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**Optische Analyse des Wandgleitens zwischen einer Phenolharz-Formmasse und der Werkzeugoberfläche während des Spritzgießens**

**Visual analysis of slip on the interface between phenolic polymer and wall surface in injection molding process**

The behavior of glass-fiber reinforced phenolic resin in the presence of a wall surface during injection molding was investigated by observing the displacement of phenolic melt on the surface of molded parts with a rather simple but effective and useful method. The experimental results show clearly a strong slip of phenolic melt on the cavity surface. The occurrence of slip begins immediately when phenolic melt contacts the wall surface. This technique was employed to study the slip of thermoplastic melts inside a mold. However, the experimental result shows that there is no slip of thermoplastics melt on the cavity surface. Complete opposite results found between the flow behavior of thermosets and thermoplastics on the cavity surface raise the questions concerning the applicability of thermoplastics injection molding concepts and rheological property testing methods for thermosets.

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