SL 2.11 **Development of Product for Injection Moulding**

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The development of a new polymeric product starts with the phase of research and development planning. The phase of technological design follows. In this phase it is necessary for the designers to realize that the product design quality directly depends on characteristics of production process and characteristics of plastics. Large number of different types of plastic materials makes development process very complex.

In this work, *CAE* tools will be used for the new plastic product development. During development process special attention will be put on the choice of the material. Also, simulation of injection moulding will be conducted in order to avoid potential moulding problems. Results gained from the simulation will be used for the optimization of an existing product design, for the mould development and for optimization of processing parameters, e.g. injection pressure, mould cavity temperature, etc.