



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 172

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

Job No : 69/2024-2025 (Steel).

Copy No : 01

Name of Client : AGE (Air) Air HQ (U).

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : CE Air/204 of 2022-2023/29/E-6 Dt.06 Mar'2025.

Sample Grade : 60

Project Name : Construction of Boundary Wall.

Frog Mark : PURBACHAL B-420 DWR.

Dt. of Sample Collection : 09 Mar'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 10.07	0.1217 78.5398	0.420 0.625	0.420 0.625	13170.59 58.59	108189 746	106433 734	15234.41 67.77	125142 863	125782 867	1.16	20		21	
2	0.394 10.00	0.397 10.07	0.1217 78.5398	0.420 0.625		12923.21 57.49	106157 732		15445.15 68.70	126873 875		1.20	21.5			
3	0.394 10.00	0.397 10.07	0.1217 78.5398	0.420 0.625		12776.61 56.83	104953 724		15257.32 67.87	125330 864		1.19	22.5			

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: 173

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

Job No : 69/2024-2025 (Steel).

Copy No : 02

Name of Client : AGE (Air) Air HQ (U).

Sample Specimen : Length 600mm , Dia 12mm

Ref.ltr.No : CE Air/204 of 2022-2023/29/E-6 Dt.06 Mar'2025.

Sample Grade : 60

Project Name : Construction of Boundary Wall.

Frog Mark : PURBACHAL B-420 DWR.

Dt. of Sample Collection: 09 Mar'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 12.05	0.175 113.097	0.602 0.896	0.602 0.896	17092.08 76.03	97501 672	96290 664	20573.78 91.52	117362 809	116644 804	1.20	19		15	
2	0.472 12.00	0.474 12.05	0.175 113.097	0.602 0.896		16560.66 73.67	94470 652		20049.23 89.18	114370 789		1.21	12			
3	0.472 12.00	0.474 12.05	0.175 113.097	0.602 0.896		16986.71 75.56	96900 668		20720.37 92.17	118199 815		1.22	14.5			

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

Laboratory Technician

Test Performed By

Vetted By



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 174

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

Job No : 69/2024-2025 (Steel).

Copy No : 03

Name of Client : AGE (Air) Air HQ (U).

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : CE Air/204 of 2022-2023/29/E-6 Dt.06 Mar'2025.

Sample Grade : 60

Project Name : Construction of Boundary Wall.

Frog Mark : PURBACHAL B-420 DWR.

Dt. of Sample Collection: 09 Mar'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	0.635 16.13	0.312 201.062	1.078 1.603	1.078 1.603	27878.46 124.01	89455 617	91491 631	33973.72 151.12	109014 752	111304 768	1.22	16		17	
2	0.630 16.00	0.635 16.13	0.312 201.062	1.078 1.603		28123.56 125.10	90242 622		34319.60 152.66	110123 759		1.22	17			
3	0.630 16.00	0.635 16.13	0.312 201.062	1.078 1.603		29536.85 131.39	94777 654		35769.54 159.11	114776 792		1.21	19			

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 (%)			
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