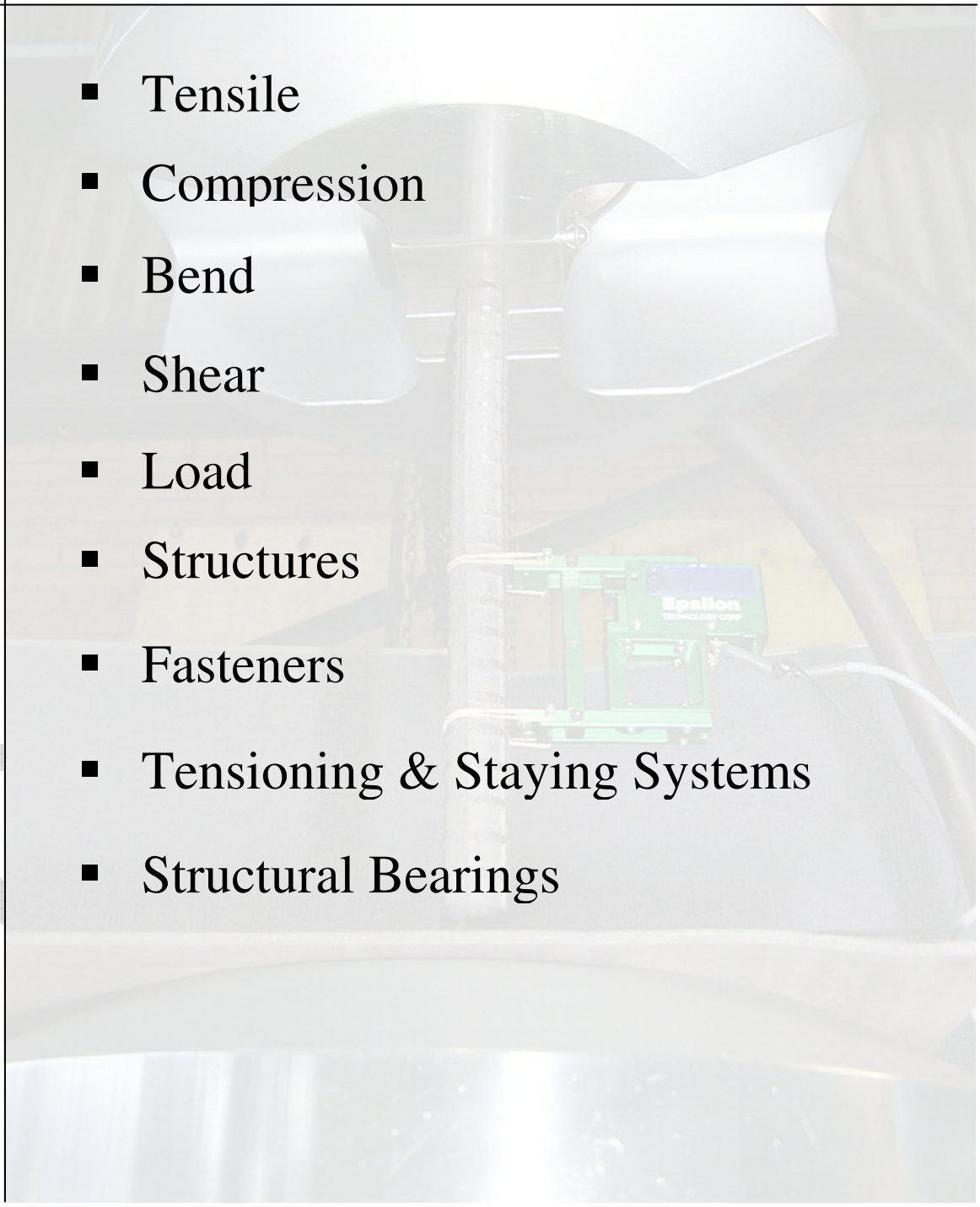
Melbourne Testing Services

Mechanical Testing



- Tensile
- Compression
- Bend
- Shear
- Load
- Structures
- Fasteners
- Tensioning & Staying Systems
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ACCREDITED FOR TECHNICAL COMPETENCE

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IN CONFIDENCE TO THE CLIENT

REPORT NO: MT-07/288-A

COMPRESSION TESTING OF ADJUSTABLE SCAFFOLD JACKS

CLIENT: **SYNERGY METALS**
C-143 PH-7 INDUSTRIAL AREA
MOHALI (PUNJAB) INDIA

DATE OF TESTING: AUGUST 9TH 2007

DATE OF REPORT: AUGUST 10TH 2007

TEST SYNOPSIS:

Two adjustable screw jacks were delivered to the Melbourne Testing Services (MTS) laboratory for load testing. The test items, as shown in Figure 1, were constructed from a threaded solid steel shaft, cast metal adjusting nut and an 8mm thick base-plate.

At the request of the client the screw jacks were to be load tested in compression to determine if the base-plate and shank of the unit could withstand a sustained application of load. Testing was to be conducted in accordance with the requirements of AS 1576.2-1991 SCAFFOLDING COUPLERS AND ACCESSORIES. Prior to testing, physical dimensions of the test items and identification details were recorded as follows:

Flat base-plate:	*150mm x 150mm x 8mm thick.*
U shaped base-plate:	*220mm x 200mm 8mm thick*
Threaded shank:	*600mm long x 36mm diameter*
Adjusting nuts:	*58mm diameter x 30mm deep*
Identification:	*No I.D. Details were observed*

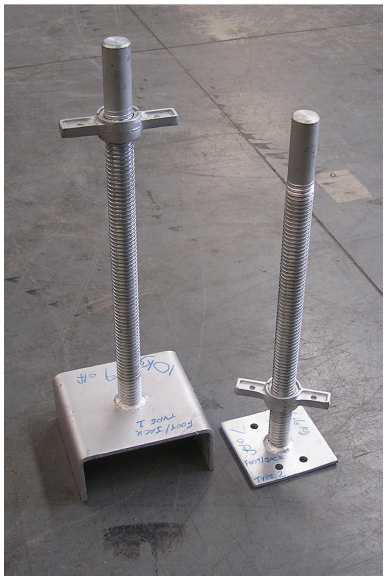

FIG.1.
ADJUSTABLE SCREW JACKS

TEST PROCEDURE:

The tests were conducted on Thursday August 9th 2007 between 9:00AM and 12:00PM by Carey Arthurson, Mechanical Testing Technician. Testing was conducted by applying a 60kN force through a length of scaffold tube bearing directly against the adjustable screw nut (See Fig.2) when in the maximum height position. In order to induce an eccentric load, a tapered steel loading plate was fitted beneath the base-plate of the jack and the load was maintained for 15 minutes.

RODNEY WILKIE
AUTHORISED SIGNATORY **DATE: 10/08/07**

TEST OBSERVATIONS:

At the completion of testing, the change in straightness in the shank of the screw jack and deflection were recorded. A test to confirm that the adjusting nut could be screwed freely along the entire length of the threaded shank was also conducted.

Test data for each screw jack is provided as follows:

#1 ***Square Plate Base Jack:***

- Vertical deflection: 2.0mm
- Change in straightness: 0mm
- Nut adjustment: Full length OK

#2 ***U head adjustable jack:***

- Vertical deflection: 10mm
- Change in straightness: 0mm
- Nut adjustment: Full length OK

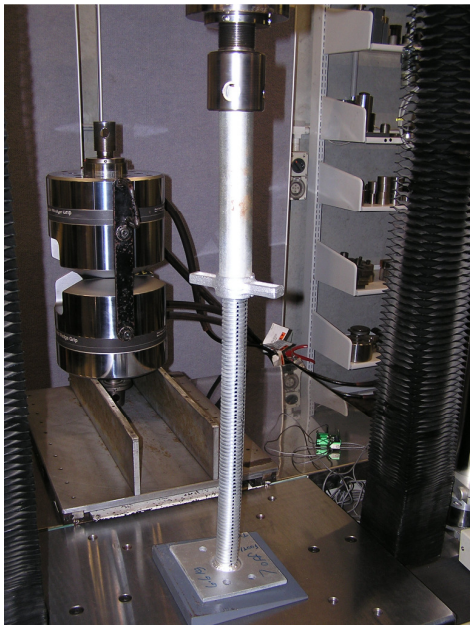

FIG.2.
TEST SETUP

SUMMARY:

In both cases the screw jacks were deemed to have passed the compressive load test in accordance with APPENDIX G of AS 1576.2-1991. Each jack supported the 60kN (6,116kg) test load at the maximum adjustable height of 490mm without failure.

Notes:

1) Melbourne Testing Services Pty Ltd shall not be liable for loss, cost, damages or expenses incurred by the client or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Melbourne Testing Services Pty Ltd be liable for consequential damages including, but not limited to, lost profit, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested.
2) This report only indicates compliance of the screw jacks in their state at the time of testing. It should not be taken as a statement that all similar screw jacks in all states of repair, would also be found to comply.
3) It remains the responsibility of the client to ensure that the samples tested are representative of the entire product batch.
4) This report only covers the structural integrity of the screw jack as specifically required by AS 1576.2-1991.
5) MTS shall take no responsibility for the compliance of the screw jacks tested and reported herein where the requirements are not in accordance with AS 1576.2-1991 Appendix G.

RODNEY WILKIE
AUTHORISED SIGNATORY **DATE: 10/08/07**

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