



## MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

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

Job No : 38/2023-2024 (Steel).  
 Name of Client : GE (Navy) Dhaka.  
 Ref.ltr.No : CEN/149 of 2022-2023/09/E-2 Dt.27 Aug'2023.  
 Project Name : Vertical extension of existing SMBK.  
 Dt. of Sample Collection: 31 Aug'2023

Copy No : 05  
 Sample Specimen : Length 600mm , Dia 25mm  
 Sample Grade : 60  
 Frog Mark : Purbachal 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 (Fult/Fy)	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		8inch	5d	8inch	5d
1	0.984 25.00	0.996 25.29	0.7609 490.8739	2.649 3.942	2.649 3.942	62821.30 279.44	82567 569	82705 570	81144.91 360.95	106650 736	107114 739	1.29	20.5	22		
2	0.984 25.00	0.996 25.29	0.7609 490.8739	2.649 3.942		63318.66 281.65	83220 574		81896.73 364.29	107638 742		1.29	23			
3	0.984 25.00	0.996 25.29	0.7609 490.8739	2.649 3.942		62640.87 278.64	82329 568		81452.58 362.32	107054 738		1.30	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/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					
				psi (kg/cm2)	psi (kg/cm2)	psi (kg/cm2)	psi (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	40000(2810)	70000(4910)	300	300(3050)	500(5090)	11	12	..	..	
400/400w	400	440	14	60000(4210)	90000(6310)	420	420(4275)	620(6295)	9	9	8	7	
500/500w	500	550	14	75000(5255)	100000(7015)	520	520(5275)	690(7010)	..	7	7	6	

Laboratory Technician

Test Performed By

Vetted By