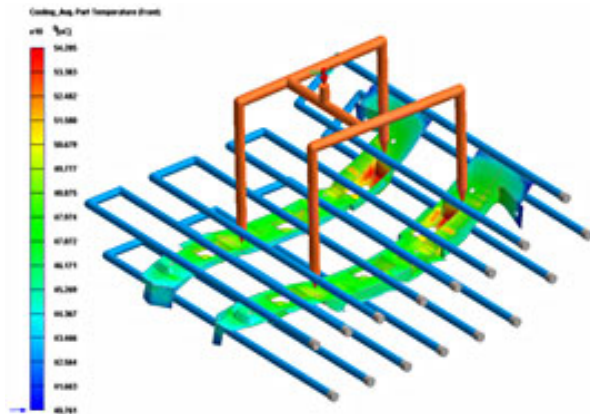


Manufacturing engineering



Rheological analysis

Injection moulding process simulation:

- Filling phase
- Packing phase
- Fiber orientation calculation
- Cooling of the mould analysis
- Deflection analysis
- GAIM (Gas Assisted Injection Moulding)

Sheet metal stamping analysis

Sheet metal process simulation:

- Feasibility of metal stamping parts
- Blank size and nesting
- Die and tools design
- Determination of the final thickness (Thinning)
- Coupling results with crash simulations
- Incremental analysis with RADIOSS or LS-DYNA

Jigs and fixtures, accessory devices

- Planning

- Design

Ergonomic evaluation

The objective of an ergonomic simulation is to reproduce human operations in a virtual environment and perform an ergonomic evaluation of these operations, (DELMIA Ergonomics):

- Impartial ergonomic evaluation of movements and worker postures
- RULA (Rapid Upper Limb Assessment)
- Carry / Lift-Lower / Push-Pull
- Accessibility envelope
- Worker's eye view

Process flow simulation

The recreation of an assembly line working flow or production cell allows us to better understand process needs by anticipating and validating the behavior of an operation plant under a specific condition by:

- Defining productivity and bottle necks
- Analyzing the impact of the product mix on productivity
- Defining maximum capacity and idleness
- Analyzing the impact of failures and non-conformities on the production system.