



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 82

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

Job No : 20/2025-2026 (Steel).

Copy No : 01

Name of Client : AGE (Air) PKP.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : EinC/442 of 2022-2023/66/E-6 Dt.23 July'2025.

Sample Grade : 60

Project Name : Construction of Administrative Building.

Frog Mark : Purbachal B-500 DWR.

Dt. of Sample Collection : 28 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	0.398 10.11	0.1217 78.5398	0.424 0.631	0.424 0.631	18456.93 82.10	151613 1046	156712 1081	22532.96 100.23	185095 1277	183360 1265	1.22	13.5		14	
2	0.394 10.00	0.398 10.11	0.1217 78.5398	0.424 0.631		21832.03 97.11	179338 1237		24786.11 110.25	203604 1404		1.14	14.5			
3	0.394 10.00	0.398 10.11	0.1217 78.5398	0.424 0.631		16944.04 75.37	139186 960		19645.97 87.39	161380 1113		1.16	13.5			

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

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

Job No : 20/2025-2026 (Steel).

Copy No : 02

Name of Client : AGE (Air) PKP.

Sample Specimen : Length 600mm , Dia 12mm

Ref.ltr.No : EinC/442 of 2022-2023/66/E-6 Dt.23 July'2025.

Sample Grade : 60

Project Name : Construction of Administrative Building.

Frog Mark : Purbachal B-500 DWR.

Dt. of Sample Collection: 28 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	0.477 12.12	0.175 113.097	0.609 0.906	0.609 0.906	21001.56 93.42	119803 826	118804 819	24293.38 108.06	138581 956	137129 946	1.16	13		13	
2	0.472 12.00	0.477 12.12	0.175 113.097	0.609 0.906		20367.72 90.60	116187 801		23509.17 104.57	134107 925		1.15	12.5			
3	0.472 12.00	0.477 12.12	0.175 113.097	0.609 0.906		21110.28 93.90	120423 831		24314.20 108.15	138700 957		1.15	13.2			

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

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

Job No : 20/2025-2026 (Steel).

Copy No : 03

Name of Client : AGE (Air) PKP.

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : EinC/442 of 2022-2023/66/E-6 Dt.23 July'2025.

Sample Grade : 60

Project Name : Construction of Administrative Building.

Frog Mark : Purbachal B-500 DWR.

Dt. of Sample Collection: 28 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	0.630 16.00	0.635 16.12	0.312 201.062	1.077 1.603	1.077 1.603	32995.99 146.77	105876 730	105253 726	40338.39 179.43	129436 893	129211 891	1.22	14.5		15	
2	0.630 16.00	0.635 16.12	0.312 201.062	1.077 1.603		32732.28 145.60	105030 724		40296.75 179.25	129303 892		1.23	14.5			
3	0.630 16.00	0.635 16.12	0.312 201.062	1.077 1.603		32676.76 145.35	104852 723		40169.52 178.68	128894 889		1.23	15.5			

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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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 : 20/2025-2026 (Steel).

Copy No : 04

Name of Client : AGE (Air) PKP.

Sample Specimen : Length 600mm , Dia 20mm

Ref.ltr.No : EinC/442 of 2022-2023/66/E-6 Dt.23 July'2025.

Sample Grade : 60

Project Name : Construction of Administrative Building.

Frog Mark : Purbachal B-500 DWR.

Dt. of Sample Collection: 28 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	0.787 20.00	0.791 20.10	0.4869 314.1593	1.674 2.491	1.674 2.491	47530.43 211.42	97609 673	97264 671	58104.50 258.46	119324 823	119015 821	1.22	17.5		18	
2	0.787 20.00	0.791 20.10	0.4869 314.1593	1.674 2.491		47167.24 209.81	96863 668		57715.86 256.73	118526 817		1.22	17.5			
3	0.787 20.00	0.791 20.10	0.4869 314.1593	1.674 2.491		47389.31 210.80	97319 671		58042.04 258.18	119196 822		1.22	18.5			

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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