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## CERTIFICATE OF TEST

**Test of one roof bolt (MB20 mm x 1.8 m)**

Application Received: 19 July 2024

Certificate No.: T31823

Order No.: COD

Date of test: 24 July 2024

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### SUBMITTED TO

Mr Jerry Mtsweni  
Reunko Steel Suppliers (Pty) Ltd  
35 Radio Street  
Alberton  
1450

### 1. INTRODUCTION

At the request of Mr Jerry Mtsweni of Reunko Steel Suppliers (Pty) Ltd, one roof bolt (MB20 mm x 1.8 m) was submitted for tensile testing to destruction. The test was conducted according to the customer's specification.

### 2. TEST PROCEDURE

Testing machine: 1 000 kN Amsler Universal testing machine  
Test type: Destruction in tension  
Test specification: Customer's request

The roof bolt was installed in the 1 000 kN Amsler Universal testing machine using suitable fittings as shown in Figure 1. A gradually increasing tensile load was applied to the specimen until failure occurred.




Figure 1. Roof bolt (MB20 mm x1.8 m) installed in the testing machine.

### 3. TEST RESULTS

Maximum load attained: 219.6 kN.

Test comment: The specimen fractured as shown in Figure 2.

**Notice:**  
ONLY the original signed report must be regarded as the official document.

Testing Officer:   
SIHLE THWALA

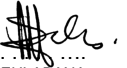
Engineer:   
MICHAEL SEHLABANA

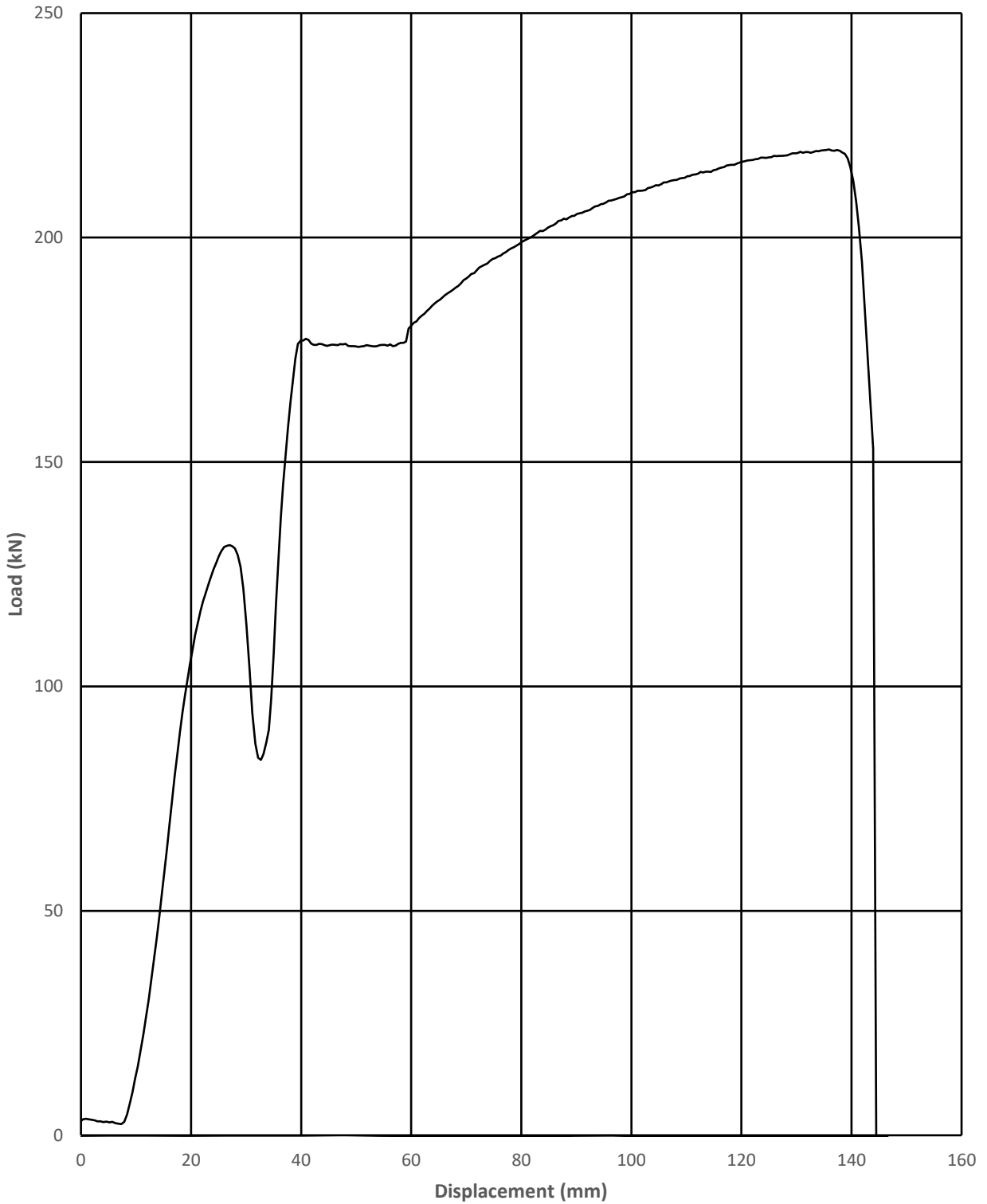


Figure 2. Roof bolt (MB20 mm x 1.8 m) after the test.


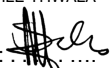
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4. This Certificate of Test may not be published without prior written consent of the CSIR.
5. This Certificate of Test must be reproduced in its entirety if published or reproduced by the client.
6. This report does not constitute any type of certification.

Certificate No.: T31823  
Date of test: 24 July 2024  
Applicant: Reunko Steel Suppliers (Pty) Ltd  
Description: Roof bolt (MB20 mm x 1.8 m)  
Maximum Force: 219.6 kN



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Testing Officer:   
SIHLE THWALA  
Engineer:   
MICHAEL SEHLABANA

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## CERTIFICATE OF TEST

**Test of one roof bolt (MB25 mm x 1.0 m)**

Application Received: 19 July 2024

Certificate No.: T31824

Order No.: COD

Date of test: 24 July 2024

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### SUBMITTED TO

Mr Jerry Mtsweni  
Reunko Steel Suppliers (Pty) Ltd  
35 Radio Street  
Alberton  
1450

### 1. INTRODUCTION

At the request of Mr Jerry Mtsweni of Reunko Steel Suppliers (Pty) Ltd, one roof bolt (MB25 mm x 1.0 m) was submitted for tensile testing to destruction. The test was conducted according to the customer's specification.

### 2. TEST PROCEDURE

Testing machine: 1 000 kN Amsler Universal testing machine  
Test type: Destruction in tension  
Test specification: Customer's request

The roof bolt (MB25 mm x 1.0 m) was installed in the 1 000 kN Amsler Universal testing machine using suitable fittings as shown in Figure 1. A gradually increasing tensile load was applied to the specimen until failure occurred.



Figure 1. Roof bolt (MB25 mm x 1.0 m) installed in the testing machine.

### 3. TEST RESULTS

Maximum load attained: 266.8 kN.

Test comment: The specimen fractured as shown in Figure 2.




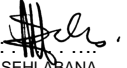
Figure 2. Roof bolt (MB25 mm x 1.0 m) after the test.

#### 4. DISCLAIMER

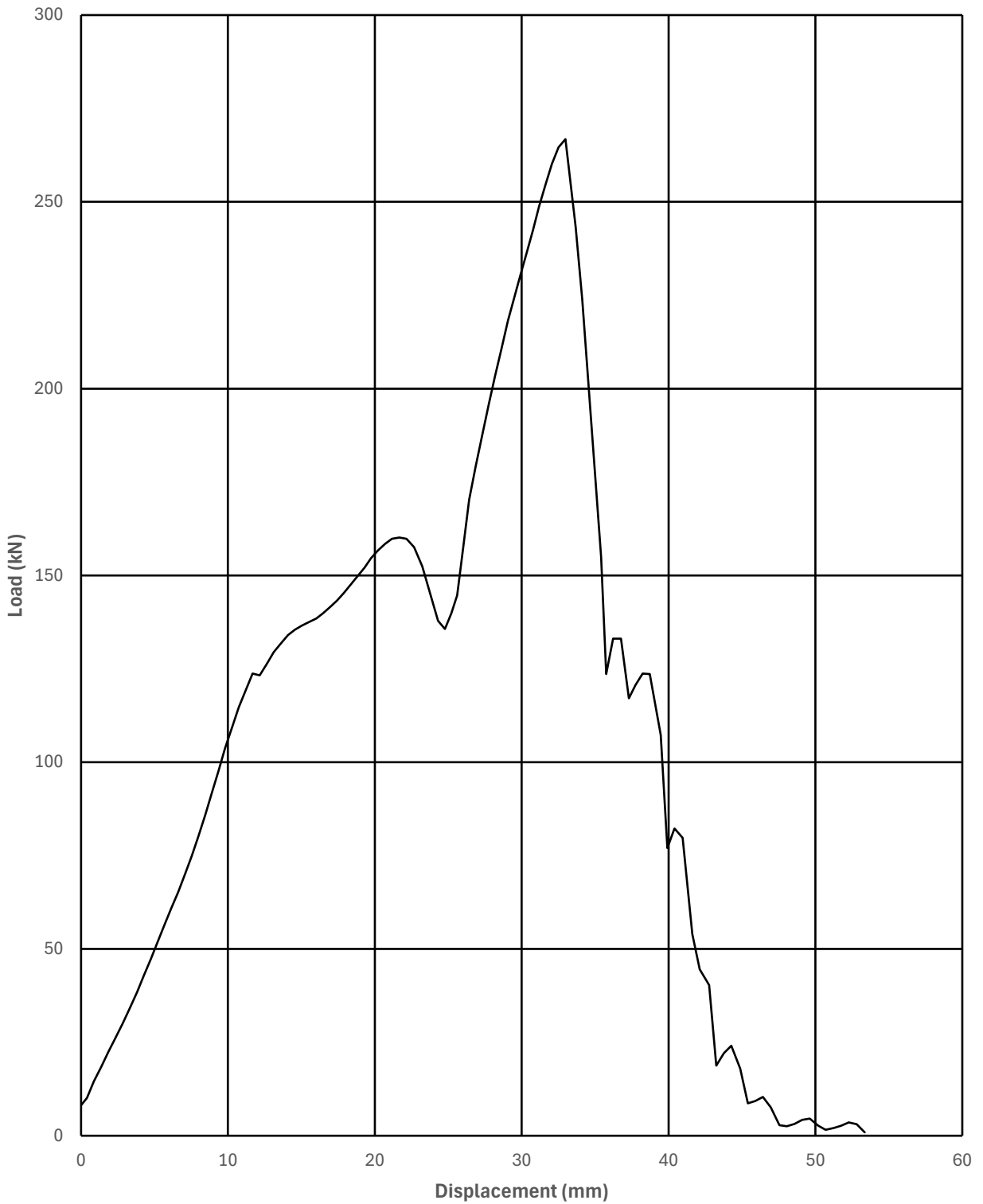
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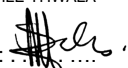
Testing Officer:   
SIHLE THWALA

Engineer:   
MICHAEL SEHLABANA

Certificate No.: T31824  
Date of test: 24 July 2024  
Applicant: Reunko Steel Suppliers (Pty) Ltd  
Description: Roof bolt (MB25 mm x 1.0 m)– Tensile testing to destruction  
Maximum Force: 266.8 kN



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Testing Officer:   
SIHLE THWALA  
Engineer:   
MICHAEL SEHLABANA



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## CERTIFICATE OF TEST

**Test of one roof bolt (MB18 mm x 1.2 m)**

Application Received: 19 July 2024

Certificate No.: T31825

Order No.: COD

Date of test: 24 July 2024

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### SUBMITTED TO

Mr Jerry Mtsweni  
Reunko Steel Suppliers (Pty) Ltd  
35 Radio Street  
Alberton  
1450

### 1. INTRODUCTION

At the request of Mr Jerry Mtsweni of Reunko Steel Suppliers (Pty) Ltd, one roof bolt (MB18 mm x 1.2 m) was submitted for tensile testing to destruction. The test was conducted according to the customer's specification.

### 2. TEST PROCEDURE

Testing machine: 1 000 kN Amsler Universal testing machine  
Test type: Destruction in tension  
Test specification: Customer's request

The roof bolt (MB18 mm x 1.2 m) was installed in the 1 000 kN Amsler Universal testing machine using suitable fittings as shown in Figure 1. A gradually increasing tensile load was applied to the specimen until failure occurred.




Figure 1. Roof bolt (MB18 mm x 1.2 m) installed in the testing machine.

### 3. TEST RESULTS

Maximum load attained: 211.9 kN.

Test comment: The specimen fractured as shown in Figure 2.

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Testing Officer:   
SIHLE THWALA

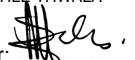
Engineer:   
MICHAEL SEHLABANA

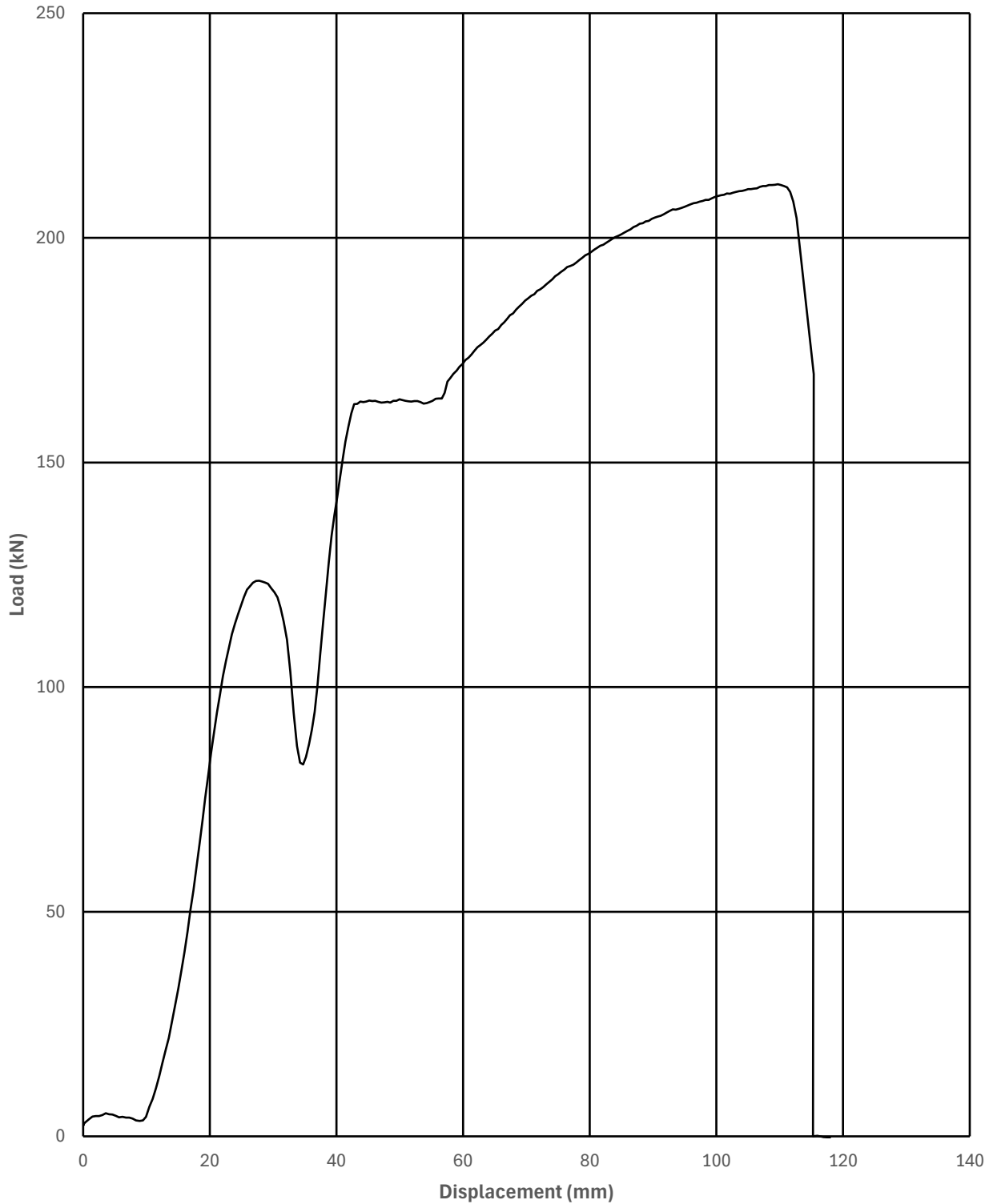


Figure 2. Roof bolt (MB18 mm x 1.2 m) after the test.


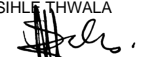
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Certificate No.: T31825  
Date of test: 24 July 2024  
Applicant: Reunko Steel Suppliers (Pty) Ltd  
Description: Roof bolt (MB18 mm x 1.2 m)– Tensile testing to destruction  
Maximum Force: 211.9 kN



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Engineer:   
MICHAEL SEHLABANA