# John Savage Consulting

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Mr Tony Clapin National Product Support Manager AWD Equipment Sales P/L 25 Garner Place Ingleburn NSW 2565

Dear Tony,

Re: DIECI APOLLO 25.6 TELEHANDLER WITH AUXILIARY COUNTERWEIGHT & 600mm LOAD CENTRE FORKS.

DESIGN VERIFICATION TO AS1418.19-2007

## **SCOPE**

The attached design verification report assesses both stability and structural aspects of the design of the subject machine for the purposes of its design registration as a Telehandler with 600mm load centre fork attachment.

## **METHOD**

- Stability on wheels has been assessed for conformity with the requirements of AS1418.19-2007
   (Appendix B & Appendix D, tests T1, T2, T3 & T5), by calculations based on Load Charts AXB1377
   (standard carriage) & AXB1377SS (side-shift carriage).
- Strength of both booms has been assessed for conformity with AS1418.19-2007 & AS3990-1993 by calculations based on loading to Load Charts AXB1377 & AXB1377SS.
- All calculations, both stability & structural, used input data supplied by the manufacturer, Dieci.

#### **RESULTS**

- Stability calculations show that all critical points assessed on the load charts comply fully with the relevant requirements of **AS1418.19-2007**.
- Boom stress calculations indicate that the structural competence of these elements complies fully with AS1418.19-2007 & AS3990-1993 for all 11 critical points assessed.

### **CONCLUSIONS**

The assessment shows that the Dieci Apollo 25.6 telehandler with auxiliary counterweight & 600mm load center fork attachment, while designed to European Standards, provides a level of safety at least equivalent to that required by AS1418.19-2007 & AS3990-1993 when loaded in accordance with Load Charts AXB1377 & AXB1377SS.

Yours faithfully,

Marg

John Savage BE, MIEAust, CPEng (Independent Design Verifier)