



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 385

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

Job No : 63/2025-2026 (Steel).

Copy No : 01

Name of Client : GE (Army) Savar.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : EinC/24 of 2023-2024/25/E-6 Dt.07 Sep'2025.

Sample Grade : 72.5

Project Name : Construction of Sub- Station Building.

Frog Mark : AKS B-500 DWR.

Dt. of Sample Collection : 09 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	0.390 9.90	0.1217 78.5398	0.406 0.604	0.406 0.604	15153.55 67.41	124478 858	124655 860	17989.65 80.02	147775 1019	148231 1022	1.19	18		18	
2	0.394 10.00	0.390 9.90	0.1217 78.5398	0.406 0.604		15146.61 67.38	124421 858		18089.12 80.46	148592 1025		1.19	18.5			
3	0.394 10.00	0.390 9.90	0.1217 78.5398	0.406 0.604		15225.26 67.73	125067 863		18056.73 80.32	148326 1023		1.19	18.5			

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)									
				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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MATERIALS TESTING LABORATORY

MILITARY ENGINEER SERVICES(MES)

Page no: 386

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

Job No : 63/2025-2026 (Steel).

Copy No : 02

Name of Client : GE (Army) Savar.

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : EinC/24 of 2023-2024/25/E-6 Dt.07 Sep'2025.

Sample Grade : 72.5

Project Name : Construction of Sub- Station Building.

Frog Mark : AKS B-500 DWR.

Dt. of Sample Collection: 09 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	0.000 0.00	0.312 201.062	0.000 0.000	0.000 0.000	31140.73 138.52	99923 689	99512 686	38853.26 172.83	124671 860	124629 860	1.25	22.5		21	
2	0.630 16.00	0.000 0.00	0.312 201.062	0.000 0.000		31043.57 138.09	99611 687		38897.21 173.02	124812 861		1.25	21			
3	0.630 16.00	0.000 0.00	0.312 201.062	0.000 0.000		30853.88 137.24	99003 683		38769.98 172.46	124404 858		1.26	20			

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				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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Page no: 387

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

Job No : 63/2025-2026 (Steel).

Copy No : 03

Name of Client : GE (Army) Savar.

Sample Specimen : Length 600mm , Dia 20mm

Ref.ltr.No : EinC/24 of 2023-2024/25/E-6 Dt.07 Sep'2025.

Sample Grade : 72.5

Project Name : Construction of Sub- Station Building.

Frog Mark : AKS B-500 DWR.

Dt. of Sample Collection: 09 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	0.783 19.88	0.4869 314.1593	1.637 2.436	1.637 2.436	38848.63 172.81	79780 550	87021 600	56189.09 249.94	115390 796	115267 795	1.45	22.5		23	
2	0.787 20.00	0.783 19.88	0.4869 314.1593	1.637 2.436		44805.36 199.30	92013 635		56172.89 249.87	115357 796		1.25	23			
3	0.787 20.00	0.783 19.88	0.4869 314.1593	1.637 2.436		43470.59 193.37	89272 616		56024.84 249.21	115053 793		1.29	22			

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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