



What's new in Simufact Welding 7.2

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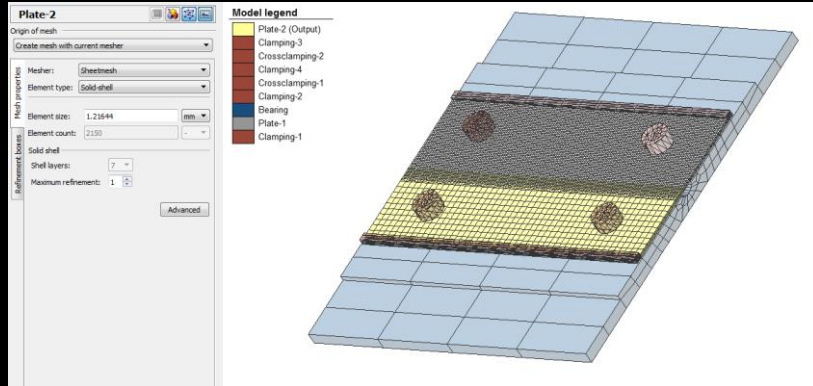


Highlights and milestones of the 7.2 release:

- ◆ New meshing capabilities
- ◆ Prestate using element type Tet 157
- ◆ UNV import for values at integration points

New features in Welding 7.2

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Meshing



- ◆ Added new meshing features that allow to create volume meshes on geometries with a surface or volume mesh
 - Imported and (automatically) surface-meshed CAD geometries
 - Imported surface-meshed geometries (STL)
 - Volume-meshed geometries
 - Switching of element types (Tet 134 to Tet 157, hexahedral to solid shells) possible without remeshing
 - Basic shapes can be generated directly in the GUI

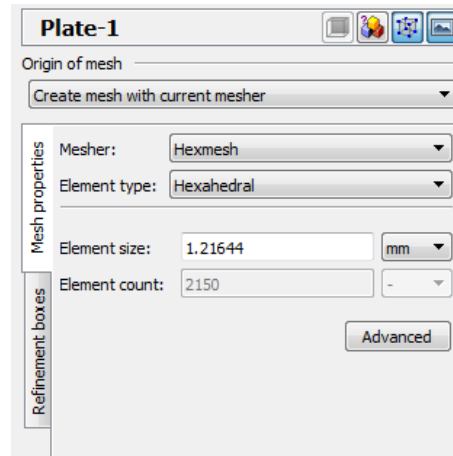
Meshing



- ◆ Added a mesh container to component objects in the process tree



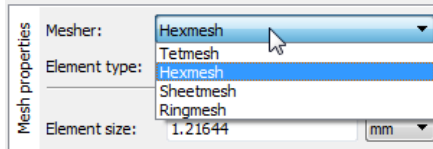
- ◆ Mesh container opens the meshing dialog



Meshing

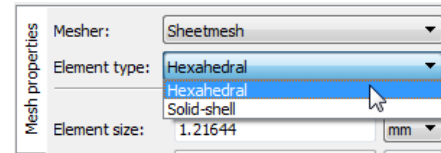
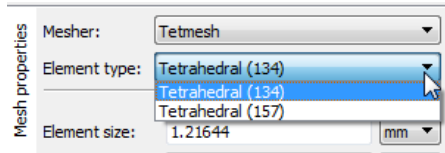


- ◆ An appropriate mesher can be selected



- ◆ Selection of element types is possible

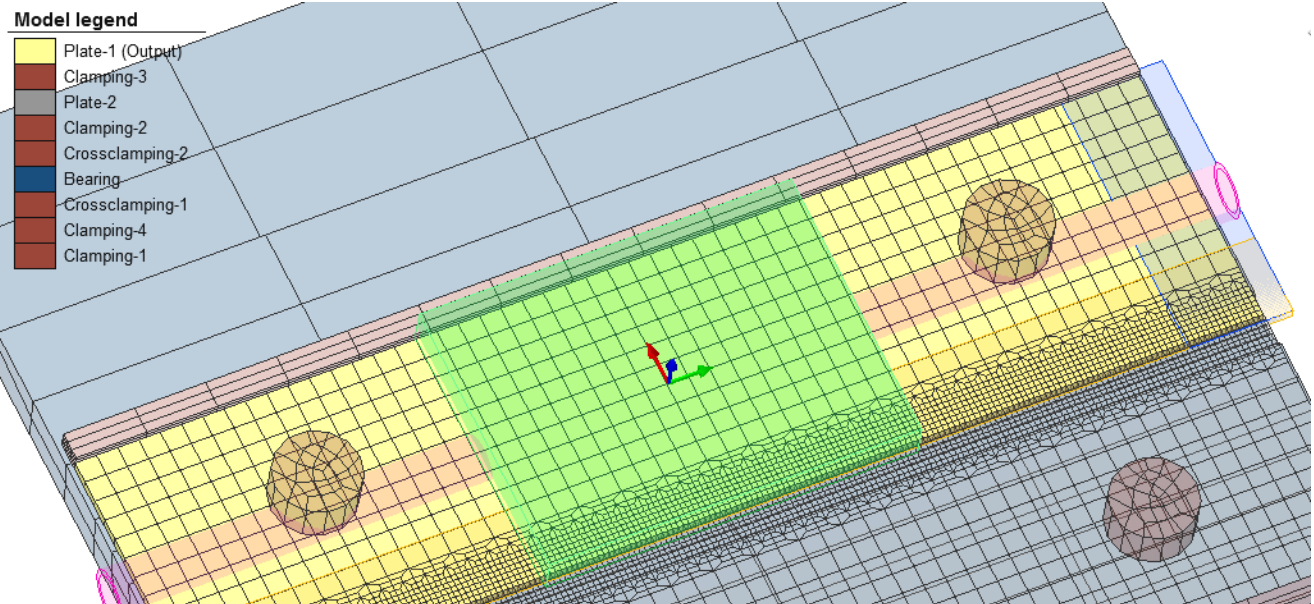
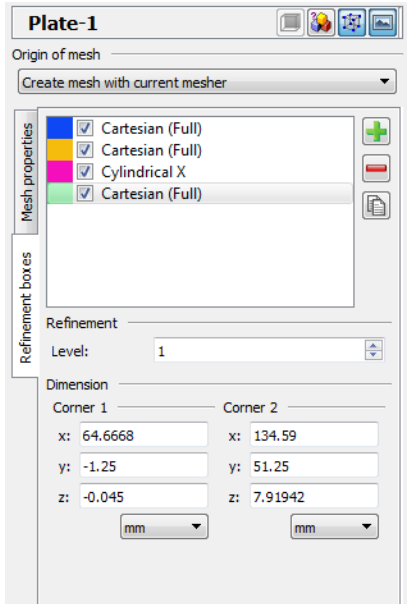
- Tet 134 and 157 for tetmesher
- Hexahedral elements and solid shells for hex-, ring-, and sheetmesher



Meshing



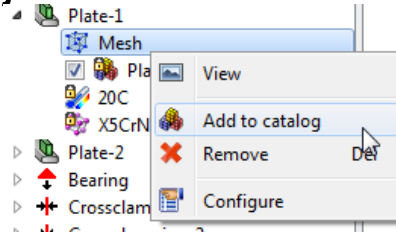
- ◆ Several refinement boxes can be defined and used during meshing



Meshing



- ◆ Created meshes can be added to the object catalog and reused in further processes and projects



New features in Welding 7.2



Other features

Other features



- ◆ Import of UNV files containing elemental results for stresses and equivalent plastic strain
- ◆ Prestate with element type 157

Features to be discontinued



Features to be discontinued in next releases



- ◆ The interactivity of the process control center will be reduced, preventing erroneous mouse interactions.
- ◆ Additive plasticity with assumed strain formulation will be removed from the process settings. Its usability is very limited and usually not well-suited for welding simulations. If you need such an approach for bending of thin-walled structures, use solid-shell elements instead.