



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 362

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

Job No : 44/2025-2026 (Steel).

Copy No : 01

Name of Client : GE (Army) Jashore.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : CEA/390 of 2022-2023/75/E-6 Dt.19 Aug'2025.

Sample Grade : 60

Project Name : Construction of 1x Academic Complex.

Frog Mark : Baizid B-420 DWR

Dt. of Sample Collection : 21 Aug'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	0.424 0.630	0.424 0.630	13171.06 58.59	108193 746	104392 720	15803.59 70.30	129817 895	127366 878	1.20	19		18	
2	0.394 10.00	0.398 10.11	0.1217 78.5398	0.424 0.630		12939.73 57.56	106293 733		15565.32 69.24	127860 882		1.20	18.5			
3	0.394 10.00	0.398 10.11	0.1217 78.5398	0.424 0.630		12014.41 53.44	98692 681		15146.61 67.38	124421 858		1.26	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: 363

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

Job No : 44/2025-2026 (Steel).

Copy No : 02

Name of Client : GE (Army) Jashore.

Sample Specimen : Length 600mm , Dia 12mm

Ref.ltr.No : CEA/390 of 2022-2023/75/E-6 Dt.19 Aug'2025.

Sample Grade : 60

Project Name : Construction of 1x Academic Complex.

Frog Mark : Baizid B-420 DWR

Dt. of Sample Collection: 21 Aug'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	0.479 12.16	0.175 113.097	0.613 0.912	0.613 0.912	16641.00 74.02	94928 655	95368 658	20219.67 89.94	115342 795	119112 821	1.22	19.5		19	
2	0.472 12.00	0.479 12.16	0.175 113.097	0.613 0.912		16534.59 73.55	94321 650		21237.52 94.47	121149 836		1.28	19.5			
3	0.472 12.00	0.479 12.16	0.175 113.097	0.613 0.912		16978.74 75.52	96855 668		21184.31 94.23	120845 833		1.25	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 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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MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 364

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

Job No : 44/2025-2026 (Steel).

Copy No : 03

Name of Client : GE (Army) Jashore.

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : CEA/390 of 2022-2023/75/E-6 Dt.19 Aug'2025.

Sample Grade : 60

Project Name : Construction of 1x Academic Complex.

Frog Mark : Baizid B-420 DWR

Dt. of Sample Collection: 21 Aug'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	0.639 16.23	0.312 201.062	1.092 1.624	1.092 1.624	26969.86 119.97	86540 597	87104 601	33844.97 150.55	108600 749	109531 755	1.25	19.5		19	
2	0.630 16.00	0.639 16.23	0.312 201.062	1.092 1.624		27300.66 121.44	87601 604		34247.49 152.34	109892 758		1.25	18			
3	0.630 16.00	0.639 16.23	0.312 201.062	1.092 1.624		27166.49 120.84	87171 601		34312.26 152.63	110100 759		1.26	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.

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: 360

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

Job No : 44/2025-2026 (Steel).

Copy No : 04

Name of Client : GE (Army) Jashore.

Sample Specimen : Length 600mm , Dia 20mm

Ref.ltr.No : CEA/390 of 2022-2023/75/E-6 Dt.19 Aug'2025.

Sample Grade : 60

Project Name : Construction of 1x Academic Complex.

Frog Mark : Baizid B-420 DWR

Dt. of Sample Collection: 21 Aug'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	0.789 20.05	0.4869 314.1593	1.666 2.479	1.666 2.479	37215.44 165.54	76426 527	76762 529	50667.25 225.38	104051 718	105080 725	1.36	21.5		24	
2	0.787 20.00	0.789 20.05	0.4869 314.1593	1.666 2.479		37460.65 166.63	76929 531		51546.30 229.29	105856 730		1.38	26.5			
3	0.787 20.00	0.789 20.05	0.4869 314.1593	1.666 2.479		37460.65 166.63	76929 531		51291.84 228.16	105333 726		1.37	24.5			

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.
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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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MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 365

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

Job No : 44/2025-2026 (Steel).	Copy No : 05
Name of Client : GE (Army) Jashore.	Sample Specimen : Length 600mm , Dia 25mm
Ref.ltr.No : CEA/390 of 2022-2023/75/E-6 Dt.19 Aug'2025.	Sample Grade : 60
Project Name : Construction of 1x Academic Complex.	Frog Mark : Baizid B-420 DWR
Dt. of Sample Collection: 21 Aug'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	0.984 25.00	0.993 25.23	0.7609 490.8739	2.638 3.926	2.638 3.926	56795.17 252.64	74646 515	73844 509	75486.59 335.78	99213 684	98859 682	1.33	25.5		27	
2	0.984 25.00	0.993 25.23	0.7609 490.8739	2.638 3.926		55569.12 247.18	73035 504		75273.77 334.83	98933 682		1.35	27.5			
3	0.984 25.00	0.993 25.23	0.7609 490.8739	2.638 3.926		56189.09 249.94	73850 509		74892.08 333.13	98431 679		1.33	28			

Cautions:

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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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