

SmartBond™

ITW DYNATEC'S ADHESIVE TESTING UNIT IS THE PERFECT SOLUTION TO DETERMINE ADHESIVE SPECIFICATIONS IN THE FORMULATION- AND PRODUCTION PROCESS AS WELL AS TO REGULARLY PROOF THEIR CONSISTENCY, WITH A FAST AND AUTOMATED BATCH TEST SYSTEM. THE FULLY AUTOMATED TEST PROCEDURE IS HIGHLY EFFECTIVE AND PROVIDES EXACT AND REPEATABLE TEST RESULTS, BY ELIMINATING MANUAL INACCURACIES.

RELIABILITY

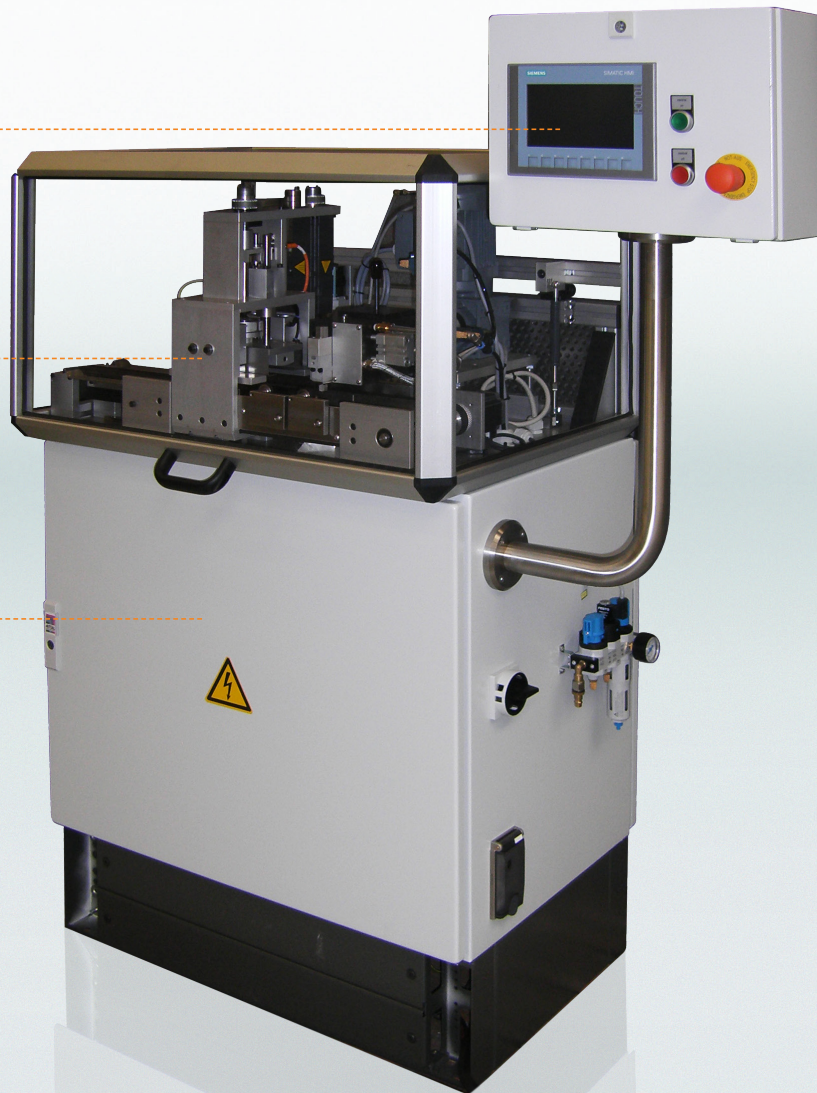
Complete automatization guarantees quick and easy testing with reliable results and digital documentation.

PERFORMANCE

Choseable parameters for open time, adhesive amount and bond-strength makes it the ideal tool to save cost and time, in R&D and QM departments.

SIMPLICITY

Compact dimensions and Plug-N-Play design makes it the perfect choice, also for smaller laboratories.

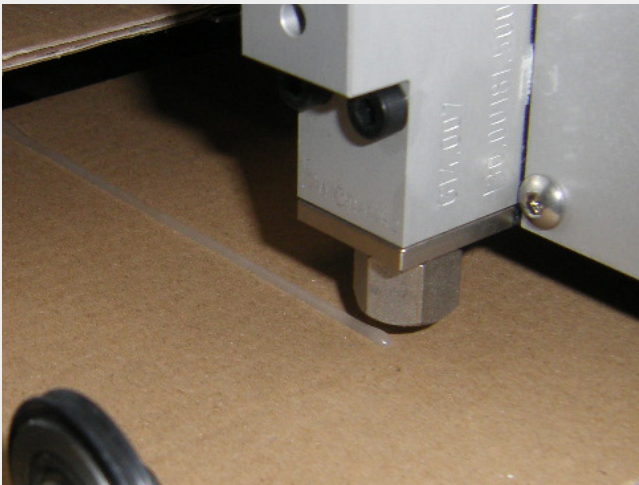


APPROVED PARAMETERS, RAPID RESULTS. LEAVE NOTHING TO CHANCE.

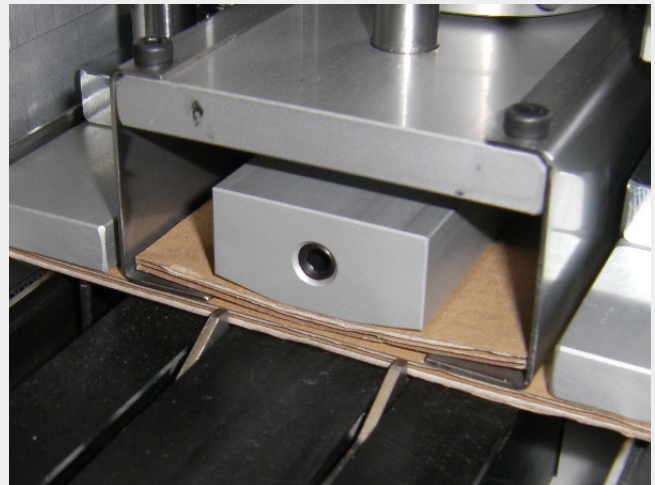
During the development and application of adhesives, many important parameters are actually being tested only visually and manually, making it almost impossible to reliably determine the important "open-time". But reproducible test results however requires approved and documented specifications of all adhesive parameters.

For this purpose, ITW Dynatec has developed an adhesive test unit which provides reliable results in a very short time, even for larger test series, especially during tests of hot melt adhesive specifications. This literally saves time and money during the development, formulation or even the phase of patenting. In addition it increases the reliability of the production process and leads to distinct application references.

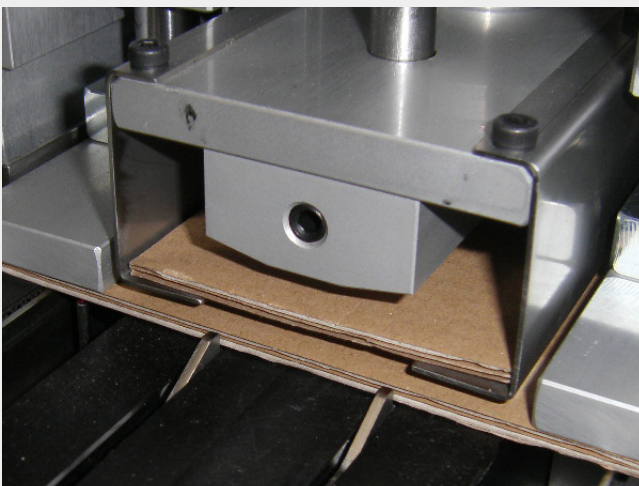
AN EXAMPLE OF AN ADHESIVE TESTING PROCESS



Application of an adhesive (hot melt) bead to the dedicated testing cardboard.



Compression of both cardboards with parameters chosen and set by the user.



Monitored separating of both cardboards.



Ejection of the lower cardboard for visual examination.

DETERMINATION OF THE ADHESIVE'S OPEN-TIME

The unique SmartBond™ adhesive test system enables the operator to freely choose any time-delay, before pressing the two cardboards together. After the, also variably entered, pressing time is over, the cardboards will immediately be torn apart and the measured traction-force is automatically recorded. Comparing various time-delays, before pressing, with the resulting bond-strengths allows exact determination of the optimal "Open-Time", for each specific adhesive. Once all parameters are determined, SmartBond™ can easily be used to assure the efficient and repeatable control of these parameters, for each production batch.

DETERMINATION OF THE ADHESIVE'S TRACTION-FORCE

The traction-force can be determined in two versions. Firstly, the test can be carried out with an immediate traction measurement. The two paperboards will be pressed, torn apart and the traction will be determined immediately. Secondly, the test can be carried out without an immediate traction measurement. Two paperboards will be pressed but not torn apart and will be taken out manually from the pressing mechanism. After a desired period of time these paperboards will be inserted again into the pressing mechanism, torn apart and the traction will be determined.

ADHESION

Basically the usage of various testing substrates is possible. Maximum dimensions of the cardboards should not exceed 160 x 75 x 3 mm. The tension-compression load cells are capable for a maximum tensile force of 500 N. The adhesion, as well as the other variable parameters can be tested with the standard cardboard, as well as boards made of plastic or metal-material.

ADJUSTABLE AND DETERMINABLE PARAMETERS

- Open time of the adhesive
- Length of adhesive bead up to max. 140 mm
- Bonding pressure for the lamination of the cardboards
- Maximum traction-force of the lamination

TECHNICAL DATA

PLC-Controller	S7 with self-explanatory programming
Dimensions of test-cardboards	160 x 75 x 3 mm
Tension-compression load cells	max. 500N
Height	1,350mm
Depth	600mm
Width	840mm

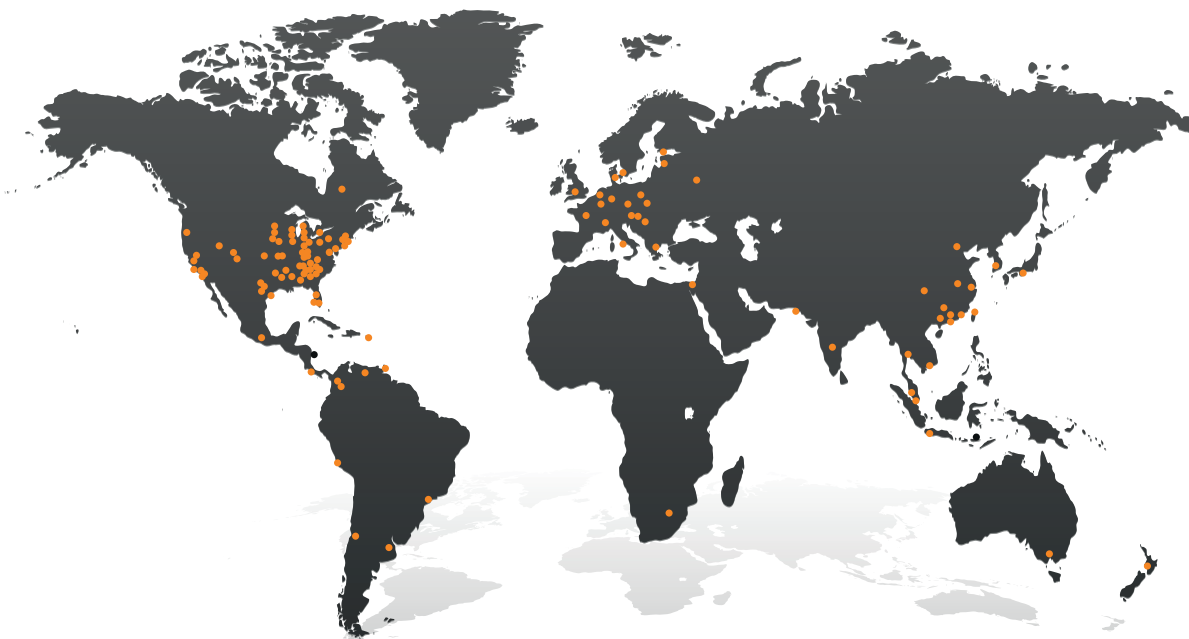
WITH MORE THAN 50 YEARS OF INDUSTRY EXPERIENCE AND EXPERTISE, ITW DYNATEC IS RECOGNIZED AS A GLOBAL LEADER IN THE DESIGN AND MANUFACTURING OF INNOVATIVE HOT MELT ADHESIVE APPLICATION SYSTEMS FOR VARIOUS INDUSTRIES SUCH AS DISPOSABLE HYGIENE PRODUCTS, AUTOMOTIVE AND PACKAGING.

ITW Dynatec's consultative customer approach to selecting products and solutions delivers outstanding services and support from its knowledgeable and responsive service and sales teams. Our best-in class solutions replace conventional application technologies with superior methods that provide a significant reduction in adhesive consumption, fast machine-changeover and process simplification. Our mission is to help customers manufacture superior products with less waste, improved quality and reduced consumables to maintain the flexibility to meet changing market demands.

For patented hot melt adhesive application technology, high-quality reliable equipment, 24/7 customer support and unmatched value, ITW Dynatec isn't just the smart choice... it's the only choice.

WORLDWIDE SERVICE AND SUPPORT NETWORK

- Global Sales and Service Network
- 130 sales and service facilities in over 120 countries.



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