SIMPOE-MOLD

SIMPOE-MOLD® PROFESSIONAL PACKAGE
B-Style*

Specifications

1- Input Format :

Import of STL CAD model files (Catia, Pro/ENGINEER, SolidWorks, Solid Edge, Unigraphics, Inventor ….) with **automatic meshing.**
Built-in mesh file checker.
Import of surface mesh under NASTRAN format.

2- User defined input parameters.

Built-in **and customizable** plastic material data bank
Built-in and customizable mold material library (aluminium, copper and steel alloys) and coolant fluid library (oil, water).
Injection process controlling parameters:
Flow rate or pressure absolute or relative profile
Resin melt and mold wall temperatures.
Injection press maximum pressure
Injection press maximum flow rate
Filling/Packing analysis switch
Pressure holding time
Fiber percentage
Co-injection

Thermal regulation parameters:
Melt temperature
Coolant temperature
Mold opening time
Ejection temperature

Cooling channels and runners built-in editor :
Geometry, diameters and meshing.
Coolant temperature and flow rate .

Definition of injection gates and runners and cooling channels.

** SIMPOE-MOLD B-Style software can be used for the analysis of the vast majority of plastic injected parts. For very thin, or completely full parts, other SIMPOE-MOLD softwares may be more appropriate.*

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3- Analysis results.

Filling/Packing :
Melt front, with dynamic display.
Pressure at filling end .

Surface, average, central and bulk temperatures.
Shear stress and shear rate
Shrinkage
Gate location optimization index.
Perfect cooling time
Weld lines
Air traps
Skin and core fibers orientation

Thermal regulation:
Part cooling time
Part temperature at end of cooling.
Mold temperature
Mold heat transfer flux.

Profile curves on user defined nodes.
Flow rate, pressure and clamping forces curves.

Automatic generation of HTML reports, including data, graphs, images and numerical results.