



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 : 52/2025-2026 (Steel). Copy No : 01
Name of Client : AGE (Army) Parbatipur. Sample Specimen : Length 600mm , Dia 10mm
Ref.ltr.No : CEA/305 of 2024-2025/06/E-6 Dt.02 Sep'2025. Sample Grade : 60
Project Name : Construction of 1 x SMBK, CH/DH & Recreation room. Frog Mark : RSM B-420 DWR.
Dt. of Sample Collection : 03 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	0.400 10.15	0.1217 78.5398	0.427 0.636	0.427 0.636	14043.17 62.47	115357 796	119100 821	17501.54 77.85	143765 991	145805 1006	1.25	17.5		17	
2	0.394 10.00	0.400 10.15	0.1217 78.5398	0.427 0.636		14711.71 65.44	120848 833		17841.60 79.36	146559 1011		1.21	17.5			
3	0.394 10.00	0.400 10.15	0.1217 78.5398	0.427 0.636		14741.78 65.57	121095 835		17906.37 79.65	147091 1014		1.21	16.5			

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)									
Grade				ASTM A 615 M			ASTM A 615 M			ASTM A 615/A 615 M			
				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 (%)			
N/mm2 or Mpa										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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TEST RESULT FOR TENSILE STRENGTH OF PLAIN/DEFORMED/RIBBED COLD TWISTED M.S BARS

Job No : 52/2025-2026 (Steel). Copy No : 02
Name of Client : AGE (Army) Parbatipur. Sample Specimen : Length 600mm , Dia 16mm
Ref.ltr.No : CEA/305 of 2024-2025/06/E-6 Dt.02 Sep'2025. Sample Grade : 60
Project Name : Construction of 1 x SMBK, CH/DH & Recreation room. Frog Mark : RSM B-420 DWR.
Dt. of Sample Collection: 03 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	0.637 16.17	0.312 201.062	1.084 1.613	1.084 1.613	27342.30 121.62	87735 605	88910 613	35776.57 159.14	114799 792	114776 792	1.31	18.5		19	
2	0.630 16.00	0.637 16.17	0.312 201.062	1.084 1.613		27219.70 121.08	87342 602		35374.06 157.35	113507 783		1.30	20.5			
3	0.630 16.00	0.637 16.17	0.312 201.062	1.084 1.613		28563.72 127.06	91654 632		36158.27 160.84	116023 800		1.27	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 N/mm2 or Mpa	Ult.Str N/mm2 or Mpa	Elongation %	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

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

Job No : 52/2025-2026 (Steel). Copy No : 03
Name of Client : AGE (Army) Parbatipur. Sample Specimen : Length 600mm , Dia 20mm
Ref.ltr.No : CEA/305 of 2024-2025/06/E-6 Dt.02 Sep'2025. Sample Grade : 60
Project Name : Construction of 1 x SMBK, CH/DH & Recreation room. Frog Mark : RSM B-420 DWR.
Dt. of Sample Collection: 03 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	0.792 20.12	0.4869 314.1593	1.677 2.496	1.677 2.496	40532.71 180.30	83238 574	84329 582	51853.97 230.66	106488 734	107466 741	1.28	23		21	
2	0.787 20.00	0.792 20.12	0.4869 314.1593	1.677 2.496		41624.58 185.15	85481 590		52436.92 233.25	107685 743		1.26	20.5			
3	0.787 20.00	0.792 20.12	0.4869 314.1593	1.677 2.496		41034.69 182.53	84269 581		52700.64 234.42	108226 746		1.28	20.5			

Cautions:

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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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