

SGS New Zealand Ltd. NDT & Materials Services P O Box 12-356, Penrose, Auckland, New Zealand 22 Vestey Drive, Mt Wellington, Auckland, New Zealand Tel: (64-9) 634 3637 Fax: (64-9) 634 6728

Amended Report

This replaces previous Report no.: INZ58565-02 dated 29/03/17.

File Ref: INZ 58565

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TEST REPORT No.: INZ58565-02A

Fastmount Limited Client:

Order No.: **TBD**

Metal clip set Sample Description:

MC-10 Identification:

Nickel Alloy plated Zinc die cast alloy (EZDA) with MC-F10 containing grade 308 Material Specification:

stainless steel internal spring and backplate

Client instruction Tested in accordance with:

Test: SGS NZ was engaged by the client to carry out a repetitive pull-out load test and a shear test on

the Fastmount metal clip set (figure 1).

Method: Repetitive pull-out test

The metal clip set was subjected to cyclic pull-out loading at a rate of 100mm/min with a frequency of approximately 1 cycle per 10s. The initial pull-out force was measured and recorded and then again after 500 cycles.

Shear test

A shear force was applied to the assembled metal clip set ensuring no separation between the male and female clips through their axis while under load.

Results:

Sample	Pull-out Force (Kgf)		Shear Force (Kgf)
	Initial	After 500 Cycles	
MC-10 Metal Clip Set	21.3	7.4	942.9

Note: Shearing action occurred at the hex of the male clip.



MC-F10



MC-M5

Figure 1 - MC-10 Metal clip set

Acceptance Criteria: Report findings

G. Schoutens Tested by:

N. Woods Checked by:

29-Mar-17 Date:

29-Sep-17 Date:

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 14 days only.



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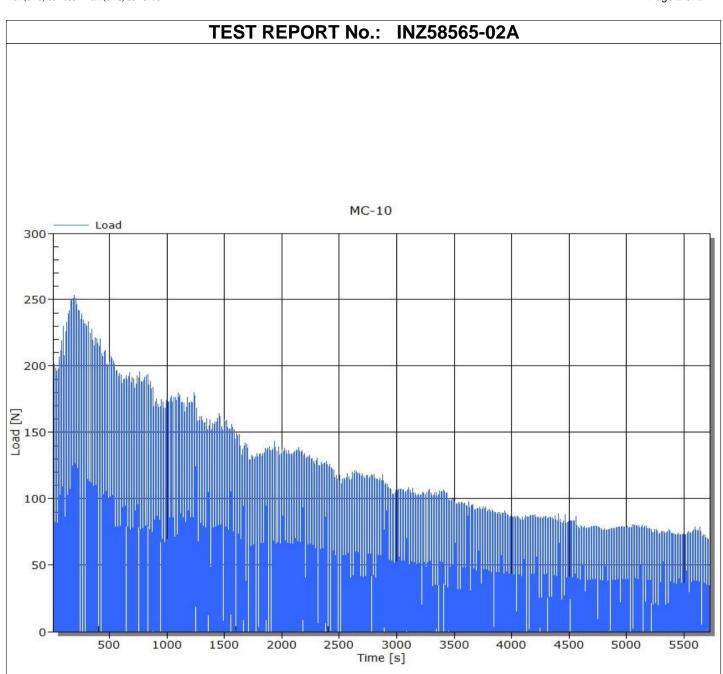


Figure 2 - Pull-out load versus time over 500 cycles