TRANSWELD®

NEW

Starting with TRANSWELD®

With TRANSWELD®, understand and analyze the physical and metallurgical phenomena intrinsic to welding.

Many industrial sectors such as the aeronautical or automotive industries use laser beam welding to assemble parts while maintaining a metallurgical continuity between them. This training is your first approach to TRANSWELD® software that simulates laser beam welding for all types of metals. You will learn how to use the software functionalities, how to configure the data of a laser beam welding simulation and how to analyze the main results.

The course will also cover topics such as Automated Adaptive Anisotropic remeshing, the configuration of the laser beam and the customization of the working environment.

LEVEL

Beginner

PREREQUISITES

There are no prior requirements for this course.

GOALS

- **Mastering the new graphical interface**
- **Using TRANSWELD® to configure a laser beam welding simulation**
- **Customizing your working environment for greater effectiveness**
- **Speeding up the data configuration**
- **Analyzing computation results better**

TRAINING	DURATION	PRICE EXCL. TAX	PARTICIPANTS
In-company	2 Days	2600€ per training	1 to 3 people

Contact us to set the course date and location.

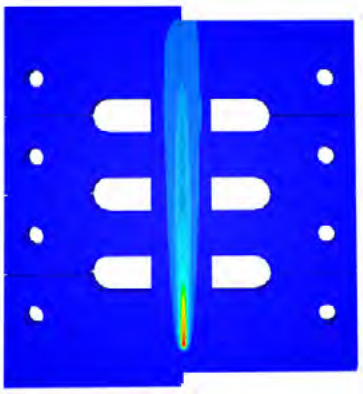
DAY 1 > 8.30 a.m. to 12.00 p.m. & 1.30 p.m. to 5.00 p.m.

Introduction	· Transvalor presentation · Course goals
Graphic environment	· Presentation of the working environment · Concepts: stores, processes, cases and stages · Import of geometries · Surface and volume meshes · Rheology, friction, heat transfer, material data · Configuration of laser beam and welded parts · Concepts of Automated Adaptive Anisotropic remeshing · Configuring simulation parameters · Sources configuration · Type of computation · Application to a tutorial case
Computation	· Quick launch · Computation restart procedure
Results analysis	· Displaying the results: temperature, liquid fraction, heat affected zone, Von Mises... · Diagrams, animations, VTFx exports · Display options: isovolumes, cutting planes, etc. · Sensors computation
Customer case	· Setup · Starting the computation

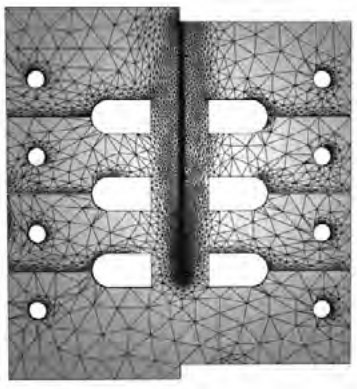
DAY 2 > 8.30 a.m. to 12.00 p.m. & 1.30 p.m. to 5.00 p.m.

Customer case 2	· Setup · Starting the computation
Ergonomics of the interface	· Right-click: customization of contextual menu · Automatic saving of project · Customization of keyboard shortcuts
Advanced setup data options	· Drag and drop file loading · Multi-object selection: resizing, rotating, moving · Edition of files (materials, heat transfer) directly from the interface
Results analysis of client's simulation	· Displaying the results: temperature, liquid fraction, heat affected zone, Von Mises... · Diagrams, animations, VTFx exports · Display options: isovolumes, cutting planes, etc.
Advanced results analysis options	· Custom actions (display configuration, scalar display...) · Synchronized multi-window animation
Customization of the environment	· Creating specific process models and data sets (materials, heat transfer, friction, etc.)
Conclusions	· Questions and course assessment

Laser beam welding process



Temperature profile of the plates during welding



AAA remeshing