



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 302

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

Job No : 95/2024-2025 (Steel).

Copy No : 01

Name of Client : GE (Army) Rangpur.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : EinC/109 of 2024-2025/07/E-6 Dt.14 May'2025.

Sample Grade : 60

Project Name : Construction of 1 x Mosque.

Frog Mark : KSRM B-500 CWR.

Dt. of Sample Collection : 17 May'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	0.396 10.07	0.1217 78.5398	0.420 0.625	0.420 0.625	14517.39 64.58	119252 822	120095 828	16377.28 72.85	134530 928	136677 943	1.13	15		16	
2	0.394 10.00	0.396 10.07	0.1217 78.5398	0.420 0.625		14552.09 64.73	119537 824		16462.87 73.23	135233 933		1.13	19			
3	0.394 10.00	0.396 10.07	0.1217 78.5398	0.420 0.625		14790.36 65.79	121494 838		17075.90 75.96	140269 967		1.15	15			

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

Job No : 95/2024-2025 (Steel).

Copy No : 02

Name of Client : GE (Army) Rangpur.

Sample Specimen : Length 600mm , Dia 12mm

Ref.ltr.No : EinC/109 of 2024-2025/07/E-6 Dt.14 May'2025.

Sample Grade : 60

Project Name : Construction of 1 x Mosque.

Frog Mark : KSRM B-500 CWR.

Dt. of Sample Collection: 17 May'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 12.06	0.175 113.097	0.603 0.897	0.603 0.897	19625.15 87.30	111951 772	111920 772	22255.36 99.00	126955 876	126797 874	1.13	19.5		19	
2	0.472 12.00	0.475 12.06	0.175 113.097	0.603 0.897		19673.73 87.51	112228 774		22255.36 99.00	126955 876		1.13	18			
3	0.472 12.00	0.475 12.06	0.175 113.097	0.603 0.897		19560.38 87.01	111582 770		22172.09 98.63	126480 872		1.13	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 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)

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

Job No : 95/2024-2025 (Steel).

Copy No : 03

Name of Client : GE (Army) Rangpur.

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : EinC/109 of 2024-2025/07/E-6 Dt.14 May'2025.

Sample Grade : 60

Project Name : Construction of 1 x Mosque.

Frog Mark : KSRM B-500 CWR.

Dt. of Sample Collection: 17 May'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	0.630 16.01	0.312 201.062	1.062 1.580	1.062 1.580	29824.47 132.67	95700 660	96029 662	34885.96 155.18	111941 772	112121 773	1.17	19.5		20	
2	0.630 16.00	0.630 16.01	0.312 201.062	1.062 1.580		30023.41 133.55	96338 664		35034.01 155.84	112416 775		1.17	19			
3	0.630 16.00	0.630 16.01	0.312 201.062	1.062 1.580		29933.19 133.15	96049 662		34906.77 155.27	112008 772		1.17	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.

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	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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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 : 95/2024-2025 (Steel).

Copy No : 04

Name of Client : GE (Army) Rangpur.

Sample Specimen : Length 600mm , Dia 20mm

Ref.ltr.No : EinC/109 of 2024-2025/07/E-6 Dt.14 May'2025.

Sample Grade : 60

Project Name : Construction of 1 x Mosque.

Frog Mark : KSRM B-500 CWR.

Dt. of Sample Collection: 17 May'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 20.04	0.4869 314.1593	1.664 2.476	1.664 2.476	43618.64 194.02	89576 618	89593 618	52862.57 235.14	108559 749	108353 747	1.21	21.5		22	
2	0.787 20.00	0.789 20.04	0.4869 314.1593	1.664 2.476		42970.92 191.14	88245 609		52203.28 232.21	107205 739		1.21	21.5			
3	0.787 20.00	0.789 20.04	0.4869 314.1593	1.664 2.476		44291.81 197.02	90958 627		53221.13 236.74	109295 754		1.20	24			

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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