



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 289

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

Job No : 91/2024-2025 (Steel).

Copy No : 05

Name of Client : GE (Army) Savar.

Sample Specimen : Length 600mm , Dia 25mm

Ref.ltr.No : EinC/201 of 2023-2024/24/E-6 Dt.14 May'2025.

Sample Grade : 60

Project Name : Construction of meat processing plant building.

Frog Mark : GPH B-500 DWR.

Dt. of Sample Collection: 15 May'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	0.984 25.00	0.984 25.00	0.7609 490.8739	2.590 3.854	2.590 3.854	64711.27 287.85	85051 587	85518 590	83405.00 371.00	109620 756	109526 755	1.29	20.5		22	
2	0.984 25.00	0.984 25.00	0.7609 490.8739	2.590 3.854		65268.77 290.33	85783 592		83361.05 370.81	109562 756		1.28	20			
3	0.984 25.00	0.984 25.00	0.7609 490.8739	2.590 3.854		65220.19 290.11	85719 591		83233.82 370.24	109395 754		1.28	25			

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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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 : 91/2024-2025 (Steel).

Copy No : 01

Name of Client : GE (Army) Savar.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : EinC/201 of 2023-2024/24/E-6 Dt.14 May'2025.

Sample Grade : 60

Project Name : Construction of meat processing plant building.

Frog Mark : GPH B-500 DWR.

Dt. of Sample Collection : 15 May'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	0.396 10.05	0.1217 78.5398	0.418 0.622	0.418 0.622	14468.81 64.36	118853 820	119550 824	17628.78 78.42	144810 999	145577 1004	1.22	15		16	
2	0.394 10.00	0.396 10.05	0.1217 78.5398	0.418 0.622		14633.06 65.09	120202 829		17760.63 79.00	145894 1006		1.21	16			
3	0.394 10.00	0.396 10.05	0.1217 78.5398	0.418 0.622		14559.03 64.76	119594 825		17776.83 79.07	146027 1007		1.22	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.

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

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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 : 91/2024-2025 (Steel).

Copy No : 02

Name of Client : GE (Army) Savar.

Sample Specimen : Length 600mm , Dia 12mm

Ref.ltr.No : EinC/201 of 2023-2024/24/E-6 Dt.14 May'2025.

Sample Grade : 60

Project Name : Construction of meat processing plant building.

Frog Mark : GPH B-500 DWR.

Dt. of Sample Collection: 15 May'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	0.472 12.00	0.175 113.097	0.596 0.887	0.596 0.887	18945.04 84.27	108071 745	106554 735	23296.35 103.63	132893 917	132405 913	1.23	16.5		18	
2	0.472 12.00	0.472 12.00	0.175 113.097	0.596 0.887		18676.70 83.08	106541 735		23296.35 103.63	132893 917		1.25	18.5			
3	0.472 12.00	0.472 12.00	0.175 113.097	0.596 0.887		18415.30 81.91	105049 724		23039.57 102.48	131428 906		1.25	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

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MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 287

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

Job No : 91/2024-2025 (Steel).

Copy No : 03

Name of Client : GE (Army) Savar.

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : EinC/201 of 2023-2024/24/E-6 Dt.14 May'2025.

Sample Grade : 60

Project Name : Construction of meat processing plant building.

Frog Mark : GPH B-500 DWR.

Dt. of Sample Collection: 15 May'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	0.630 16.01	0.312 201.062	1.062 1.581	1.062 1.581	29378.00 130.68	94267 650	94200 650	37856.23 168.39	121472 838	120247 829	1.29	20.5		20	
2	0.630 16.00	0.630 16.01	0.312 201.062	1.062 1.581		29223.01 129.99	93770 647		37495.35 166.79	120314 830		1.28	19.5			
3	0.630 16.00	0.630 16.01	0.312 201.062	1.062 1.581		29470.53 131.09	94564 652		37072.02 164.90	118955 820		1.26	20			

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 N/mm2 or Mpa	Ult.Str N/mm2 or Mpa	Elongation %	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 (%)			
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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Page no: 288

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

Job No : 91/2024-2025 (Steel).

Copy No : 04

Name of Client : GE (Army) Savar.

Sample Specimen : Length 600mm , Dia 20mm

Ref.ltr.No : EinC/201 of 2023-2024/24/E-6 Dt.14 May'2025.

Sample Grade : 60

Project Name : Construction of meat processing plant building.

Frog Mark : GPH B-500 DWR.

Dt. of Sample Collection: 15 May'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	0.787 20.00	0.4869 314.1593	1.657 2.465	1.657 2.465	44139.13 196.34	90644 625	89338 616	56200.65 249.99	115414 796	112616 777	1.27	20.5		21	
2	0.787 20.00	0.787 20.00	0.4869 314.1593	1.657 2.465		43750.50 194.61	89846 620		55134.23 245.25	113224 781		1.26	20			
3	0.787 20.00	0.787 20.00	0.4869 314.1593	1.657 2.465		42619.30 189.58	87523 604		53179.49 236.55	109210 753		1.25	22.5			

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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