

## **Mechanical Testing**

- Tensile
- Compression
- Bend
- Shear
- Load
- Structures
- Fasteners
- Tensioning & Staying Systems
- Structural Bearings





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IN CONFIDENCE TO THE CLIENT

REPORT NO: MT-07/234-B

## LOAD TESTING OF POWER CABLE HOOK-PULLEY DEVICE

| CLIENT: | GARY HERZBERG                    |
|---------|----------------------------------|
|         | HEARTHILL PTY LTD.               |
|         | Factory 3, 35 Gilbert Park Drive |
|         | KNOXFIELD VIC 3180               |
|         |                                  |

Date of Testing: June 26<sup>th</sup> 2007

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## **TEST SYNOPSIS:**

A hook-pulley device used to haul electrical cable was tested by Melbourne Testing Services (MTS) for load capacity. The test item, as shown in Figure 1, was manufactured from metallic materials and consisted of an aluminium pulley, steel frame and swivel hook.

At the request of the client, the hook-pulley device was to be tested to determine if the unit could support a test load of 60kN or three times the nominated Working Load Limit WLL of 20kN (**≈2 Tonnes**). Prior to testing the hook-pulley assembly was visually inspected and the identification details are provided as follows:

- HOOK: Class 8 M-LI, A-WLL-2t.
- FRAME: No identification details were noted.
- PULLEY: No identification details were noted.

## **TEST COMMENTS:**

Testing was conducted by coupling the pulley device into a tensile testing machine (See Fig.2). Tensile load was then applied until the nominated test load of 60kN was achieved. At this point the load was maintained for 30 seconds before terminating the test.



FIG.1. Pulley Test Item

The hook-pulley supported the test load without failure. There was no visible evidence of cracking or plastic deformation in the pulley or hook components of the test item. Permanent deformation was observed in the hinge mechanism of the frame.



FIG.2. Load Test Set-up

Notes:

- 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 is specific to the hook-pulley assembly in their state at the time of testing. It should not be taken as a statement that all similar hookpulley assemblies or components of hook-pulley assemblies in all states of repair, would also be found to comply.
- 3) It remains the responsibility of the client to ensure that the hook-pulley assembly and components as reported herein are representative of the entire production batch.
- 4) This report only covers the structural integrity of the hook-pulley assembly and is specific to the test procedure outlined herein.
- 5) Melbourne Testing Services shall take no responsibility for the procurement and authenticity of the hook-pulley assemblies as described herein.
- 6) Melbourne Testing Services shall take no responsibility for the installation procedures, hook-pulley assemblies described herein.

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