885		19243.45 85.60	109774 757		21977.77 97.76	125371 865		1.14	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):

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

Job No : 101/2024-2025 (Steel).

Copy No : 03

Name of Client : GE (Navy) South Chattogram.

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : CEN/228 of 2021-2022/85/E-6 Dt.22 May'2025.

Sample Grade : 72.5

Project Name : Construction of boundary wall.

Frog Mark : KSRM B-500 CWR.

Dt. of Sample Collection: 28 May'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	0.630 16.00	0.312 201.062	1.061 1.579	1.061 1.579	29218.38 129.97	93755 647	94114 649	33696.92 149.89	108125 746	108237 746	1.15	19		20	
2	0.630 16.00	0.630 16.00	0.312 201.062	1.061 1.579		29327.11 130.45	94104 649		33717.74 149.98	108192 746		1.15	21.5			
3	0.630 16.00	0.630 16.00	0.312 201.062	1.061 1.579		29445.09 130.98	94482 652		33780.20 150.26	108393 748		1.15	18			

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.

Obsvervation 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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