

Solutions@Mecmesin

Tensile Testing on Polyethylene Film

Specification

Eurofilm Mantzaris S.A. are a leading producer of polyethylene films used for packaging and agricultural applications. They approached Mecmesin because they needed to upgrade their tensile testing equipment to a machine capable of determining the tensile strength at yield and at break and the elongation limit of their PE film to ensure it conformed to Standard DIN53455. It was important that their new equipment could make automatic statistical calculations and could provide immediate feedback on the performance of individual specimens and batch trends.

Solution

Mecmesin supplied a MultiTest 1-i, driven by Mecmesin's powerful Emperor™ Software, with an extended travel stand which is ideal for tension testing of highly elastic products such as PE film. The MultiTest 1-i is used to conduct tests to identify the elongation limit, tensile strength and other material characteristics of polymer products with reference to DIN53455. The PE film samples are placed between two parallel grips and stretched until they rupture. The MultiTest 1-i provides full automated control of all test parameters and the tests are displayed graphically within the software and show exactly when the film breaks. Emperor™ Software is capable of storing both results and raw data and can display results with colour coded pass and fail indicators. Eurofilm Mantzaris chose the MultiTest 1-i because it was competitively priced and was easy to operate but still provided sophisticated programming.

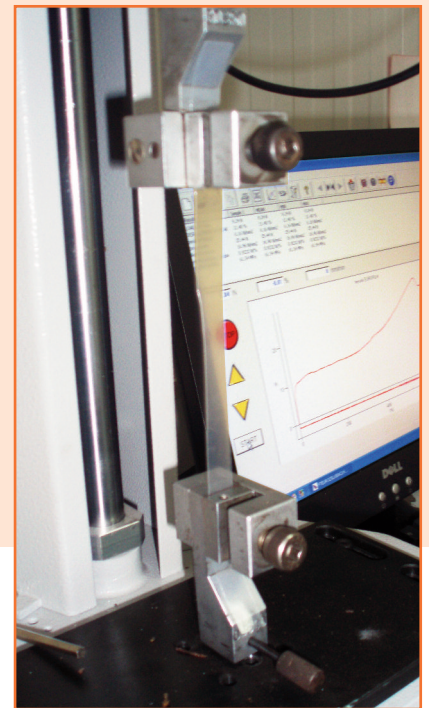
System

- MultiTest 1-i with extended column measuring 1200mm
- ILC-S 100N loadcell
- Emperor™ Software
- Parallel grips provided by Eurofilm Mantzaris

Testimonial

"The MultiTest 1-i is a very good and reliable machine and the Emperor™ Software brings great advantages. It's a very useful tool for these kinds of tests. It's fully programmable and offers an in-depth analysis of results. It's a precious tool for everybody involved, especially those who work with plastics and their mechanical performance"

Nikos Michopoulos, Quality Control, Eurofilm Mantzaris S.A.



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