

Solutions@Mecmesin Testing Metal Shutters in France

Specification

Soprofen Industrie are leading French manufacturers of metal roller shutters and garage doors. They approached Mecmesin because they wanted to develop new force testing methods to improve the quality control of their raw materials and finished products. Soprofen have a number of different test applications, which include determining the tensile strength and elongation limit of aluminium and steel samples and testing the strength of their clip mountings and sliding crimped rings. As a result they required a flexible solution that would allow them to develop a range of different tensile tests.

Solution

Mecmesin supplied Soprofen with a twin-column MultiTest 10-*i* force testing system, driven by Mecmesin's powerful Emperor™ Software. A range of metal samples were placed between two 25kN Wedge Grips and aligned to minimise bending. The samples were pulled until failure and the results used to measure the "elongation@break" and "tensile strength" of the metal. One of the key criteria in the choice of the MultiTest 10-*i* by Soprofen Industrie was that the twin-column test system offered the necessary rigidity for analysing the tensile strength of a wide range of materials. The versatile MultiTest 10-*i* was also used to conduct cyclic sliding force tests on Soprofen's shutter clip mountings and sliding crimped rings, ensuring they are strong enough to function correctly and safely. The MultiTest 10-*i* combined with the power of Emperor™ software in French, provided Soprofen with full automated control of all test parameters, including cyclic testing and the ability to display test results graphically within the software.

System

- MultiTest 10-*i* twin-column test stand
- Emperor™ Software
- ILC-T 10kN and ILC-S1000N loadcells
- 25kN Wedge Grip for tensile testing

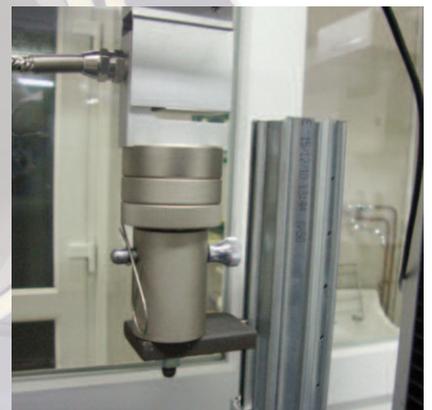
Testimonial

"Not being an expert in force measurement, I have found Mecmesin to be an extremely capable partner in this field. They ensure that test solutions are found, they offer training in the use of the equipment and they are a competitive supplier of the service and calibration of all our measuring equipment."

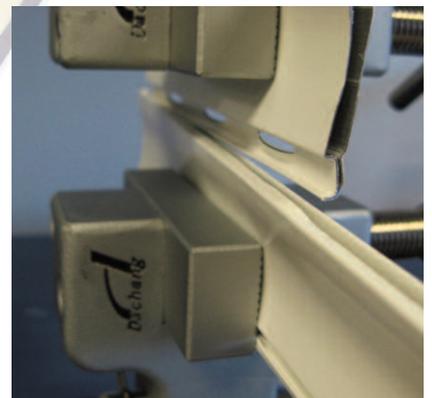
Michaël Valdenaire, Quality Engineer. Soprofen Industrie, France.



Tensile test on shutter material



Cyclic testing sliding force of crimped rig



Extraction force of clip from mounting

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