Specification

The Thin Film Centre at University of Paisley is conducting ground-breaking research into flexible displays and required the means to analyse the adhesion between thin films and their substrates.

Quantifying the adhesive properties would allow them to specify the characteristics of good and bad samples.

Solution

The Centre chose the Imperial computer-controlled test system fitted with a 90° assisted peel table to carry out the analysis because of the accuracy in measuring small forces and the high degree of control over test parameters. The user-friendly Emperor software allowed the operators to evaluate different test parameters, such as peel speed, to develop standard tests. Different tapes were used to pull the thin film from its substrate and results could then be compared within the software. Maximum and average peel forces were calculated automatically and could be exported for use in reports or to other software packages such as Excel. Once standard tests had been developed, pass and fail criteria could be added to the program to automatically indicate the quality of new samples.

System

- Imperial 2500 Computer-Controlled Stand
- 25N Intelligent Loadcell
- Emperor Software
- 90° Assisted Peel Table
- Miniature Vice Grip

Supplied to

Thin Film Centre, University of Paisley, UK