



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 10

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

Job No : 03/2025-2026 (Steel).

Copy No : 01

Name of Client : GE (Air) Tejgaon, Dhaka.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : CE (Air)/170 of 2024-2025/24/E-6 Dt.29 Jun'2025.

Sample Grade : 60

Project Name : Construction of Medical Squadron (MI Room).

Frog Mark : RSM B-420 DWR.

Dt. of Sample Collection : 02 July'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	0.398 10.11	0.1217 78.5398	0.423 0.630	0.423 0.630	13471.78 59.93	110663 763	114894 792	16950.98 75.40	139243 960	141333 975	1.26	17.5		18	
2	0.394 10.00	0.398 10.11	0.1217 78.5398	0.423 0.630		14806.56 65.86	121627 839		17698.17 78.73	145380 1003		1.20	17.5			
3	0.394 10.00	0.398 10.11	0.1217 78.5398	0.423 0.630		13682.29 60.86	112392 775		16967.17 75.47	139376 961		1.24	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)

Page no: 11

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

Job No : 03/2025-2026 (Steel).

Copy No : 02

Name of Client : GE (Air) Tejgaon, Dhaka.

Sample Specimen : Length 600mm , Dia 12mm

Ref.ltr.No : CE (Air)/170 of 2024-2025/24/E-6 Dt.29 Jun'2025.

Sample Grade : 60

Project Name : Construction of Medical Squadron (MI Room).

Frog Mark : RSM B-420 DWR.

Dt. of Sample Collection: 02 July'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	0.478 12.14	0.175 113.097	0.610 0.908	0.610 0.908	17293.35 76.92	98649 680	101372 699	22151.27 98.53	126361 871	129146 891	1.28	16		17	
2	0.472 12.00	0.478 12.14	0.175 113.097	0.610 0.908		17709.74 78.78	101025 697		22766.60 101.27	129871 896		1.29	17			
3	0.472 12.00	0.478 12.14	0.175 113.097	0.610 0.908		18308.88 81.44	104442 720		23000.25 102.31	131204 905		1.26	17			

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)

Page no: 12

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

Job No : 03/2025-2026 (Steel). Copy No : 03
Name of Client : GE (Air) Tejgaon, Dhaka. Sample Specimen : Length 600mm , Dia 16mm
Ref.ltr.No : CE (Air)/170 of 2024-2025/24/E-6 Dt.29 Jun'2025. Sample Grade : 60
Project Name : Construction of Medical Squadron (MI Room). Frog Mark : RSM B-420 DWR.
Dt. of Sample Collection: 02 July'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	0.634 16.10	0.312 201.062	1.075 1.599	1.075 1.599	26798.68 119.21	85991 593	87515 604	34990.05 155.64	112275 774	113655 784	1.31	22.5		21	
2	0.630 16.00	0.634 16.10	0.312 201.062	1.075 1.599		27816.53 123.73	89257 616		35855.23 159.49	115051 793		1.29	21			
3	0.630 16.00	0.634 16.10	0.312 201.062	1.075 1.599		27205.82 121.02	87297 602		35415.70 157.54	113641 784		1.30	18			

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)									
				ASTM A 615 M			ASTM A 615 M			ASTM A 615/A 615 M			
				Grade	Y/strength	Ult.Str	Grade	Y/strength	Ult.Str	Minimum Elongation in 8"(203.2 mm) GL (%)			
					psi (kg/cm2)	psi (kg/cm2)		Mpa (kg/cm2)	Ult.Str (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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MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 13

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

Job No : 03/2025-2026 (Steel).

Copy No : 04

Name of Client : GE (Air) Tejgaon, Dhaka.

Sample Specimen : Length 600mm , Dia 20mm

Ref.ltr.No : CE (Air)/170 of 2024-2025/24/E-6 Dt.29 Jun'2025.

Sample Grade : 60

Project Name : Construction of Medical Squadron (MI Room).

Frog Mark : RSM B-420 DWR.

Dt. of Sample Collection: 02 July'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	0.791 20.09	0.4869 314.1593	1.672 2.488	1.672 2.488	39542.62 175.89	81205 560	80714 557	50209.22 223.34	103110 711	103387 713	1.27	18.5		18	
2	0.787 20.00	0.791 20.09	0.4869 314.1593	1.672 2.488		39068.39 173.78	80231 553		50271.68 223.62	103238 712		1.29	16.5			
3	0.787 20.00	0.791 20.09	0.4869 314.1593	1.672 2.488		39299.72 174.81	80706 557		50551.59 224.86	103813 716		1.29	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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