THERCAST®

New Functionalities of THERCAST® NxT 3.0

Are you already familiar with the new THERCAST® NxT environment and do you want to improve your knowledge of the software? Discover the new features in NxT 3.0 and learn the best practices right now to make the best out of the software!

At the end of this training, you will have full knowledge of the functionalities in NxT 3.0. First you will discover the new features in the graphical interface. You will then practice with different tutorials illustrating your sector of activity.

THERCAST® NxT 3.0 improves your experience through user interface customization, faster and easier navigation, and new shortcuts.

LEVEL

Intermediate

PREREQUISITES

A first experience with THERCAST® software is required.

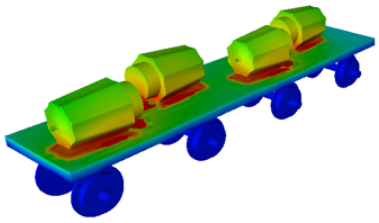
GOALS

- **Mastering the new features in THERCAST®**
- **Taking advantage of these features according to your sector of activity**
- **Improving the quality of cast parts thanks to even more predictive results**
- **Taking advantage of the electromagnetic stirring (EMS) calculation**

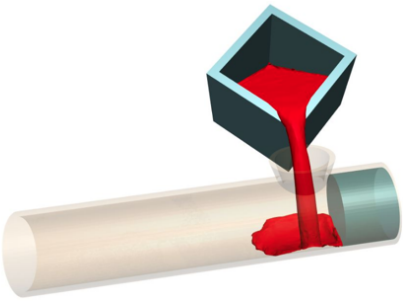
TRAINING	DURATION	PRICE EXCL. TAX	PARTICIPANTS
In-company	1 day	€1400 per training	1 to 3 people

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

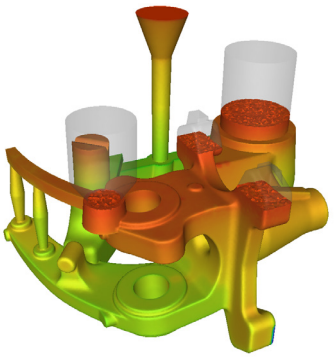
Introduction	• Presentation of Transvalor • Course goals
New features in the interface	• Meshing improvements • Custom legends • Results grouped by categories • Customizable display • Simplified templates • Plot for each object
New features	• Advanced input numerical options • Bubbles calculation • Surface tension - Viscosity - Marangoni Effect - Permeability Model of Darcy • Capability to empty initial filling • Multi-Material Filling • Enrichment types for Macrosegregation
Python API	• Introduction to the Python API to setup and analyze automatically your simulation • Python recorder • User interaction • Real time Output Display
Lost Foam	• Define cavity material • Replacement of foam by metal • Visualization of Foam and Metal results
Electromagnetic Stirring	ELECTROMAGNETIC COMPUTATION • Defining of the input and output current • Definition of the mesh for the 'Room mesh' environment • Creation of the global mesh • Mesh suited to the skin thickness • Check the quality of the global mesh THERMAL COMPUTATION • Defining the billet • Parameters of the simulation: storage, heating time, coupling with electromagnetic computation STARTING COMPUTATION • Chained computation by setting the 'In Loop' tab • Chained induction and casting simulation ANALYZING RESULTS • Evolution of temperature, magnetic fields, magnetic potential, induced current
Optimization	• Explanation of core concepts (individuals, generations, minimizables, constraints, parametered actions) • Case study
Conclusion	• Questions and course assessment



Self-radiation is considered



Filling via casting bucket



Temperature during the filling