

Publication

A novel tool for the prediction of tablet sticking during high speed compaction

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Keywords Sticking, adhesion, radial die-wall pressure, Mefenamic acid, compaction simulation During tableting, capping is a problem of cohesion while sticking is a problem of adhesion. Sticking is a multi-composite problem; causes are either material or machine related. Nowadays, detecting such a problem is a pre-requisite in the early stages of development. The aim of our study was to investigate sticking by radial die-wall pressure monitoring guided by compaction simulation. This was done by using the highly sticking drug; Mefenamic acid (MA) at different drug loadings with different fillers compacted at different pressures and speeds. By increasing MA loading, we found that viscoelastic fillers showed high residual radial pressure after compaction while plastic/brittle fillers showed high radial pressure during compaction, p?

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