Advanced numerical framework for melt thermoplastic flow : Applications to Slot Die Coating and Composite Processing

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Résumé

Simulations tools are often used by material suppliers predict some characteristics of some thermoplastic manufacturing processes, in order to optimize the part performances, to support in customer in tuning process parameters and to reduce the time to market of newly developed grades. If some commercial softwares can be readily used for some processes(e.g injection molding), it is not the case for all processes and one has to resort to more customized tools. The presentation will show how, through an R&D partnership with a software editor, we resort to advanced numerical tools (Levelset method, anisotropic mesh adaptation, immersed boundary approach) to tackle industrial problem rising from adhesive and composite processing.

Mots-Clés: numerical

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