



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 : 58/2024-2025 (Steel).

Copy No :02

Name of Client : GE (Navy) South Chattogram.

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : CEN/203 of 2022-2023/18/E-6 Dt.16 Feb'2025.

Sample Grade : 72.5

Project Name : Construction of Administrative building.

Frog Mark : AKS B-500 DWR.

Dt. of Sample Collection: 18 Feb'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	0.632 16.05	0.312 201.062	1.067 1.588	1.067 1.588	29738.42 132.28	95424 658	95404 658	37595.14 167.23	120634 832	120614 832	1.26	22.5		22	
2	0.630 16.00	0.632 16.05	0.312 201.062	1.067 1.588		29642.22 131.85	95115 656		37553.91 167.05	120502 831		1.27	22.5			
3	0.630 16.00	0.632 16.05	0.312 201.062	1.067 1.588		29816.30 132.63	95673 660		37618.05 167.33	120707 832		1.26	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/supplier.

Obsvervation on Specimen(if any):

Minimum Standard Requirements (BDS/ISO 6935-2:1991(E)				Minimum Standard Requirments(ASTM A615/A616M-96a)									
Grade	Y/strength N/mm2 or Mpa	Ult.Str N/mm2 or Mpa	Elongation %	ASTM A 615 M			ASTM A 615 M			ASTM A 615/A 615 M			
				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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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 : 58/2024-2025 (Steel).

Copy No :03

Name of Client : GE (Navy) South Chattogram.

Sample Specimen : Length 600mm , Dia 20mm

Ref.ltr.No : CEN/203 of 2022-2023/18/E-6 Dt.16 Feb'2025.

Sample Grade : 72.5

Project Name : Construction of Administrative building.

Frog Mark : AKS B-500 DWR.

Dt. of Sample Collection: 18 Feb'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	0.787 20.00	0.792 20.12	0.4869 314.1593	1.677 2.496	1.677 2.496	44476.07 197.84	91336 630	90919 627	57078.89 253.90	117218 808	117937 813	1.28	26.5		26	
2	0.787 20.00	0.792 20.12	0.4869 314.1593	1.677 2.496		44599.76 198.39	91590 632		57562.21 256.05	118210 815		1.29	24.5			
3	0.787 20.00	0.792 20.12	0.4869 314.1593	1.677 2.496		43743.08 194.58	89831 620		57646.96 256.43	118384 816		1.32	25.5			

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	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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Page no: 136

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

Job No : 58/2024-2025 (Steel).

Copy No : 01

Name of Client : GE (Navy) South Chattogram.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : CEN/203 of 2022-2023/18/E-6 Dt.16 Feb'2025.

Sample Grade : 72.5

Project Name : Construction of Administrative building.

Frog Mark : AKS B-500 DWR.

Dt. of Sample Collection : 18 Feb'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 10.01	0.1217 78.5398	0.415 0.618	0.415 0.618	14927.47 66.40	122621 846	124038 855	17987.70 80.01	147759 1019	148135 1022	1.21	17		18	
2	0.394 10.00	0.394 10.01	0.1217 78.5398	0.415 0.618		15170.28 67.48	124615 859		18040.38 80.25	148192 1022		1.19	17.5			
3	0.394 10.00	0.394 10.01	0.1217 78.5398	0.415 0.618		15202.34 67.62	124879 861		18072.45 80.39	148455 1024		1.19	19.5			

Cautions:

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Obsvervation on Specimen(if any):

Minimum Standard Requirements (BDS/ISO 6935-2:1991(E))				Minimum Standard Requirments (ASTM A615/A616M-96a)									
Grade	Y/strength N/mm2 or Mpa	Ult.Str N/mm2 or Mpa	Elongation %	ASTM A 615 M		ASTM A 615 M		ASTM A 615/A 615 M					
				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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