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Client: Cliff Scaffoldings (P) Ltd
Job Number: 10337
Project: Assessment of Right Angle Couplers
Test Type: Distortion
Test Method: AS/NZS 1576.2 - 2009 Appendix B

Test Date: 4/7/2012
Manufacturer's Reference and Batch Number: 140312INT
Number of Couplers Tested: 6
Number of Couplers that Passed Test: 6

Test Results:

Coupler Number:	*Orientation*	*Load (kN)*	*Rotation (mm)*
1	A	30	45.0
	B	30	35.0
	C	30	33.0
	D	30	37.0
2	A	30	15.0
	B	30	13.0
	C	30	21.0
	D	30	24.0
3	A	30	20.0
	B	30	19.0
	C	30	23.0
	D	30	21.0
4	A	30	19.0
	B	30	25.0
	C	30	25.0
	D	30	22.0
5	A	30	16.0
	B	30	22.0
	C	30	22.0
	D	30	23.0
6	A	30	11.0
	B	30	19.0
	C	30	23.0
	D	30	12.0

Note: Couplers are required to not show a rotation of more than 125mm when tested to 30kN, as indicated by the 600mm long poi nter

Methodology: the testing was undertaken in accordance with the Method. Load was applied via an hydraulic ram acting against a n electronic digital load cell. A 600mm long tubular member was attached to the loading member as per the Method, and rotation of t he coupler under test was assessed by use of a steel millimetre rule to measure displacement of the end of the tubular member. Photograph 1 (below) shows the general layout of th e test apparatus.

The measured rotation for couplers represented by this testing are less than the maximum value stated in AS / NZS 1576.2 - 2009 Cl 4.1.2

After each test, each coupler was capable of being reassembled onto the relevant scaffold tube.

No local distortion of the tubes used for testing purposes was detected.

David Wilmshurst
Technical Manager
Approved Signatory
5/07/2012

PHOTOGRAPH 1 - General layout of test apparatus

Note the black sleeve in the photo which acts to prevent slip of the test item, as well as the load cell on the far right hand side of the photograph

PHOTOGRAPH 2 - Coupler 1 as tested

Other Assessment

In addition to the above testing, there are a number of other parameters referred to in AS/ NZS 1576.2 Cl 3.2.2 which we have measured. 3 couplers were sampled at random and the results for the various measurements are given below for each of the 3 couplers.

(e) Hinge pins – 7.89, 7.90, 7.92 mm respectively (only one pin measured)

(f) Opening angle – Approximately 90, 90 90 degrees respectively (only one flap measured)

(g)(i) Bolt thread / shank diameter – 12.36/11.26, 12.31/11.24, 12.31/11.23mm respectively

(g) (ii)Nut thickness 18.78, 18.86, 18.98mm respectively (only one nut measured)

(g)(ii) Bolt projection 17, 14, 16mm respectively (only one bolt measured)

(g)(iv) Remaining thread approximately 17, 19, 17mm respectively (only one bolt measured)