

Curtain coating by high-viscosity liquids.

We investigate the dynamics of a coating process in which a falling liquid sheet impinges onto a moving solid substrate. This method of coating is used in a number of industries. In the present work, the process is considered in the framework of a theory of flows with forming interfaces, and the resulting problem is solved numerically using boundary integral method in the case of zero Reynolds numbers. The main objective of research is to study the role of hydrodynamics factors on the key characteristics of the flow.

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