



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 19

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

Job No : 05/2025-2026 (Steel).

Copy No : 01

Name of Client : GE (Army) Rangpur.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : EinC/279 of 2021-2022/45/E-6 Dt.30 Jun'2025.

Sample Grade : 60

Project Name : Construction of Drain & Box Culvert.

Frog Mark : AKS B-500 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	0.395 10.03	0.1217 78.5398	0.416 0.620	0.416 0.620	14711.71 65.44	120848 833	126289 871	18732.22 83.32	153875 1061	152696 1053	1.27	17.5		17	
2	0.394 10.00	0.395 10.03	0.1217 78.5398	0.416 0.620		15717.99 69.92	129114 890		18542.53 82.48	152316 1050		1.18	16.5			
3	0.394 10.00	0.395 10.03	0.1217 78.5398	0.416 0.620		15692.55 69.80	128905 889		18491.63 82.25	151898 1048		1.18	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

Laboratory Technician

Test Performed By

Vetted By



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 20

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

Job No : 05/2025-2026 (Steel).

Copy No : 02

Name of Client : GE (Army) Rangpur.

Sample Specimen : Length 600mm , Dia 12mm

Ref.ltr.No : EinC/279 of 2021-2022/45/E-6 Dt.30 Jun'2025.

Sample Grade : 60

Project Name : Construction of Drain & Box Culvert.

Frog Mark : AKS B-500 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	0.474 12.04	0.175 113.097	0.601 0.894	0.601 0.894	19955.95 88.77	113838 785	113174 781	24080.55 107.12	137367 947	137732 950	1.21	17		19	
2	0.472 12.00	0.474 12.04	0.175 113.097	0.601 0.894		19759.32 87.89	112716 777		24166.15 107.50	137855 951		1.22	20.5			
3	0.472 12.00	0.474 12.04	0.175 113.097	0.601 0.894		19803.27 88.09	112967 779		24186.97 107.59	137974 952		1.22	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