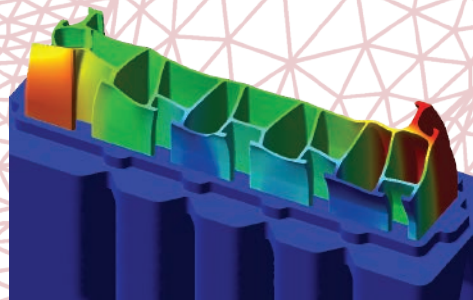
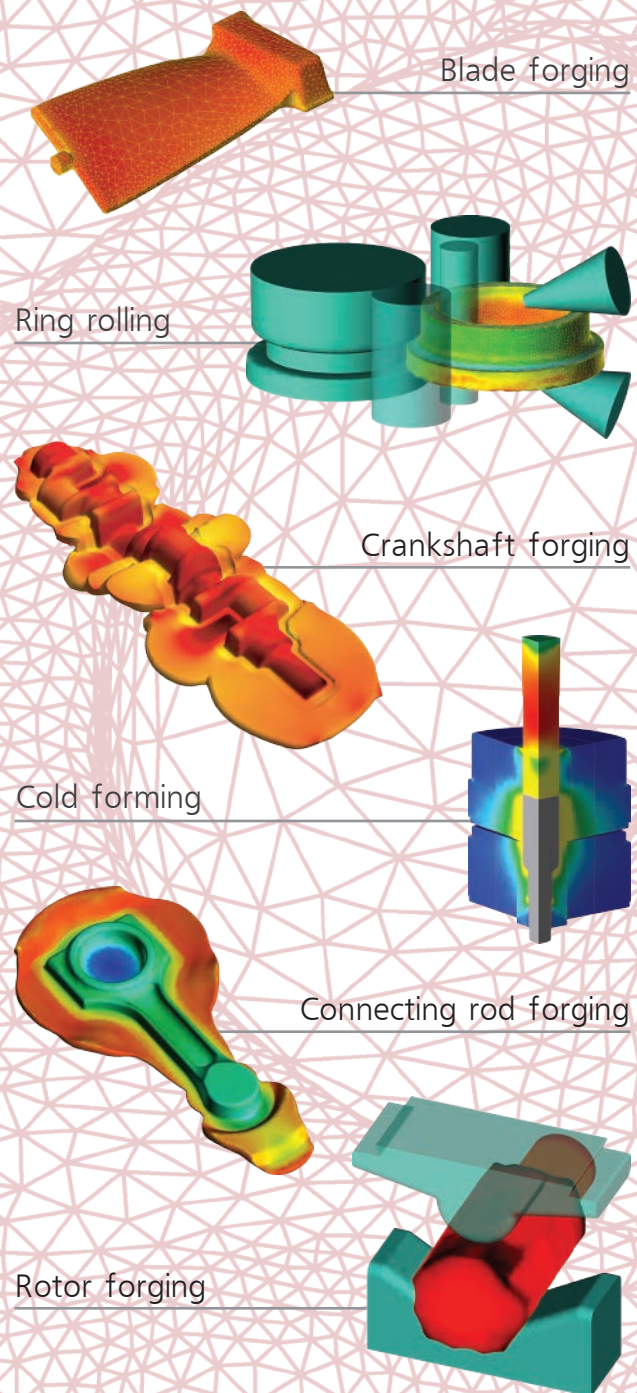


PROCESSES

Closed die forging
Ring and wheel rolling
Cross wedge rolling,
shape and transverse rolling
Cross-roll piercing
Open die forging
Profile extrusion
Cold forming
Hydroforming
Flow forming
Radial forging
Orbital forging
Heat treatment
Microstructure prediction
Multiple billet deformation
Bulk forming of sheet metal



Profile extrusion (FEP, Brazil)



NEW IN QFORM VX

Thin aluminium profile extrusion simulation
New dual mesh method features
Electric upsetting simulation
New operations structure
New forging manipulator
Pusher for rolling simulation
Advanced database features
Advanced ring rolling simulation features
Advanced features of creating finite element mesh adaptation box
Copying initial data from previous operation, inserting intermediate operations
Improved graphs and measurements
Improved diagnostic messages
Rotate light source mode
Calculating elastic unloading at elastic-plastic deformation
Importing DXF files with layers for 2D simulation

FEATURES

User friendly interface
2D & 3D simulation chain
Coupled thermal and mechanical problem
More than 1000 materials in database
Geometry import from any CAD system
Highest performance on multi-core and multi-CPU systems
Rotating and complex tool movement
Clear visualization of results concurrent with simulation calculation
Assembled pre-stressed tools
User defined subroutines
Cloud and local network client-server versions for remote simulation
Dual mesh method for all processes
Elastic-plastic simulation of the workpiece



IMPLEMENTATION

Metal forming process development

Control of die cavity filling

Abrasive die wear simulation

Eliminating laps, flow-through and other material flow defects

Estimation of the deformation load and energy

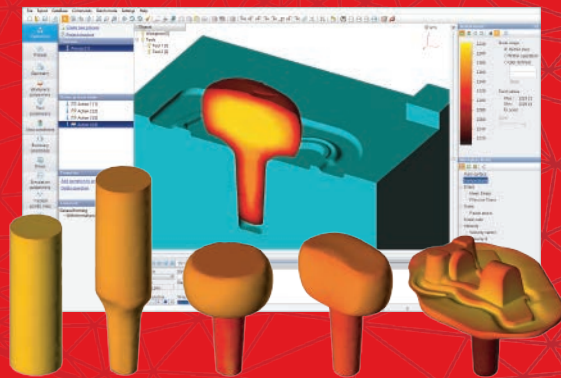
Optimization of raw material use

Die stress analysis

Carrying out scientific numerical research and experiments

Sales and marketing

Staff training



QFX Simulations Ltd.
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www.qform3d.com

QFORM

SOFTWARE FOR SIMULATION AND OPTIMIZATION OF METAL FORMING PROCESSES

WHAT IS QFORM?

QForm is a professional engineering software for simulation, analysis and optimization of metal forming processes based on the Finite Element Method.

QForm software allows simulation of an entire technological chain at high speed and excellent reliability and provides a wide range of possibilities for process analysis.

The most important economic benefits of QForm software include:

- Decreasing production lead time
- Eliminating defects in metal forming production
- Increasing quality and improving product properties
- Reducing material consumption
- Elimination of test dies
- Reduced development time and improved efficiency

