

Dispersion for high-end printing foil lamination

Jowat has developed a new dispersion adhesive to meet the highest requirements with regard to manufacturing efficiency and end product quality in printing foil lamination. According to the company, the processing characteristics of this one-component printing foil lamination adhesive called Jowacoll 764.45 are at least comparable – with regard to foaming, degree of gloss, compound strength, cutting stability and resistance to downline stress factors such as embossing, grooving, or folding – to those of two-component systems from market competitors in the high-end segment. The absence of processing steps such as dosing and mixing leads to an increase in manufacturing efficiency.

By using this one-component adhesive, processors eliminate all error sources in their production processes which exist when two-component systems are used (such as dosing, mixing, pot life or disposal).

Print finishing methods and processes as used for luxury goods packaging or superior book cover finishing have the greatest benefit from this high-end dispersion.

Selecting the right printing foil lamination adhesive depends on the product requirements, the type of laminator and the methods of application used. //

For further information, please visit: www.jowat.de

Measuring the rheology of powder

Anton Paar has developed a powder cell that converts any rheometer of the MCR series into a powder rheometer. Powders, as a mixture of solid, liquid and gas, are complex materials. This complex-



A powder rheometer makes it possible to measure the rheology of powder and therefore to guarantee efficient quality control and trouble-free powder processing.

ity can be simplified with the measurement of a sum value: cohesion strength. Cohesion strength describes the internal flow resistance of the powder. By measuring the cohesion strength, one can determine, for example, whether the quality of the powder has changed and might cause problems in the process. Regardless of which of the many possible factors influences the powder, this influence is detected by changes in the value of cohesion strength.

The high reproducibility of the results delivered by the powder rheometer is achieved by a fluidisation step to clear the "powder memory". The possibility of using an automated measuring program and the shorter measuring period of approximately two minutes that this involves allows a high sample throughput. The powder cell is easy to operate due to automatic calibration and live visualisation of the measurements. Furthermore, operating costs are low and the unique dust protection hood protects the operator and the instrument against escaping powder.

The powder cell for the MCR series rheometer is suitable not only for quality control but also for scientific studies of the rheology of granular media in non-fluidised, sub-fluidised and fluidised states. //

For further information, please visit: www.anton-paar.com

Castor oil with a low acid content

Alberdingk Boley is systematically expanding its product range in the field of renewable resource-based binders for the formulation of, for example, PU adhesive systems, coatings and elastomeric applications. A new product in the range is a technical castor oil quality in which the acid content has been significantly reduced due to further modification. In addition to the Castor Oil Low Acid 0.7 types

(acid value max. 0.7), which have already been on the market for several years, modified castor oils with a maximum acid value of 0.2 are now available.

Due to the further modification of the acid value, it is possible to significantly reduce any potentially undesirable side reactions during the curing phase. One major feature is a significantly extended pot life in PU systems. Both at room temperature

and in environments with higher temperatures of 35 °C and a high relative air humidity of 85 %, it was possible to extend the pot life compared to standard-quality castor oil grades up to almost double in some cases. Positive effects are also observed in the reduction of CO₂ formation in the formulation of resin components. //

For further information, please contact: oils@alberdingk-boley.de