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தேசிய கட்டிட ஆராய்ச்சி நிறுவனம்
NATIONAL BUILDING RESEARCH ORGANISATION



99/1, ජාවත්ත පාර, කොළඹ 5. 99/1, ஜாவத்தை வீதி, கொழும்பு 5. 99/1, Jawatta Road, Colombo 5.

දුරකථන } 011-2588946
தொலைபேசி } 011-2503431
Telephone } 011-2500354

අධ්‍යක්ෂ ජනරාල් }
பணிப்பாளர் நாயகம் } 011-2505149
Director General }

ෆැක්ස් }
தொலைநகல் } 011-2502611
Fax }

වෙබ් අඩවිය }
இணையத்தளம் } www.nbro.gov.lk
Website }

ඊමේල් }
மின்னஞ்சல் } info@nbro.gov.lk
E-mail }

මගේ අංකය }
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Our Ref. }

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திகதி }
Date }

202420 2270

08.01.2021

TENSILE TEST OF J BOLT

REPORT NO. : IB/ 20/ 084
(Reference of Requisition: Letter received on 30th December 2020)

PROJECT : NOT INTIMATED

ISSUED TO : GRANT TECH HOLDING (PVT) LTD
NO. 100, PEPILYANA ROAD
NEDIMALA
DEHIWALA

ISSUED BY : BUILDING MATERIALS RESEARCH AND
TESTING DIVISION
NATIONAL BUILDING RESEARCH ORGANISATION
99/1, JAWATTA ROAD, COLOMBO 05.

*The test results reported herein
relate to the specimens submitted
to N.B.R.O. and do not certify the
quality of a product in general.*

202420 2270

TENSILE TEST OF J BOLT
REPORT NO: M/ 20/ 084

1.0 SAMPLES RECEIVED ON : 30.12.2020

2.0 DESCRIPTION OF SAMPLE:
SUPPLIED BY THE CLIENT

- (a) Nos. : 01
- (b) Nominal size* : 24 mm dia
- (c) Type* : Gr.4.6 Electro Galvanize M24 J bolt
- (d) Sample as received



Figure 01: Sample as received

(*As intimated by the client)

3.0 TEST REQUESTED :

- (a) Proof/yield stress
- (b) Tensile strength
- (c) Percentage elongation
- (d) Mass per meter run

4.0 TESTS CARRIED OUT
IN ACCORDANCE WITH :

ISO 15630- 1: 2010
Steel for the reinforcement and prestressing of concrete-
Test methods- Part I: Reinforcing bars, wire rod and wire
And
ISO 6892- 1: 2016
Metallic materials- Tensile testing-
Part 1: Method of test at room temperature

5.0 SAMPLE PREPARATION :
FOR TESTING

Threaded and bent portion of the sample was cut off and straight
portion was subjected to tensile testing

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6.0 TEST RESULTS :

Test results are given in the page no.3

TENSILE TESTING RESULTS

No. 202420 2270

Report No.M/20/ 084

Serial No.	1
Sample No.	S1
(as intimated by the client)	
Nominal Diameter (mm)	24.00
Observed Diameter (mm)	23.75
Length (mm)	445
Weight (g)	1538
Gauge Length L1 (mm)	120.00
Gauge Length L2 (mm)	137.40
Yield Point (kN)	238.50
Maximum Load (kN)	242.70
Cross-sectional Area (mm ²)	440.28
Proof/Yield Stress (N/mm ²)	541.70
Tensile Strength (N/mm ²)	551.24
Percentage elongation	15
Mass per meter run (kg)	3.46
U.T.S. to Y.S. ratio	1.02

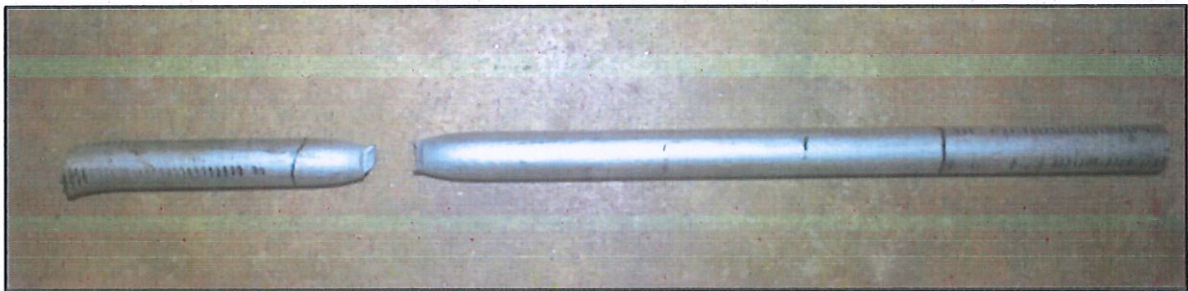



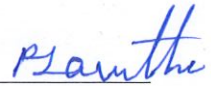
Figure 02: Samples after testing

Testing Officer : 

W.D.D. Sameera

MA- Technical

Checked by :



R. Savitha

Senior Engineer

Certified by :



Eng. (Mrs.) S.S.K. Muthurathne

Director

Building Materials Research &

Testing Division