

# Solutions@Mecmesin

# **Extruded Seal Deflection, Insertion and Extraction Forces**

## **Specification**

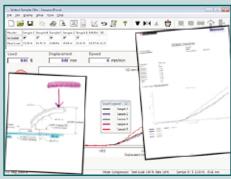
Vintech Industries Inc. is a global tier 2 supplier of thermoplastic extrusion components to the automotive and non-auto RV industry. Internationally renowned OEM brands specify Vintech's weatherstrips, seals and gimps as original equipment for glass, trim and closure sealing. Committed to continuous improvement and the production of defect-free parts, on time, the company's Quality Control division tests to strict automotive industry standards, including GMW14685 and GMW14712. To further improve the performance of their coextruded designs, Vintech moved to bring the testing processes in-house. This investment not only increased efficiency through reduced outsourcing costs, but most importantly brought faster turnaround times in design iterations for their customers, increased opportunities to win new customers, and added the capability to perform other tests to its own internal specifications—functions previously outsourced to material suppliers.



Beltline molding deflection testing, including T-slot locating design

### Solution

To cover the variety of testing procedures, Mecmesin supplied a 2.5 kN computercontrolled single-column test stand with a range of grips and fixtures, a portable, 500 N digital force gauge and a selection of compression plates. Engineers from both companies worked on the specific requirements to provide a comprehensive suite of solutions, from custom fixturing-conveniently interchangeable on standard mounts-through to professional reporting back to the OEM client. Emperor™ software enables the accurate control of the test procedure, data acquisition and analysis of the results for a host of test methods dependent upon the part's functionality and movement. Amongst the growing library of programs are compressibility of elastomeric components, to ensure effective sealing forces in vehicle closure systems, plus insertion and extraction forces of moldings to meet manufacturing ease-of-assembly and replacement-yet secure retention in service.



Complete solution: testing requirement, fixture design, results reporting to Vintech's customers

### **System**

- MultiTest 2.5-i PC-controlled test stand
- AFG digital force gauge (500 N)
- Various grips, compression plates, interchangeable baseplates and fixtures

#### **Testimonial**

"Mecmesin has customer service which provide unwavering support for our questions and ALWAYS come through with the results and answers we have needed. This solution continues to open doors for us and grow with our needs. It was everything we didn't know we needed and everything we could ask for. It is simple to use and can be mastered using very user friendly software and conversions into the programs we use every day. I look forward to taking our next steps with Mecmesin!"

Terri Lebow, Quality Manager, Vintech Industries

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