

# Test Certificate

Vipac Engineers & Scientists  
 Victorian Technology Centre, Private Bag 16  
 Port Melbourne VIC Australia 3207  
 t. +612 9647 9700 f. +613 9646 4370  
 e. melbourne@vipac.com.au w. www.vipac.com.au

**Document Control:**

<b>Contact:</b> Dave Pearson	<b>Test Date:</b> 29 November – 06 December 2010
<b>Company:</b> Vynco Industries (NZ) Limited	<b>Vipac Ref.:</b> 30V-09-0008 -TRP- 591816-0
<b>Email:</b> pearson@vynco.co.nz	<b>Page:</b> 1 of 1

**Sample Description:**

**ELGAN Type Tested Switchboard System**

**Test Specification:**

**Seismic Vibration [AS60068.3.3-2003 “Environmental testing – Seismic test methods for equipment”]**

Parameter	Detail
Performance Level	III
Frequency range	1 – 35 Hz
No. of axes	3
No. of Sweeps	5

Table 1: AS60068.3.3 test parameters

Parameter	Vertical	Horizontal
Frequency range	1.2 – 35 Hz	1.2 – 35 Hz
Floor acceleration	7.5 m/s <sup>2</sup>	15 m/s <sup>2</sup>
Wave factor	0.55	0.55
Geometric factor	1.5	1.5
Vibration level	0.63 G <sub>pk</sub> (6.19m/s <sup>2</sup> )	1.26 G <sub>pk</sub> (12.38m/s <sup>2</sup> )
Sweep rate	1 octave / min	1 octave / min

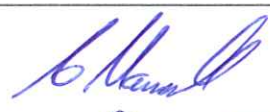
Table 2: Vibration test parameters

**Result:**

At the completion of the test, there was no evidence of any damage or wear on the modules that would impair functionality of the switchboard system – refer to Vipac report 30V-09-0008-TRP-590724-0, 20 Dec 2010 for further details. Further assessment is to be conducted by Vynco Industries (NZ) Limited.


**Approval:**

**Author:** Ashley Mansell  
 Supervising Engineer, Automotive & Defence Group



**Date:** 27/01/2011

**Approved:** Maurizio Demontis  
 Team Leader, Automotive & Defence Group



**Date:** 27-01-2011