APPLICATION SAMPLES

COUPLED TASK

Simulation taking into account die set deformation and temperature evolution

Simulation with rigid tool

Real flow

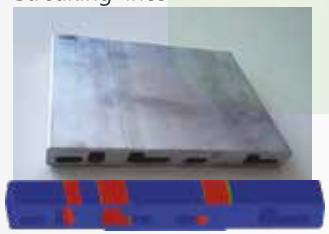
Simulation with deformable tool

PREDICTION OF DEFECTS

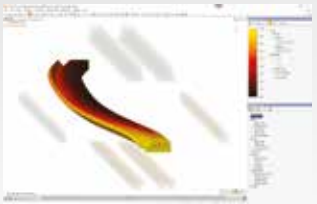
Prediction and elimination of defects at the design stage

Underfilling

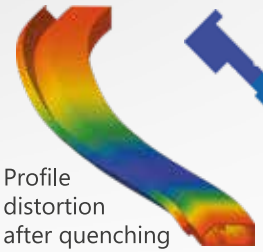
Streaking lines



NEW: QUENCHING SIMULATION



Cooling station in QForm UK



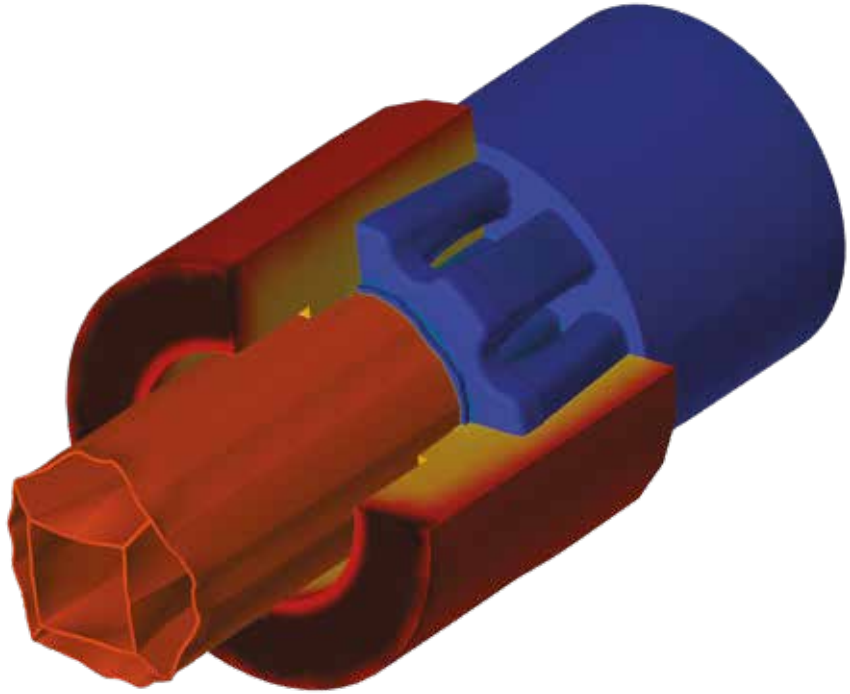
Profile distortion after quenching

Hardness distribution after quenching

Micas Simulations Ltd., UK | www.qform3d.com

QFORM UK

EXTRUSION



SOFTWARE FOR SIMULATION, ANALYSIS AND OPTIMIZATION OF PROFILE EXTRUSION

- Validated by industry worldwide
- Integrated with CAD/CAM
- Easy-to-use interface
- 24/7 online support
- High performance
- Reduce costs
- Boost productivity
- Increase profitability
- Extend your product range
- Get more from your equipment

FOR DIEMAKERS AND DESIGNERS

FOR PROFILE MANUFACTURERS

Calculation of stress-strain state, tool life analysis

Design optimization based on simulation

Productivity increase:

- temperature-velocity mode
- tool life analysis
- material utilization rate

Prediction of final profile dimensions

Fully coupled deformation and temperature task calculation

Prediction of extruded profile shape

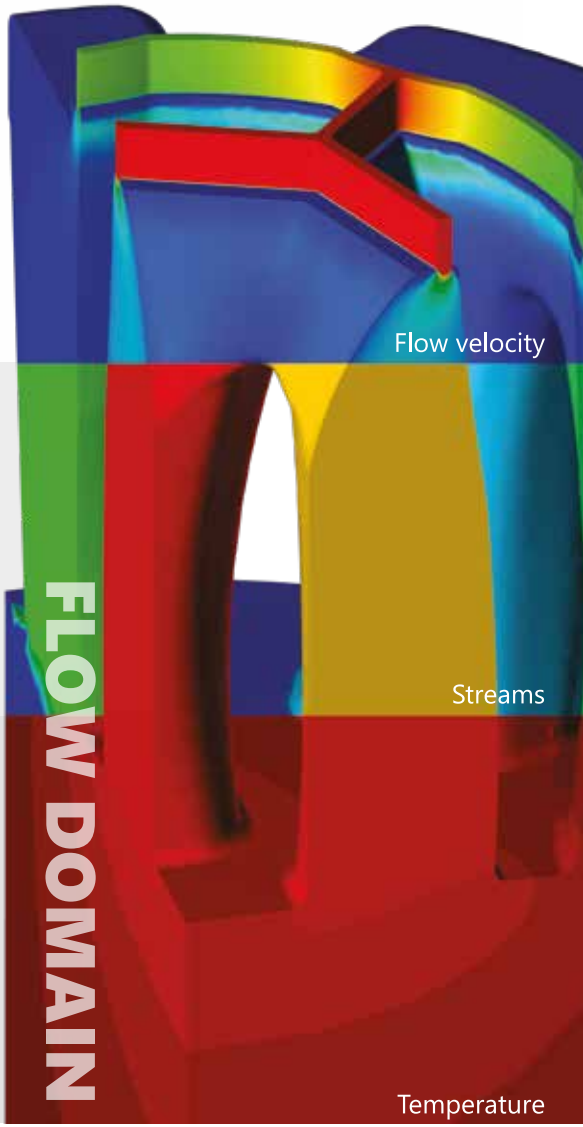
Profile quality control:

- streaking lines
- welding seams
- back-end defects
- underfilling prediction

Analysis of charge welds for scrap minimization

Quenching simulation:

- all cooling system configurations
- prediction of profile distortion and mechanical properties depending on cooling modes



VALIDATION OF DIES AND TECHNOLOGY BY QFORM UK ALLOWS DIEMAKERS AND DESIGNERS TO SUPPLY PRODUCTS OF THE HIGHEST QUALITY TO EXTRUDERS

QFORM EXTRUSION CALCULATES MATERIAL FLOW FULLY COUPLED WITH THE TEMPERATURE AND DEFORMATION OF THE TOOL AND DIE SET ELEMENTS