

Confidential Technical Report NE4616



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Project Number: HQ0005

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TIMESCO CALLISTO LARYNGOSCOPE TESTING.

Timesco of London Ltd.

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SS14 3WN

For the attention of Graham Dodds.

A handwritten signature in black ink, appearing to read 'S. Poole'.

Simon Poole
Senior Test Engineer
Author

A handwritten signature in black ink, appearing to read 'A. Hamilton'.

Andrew Hamilton
Laboratory Manager

TIMESCO CALLISTO LARYNGOSCOPE TESTING.

1. INTRODUCTION.

Details of the samples received and the test requested are as follows:

1.1 Sample designations:

10 off Timesco "Callisto" single use laryngoscopes, consisting of a metal clip on blade with light guide and polymeric battery holder / handle with green screw cap.

1.2 Date received:

9 off 7th December 2007

1 off 12th February 2008

1.3 Testing requested:

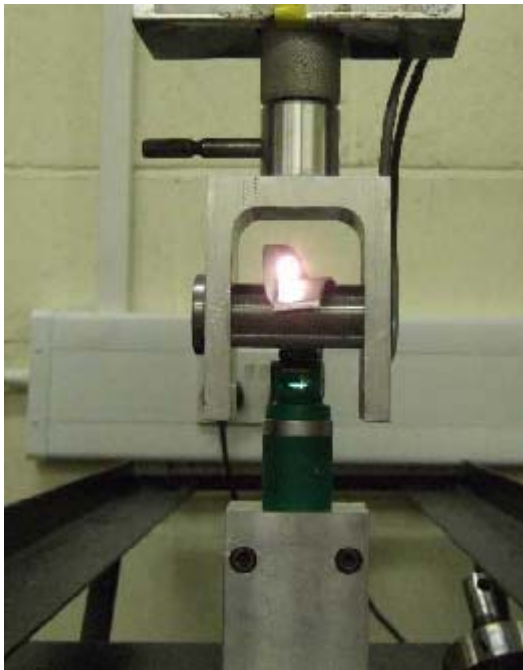
Short Term Axial Loading

2. EXPERIMENTAL DETAILS.

A fixture was produced which would grip the handle of the device and could be attached to a tensile test machine. A second fixture was also designed to apply an upward vertical load to the centre of the blade simulating the service orientation (see photographs in the appendix to this report). A load of 30 N was applied and maintained for 5 minutes. During this time the interface between the threaded collar was inspected for any distortion or detachment. At the end of 5 minutes, the load was increased at a speed of 5 mm/min until failure occurred.

3. RESULTS.

Sample No.	Proof Load, 30 N	Load at Failure (N)	Comments
1	OK, no damage	327	Blade detached, no damage to collar
2	OK, no damage	305	Top of battery holder failed, collar detached
3	OK, no damage	307	Top of battery holder failed, collar detached
4	OK, no damage	323	Blade detached, small gap opened under collar
5	OK, no damage	315	Blade detached, no damage to collar
6	OK, no damage	316	Blade detached, no damage to collar
7	OK, no damage	323	Blade detached, small gap under front of collar
8	OK, no damage	315	Cap detached from thread. Threads damaged then blade detached
9	OK, no damage	326	Blade detached. Very small gap opened under front of collar
10	OK, no damage	303	Blade detached, plastic mounting failed. No damage to collar.



Photographs of test fixture with laryngoscope fitted



Photograph of sample 2 after test



Photographs showing failure site on blade retention mechanism on Sample 10