

# 2017

## DAAD Praxispartnerschaft Metallurgie

[internship-metallurgy.org](http://internship-metallurgy.org)

[www.praxispartnerschaft-metallurgie.de](http://www.praxispartnerschaft-metallurgie.de)

Переддипломна практика в Україні та Німеччині



# QFORM® UK

## MICAS SIMULATIONS

### WHAT IS QFORM?

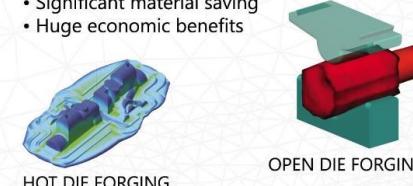
QForm is the most innovative software for simulation, analysis and optimization of metal forming and heat treatment processes.

QForm це найбільш інноваційна програма для моделювання, аналізу та оптимізації процесів формування та термічної обробки металів.

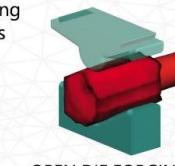
QForm это наиболее инновационная программа для моделирования, анализа и оптимизации процессов формоизменения и термообработки металлов.

QForm use in industry provides:

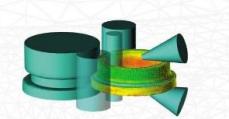
- Reduction of technology development lead time
- Increasing product quality
- Significant material saving
- Huge economic benefits



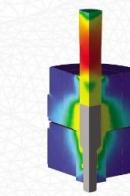
HOT DIE FORGING



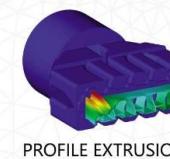
OPEN DIE FORGING



RING AND WHEEL ROLLING



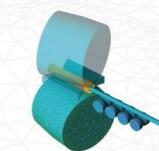
COLD FORMING



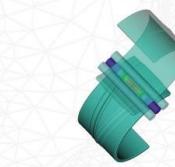
PROFILE EXTRUSION



HEAT TREATMENT

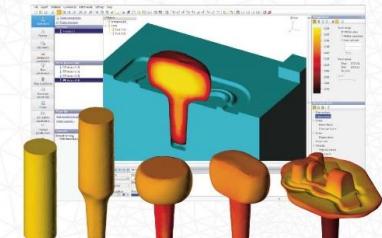


CROSS-ROLL PIERCING



CROSS-WEDGE ROLLING

SOFTWARE FOR SIMULATION,  
ANALYSIS AND OPTIMIZATION  
OF METAL FORMING PROCESSES



### IMPLEMENTATION

Eliminating laps, flow-through and other material flow defects  
Control of die cavity filling

Die fatigue analysis

Abrasive die wear simulation

Estimating deformation load and energy  
Die stress analysis and many more...

### FEATURES

User friendly interface

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

Clear visualization of results concurrently with simulation progress

Simulation of assembled pre-stressed tools

Built-in compiler and debugger for coding of User's Defined Subroutines

Cloud and local network client-server versions for remote simulation

Rigid-plastic and elastic-plastic material models

Micas Simulations Limited

107 Oxford Road

Oxford, UK, OX4 2ER

Tel. +44 (0) 1865 775412

[micas@qform3d.co.uk](mailto:micas@qform3d.co.uk)

[www.qform3d.co.uk](http://www.qform3d.co.uk)