

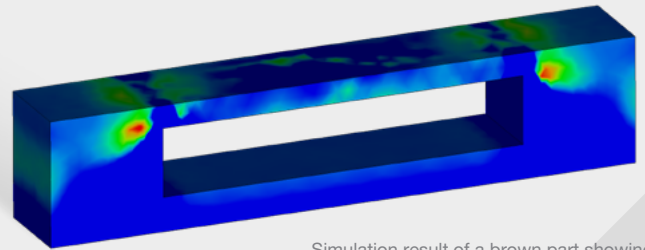
# Ultrafuse 316L

## Customer Simulation Service

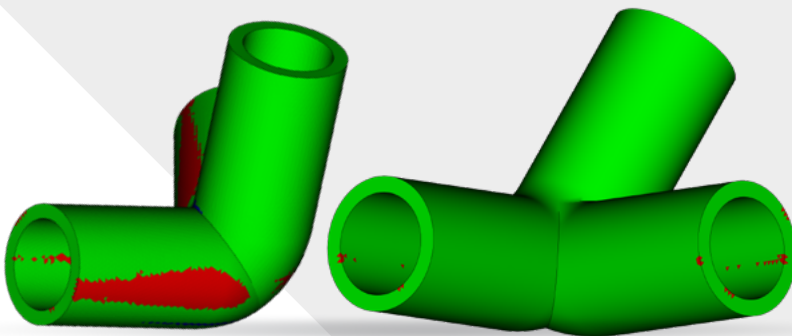


### Debinding analysis

Our brown part simulation service allows us to predict decisive stresses in the part during debinding. We judge the parts survivability and can also support a redesign of the part to ensure a successful debinding.



Simulation result of a brown part showing the stresses within the part.



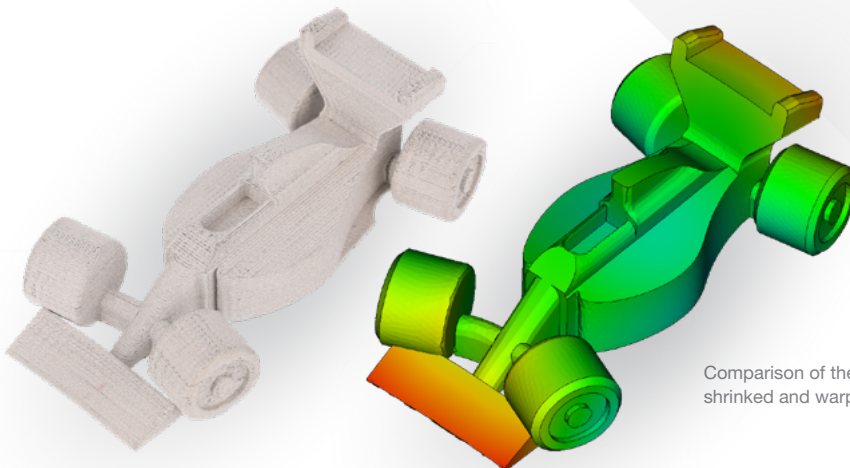
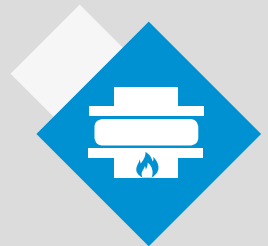
Result of the brown part optimization method highlighting failure prone areas (in red): initial orientation (left); optimal orientation (right).

### Debinding optimization

If a part design is unchangeable, we can apply our Brown Part Optimization Method to find an optimal part orientation during debinding. This will provide a part orientation with minimal internal stresses and consequently highest survivability.

### Sinter analysis

During sintering, the part undergoes anisotropic shrinkage. Further, some geometrical aspects can lead to warping of the part. Our Sinter Simulation can predict these effects and help to redesign the part for a better near-net shape of the sintered part.



Comparison of the sinter simulation result (right) with the shrunk and warped sintered part (left).

