

EVALUATION OF HIGHPERFORMANCE FOAM FOR FLEXO-PRINTING PLATE MOUNTING TAPES

Flexo printing is a widely used technique to print on flexible packaging film materials, but also on corrugated cardboard. To mount the flexoprinting plate on the printing cylinder, a double-sided foam tape is used which provides a defined compressibility enabling the transfer of the ink to the substrate. The printing pressure should remain on a constant level throughout the complete printing job, which can last many thousand cycles. Tight thickness tolerances, a precise compression stress-strain deformation behaviour of the foam and an optimal synergy between foam and adhesive are additional factors which have a significant impact on the print quality.

Various test methods can be used to evaluate the performance of foam in this application. We will compare the results of several foams, including representatives of both groups of crosslinked polyethylene foam and polyurethane foam, in terms of their performance as compressible medium in long-lasting flexographic printing tapes.