

Study on the Effect of Coupling Fluid Compressible-Deformable Wall on the Flow of Molten Polymers

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Abstract : The main objective of this work is to establish a numerical code for studying the flow of molten polymers in deformable pipes. Using an iterative numerical method based on finite differences, we determine the profiles of the fluid velocity, the temperature and the apparent viscosity of the fluid. The numerical code presented can also be applied to other industrial applications.

Keywords : numerical code, molten polymers, deformable pipes, finite differences

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