Ultimate Load Test

Minimum Frequency – Minimum of 1 common RC & 1 common RPC / 6 months & at commencement of any new design or major design alterations as detailed in *Product Specification* & *Inspection and Test Plan.*

Notes:
i) Testing shall be in accordance with *Clause 8.5 AS/NZS 7000:2010 and relevant site Work Instructions.*
ii) Guidance on acceptance criteria is provided in *Clause 8.5.3 AS/NZS 7000:2010*
iii) Record lateral deflection, shear cracks, angular rotation, and crack widths with corresponding distance from tip at each 10% load interval
iv) Post initial 50% loading, remove load to 0% and record permanent set (mm) & crack widths.
v) Loads at and beyond 60% to be held for two minutes.

If non-conforming do the following:

a. Advise the designated quality coordinator of non-conformance and provide them with a copy of this form. – *NCR shall be raised*

Pole Size *(Length / Working Load):*	Ultimate Test Load: kN
Drawing No.:	Moment arm: mm
Date Cast:	Distance – *Tip to centre of load* mm
Test Date:	Distance – *Butt to centre of top jaw* mm
Pole No.:	Distance – *Butt to centre of bottom jaw* mm
Customer:	Jaw spacing mm
Specification:	Steam (*Hours & Temperature)*
Date forwarded to Engineering Dept.:	Measured Mass kg
Tip Wall Thickness (mm): Min: _____ Max: _____	Butt Wall Thickness (mm): TDC: _____ 90°_____ 180°_____ 270° _____

% of Ultimate Test Load	Load (kN)		Lateral Deflection (mm)	Angular Rotation (deg)	Remarks	Angle	Shear
	Target	Actual					
10							
20							
30							
40							
50							
Perm. Set 0							
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							

Failure point of pole: _____m from tip
Wall thickness at failure point (mm) _____ min _____max
Failure load result: _____kN _____% ULT
Type of Failure _____ PASS / FAIL
Deflection measured at _____mm below / beyond tip
After 1st 50% loading cracks closed to: H/L / Not Visible / Width = _____
Crack Widths determined by: Feeler Gauge / Optical Device / Visual Estimate
Ambient Temperature: _____ °C
Load Cell checked before test: YES / NO
Trolley support(s) distance(s) from tip: _____m _____m

Abbreviations: 0.15/3 = 0.15mm crack width located 3m from tip
H/L = hairline crack width (width less than 0.05mm feeler gauge

Test load to be square to pole axis (angle 0) Mark +x to show load angled above pole tip or -x angled below tip *(x = angle, deg)*

In shear column: Mark with ✓to demonstrate pole was inspected and has no shear cracks between jaws. Record shear crack locations i.e., SC/10.4

Testing Officer: _____ Witness: _____

Additional Notes:

Document History:

Version No.:	Date:	Description	Made by	Reviewed by	Approved by
1	02/072024	Initial Issue	Joshua Myhill	Joshua Myhill	Joshua Myhill