

Report Number: 16030371

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Scaffolding Testing Report

Report for the testing of Pressed Steel Sleeve Couplers

Couplers Marked:

EN74-1-B-L VRPS04 08/15 RS

This report consists of the report and appendix A

Authorised Signatory
L Mangham
Operations Manager



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This report details the results of tests carried out on Pressed Steel Sleeve Couplers used for connecting steel tubes of 48.3mm outside diameter and of at least 3.2mm nominal wall thickness at a minimum in the construction of working scaffolds and falsework required for the construction, maintenance, repair and demolition of buildings and structures.

Description and Marks on couplings

Pressed Steel Sleeve Couplers

Marks : EN74-1-B-L VRPS04 08/15 RS

Basis of Tests

The couplings have been tested in accordance with the relevant sections and requirements of EN74-1 :2005 .

Information supplied by the customer

Manufactured by: VR Access Solutions Ltd
Shape: As per drawings shown at the end of this report
Dimensions: As per drawings shown at the end of this report

RESULTS**Design**

The design of the coupling complied with the requirements of the relevant items in clause 6.2 of the standard.

Dimensions and Material Characteristics

The measured dimensions, of the couplings, were all within the tolerances as specified by the manufacturer. (Drawings are shown at the end of this report)

Marking

The markings satisfy the requirements laid out in EN74-1 :2005

Mass

10 samples were weighed giving an average mass of 1.000kg With a range between 0.960kg and 1.004kg

Results of all tests performed are detailed on the following pages.

All requirements stated are minimum values.

Conclusion

The couplers passed all the sections of EN74-1 required for this type of coupler.



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Slipping Force Tests, tested in accordance with Clause 7.2.1.

Tested using 4.0mm tube (S1)

Test Number	$1 \leq \Delta_2 \leq 2\text{mm}$ (kN)
1	18
2	18
3	18
4	18
5	18
6	18
7	18
8	18
9	18
10	18

$F_{S5\%}$	18.00
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Tested using 4.0mm tube (A)

Test Number	$1 \leq \Delta_2 \leq 2\text{mm}$ (kN)
1	18
2	18
3	18
4	18
5	18

$F_{S5\%}$	18.00
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The $F_{S5\%}$ figures must be equal to or greater than the requirements stated below.

Requirements from EN 74-1 table 8:

$1\text{mm} \leq \Delta_2 \leq 2\text{mm} = 6.0\text{kN Minimum}$	Class A
$1\text{mm} \leq \Delta_2 \leq 2\text{mm} = 9.0\text{kN Minimum}$	Class B

From the results, the prototype is Accepted to Class B for slipping force

Bending Moment Tests, tested in accordance with Clause 7.4.3.

Tested using 4.0mm tube (S3)

Test Number	Δ_4 (kN)	Δ_4 (kNm)
1	38.43	2.40
2	40.08	2.51
3	38.08	2.38
4	36.24	2.27
5	39.56	2.47

$F_{S5\%}$	1.75
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Requirements from EN 74-1 table 8:

$\Delta_4 = 1.4 \text{ kNm Minimum}$	Class B
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From the results, the prototype is Accepted to Class B for bending moment

Load-displacement curves are shown in Appendix A as charts 1 to 5



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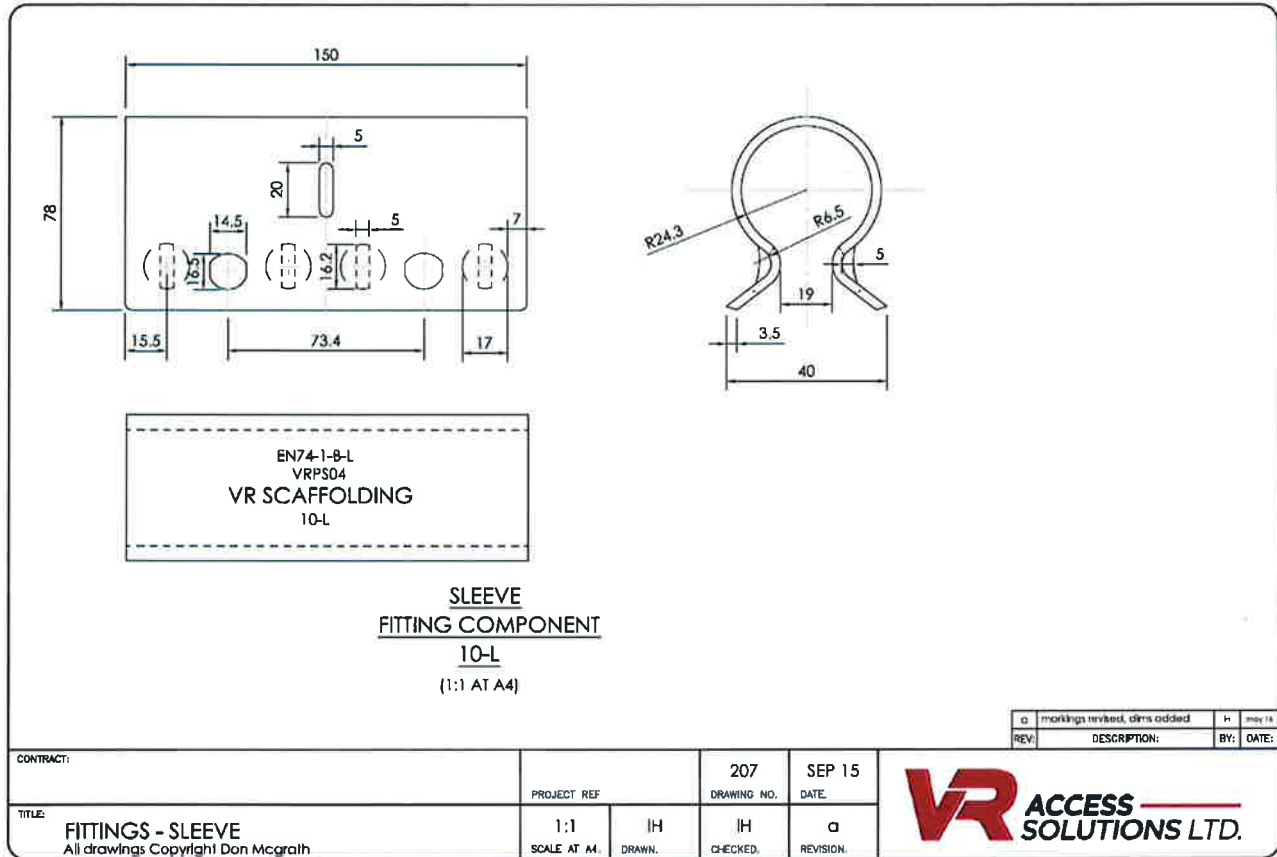
Photograph of coupler under test



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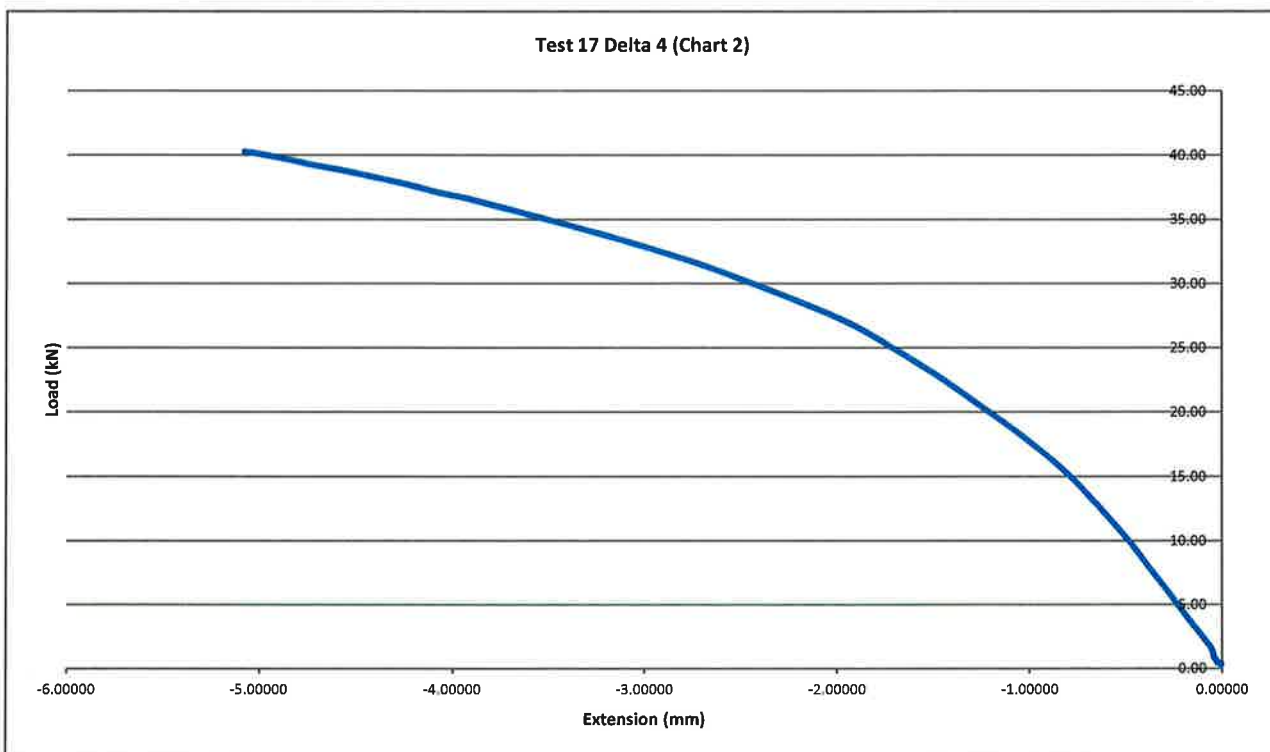
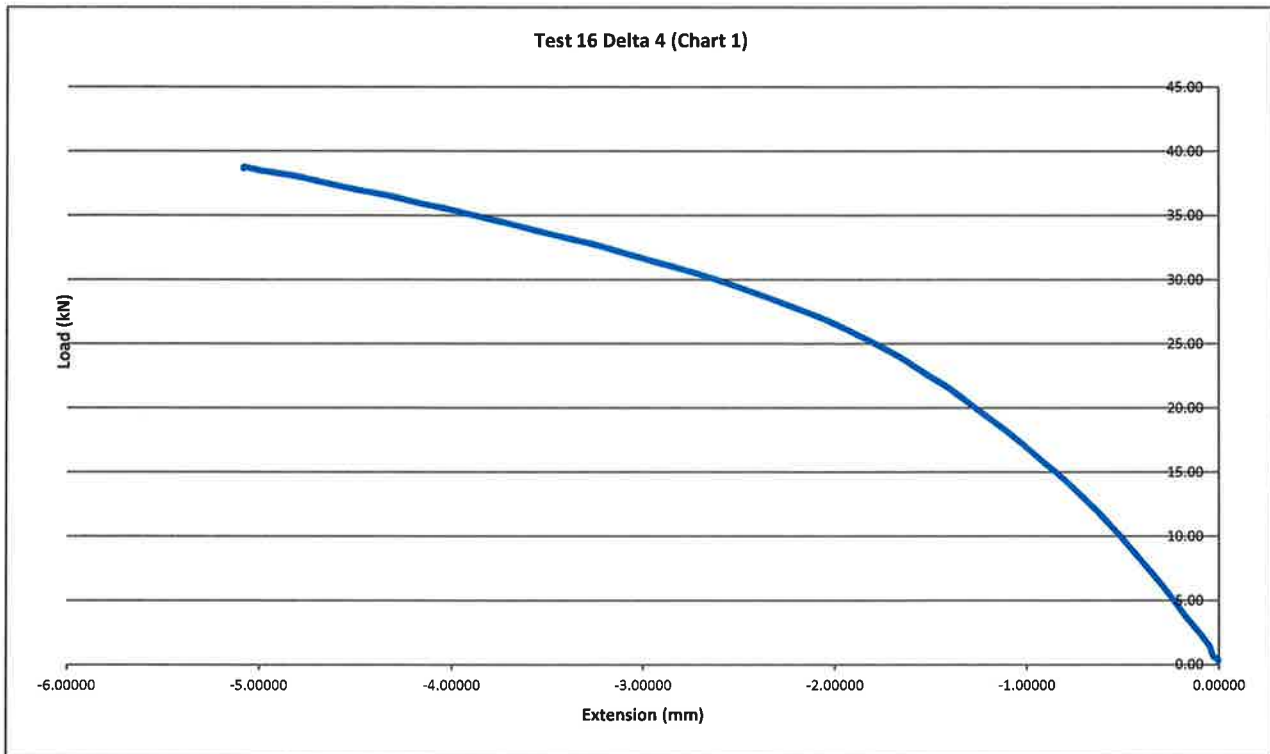
Drawings



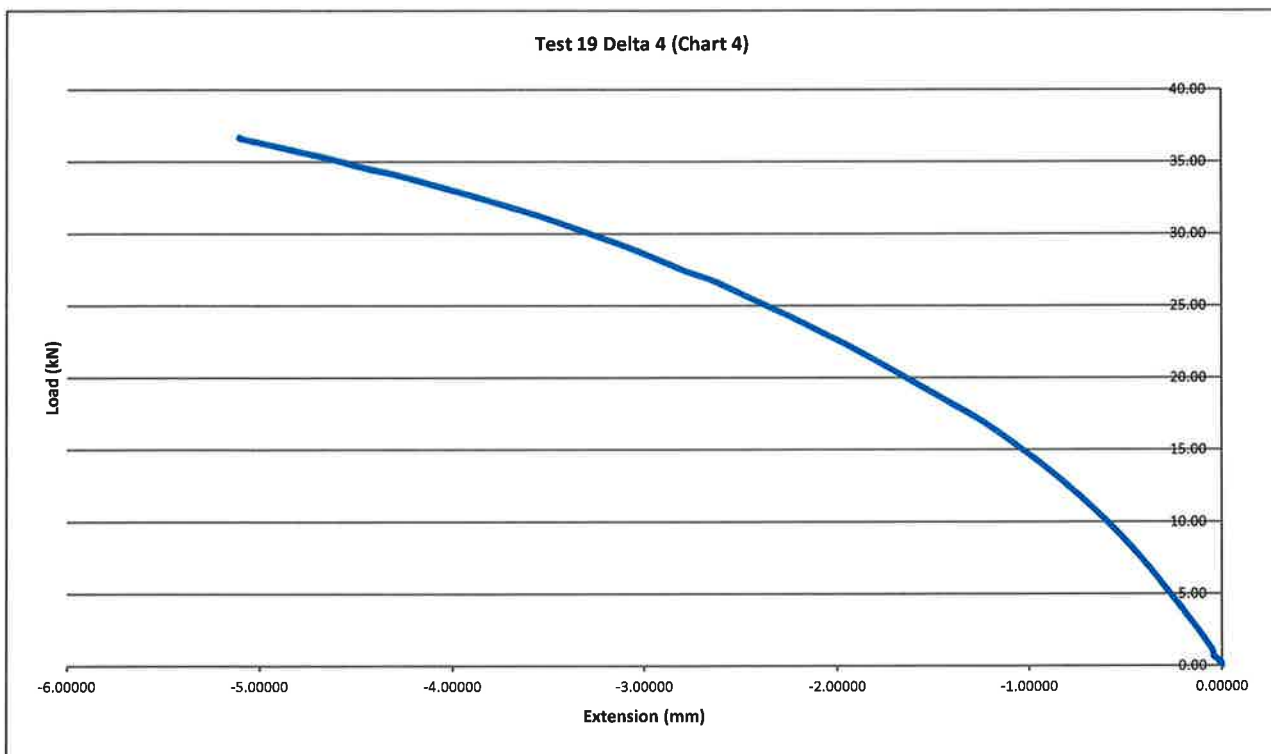
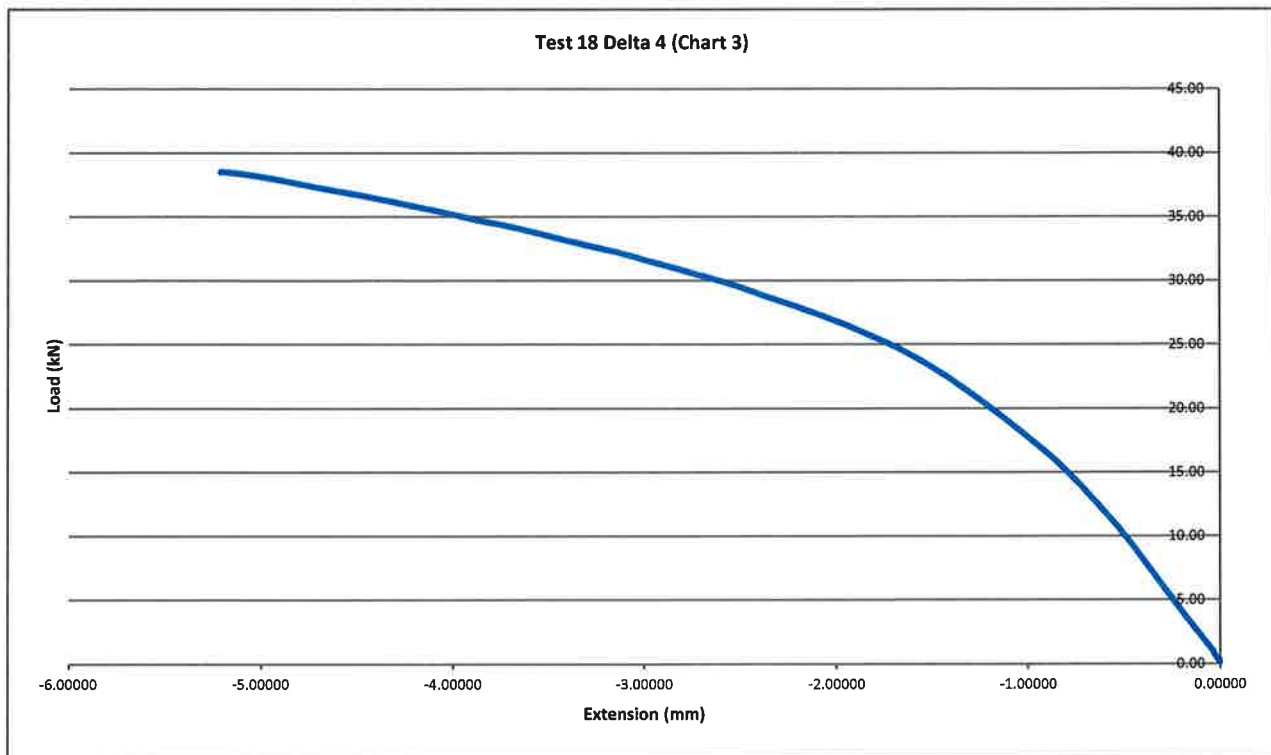
End of Report



Appendix A

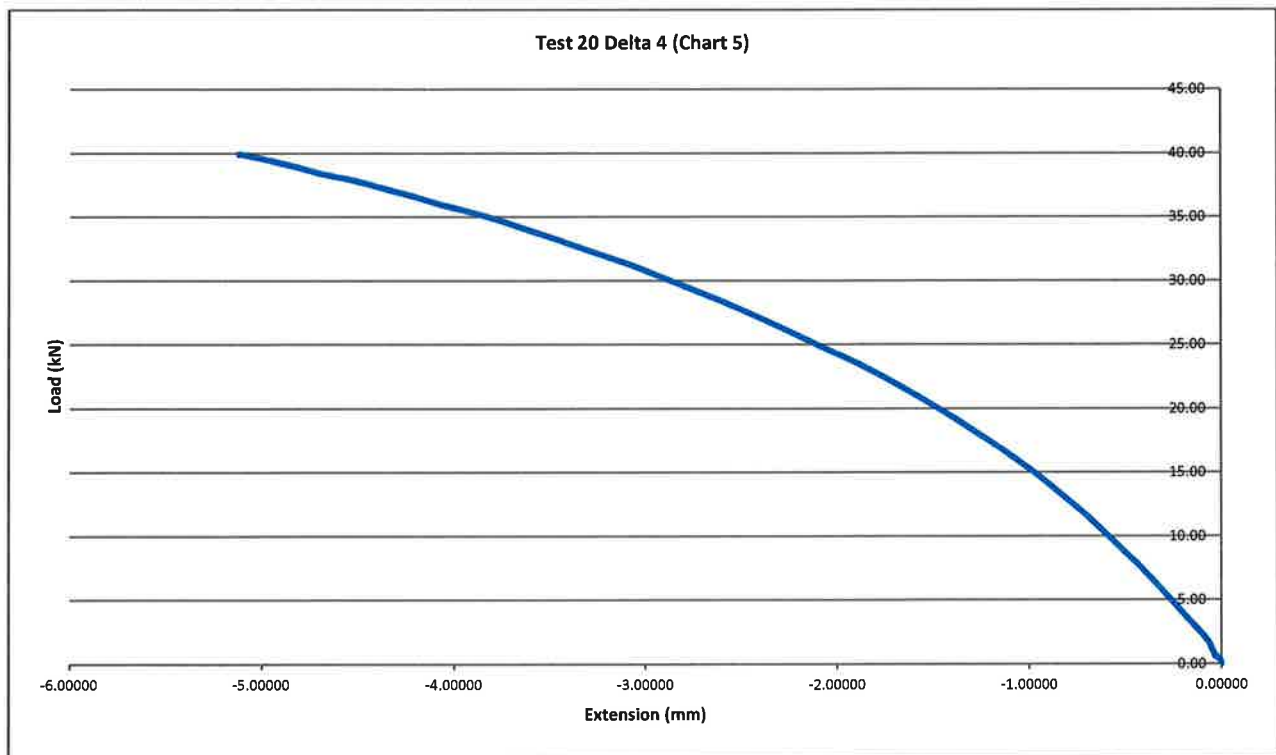


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A handwritten signature in black ink, consisting of a stylized 'R' followed by a flourish.