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Capillary Rheometry of Polymer Melts and Options for Process Modelling

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Calculation of flow in processing machines necessarily need rheological functions in a process like range of shear and elongation rates, temperatures and pressures to solve the problems of scale up of technical processes, process monitoring and control and scientific applications.
High pressure capillary rheometers of different design and measurement range with corresponding options (pVT-measurement device, pressure chamber, die swell tester …) generate these functions in a database shape to use them in above mentioned technological tasks.
Thus high pressure capillary rheometers become a “simulator for material models” under process like conditions. The process models themselves complete the process models of polymer processing and are essential tools of engineering to solve above mentioned technological tasks in planning, realisation and application.