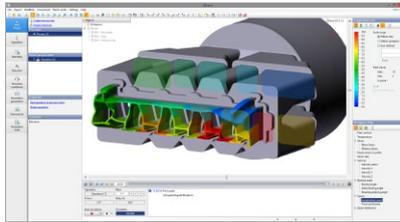


# QFORM NEWS

## New version of QForm VX has been released

This version 8.1.3 is the next step of development of QForm VX software which was presented at ET '16 conference in the USA. Most of the improvements implemented in the new version of QForm VX are focused on profile extrusion simulation module.



New and improved features include:

- Coupled simulation of material flow and die deformation
- Simulation of whole billet length extrusion
- Specific interface for extrusion simulation
- Tracking points through container to the extruded profile
- Simulation of longitudinal welding seams (available in workpiece fields)
- Simulation of transversal welding seams (available in workpiece fields)
- Taking upsetting and die filling into account for temperature calculation
- Completely new deformed material rheology models
- Calculation of user subroutines in tracked points

## Lua for QForm VX Extrusion

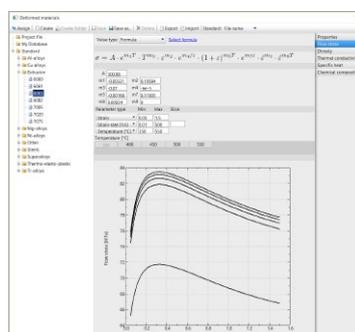
QForm VX 8.1.3 provides a unique opportunity for researchers in the field of material science to develop new material models based on any kind of internal variables of any complexity and immediately implement them to any kind of metal forming, including extrusion processes.

If you are developing your own material model, just write it as a program code using the simple and free programming language LUA ([www.lua.org](http://www.lua.org)) and run it in QForm debugging environment to check how it works. As soon as you are happy with results take this piece of code without any alterations and put it together with the other source data in QForm. This program provides the fastest and the most elegant way of implementing user's defined variables and functions.

Any user defined variable or function can be implemented either in post-processor mode or during the simulation. In the latter case it may influence the flow stress data and affect the material flow. Post-processor implementation takes only few seconds to accomplish the calculation so the user can repeat them again and again changing parameters of his model. Applying the user's model in simulation mode is also relatively quick. Simulation in QForm is amazingly fast thanks to the most advanced meshing algorithms and numerical methods specially developed for this program.

## New aluminium alloys database for extrusion

QForm VX 8.1.3 version obtained a new standard database of billet materials for extrusion simulation. Each of them is a representation of Hensel-Spittel formula to consider properties of material for all possible extrusion conditions. New calculation algorithms together with more accurate material models significantly increase the accuracy of metal flow prediction.



## SEPTEMBER 2016

### EVENTS

**18 – 21 Sept 2016**

16th International Conference Metal Forming 2016 in AGH University in Kraków, Poland

**19 – 20 Sept 2016**

FIA Forging Industry Technical Conference in Columbus, OH USA

**21 – 23 Sept 2016**

6th International Aluminum Fabrication Technology Seminar in Hangzhou, China

**25 Oct 2016**

The International Conference and Exhibition «Aluminium-21/Quality of Extruded Profiles» in Moscow, Russia

**7 – 10 Nov 2016**

6th Asia Forge Meeting in Tokyo, Japan

**8 – 11 Nov 2016**

Metal-Expo'2016, the 22nd International Industrial Exhibition in Moscow, Russia  
Our booth is 2A12

**29 Nov – 1 Dec 2016**

ALUMINIUM 2016 11th World Trade Fair & Conference in Düsseldorf, Germany  
Our booth is 12J35

**3 – 4 Dec 2016**

Forgetech India 2016 Conference organized by Association of Indian Forging Industry in Gurgaon, India

## Open Forge Meeting 2016 in China

Two representatives of QuantorForm Ltd. attended the Open Forge Meeting 2016 which was held in Zhengzhou, Henan, China in May. At the booths of Beijing Intelligent United Innovation Technology (IUIT) and Fukin Technologies Services we were glad to meet so many visitors and show them QForm applications for open die forging industry.



Our colleagues from IUIT company also prepared a joint report «Experience of Simulation implementation to Development of technological process for production of large forged products at «EnergomashSpetsStal (Kramatorsk)», which was well received by industry representatives.

We want to thank our partners for their participation and Mr. Zhang Jin (General Secretary of Confederation of Chinese Metalforming Industry) for organizing this event.

## 17th ADA conference in Japan

«17th ADA User's Conference 2016» organized by Applied Design Analysis Corporation (ADA) (QuantorForm representative in Japan) took place on the 8th of July in Tokyo. It is the third consecutive year QuantorForm Ltd. participated in this event.

Two reports about QForm software were presented at the conference. First one was about new version of QForm software for general forming and ring rolling processes simulation which was presented by QuantorForm Ltd. CEO Sergey Stebunov. The second presentation - Extrusion simulation by QForm Extrusion VX and



automated die design by QExDD: new features and examples was presented by Business development manager Stanislav Kanevskiy.

Additionally, a report about a scientific work about continuous extrusion from Dr. Hoshino Rin was presented where he proved his new technology with QForm simulation.

## The 49th (ICFG) Plenary Meeting in Germany

The 49th International Cold Forming Group (ICFG) Plenary Meeting took place on 4-7 September, 2016 in Stuttgart. Institut für Umformtechnik (IFU Stuttgart) held the conference this year. More than 100 participants visited the event.

The results of cooperative investigation by IFU Stuttgart, IKT Stuttgart and QuantorForm Ltd. regarding the simultaneous processing of metal and plastic using full forward extrusion were presented at the Conference. The main aim of this investigation was determination of the predictive accuracy of the forward extrusion of aluminum and noncompact polyethylene with QForm software.

QuantorForm Ltd. representative Dmitry Gerasimov officially awarded Mr. Karl Christoph Grötzinger (University of Stuttgart) the winner of the International Students Olympiad in Hot Bulk Forging Technologies 2016.



## NEW USERS

**HIM TEKNOFORGE**  
India

**TAIWAN HODAKA TECH**  
Taiwan

**MINSK BEARING PLANT**  
Belarus

**CEFET-MG**  
Brazil

**INSTITUTE FOR  
TECHNOLOGICAL  
RESEARCH**  
Brazil

**CONFEDERATION  
OF BRITISH  
METALFORMING**  
United Kingdom

And others

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