



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 : 113/2024-2025 (Steel).

Copy No : 01

Name of Client : GE (Navy) Khulna.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : EinC/39 of 2023-2024/63/E-6 Dt.01 Jun'2025.

Sample Grade : 72.5

Project Name : Construction of BNS Mongla Boundary Wall.

Frog Mark : GPH B-500 DWR.

Dt. of Sample Collection : 02 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	0.394 10.00	0.394 10.00	0.1217 78.5398	0.415 0.617	0.415 0.617	15333.99 68.21	125960 869	127563 880	18343.58 81.60	150682 1039	151943 1048	1.20	16.5		17	
2	0.394 10.00	0.394 10.00	0.1217 78.5398	0.415 0.617		15384.88 68.44	126378 872		18181.65 80.88	149352 1030		1.18	15.5			
3	0.394 10.00	0.394 10.00	0.1217 78.5398	0.415 0.617		15868.36 70.59	130350 899		18965.86 84.36	155794 1074		1.20	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/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

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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 : 113/2024-2025 (Steel).

Copy No : 02

Name of Client : GE (Navy) Khulna.

Sample Specimen : Length 600mm , Dia 12mm

Ref.ltr.No : EinC/39 of 2023-2024/63/E-6 Dt.01 Jun'2025.

Sample Grade : 72.5

Project Name : Construction of BNS Mongla Boundary Wall.

Frog Mark : GPH B-500 DWR.

Dt. of Sample Collection: 02 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	0.472 12.00	0.469 11.91	0.175 113.097	0.587 0.874	0.587 0.874	19740.81 87.81	112611 777	113200 781	23976.46 106.65	136773 943	136769 943	1.21	17.5		17	
2	0.472 12.00	0.469 11.91	0.175 113.097	0.587 0.874		19932.82 88.67	113706 784		23997.28 106.74	136892 944		1.20	14.5			
3	0.472 12.00	0.469 11.91	0.175 113.097	0.587 0.874		19858.79 88.34	113284 781		23953.32 106.55	136641 942		1.21	18.5			

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/supplier.

Ovservation on Specimen(if any):

Minimum Standard Requirements (BDS/ISO 6935-2:1991(E))				Minimum Standard Requirments(ASTM A615/A616M-96a)									
Grade				ASTM A 615 M		ASTM A 615 M		ASTM A 615/A 615 M					
				Y/strength	Ult.Str	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	40000(2810)	70000(4910)	300(3050)	500(5090)	11	12	..	..	..	..
400/400w	400	440	14	60000(4210)	90000(6310)	420(4275)	620(6295)	9	9	8	7	8	7
500/500w	500	550	14	75000(5255)	100000(7015)	520(5275)	690(7010)	..	7	7	6	7	6

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

Job No : 113/2024-2025 (Steel).

Copy No : 03

Name of Client : GE (Navy) Khulna.

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : EinC/39 of 2023-2024/63/E-6 Dt.01 Jun'2025.

Sample Grade : 72.5

Project Name : Construction of BNS Mongla Boundary Wall.

Frog Mark : GPH B-500 DWR.

Dt. of Sample Collection: 02 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	0.630 16.00	0.627 15.93	0.312 201.062	1.052 1.565	1.052 1.565	30236.23 134.50	97021 669	96934 669	38409.10 170.85	123246 850	123290 850	1.27	22.5		22	
2	0.630 16.00	0.627 15.93	0.312 201.062	1.052 1.565		30196.91 134.32	96895 668		38409.10 170.85	123246 850		1.27	20.5			
3	0.630 16.00	0.627 15.93	0.312 201.062	1.052 1.565		30194.59 134.31	96887 668		38450.74 171.04	123379 851		1.27	23.5			

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):

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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