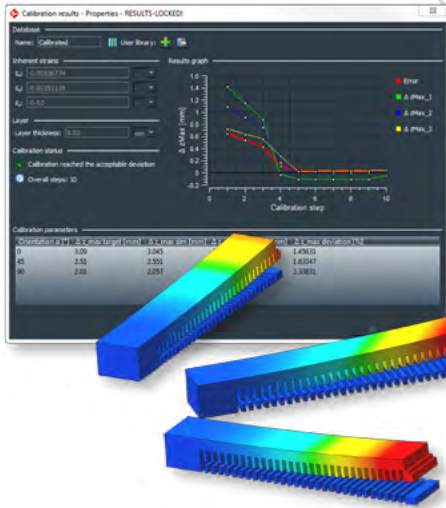
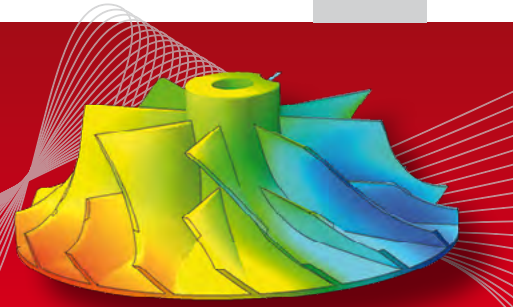
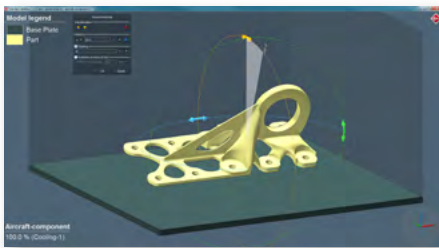


Top Novelties in Simufact Additive 2



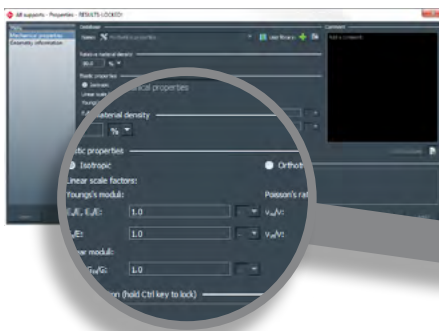
Calibrating with Cantilevers (physical testing)

A fast optimization algorithm calibrates the inherent strain values allowing for the accurate prediction of the distorted part. These strain values represent the machine, the material and the used process parameters and provide a fast and reliable simulation for complex additive components. Technical improvements to the optimization algorithm in version 2 allow a faster calibration of the necessary inherent strains on the basis of the measured test body deformations.



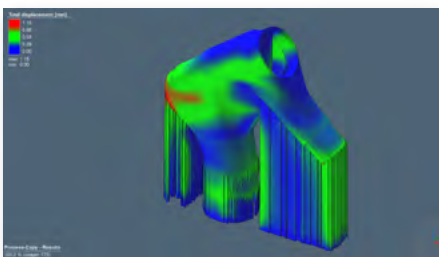
Individual positioning of parts in virtual build space

Simufact Additive 2 provides special handling to determine the most efficient positioning of parts on the base plate and allows for iterations to be made that optimize the build-up-orientation. Positioning the part is very intuitive, due to the easy-to-use-interface.



Support of orthotropic material properties

Simufact Additive 2 takes into account orthotropic material properties, which enables a more realistic representation of support structures stiffness. Coarser meshing provides reliable results with a simultaneous reduction of the required calculation times.

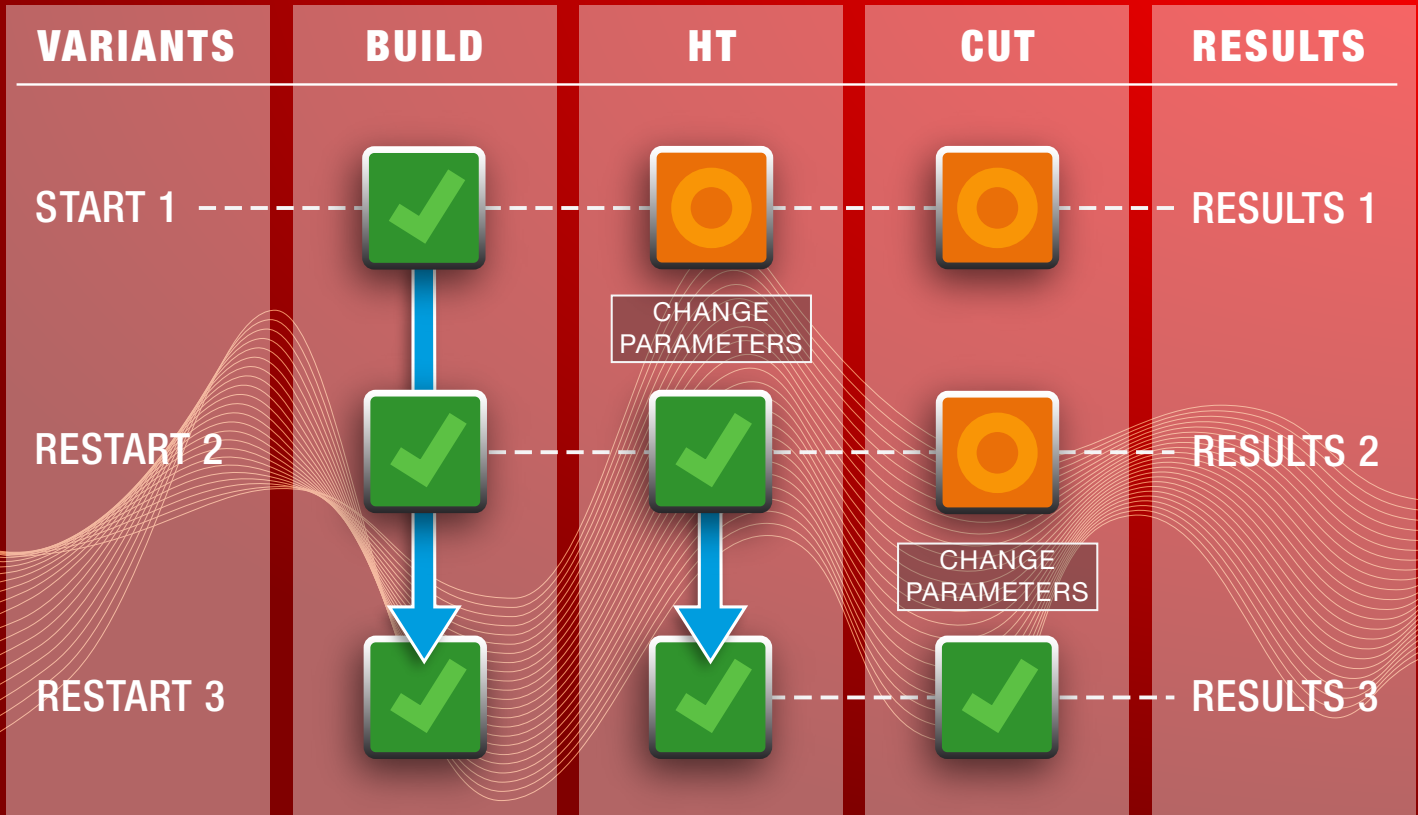


Simulate HIP processes

Simulating the HIP process (Hot Isostatic Pressing) in Simufact Additive 2 now includes the parts porosity and its densification – based on the hollow-sphere model. The component density affects the product lifetime, which can be significantly longer, the less porous the work piece is.

Top Novelties in Simufact Additive 2

VARIANTS SIMULATION – SELECTIVE RESTARTABILITY

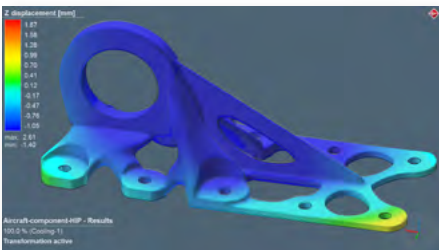


Label	
BUILD	Additive Manufacturing
HT	Heat Treatment
CUT	Cut from Base Plate
	Results Accepted
	Results Not Accepted
----	Simulation Run
	Results Transfer

Variants simulation:

Optimize the additive process chain more effectively

An effective, fast optimization of the whole process chain, including printing, heat treatment, cutting/removing of supports, and HIP. With Simufact Additive 2, users are now able to stop and re-start the simulation process at any stage of the process chain. Each process step can be optimized separately based on the previous results. Simufact Additive 2 further shortens the simulation calculation times.



Comparison with Physical Testing

Simufact Additive 2 enables users with a comparison of simulated parts with the target design or 3D measurement data as a reference. Users can also evaluate deformations relative to the reference geometry. Users can measure the actual part and import the results into Simufact Additive. This ultimately provides engineers with an easier way to compare their results, which ensures a more efficient workflow.



Please find a detailed description of the product functionalities on our website: simufact.com

