MATERRIALS TESTING LABORATORY
MILITARY ENGINEER SERVICES(MES)

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

Job No : 93(D)/2025-2026 (Steel).
Name of Client : GE (Army) PMB.
Ref.ltr.No : EinC/172 of 2024-2025/04/E-6 Dt.27 Oct'2025.
Project Name : Construction of internal road,approach road, Drain & footpath.
Dt. of Sample Collection: 30 Oct'2025

Copy No : 00
Sample Specimen : Length 600mm , Dia 08mm
Sample Grade : 60
Frog Mark : SAS B-420 DWR.

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	0.315 8.00	0.000 0.00	0.0779 50.2655	0.000 0.000		-708.71 -3.1525	-9096 -63		-708.71 -3.1525	-9096 -63		1.00	0			
2	0.315 8.00	0.000 0.00	0.0779 50.2655	0.000 0.000	0.000 0.000	-708.71 -3.1525	-9096 -63	-9096 -63	-708.71 -3.1525	-9096 -63	-9096 -63	1.00	0		8	
3	0.315 8.00	0.000 0.00	0.0779 50.2655	0.000 0.000		-708.71 -3.1525	-9096 -63		-708.71 -3.1525	-9096 -63		1.00	24			

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/supplyer.

Ovservation on Specimen(if any):

1. Diameter & Unit weight of 22 mm bar is less than the standard value but within tolerance limit according to MES Schedule of Rates-2016.

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	Ult.Str	Elongation	Grade	Y/strength	Ult.Str	Grade	Y/strength	Ult.Str	Minimum Elongation in 8"(203.2 mm) GL (%)			
	N/mm2 or Mpa	N/mm2 or Mpa	%		psi (kg/cm2)	psi (kg/cm2)		Mpa (kg/cm2)	Mpa (kg/cm2)	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

Laboratory Technician Test Performed By Vetted By

MATERRIALS TESTING LABORATORY
MILITARY ENGINEER SERVICES(MES)

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

Job No : 93(D)/2025-2026 (Steel).
Name of Client : GE (Army) PMB.
Ref.ltr.No : EinC/172 of 2024-2025/04/E-6 Dt.27 Oct'2025.
Project Name : Construction of internal road,approach road, Drain & footpath.
Dt. of Sample Collection : 30 Oct'2025

Copy No : 01
Sample Specimen : Length 600mm , Dia 10mm
Sample Grade : 60
Frog Mark : SAS B-420 DWR.

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	0.409 10.38	0.1217 78.5398	0.447 0.665		12939.73 57.56	106293 733		16698.83 74.28	137171 946		1.29	24			
2	0.394 10.00	0.409 10.38	0.1217 78.5398	0.447 0.665	0.447 0.665	12217.98 54.35	100364 692	104487 721	15741.13 70.02	129304 892	134771 929	1.29	21		22	
3	0.394 10.00	0.409 10.38	0.1217 78.5398	0.447 0.665		13002.19 57.84	106806 737		16779.80 74.64	137836 951		1.29	20.5			

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/supplyer.

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

Laboratory Technician Test Performed By Vetted By

MATERRIALS TESTING LABORATORY
MILITARY ENGINEER SERVICES(MES)

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

Job No : 93(D)/2025-2026 (Steel).
Name of Client : GE (Army) PMB.
Ref.ltr.No : EinC/172 of 2024-2025/04/E-6 Dt.27 Oct'2025.
Project Name : Construction of internal road,approach road, Drain & footpath.
Dt. of Sample Collection: 30 Oct'2025

Copy No : 02
Sample Specimen : Length 600mm , Dia 12mm
Sample Grade : 60
Frog Mark : SAS B-420 DWR.

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	0.000 0.00	0.175 113.097	0.000 0.000		17566.32 78.14	100206 691		22724.96 101.09	129634 894		1.29	21.5			
2	0.472 12.00	0.000 0.00	0.175 113.097	0.000 0.000	0.000 0.000	17589.45 78.24	100338 692	100453 693	22829.06 101.55	130228 898	130030 897	1.30	23		23	
3	0.472 12.00	0.000 0.00	0.175 113.097	0.000 0.000		17672.73 78.61	100813 695		22829.06 101.55	130228 898		1.29	23			

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/supplyer.

Ovservation on Specimen(if any):

1. Diameter & Unit weight of 12 mm bar is less than the standard value but within tolerance limit according to MES Schedule of Rates-2016.

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

Laboratory Technician Test Performed By Vetted By

MATERRIALS TESTING LABORATORY
MILITARY ENGINEER SERVICES(MES)

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

Job No : 93(D)/2025-2026 (Steel).
Name of Client : GE (Army) PMB.
Ref.ltr.No : EinC/172 of 2024-2025/04/E-6 Dt.27 Oct'2025.
Project Name : Construction of internal road,approach road, Drain & footpath.
Dt. of Sample Collection: 30 Oct'2025

Copy No : 03
Sample Specimen : Length 600mm , Dia 16mm
Sample Grade : 72.50
Frog Mark : GPH B-420 DWR.

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		27379.31 121.79	87854 606		36667.19 163.10	117656 811		1.34	21.5			
2	0.630 16.00	0.000 0.00	0.312 201.062	0.000 0.000	0.000 0.000	27291.41 121.40	87572 604	87799 606	36815.24 163.76	118131 815	117857 813	1.35	24.5		23	
3	0.630 16.00	0.000 0.00	0.312 201.062	0.000 0.000		27416.33 121.95	87972 607		36706.52 163.28	117783 812		1.34	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/supplyer.

Ovservation on Specimen(if any):

1. Diameter & Unit weight of 16 mm bar is less than the standard value but within tolerance limit according to MES Schedule of Rates-2016.

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	Ult.Str	Elongation	Grade	Y/strength	Ult.Str	Grade	Y/strength	Ult.Str	Minimum Elongation in 8"(203.2 mm) GL (%)			
	N/mm2 or Mpa	N/mm2 or Mpa	%		psi (kg/cm2)	psi (kg/cm2)		Mpa (kg/cm2)	Mpa (kg/cm2)	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

Laboratory Technician Test Performed By Vetted By

MATERRIALS TESTING LABORATORY
MILITARY ENGINEER SERVICES(MES)

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

Job No : 93(D)/2025-2026 (Steel).
Name of Client : GE (Army) PMB.
Ref.ltr.No : EinC/172 of 2024-2025/04/E-6 Dt.27 Oct'2025.
Project Name : Construction of internal road,approach road, Drain & footpath.
Dt. of Sample Collection: 30 Oct'2025

Copy No : 04
Sample Specimen : Length 600mm , Dia 20mm
Sample Grade : 72.50
Frog Mark : GPH B-420 DWR.

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	0.000 0.00	0.4869 314.1593	0.000 0.000		45922.69 204.27	94307 650		57736.68 256.82	118569 818		1.26	20.5			
2	0.787 20.00	0.000 0.00	0.4869 314.1593	0.000 0.000	0.000 0.000	45797.77 203.72	94051 649	94561 652	58104.50 258.46	119324 823	118898 820	1.27	21.5		21	
3	0.787 20.00	0.000 0.00	0.4869 314.1593	0.000 0.000		46417.73 206.48	95324 657		57850.03 257.33	118801 819		1.25	20.5			

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/supplyer.

Ovservation on Specimen(if any):

1. Diameter & Unit weight of 20 mm bar is less than the standard value but within tolerance limit according to MES Schedule of Rates-2016.

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

Laboratory Technician Test Performed By Vetted By

MATERRIALS TESTING LABORATORY
MILITARY ENGINEER SERVICES(MES)

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

Job No : 93(D)/2025-2026 (Steel).
Name of Client : GE (Army) PMB.
Ref.ltr.No : EinC/172 of 2024-2025/04/E-6 Dt.27 Oct'2025.
Project Name : Construction of internal road,approach road, Drain & footpath.
Copy No : 00
Sample Specimen : Length 600mm , Dia 22mm
Sample Grade : 60
Frog Mark : SAS B-420 DWR.
Dt. of Sample Collection: 28 Aug'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	0.866 22.00	0.000 0.00	0.5892 380.1327	0.000 0.000		-708.71 -3.15	-1203 -8		-708.71 -3.15	-1203 -8		1.00	0			
2	0.866 22.00	0.000 0.00	0.5892 380.1327	0.000 0.000	0.000 0.000	-708.71 -3.15	-1203 -8	-1203 -8	-708.71 -3.15	-1203 -8	-1203 -8	1.00	0		0	
3	0.866 22.00	0.000 0.00	0.5892 380.1327	0.000 0.000		-708.71 -3.15	-1203 -8		-708.71 -3.15	-1203 -8		1.00	0			

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/supplyer.

Ovservation on Specimen(if any):

1. Diameter & Unit weight of 22 mm bar is less than the standard value but within tolerance limit according to MES Schedule of Rates-2016.

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	Ult.Str	Elongation	Grade	Y/strength	Ult.Str	Grade	Y/strength	Ult.Str	Minimum Elongation in 8"(203.2 mm) GL (%)				
	N/mm2 or Mpa	N/mm2 or Mpa	%		psi (kg/cm2)	psi (kg/cm2)		Mpa (kg/cm2)	Mpa (kg/cm2)	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

Laboratory Technician Test Performed By Vetted By

MATERRIALS TESTING LABORATORY
MILITARY ENGINEER SERVICES(MES)

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

Job No : 93(D)/2025-2026 (Steel).
Name of Client : GE (Army) PMB.
Ref.ltr.No : EinC/172 of 2024-2025/04/E-6 Dt.27 Oct'2025.
Project Name : Construction of internal road,approach road, Drain & footpath.
Dt. of Sample Collection: 30 Oct'2025

Copy No : 05
Sample Specimen : Length 600mm , Dia 25mm
Sample Grade : 72.50
Frog Mark : GPH B-420 DWR.

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	0.000 0.00	0.7609 490.8739	0.000 0.000		67503.41 300.27	88720 612		86241.10 383.62	113347 782		1.28	21.5			
2	0.984 25.00	0.000 0.00	0.7609 490.8739	0.000 0.000	0.000 0.000	68690.13 305.55	90280 623	89760 619	85993.58 382.52	113022 779	113215 781	1.25	23.5		23	
3	0.984 25.00	0.000 0.00	0.7609 490.8739	0.000 0.000		68690.13 305.55	90280 623		86185.58 383.37	113275 781		1.25	23.5			

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/supplyer.

Ovservation on Specimen(if any):

1. Diameter & Unit weight of 25 mm bar is less than the standard value but within tolerance limit according to MES Schedule of Rates-2016.

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	Ult.Str	Elongation	Grade	Y/strength	Ult.Str	Grade	Y/strength	Ult.Str	Minimum Elongation in 8"(203.2 mm) GL (%)			
	N/mm2 or Mpa	N/mm2 or Mpa	%		psi (kg/cm2)	psi (kg/cm2)		Mpa (kg/cm2)	Mpa (kg/cm2)	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

Laboratory Technician Test Performed By Vetted By

MATERRIALS TESTING LABORATORY
MILITARY ENGINEER SERVICES(MES)

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

Job No : 93(D)/2025-2026 (Steel).
Name of Client : GE (Army) PMB.
Ref.ltr.No : EinC/172 of 2024-2025/04/E-6 Dt.27 Oct'2025.
Project Name : Construction of internal road,approach road, Drain & footpath.
Dt. of Sample Collection: 28 Aug'2025

Copy No : 04
Sample Specimen : Length 600mm , Dia 28mm
Sample Grade : 60
Frog Mark : SAS B-420 DWR.

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	1.102 28.00	0.000 0.000	0.9544 615.7522	0.000 0.000		-708.71 -3.15	-743 -5		-708.71 -3.15	-743 -5		1.00	0			
2	1.102 28.00	0.000 0.000	0.9544 615.7522	0.000 0.000	0.000 0.000	-708.71 -3.15	-743 -5	-743 -5	-708.71 -3.15	-743 -5	-743 -5	1.00	0		0	
3	1.102 28.00	0.000 0.000	0.9544 615.7522	0.000 0.000		-708.71 -3.15	-743 -5		-708.71 -3.15	-743 -5		1.00	0			

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/supplyer.

Ovservation on Specimen(if any):

1

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	Ult.Str	Elongation	Grade	Y/strength	Ult.Str	Grade	Y/strength	Ult.Str	Minimum Elongation in 8"(203.2 mm) GL (%)				
	N/mm2 or Mpa	N/mm2 or Mpa	%		psi (kg/cm2)	psi (kg/cm2)		Mpa (kg/cm2)	Mpa (kg/cm2)	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

Laboratory Technician Test Performed By Vetted By

MILITARY ENGINEER SERVICES(MES)

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

Job No : 93(D)/2025-2026 (Steel).
Copy No : 08
Name of Client : GE (Army) PMB.
Sample Specimen : Length 600mm , Dia 28mm
Ref.ltr.No : EinC/172 of 2024-2025/04/E-6 Dt.27 Oct'2025.
Sample Grade : 60
Project Name : Construction of internal road,approach road, Drain & footpath.
Frog Mark : SAS B-420 DWR.
Dt. of Sample Collection: 24 Aug '2022

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	1.260 32.00	0.315 8.000	0.078 50.250	0.265 0.395		-708.72 -3.152508	-9099 -63		-5129.94 -22.819	-65863 -454		7.24	0			
2	1.260 32.00	0.315 8.000	0.078 50.250	0.265 0.395	0.265 0.395	-5129.94 -22.819	-65863 -454	-46942 -324	-5129.94 -22.819	-65863 -454	-65863 -454	1.00	0		0	
3	1.260 32.00	0.315 8.000	0.078 50.250	0.265 0.395		-5129.94 -22.819	-65863 -454		-5129.94 -22.819	-65863 -454		1.00	0			

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/supplyer.

Ovservation on Specimen(if any):

1

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	Ult.Str	Elongation	Grade	Y/strength	Ult.Str	Grade	Y/strength	Ult.Str	Minimum Elongation in 8"(203.2 mm) GL (%)				
	N/mm2 or Mpa	N/mm2 or Mpa	%		psi (kg/cm2)	psi (kg/cm2)		Mpa (kg/cm2)	Mpa (kg/cm2)	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

Laboratory Technician Test Performed By Vetted By

Table-1

Bar	Ylt	Ult	E-%
8			
10	59	75.25	24
	55.88	71.11	21
	59.27	75.6	20.5
12	79	101.3	21.5
	79.1	101.75	23
	79.46	101.75	23
16	121.42	161.57	21.5
	121.04	162.21	24.5
	121.58	161.74	22.5
20			
22			
25			
28			

Table-2

Page	Dia.	Copy No	Page No
1	8	: 00	0
2	10	: 01	443
3	12	: 02	0
4	16	: 03	0
5	20	: 04	0
6	22	: 00	0
7	25	: 05	