

AGH University of Science and Technology awards QForm with a medal

AGH University of Science and Technology has awarded QForm software with a medal *in recognition of the Company's commitment to improving the professional qualifications of students and teaching staff, and also for providing substantive support in solving problems related to technological and technical issues within seminars, workshops and competitions.*



We would like to thank our Polish colleagues Rudolf Kenig (Firma Usługowa Kendin), professor Aneta Lukaszek-Solek (head of QForm training center in AGH) and the Department of Metal Forming at AGH University. This medal acknowledges our commitment during 25 years of development of our software for the metal forming industry and education with an effective solution for reducing costs and increasing quality of metal forming technologies.

QForm Extrusion Seminar in Moscow

The «Aluminium-21/EXTRUSION» conference and exhibition was held on 5-7 June in Moscow, Russia. QForm leading engineer Ivan Kniazkin made a report about QForm Extrusion software at the conference which included specialists from about 80 companies from around the world.



A special seminar called «Profile extrusion simulation. Effective solutions and latest developments» took place on 6 June during the conference. Participants from different countries heard presentations about QForm Extrusion software, its practical use experience, economic aspects of implementation and interesting case studies. Also, we presented our QForm Heat Treatment software and its special features for simulation of aluminium heat treatment.



EVENTS

5 July 2018

QForm at ALFED Members' Day on 5 July 2018 in West Bromwich, UK.

Participation in the event is exclusive to ALFED Members and is free of charge.

6 July 2018

QForm at 19th ADA Users' Conference 2018 in Japan.

Presentations about new features and possibilities of QForm software will be shown during the event.

19-22 August 2018

13th International Conference on Superplasticity in Advanced Materials (ICSAM 2018) in Russia.

At this event we will make a presentation about microstructure evolution simulation in QForm.

11-12 September 2018

QForm will participate in the 32nd Forging Industry Technical Conference (organized by Forging Industry Association) on 11-12 September 2018 in California.

16-19 September 2018

Metal Forming 2018, 17th International Conference on Metal Forming in Japan.

Article «Prediction of the fracture in cold forging with modified Cockcroft-Latham criterion» will be presented during the conference.

9-11 October 2018

QForm Extrusion Seminar. Düsseldorf

Seminar will be held at booth 12J35 during 12th World Trade Fair & Conference «ALUMINIUM 2018» in Germany.

October 2018

QForm Extrusion Seminar. Dubai

13-16 November 2018

QForm at booth 1B78 at International Industrial Exhibition Metal-Expo'2018 in Russia.

13-15 November 2018

QForm at EUROFORGE conFAIR 2018 in Germany.

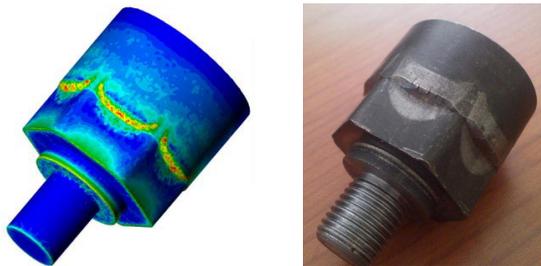
Case study: Launching a full cycle production of aluminium profile including own die shop

 Presentation about launching a full cycle production of aluminium profile including own die shop was made by certified specialist Alexander Terekhov, leading engineer of «LPZ «SEGAL» Ltd., Russia at QForm Extrusion Seminar in Moscow. Experience of design and manufacturing of extrusion dies, that is based on implementation of design and simulation packages was shown in the report.

The company prepares 3D die set models with help of QExDD system and uses PowerMill system and modern 5-axis machining centers for production of the dies. QForm Extrusion is used for simulation of the designed dies to ensure their high quality. It is shown in shop conditions that simulation repeats very accurately metal flow at the steady-state extrusion stage, that provides design and machining of the dies without errors.

Prediction of fracture in cold forming with modified Cockcroft-Latham criterion

A modified Cockcroft-Latham criterion is now available in QForm as a subroutine that shows very good accuracy in tests for different practical cold forming processes. Cold forming technology provides production of net shape parts that require no, or very little, machining. Meanwhile one of the technological problems of cold forming is fracture of the workpiece during production. The use of reliable fracture criteria implemented in QForm metal forming software can help predict possible cracks and find ways to avoid them.



Damage factor distribution predicted by modified criterion Cockcroft- Latham-Oh and actual cracks in the cold forged part

A detailed report about the new subroutine will be presented during the 17th International Conference on Metal Forming that will take place on 16-19 September 2018 in Toyohashi, Japan. We will be glad to meet you there!



Simulation of Deformation Behavior and Microstructure Evolution during Hot Forging



International Conference on Superplasticity in Advanced Materials (ICSAM 2018) will be held in St. Petersburg, Russia on 19-22 August 2018.

Analysis of titanium alloy critical parts should include the prediction of microstructure, since their mechanical and technological properties essentially depend on the type and parameters of the microstructure. The technological process of parts production for aerospace applications is multi-operational and consists of deformation, heating and cooling steps. Therefore, it is necessary to simulate the microstructure evolution to obtain high quality parts. At ICSAM 2018 QForm representatives will make a presentation about practical use of microstructure evolution simulation in QForm software based on case study of hot forging of TC11 titanium alloy.

We invite you to attend this conference to get more information about QForm Software implementation for microstructure prediction.

International Students Olympiad 2018



MISIS University, Russia



University Stuttgart, Germany



AGH University, Poland



Budapest University, Hungary



Hanoi University, Vietnam

... and more students from 16 countries participated in the Olympiad.