

# TEST REPORT



## REPORT SERIAL NUMBER

233929

## DATE OF ISSUE

28<sup>th</sup> November 2013

## Customer

Ramsteel Tubes Limited  
Ten Acres Berry Hill Ind Estate  
Droitwich  
Worcester  
WR9 9AQ

## Testing of

10 Number submitted Props  
Tested in accordance with client specification  
Load application as per BS 5507-3:1982 props  
Tests applied until ultimate destruction.



LLOYDS BRITISH TESTING LTD, UNIT 1 KINGS HILL BUSINESS PARK, DARLASTON ROAD, WEDNESBURY WS10 7SH

TEL: 0870 609 9140 FAX: 0870 609 9141

E.MAIL: WESTMIDLANDS@LLOYDSBRITISH.COM WWW.LLOYDSBRITISH.COM

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TRADING UNDER LLOYDS BRITISH TESTING LTD

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**1.0 Test Objective**

To apply compressive load to 10 number submitted props.

2 x size 0 heavy duty, 2 x size 1 heavy duty, 2 x size 2 heavy duty, 2 x size 3 heavy duty & 2 x size 4 heavy duty.

Props to be subject to load application at 1°30' out of plumb and orientated that the pin and locating hole are in the most adverse bending direction.

All applications applied until failure occurred.

**2.0 Name of test house**

Lloyds British Testing Ltd  
Unit 1 Kings hill Business Park  
Darlaston Road  
Wednesbury  
WS10 7SH

**3.0 Accreditation Reference**

ISO 9001:2008

**4.0 Date of test**

28<sup>th</sup> November 2013

**5.0 Witness details**

None

**6.0 Description of samples tested**

2 number free issue props: Size 0, closed test height 1120mm,  
Extended test height 1780mm

2 number free issue props: Size 1, closed test height 1800mm,  
Extended test height 3080mm

2 number free issue props: Size 2, closed test height 2030mm,  
Extended test height 3330mm

2 number free issue props: Size 3, closed test height 2665mm,  
Extended test height 3900mm

2 number free issue props: Size 4, closed test height 3300mm,  
Extended test height 4840mm

**7.0 Test type**

1 tested at closed height in accordance with BS 5507-3

1 tested at maximum height in accordance with BS 5507-3

All loads applied until ultimate failure occurred. See Figure 1



**8.0 Equipment and calibration:**

Calibrated load cell and associated equipment.

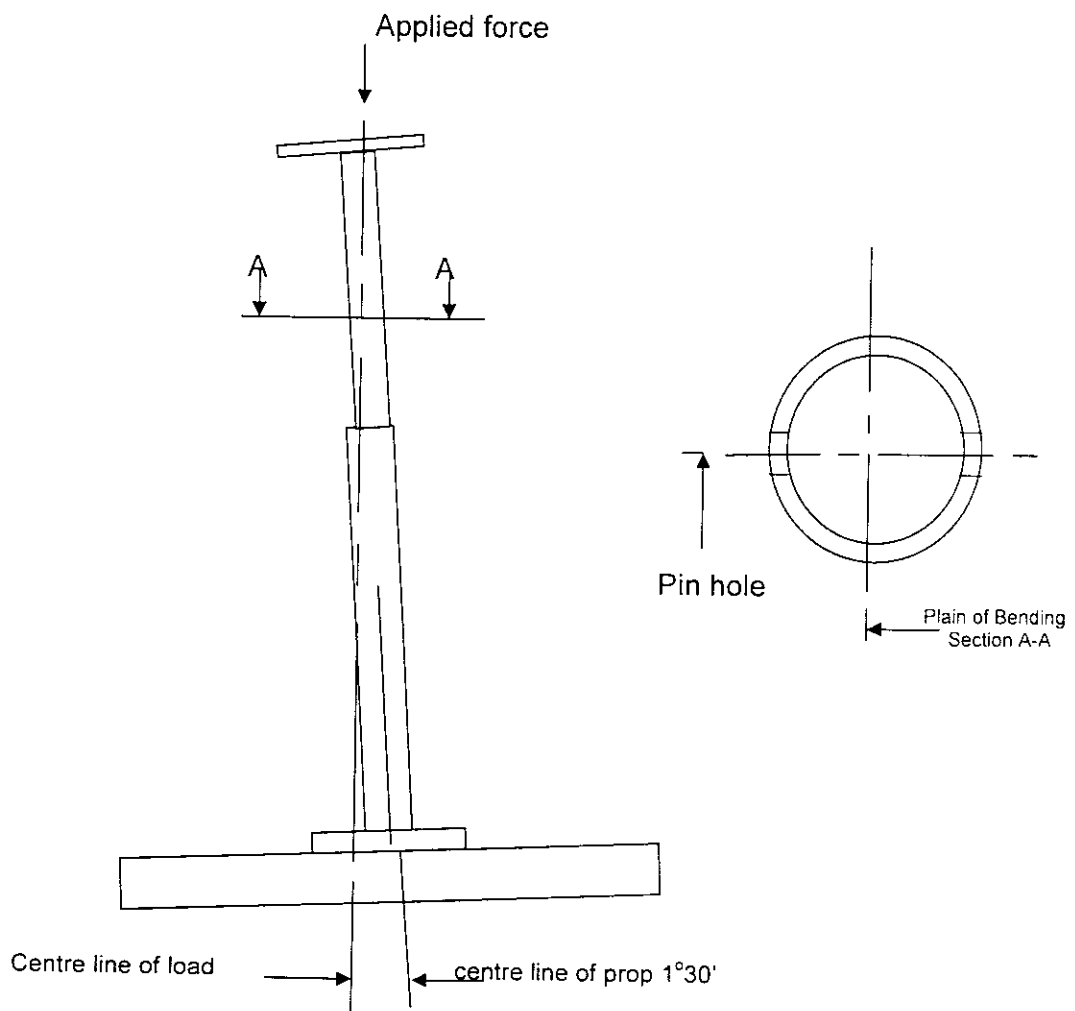
Compressive test machine LL200C, 200 tonne compressive load cell

Certificate N° C6409

Calibrated in accordance with international standard ISO 7500-1:2004 (E) Part 1

Calibration date: 19/03/2013, Validity 12 months

Figure 1: Test arrangement



## 9.0 Test Data

### Size 0

**Sample 1:** size 0 prop closed height at 1120mm

Failure occurred at a recorded 7.44 tonne

Failure mode: pin failure observed.

**Sample 2:** Size 0 prop fully extended height at 1780mm

Failure occurred at a recorded 8.66 tonne

Failure mode: pin failure observed.

### Size 1

**Sample 1:** size 1 prop closed height at 1800mm

Failure occurred at a recorded 7.74 tonne

Failure mode: pin failure observed.

**Sample 2:** Size 1 prop fully extended height at 3080mm

Failure occurred at a recorded 7.34 tonne

Failure mode: Prop deformation observed

### Size 2

**Sample 1:** size 2 prop closed height at 2030mm

Failure occurred at a recorded 7.74 tonne

Failure mode: pin failure observed.

**Sample 2:** Size 2 prop fully extended height at 3330mm

Failure occurred at a recorded 4.28 tonne

Failure mode: Prop deformation observed

### Size 3

**Sample 1:** size 3 prop closed height at 2665mm

Failure occurred at a recorded 5.2 tonne

Failure mode: Prop deformation observed

**Sample 2:** Size 3 prop fully extended height at 3900mm

Failure occurred at a recorded 3.87 tonne

Failure mode: Prop deformation observed



**Size 4**

**Sample 1:** size 4 prop closed height at 3300mm  
Failure occurred at a recorded 6.42 tonne  
Failure mode: Prop deformation observed

**Sample 2:** Size 4 prop fully extended height at 4840mm  
Failure occurred at a recorded 3.67 tonne  
Failure mode: Prop deformation observed

Test Conducted By: I.Holloway Test and Examination Engineer  
P.Hendy Test and Examination Engineer

Report reviewed by .......... Mr.R.G.McFarlane  
On Behalf of Lloyds British Testing Ltd

**Test conducted on behalf of**

Ramsteel Tubes Limited  
Ten Acres Berry Hill Ind Estate  
Droitwich  
Worcester  
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