

## CERTIFICATE OF TEST

**Test of two roof bolt assemblies (20 mm x 1.5 m)**

Application Received: 04 March 2020

Certificate No.: T28055

Order No.: COD

Date of Test: 06 March 2020

### SUBMITTED TO

Mr Jo du Plessis  
Reunko Steel Suppliers  
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1450

### 1. INTRODUCTION

At the request of Mr Jo du Plessis of Reunko Steel Suppliers, two roof bolt assemblies (20 mm x 1.5 m) were submitted for tensile testing to destruction. The test was conducted in accordance with the customer's request.

Each assembly comprised:

- 1 x 20 mm x 1.5 m threaded rebar
- 1 x M20 nut
- 1 x Dome washer
- 1 x Dog ear dome plate

### 2. TEST PROCEDURE

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

The bolt assemblies were in turn 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 each assembly until failure occurred.

\*NB. The length under tension of the 1.5 m length roof bolt assemblies was restricted to 1130 mm in order to accommodate the stroke of the testing machine.

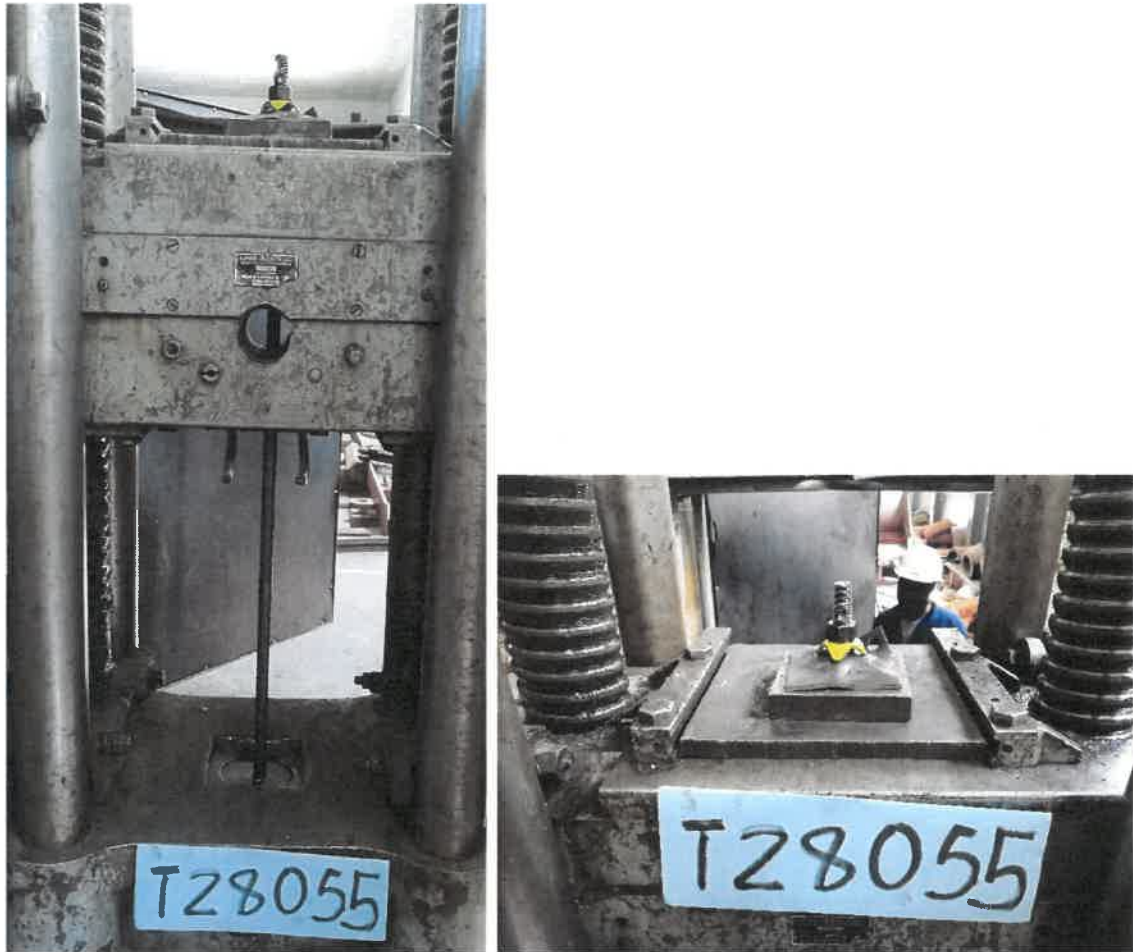


Figure 1. Roof bolt assembly (20 mm x 1.5 m) installed in the testing machine

### 3. TEST RESULTS

The results of the destruction tests carried out on the roof bolt assemblies (20 mm x 1.5 m) are summarised in Table 1.

Table 1. Test results for the roof bolt assemblies (20 mm x 1.5 m)

Test No.	Maximum load carried (kN)	Mode of failure
1	214	The roof bolts fractured as shown in Figure 2.
2	211	



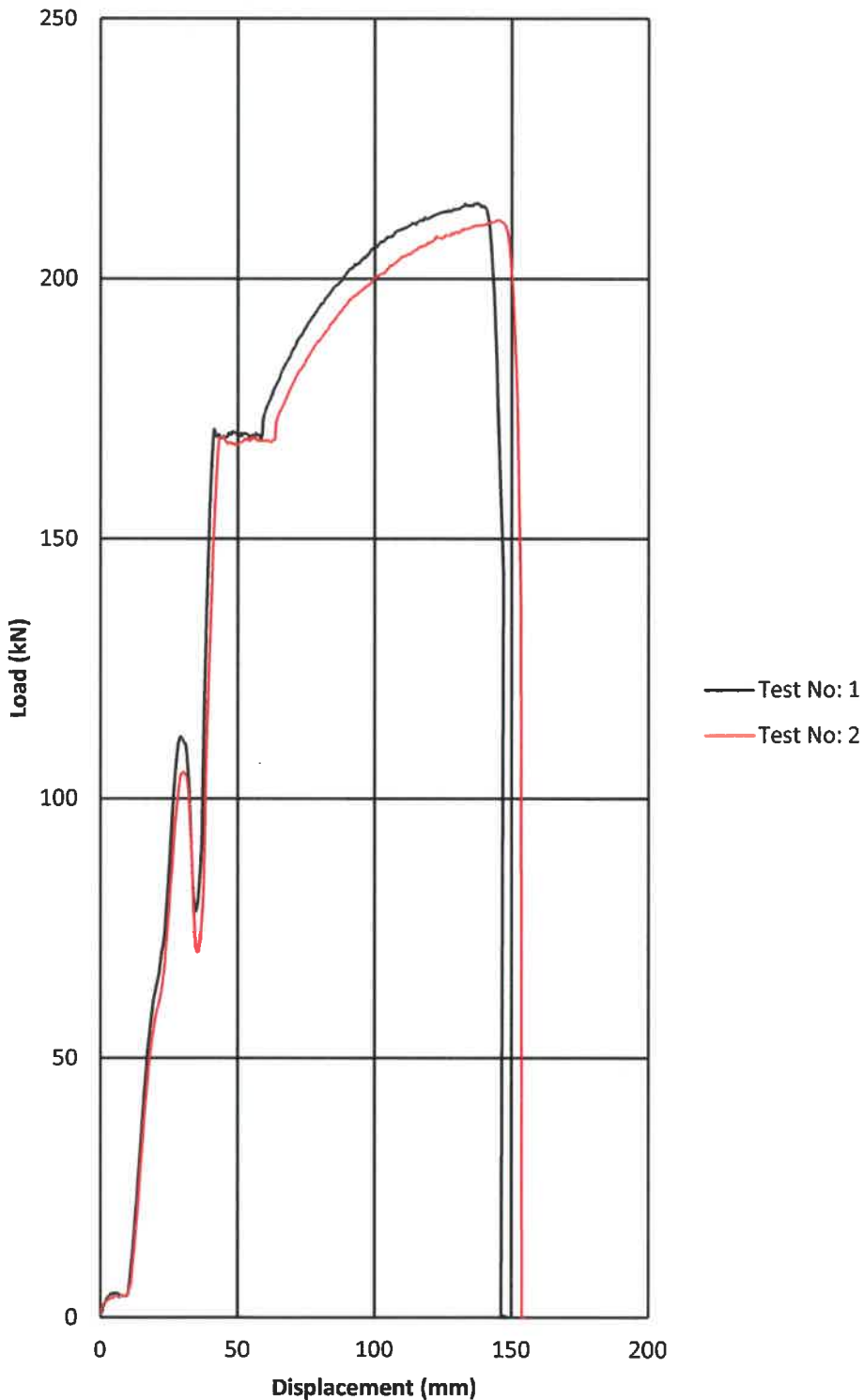
Figure 2. Roof bolt assemblies (20 mm x 1.5 m) after testing

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Certificate No.: T28055  
Date of test: 06 March 2020  
Applicant: Reunco Steel Suppliers  
Description: Roof bolt assemblies (20 mm x 1.5 m)

Test No.:	1	2
Maximum Force:	215 kN	211 kN



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

Testing Officer:   
JAN KGANYAGO  
Engineer:   
RUTH TELEKA