

ICPNS'2019 took place on October 10–14 in Russia

The 9th International Conference on Physical and Numerical Simulation of Materials Processing (ICPNS'2019) was held on October 10–14, 2019 in Moscow Institute of Electronics and Mathematics (Higher School of Economics) in Russia. More than 100 specialists and professors of materials processing technologies from around the world took part in the event. Many of them made interesting presentations within the conference.



Dmitrii Krivenko, QForm specialist, made a presentation «Preform shape design of hot metal forging by using QForm software and isothermal surfaces method».

The 39th SENAFOR conference took place on October 2–4, 2019 in Brazil

The 39th SENAFOR conference and 23rd International Forging Conference took place on October 2–4, 2019 in Brazil. QForm Group has been presented by Stanislav Kanevskiy, Regional Director.



During the exhibition we were presenting the new QForm 9 version at our joint booth together with ESI Group.

Also, QForm Seminar, organized by QForm Group, our partners in Brazil QX2Box and 6Pro Virtual and Practical Process Ltda, took place on October 9 at FEI University Center. We would like to thank Evaristo Gotsfritz who has made an interesting speech about Brazilian users experience with QForm within last 5 years.

Forum dedicated to simulation in QForm took place on October 1, 2019 in Moscow, Russia



Organizers of the event are Bauman Moscow State Technical University, National University of Science and Technology MISIS, Moscow Polytech University and QuantorForm Ltd., QForm Group.

69 specialists from 39 companies and universities as well as 42 students took part in the event. A total of 28 presentations were made at the event: 17 reports made by manufacturing companies and universities and 11 reports made by QForm Group specialists. 5 engineers from the industry underwent an additional training on simulation of aluminium profile extrusion on October 2-3.

COMING EVENTS

12–15 November 2019

Metal-Expo 2019, the 25th International Industrial Exhibition in Moscow, Russia.

Our booth is 1C71.

April 2020

International Students Olympiad in Hot Bulk Forging and Extrusion Technologies around the world.

4–6 May 2020

ESAFORM 2020, the 23rd International Conference on Material Forming in Cottbus, Germany.

19–21 May 2020

ET'20, the 12th International Aluminium Extrusion Technology Seminar and Exposition in Orlando, Florida, USA.

25–29 May 2020

METALLOBRABOTKA 2020, the 21st International Specialized Exhibition in Moscow, Russia.

26–31 July 2020

The 13th International Conference on the Technology of Plasticity in Columbus, Ohio, USA.

“Development and Implementation of Static Recrystallization Model of AA6063 Using Industrial Experiments” paper by Artem Alimov and Nikolay Biba will be presented at the event.

August 2020

QForm Summer School 2020 in Moscow, Russia.

13–16 September 2020

The 18th International Conference on Metal Forming 2020 in Krakow, Poland.

19–21 September 2020

International Forging Congress 2020 in Chicago, Illinois, USA.

6–8 October 2020

ALUMINIUM 2020, the 13th World Trade Fair & Conference in Düsseldorf, Germany.

7th Aluminium Fabrication Seminar and Exposition was held on September 18–21, 2019 in China

LW2019 was held on September 18–21, 2019 in Guangzhou, China. QForm representative in China Mr. Hanlong Liu (Beijing Intelligent United Innovation Technology Co., Ltd.) made a report «Aluminium profile extrusion and product quality control by means of simulation».

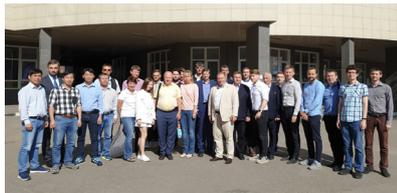
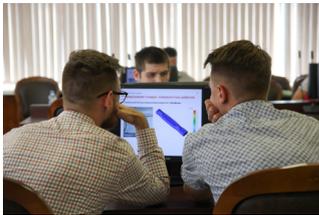


After presentation leading extrusion engineer of QForm Group Mr. Ivan Kniiazkin held a series of meetings with interested participants and current QForm user and answered their questions.

39 professors from 14 universities took part in QForm school on August 26–30, 2019 in Moscow

“Summer school on simulation of metal forming processes in QForm” took place on August 26-30, 2019 in Moscow Polytechnic University in Russia. The event was attended by 39 professors of 14 universities from 3 countries: Russia, Vietnam and Egypt.

Lectures were held by engineers of QForm Group and divided into two section: basic course and advanced course. During the week we considered simulation of different metal forming processes. Also, QForm users tried out new QForm 9 possibilities and features. According to the results of training, professors received certificates of “QForm Specialist”, “QForm Master” and “QForm Instructor”.



Professors and university specialists are welcome to Summer School 2020, the detailed information about the event will be provided soon. Also, we want to invite universities around the world to participate in the International Students Olympiad in Hot Bulk Forging and Extrusion Technologies 2020.

NUMIFORM 2019 conference took place on June 23–27, 2019 in Portsmouth, New Hampshire, USA

NUMIFORM 2019 conference took place June 23-27 in Portsmouth, New Hampshire, USA. QForm has been presented in mini-symposium called “Calibration and evaluation of Stress-Based Ductile Failure Criteria” and was dedicated to a comparative analysis of different approaches to ductile damage prediction in cold and hot forming processes.

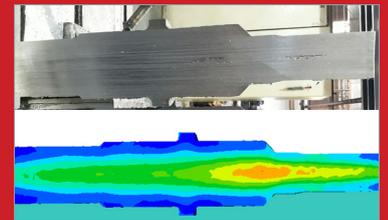
The presentation of the paper was done by Dr. Nikolay Biba (Micas Simulations Ltd., UK) and it was based on the recent experience of implementation of ductile damage criteria for solving practical tasks. The newest version of QForm includes nine different damage criteria plus their modifications that allows predicting and elimination of fracture in a wide range of industrial metal forming processes.

NEW QFORM 9 FEATURES AND POSSIBILITIES

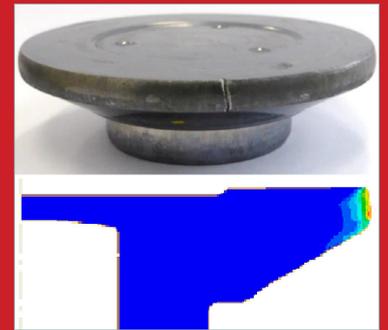
Nine workpiece damage analysis models are implemented:

- Kolmogorov model
- Cockcroft & Latham normalized model
- Cockcroft & Latham modified model
- Oyane model
- Oyane modified model
- Ayada model
- Johnson Cook model
- Brozzo model
- GTN model

Cockcroft & Latham model

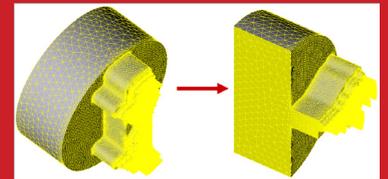


GTN (Gurson – Tvergaard – Needleman) model

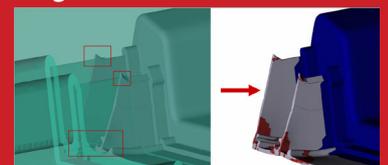


New QForm Extrusion

Symmetry boundary condition speeds up calculation several times



Profile intersection of die diagnostic



Statistics

