COLDFORM®

NEW

New functionalities of COLDFORM® NxT 3.0

Do you want to further increase your productivity? Learn how to use the new features in COLDFORM® NxT 3.0 and make them work for you!

By the end of this course, you will be able to use all new features in COLDFORM® NxT 3.0 and work with the best practices to configure data and analyze results. COLDFORM® NXT 3.0 provides a new user experience thanks to the optimization module newly implemented in its interface. The new graphical functionalities will also be covered in this course. You will appreciate the new developments such as the phase field approach used in shearing processes, and take advantage of the reduction of the computation time in 2D.

The implementation of local remeshing in 3D improves the quality and accuracy of the solutions. It is now possible to model the steady state in cold rolling. This approach reduces the computation time.

LEVEL

Intermediate

PREREQUISITES

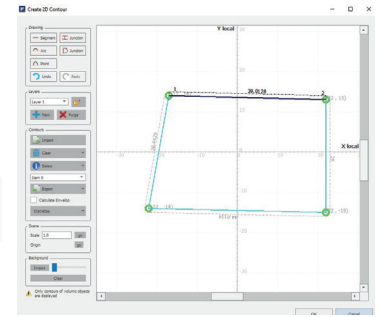**A first experience with COLDFORM® software is required.**

GOALS

- **Mastering the new features in COLDFORM® NxT 3.0**
- **Taking advantage of the new features of the interface to configure data and analyze results faster**
- **Increasing the predictive quality of simulation with more realistic data setups**
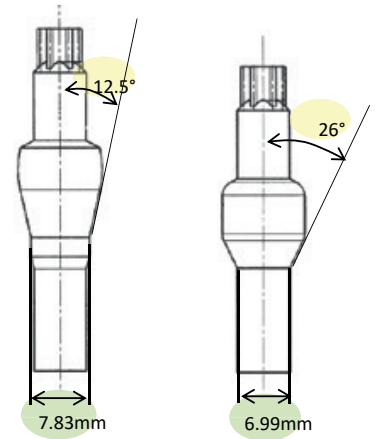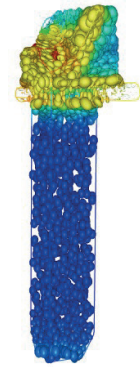- **Gaining experience based on practical case studies**

DURATION	DATES 2023	
1 day	13 June	10 October

TRAINING	PRICE EXCL. TAX	PARTICIPANTS
Inter-company	540 € per person	3 to 8 people
In-company	1300 € per training	1 to 10 people

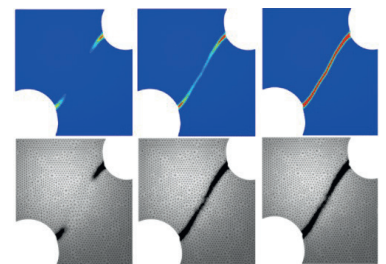## DAY 1 > 8.30 a.m. to 12.00 p.m. & 1.30 p.m. to 5.00 p.m.

Introduction	▫ Transvalor presentation ▫ Course goals
New features	▫ Meshing improvements ▫ Result Analysis ▫ 2D CAD ▫ Visualization of tensors and vectors ▫ Custom legends
Material viewer	▫ Graphical User Interface ▫ View and edit JMatPro files, the FPD Base database, files in the Cold Rheology Generation Tool
Python API	▫ Introduction to the Python API to setup and analyze automatically your simulation
Steady state in cold rolling	▫ Simulation setup of a process ▫ Remeshing between passes ▫ Field analysis: temperature, stress, velocity

Automated optimization	▫ Concept
	  ‑ Terms of individuals and generation
	  ‑ Definition of a minimized variable
	  ‑ Definition of a constraint
	  ‑ Definition of parameters and operations
	▫ Study case
	▫ Results analysis (best individual, comparison...)

Shearing process	▫ Data setup ▫ Advantages of Phase Field approach ▫ Results analysis
Conclusions	▫ Questions and course assessment

2D CAD

Optimization of tool geometry

Simulation of crack initiation and propagation