



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 380

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

Job No : 61/2025-2026 (Steel).

Copy No : 01

Name of Client : GE (Army) South, Dhaka.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : EinC/139 of 2024-2025/11/E-6 Dt.08 Sep'2025.

Sample Grade : 60

Project Name : Construction of DGFI office Building in Kakril.

Frog Mark : AKS B-500 DWR.

Dt. of Sample Collection : 09 Sep'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	0.397 10.09	0.1217 78.5398	0.422 0.627	0.422 0.627	14873.64 66.16	122179 843	116345 802	17890.18 79.58	146958 1014	140909 972	1.20	18.5		18	
2	0.394 10.00	0.397 10.09	0.1217 78.5398	0.422 0.627		14720.96 65.48	120924 834		17480.72 77.76	143594 990		1.19	16.5			
3	0.394 10.00	0.397 10.09	0.1217 78.5398	0.422 0.627		12895.77 57.36	105931 731		16090.43 71.57	132174 912		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.

Obsveration 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 (%)					
					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
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	

Laboratory Technician

Test Performed By

Vetted By



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 381

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

Job No : 61/2025-2026 (Steel).

Copy No : 02

Name of Client : GE (Army) South, Dhaka.

Sample Specimen : Length 600mm , Dia 12mm

Ref.ltr.No : EinC/139 of 2024-2025/11/E-6 Dt.08 Sep'2025.

Sample Grade : 60

Project Name : Construction of DGFI office Building in Kakril.

Frog Mark : AKS B-500 DWR.

Dt. of Sample Collection: 09 Sep'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	0.475 12.07	0.175 113.097	0.604 0.899	0.604 0.899	17811.53 79.23	101605 701	102036 704	21952.32 97.65	125226 864	126876 875	1.23	19.5		20	
2	0.472 12.00	0.475 12.07	0.175 113.097	0.604 0.899		17739.81 78.91	101196 698		22202.16 98.76	126651 873		1.25	19.5			
3	0.472 12.00	0.475 12.07	0.175 113.097	0.604 0.899		18109.94 80.56	103308 712		22569.97 100.40	128750 888		1.25	19.5			

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

Laboratory Technician

Test Performed By

Vetted By



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 382

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

Job No : 61/2025-2026 (Steel).

Copy No : 03

Name of Client : GE (Army) South, Dhaka.

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : EinC/139 of 2024-2025/11/E-6 Dt.08 Sep'2025.

Sample Grade : 60

Project Name : Construction of DGFI office Building in Kakril.

Frog Mark : AKS B-500 DWR.

Dt. of Sample Collection: 09 Sep'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	0.633 16.09	0.312 201.062	1.072 1.596	1.072 1.596	43942.50 195.47	141001 972	112413 775	55916.12 248.73	179422 1237	143713 991	1.27	20.5		20	
2	0.630 16.00	0.633 16.09	0.312 201.062	1.072 1.596		30636.43 136.28	98305 678		39339.05 174.99	126230 871		1.28	21			
3	0.630 16.00	0.633 16.09	0.312 201.062	1.072 1.596		30520.77 135.76	97934 675		39107.72 173.96	125487 865		1.28	19.5			

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	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 (%)			
										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

Laboratory Technician

Test Performed By

Vetted By



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 383

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

Job No : 61/2025-2026 (Steel). Copy No : 04
Name of Client : GE (Army) South, Dhaka. Sample Specimen : Length 600mm , Dia 20mm
Ref.ltr.No : EinC/139 of 2024-2025/11/E-6 Dt.08 Sep'2025. Sample Grade : 60
Project Name : Construction of DGFI office Building in Kakril. Frog Mark : AKS B-500 DWR.
Dt. of Sample Collection: 09 Sep'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	0.794 20.18	0.4869 314.1593	1.687 2.510	1.687 2.510	31425.27 139.79	64535 445	82961 572	39234.95 174.52	80573 556	103558 714	1.25	20.5		22	
2	0.787 20.00	0.794 20.18	0.4869 314.1593	1.687 2.510		45094.53 200.59	92606 639		55883.73 248.58	114763 791		1.24	24			
3	0.787 20.00	0.794 20.18	0.4869 314.1593	1.687 2.510		44673.51 198.72	91742 633		56163.64 249.83	115338 795		1.26	22			

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

Laboratory Technician

Test Performed By

Vetted By



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 384

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

Job No : 61/2025-2026 (Steel). Copy No : 05
Name of Client : GE (Army) South, Dhaka. Sample Specimen : Length 600mm , Dia 25mm
Ref.ltr.No : EinC/139 of 2024-2025/11/E-6 Dt.08 Sep'2025. Sample Grade : 60
Project Name : Construction of DGFI office Building in Kakril. Frog Mark : AKS B-500 DWR.
Dt. of Sample Collection: 09 Sep'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	0.990 25.14	0.7609 490.8739	2.618 3.895	2.618 3.895	67235.07 299.08	88368 609	88223 608	84288.68 374.93	110781 764	110836 764	1.25	26		26	
2	0.984 25.00	0.990 25.14	0.7609 490.8739	2.618 3.895		66372.21 295.24	87234 602		84024.97 373.76	110435 762		1.27	24.5			
3	0.984 25.00	0.990 25.14	0.7609 490.8739	2.618 3.895		67767.13 301.44	89067 614		84677.31 376.66	111292 768		1.25	27.5			

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	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 (%)			
										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

Laboratory Technician

Test Performed By

Vetted By