

## Solutions@Mecmesin

### Medical Pouch Heat Seal Tensile Test

#### Specification

Rocket Medical PLC are award winning designers and manufacturers of medical devices for a wide range of clinical applications. These medical devices are packed into pre-purchased pouches and sealed in-house before being sent off-site for sterilisation. The heat seal on these pouches must conform to British Standard BS EN 868-5:1999 (Packaging materials and systems for medical devices which are to be sterilised).

Wishing to perform this test themselves, Rocket Medical sought a test system, which could accurately confirm that the strength of each heat seal joint was not below 1.5N per 15mm width before and after undergoing the sterilisation process.

#### Solution

Mecmesin provided an Imperial 1000N test system (now superseded by the MultiTest-*i* range), a 250N loadcell and lever-operated serrated cam grips.

To perform the test, 15mm width strips are cut at right angles to the heat seal joint at the mid-point of the pouch. Each end of the strip is then clamped into opposing jaws on the test stand with the tail unsupported. The seal is tested at a rate of 200mm/min  $\pm$ 10mm/min and the maximum force recorded.

The computer-controlled test system offered Rocket Medical full programming capability. The system displays the maximum force achieved during the test, as well as the average maximum force incurred over a number of tests. This saves the company a significant amount of time when performing tests and provides them with a means of guaranteeing compliance with the relevant standards.



#### System

- Imperial 1000N (now superseded by the MultiTest 1-*i*) • Loadcell 250N
- Lever-operated cam grips (serrated)

#### Testimonial

“In order to meet the British Standard regarding heat seal strengths on medical pouches, Mecmesin provided an operator-friendly system, which displays data in graphical format to clearly show compliance to the standard.”

David Dixon, Quality Assurance Technician, Rocket Medical PLC, UK

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medical industry

