

MATERIAL TESTING LABORATORY

MILITARY ENGINEER SERVICES (MES)

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

Job No : 239/19-20(Steel). Copy No. : 01

Name of Client : GE (Navy) South, Chattogram. : Length 600 mm Dia 10mm

Ref Itr No : CEN/343 of 2018-2019/14/E-6 Dt.19 Sept'2019. Sample Grade : 60

Project Name : CEN/343 of 2018-2019 Frog Mark : AKS 500W

Date of Collection : Thursday, 07 November, 2019

| 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 Strength | Ultimate Load | Ultimate Strength | Average Ultimate Strength | % (g | gation gauge gth) | 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 | 0.394 10 | 0.395 10.027 | 0.1217 78.5398 | 0.417 0.62 | | 11735.08 52.2 | 96397 665 | | 13400.92 59.61 | 110081 759 | | 14.5 | | | |
| 2 | 0.394 10 | 0.395 10.027 | 0.1217 78.5398 | 0.417 0.62 | 0.417 0.62 | 11352.91 50.5 | 93258 643 | 93898 647 | 13036.73 57.99 | 107090 738 | 107859 744 | 17.5 | | 16 | |
| 3 | 0.394 10 | 0.395 10.027 | 0.1217 78.5398 | 0.417 0.62 | | 11204.53 49.84 | 92039 635 | | 12953.55 57.62 | 106406 734 | | 15 | | | |

Cautions:

- 1. Samples as supplied to the laboratory have been tested. The laboratory authority does not bear any responsibility as to the representative charecter of the samples to be tested.
- 2. It is recommended that the samples are sent in a secure and sealed cover/packet/container under signature of the competent authority.
- 3. In order to avoid fraudulent fabrication of the test results, it is recommended that all test reports should be collected by duly authorized person and not by the contractor/supplier.

Observation 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 | Ult.Str Grade Y/strength Ult.Str Minimum 8 | | | | Elongation in 8"(203.2 mm) GL (%) | | | |
| | N/mm2 or | Control of the Contro | 25-26 | | psi | psi | | Mpa | Mpa | 10 | 13,16,19 mm | 22,25 | 29,32,36 | |
| | Mpa | Mpa | % | | (kg/cm2) | (kg/cm2) | | (kg/cm2) | (kg/cm2) | mm | | mm | 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 | |

This is a computer genarated copy

No signature is required

Note : [1 Mpa = 145 Psi, 1 kg/cm2 = 14.223 psi]

Laboratory Technichian

Test Performed By

Vetted By