

**BUREAU VERITAS**  
**ASSET INTEGRITY AND RELIABILITY SERVICES PTY LTD**

Unit 6, 175-177 Five Islands Road  
Unanderra  
NSW 2526

Tel :  
61 (02) 4272 6262  
A.B.N.  
86 000 928 816



## THIRD PARTY WITNESS INSPECTION REPORT

**Certificate Number:** 2760104/MECH001/00

**Issue Date:** 15 October, 2014

<b>Client:</b> Powercast	<b>Job No.:</b> 2755126
<b>Client Contact:</b> Mr A Gilbert	<b>Test Date:</b> 8 October, 2014
<b>Order No.:</b> Cash Client	<b>Customer:</b> Powercast
<b>Work Scope:</b> Load Testing of MIN-X 150 Pipe Clamp	

Load testing of the MIN-X 150 pipe clamp was witnessed by John Etienne at the Powercast workshop on the 8 October, 2014.

Load testing of the MIN-X 150 pipe clamp was carried out as shown in Figure 1.

The MIN-X 150 pipe clamp was proof loaded horizontally to a jig and the load was hydraulically applied – Refer Figure 1 and Zenith Calibration Report No. 15681 (Attachment 1).

### TEST RESULTS

1. The pipe clamp was subjected to a pressure of 4000kPa and held for 10 minutes (Figure 2). No drop in the pressure or deformation of the pipe clamp body was observed.
2. The pipe clamp was subjected to increasing load until pressure drop/failure of the clamp occurred.  
Failure of the clamp occurred at a pressure of 10,000kPa, with cracking of the pipe clamp body and damage to the rubber insert (Figure 3).

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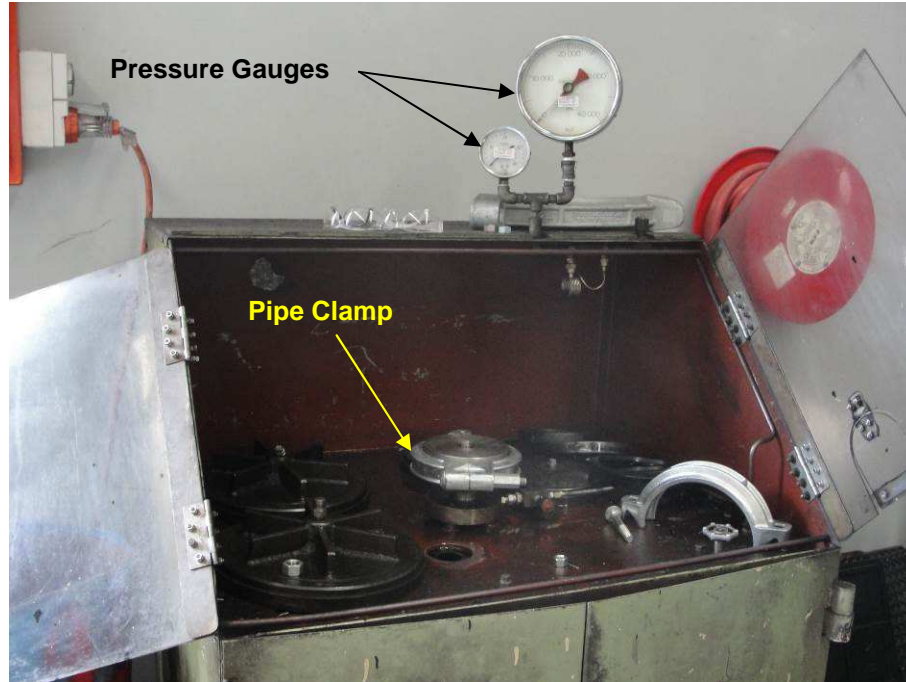
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**FIGURE 1 – View of the pipe clamp in the test jig**



**FIGURE 2 – Shows the pipe clamp and pressure gauges.**

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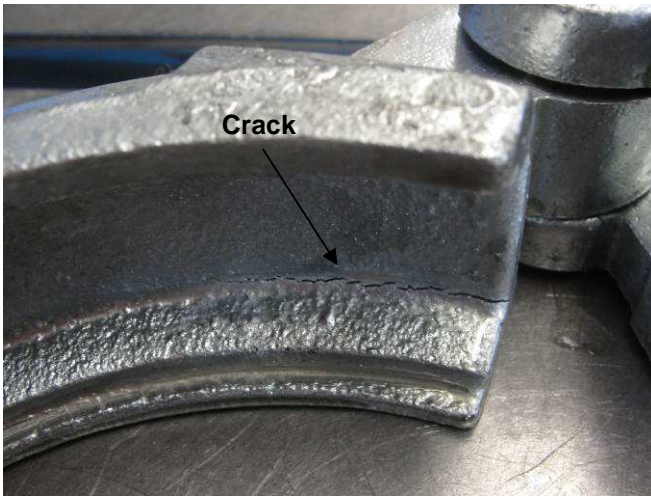
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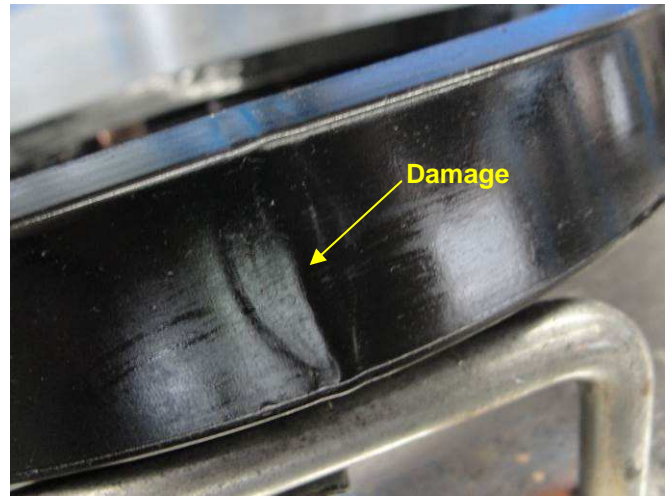


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*Pipe Clamp Body*



*Rubber Insert*

**FIGURE 3** – Shows the crack in the pipe clamp body and damage to the rubber insert following failure at a pressure of 10,000kPa.

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### Attachment 1 – Pressure Gauge Calibration Report No. 15681



Unit 22, 9 Salisbury Road  
Castle Hill NSW 2154  
Phone: 02 9680 8765  
Email: info@zenithinstruments.com.au  
ABN 16 144 873 656

### Calibration Report

**Company:** Powercast Pty Ltd  
27/ 13 Swasshan Rd  
Minto NSW 2566

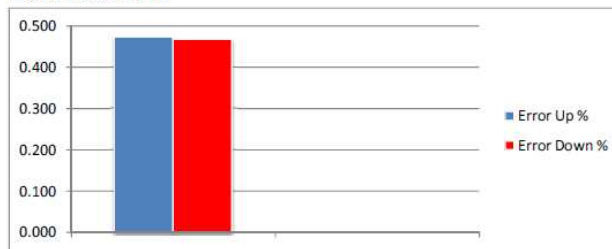
**Report No.:** 15681  
**Asset No.:** -

a **Instrument:** Pressure Gauge  
b **Make:** Zenith  
c **Model:** 100 mm  
d **Type:** Analog  
e **S/N:** 143953E  
f **Range:** 0 to 40000 kPa  
g **Accuracy:** 1 %  
h **Calibration Interval:** 12 months  
i **Calibration Date:** 09-Sep-14  
j **Calibration Due Date:** 09-Sep-15  
k **Temperature & RH:** 22 deg C 45%

l **Adjustments:** NIL  
m **Repair:** NIL  
n **Test Result:** See Page 2  
o **Condition:** Unit is in good working condition.

p **Remarks:** The unit has been tested and it is working within manufacturer's specification.

q **Traceability:** Make: Hauxtin Instruments  
r Model: HX601  
s S/N: 1305111212DN  
t Cal. Report No.: NL140081  
u **NATA ISO 17025 :** 2005



v **Calibration Engineer:** Bipin Gadhavi

Form: Pressure Gauge\_v1

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### Attachment 1 (Con't) – Pressure Gauge Calibration Report No. 15681



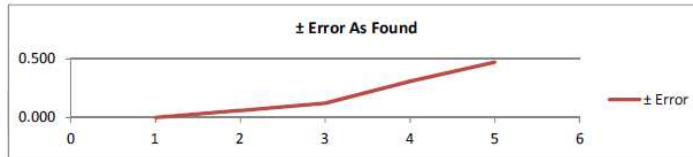
Unit 22, 9 Salisbury Road  
Castle Hill NSW 2154  
Phone: 02 9680 8765  
Email: info@zenithinstruments.com.au  
ABN 16 144 873 656

**Report No.:** 15681  
**Asset No.:** -

**Physical condition:** good

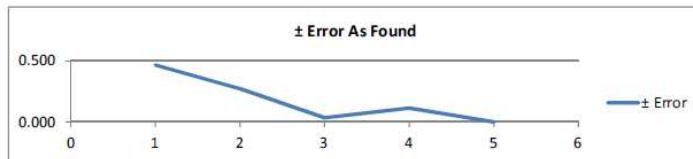
**Pressure Test:** As Found      **Up Scale**  
**Accuracy:** 1 %

Test	Master kPa	U.U.T. kPa	Correction kPa	± Error %	Pass/Fail
1	0	0	0.00	0.000	Pass
2	9976	10000	-24.00	0.060	Pass
3	20049	20000	49.00	0.123	Pass
4	30124	30000	124.00	0.310	Pass
5	40189	40000	189.00	0.473	Pass



**Pressure Test:** As Found      **Down Scale**  
**Accuracy:** 1 %

Test	Master kPa	U.U.T. kPa	Correction kPa	± Error %	Pass/Fail
1	40187	40000	187.00	0.468	Pass
2	30109	30000	109.00	0.273	Pass
3	19986	20000	-14.00	0.035	Pass
4	9954	10000	-46.00	0.115	Pass
5	0	0	0.00	0.000	Pass



Form: Pressure Gauge\_v1

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