

Mold Surface Contamination during Polymer Processing

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The aim of this work is concerned with a problematic adhesion of polymer materials on the surface of processing tools. Such phenomenon plays especially an important role in production of rubber components which creates an additional and considerable costs associated with mold cleaning. However, the origin of contamination is still not fully known yet. From production point of view, the attention should be paid to three fundamental aspects: processed material, material of processing tool, and processing conditions. This study describes the results of mold's surface contamination during processing a rubber compound in terms of material and surface treatment. A method of spectral analysis in terms of FTIR was used for proper examination of this problem.

Keywords: Rubber; Fouling; Contamination; Mold Surface; FTIR

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