REM3D®

Starting with REM3D® - Molding

Try the REM3D® experience and make your own rheology simulations to better manage your injection processes!

This course will be your first approach to REM3D® software. Based on an example including the three conventional 'filling-compacting-cooling' phases, the first day lets you perform the data setup, computation launch and analysis of the main results operations.

The second day will be devoted to a more in-depth analysis of results such as the solidified thickness, the closing force, fault detection. Other key functions will also be covered, such as the AAA remesh technique, managing the pressure cycle, the impact of heat regulation, point tracking and to finish off, the part's dimensional inspection with the shrinkage phenomenon.

LEVEL

Beginner

PREREQUISITES

There is no prior requirement for this course.

GOALS

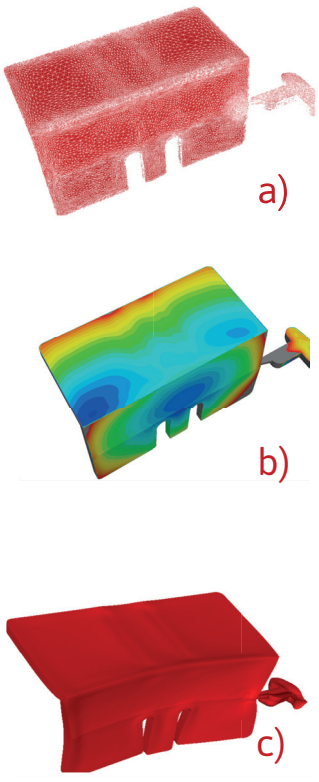
- **Data setup for an injection case**
- **Launching a computation on one or more cores**
- **Analyzing simulation results**
- **Identifying and interpreting injection defects**
- **Monitoring physical values (temperature, pressure, etc.) at any point on the part**
- **Testing the influence of process parameters (feed gate, heat regulation, holding pressure, etc.)**
- **Understanding and quantifying shrinkage/deformation phenomena**
- **Exporting a simulation report**
- **Customizing your working environment**

TRAINING	DURATION	PRICE EXCL. TAX	PARTICIPANTS
In-company	1.5 days	1950€ per training	1 to 3 people

Contact us to set the course date and location.

DAY 1 > 8.30 a.m. to 12.00 p.m. & 1.30 p.m. to 5.00 p.m.

Introduction	· Transvalor presentation · Course goals
Data setup	· Project concept · Importing geometries · Surface and density meshes · Defining process parameters (injection, dwell and cooling) · Defining the material: temperature, rheology · Defining the mold: temperature, properties · Defining the symmetry plane · Managing simulation control parameters: - Managing time increments - Stop criteria: max. time, max. temperature, etc. - Managing storage: in time, filling · Setup for a tutorial case (standard injection for a plastic part): filling, compacting, cooling and shrinkage after cooling
Launching computations	· Quick launch · Batch manager
Result analysis	· Displaying results: temperature, material front, solidified thickness, etc. · Curve patterns, animations, VTFx exports
Industrial case	· Data setup and launching computation



Observation after computing part deformation:
a) Adaptive automatic remeshing
b) Projected deformation
c) Deformation amplified x10

DAY 2 > 8.30 a.m. to 12.00 p.m. & 1.30 p.m. to 5.00 p.m.

Industrial case result analysis	· Interpreting results: temperature, polymer front, pressure, deformation, closing force, etc. · Predicting faults and the finished properties of the injected parts
Additional functions	· AAA (Automatic, Anisotropic, Adaptive) remesh · Defining the feed system (runner, sprue, gate, etc.) · Customized materials form · Overmolding · Heat regulation · Pre-processing sensors
Conclusions	· Questions and course assessment