

Optimization of Thermoplastic Impregnation of Glass Fiber Yarns with Pultrusion

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The influence of process variables on the degree of thermoplastic impregnation of glass fiber yarns by pultrusion is investigated. The performance of the pultrusion line consisting of fiber distribution system, guidance device, extruder, impregnation chamber, cooling unit, pulling mechanism, and take-up device is examined in order to evaluate variable sensitivity and to optimize the process for pulling speed.