

Sunday, 16. September 2018

from 10.30 am
to 4.30 pm

3 optional workshops (that are being held parallel) are available
These workshops can be separately booked by conference attendees.
Booking fee is 150 Euro / person; Incl. lunch and beverages
There will be max. 50 seats per Workshops (*min. 25*)

Workshop No. 1

Future-Proofing Rotomoulding

Mark Kearns and Mark McCourt

Queen's University Belfast www.qub.ac.uk/pprc

Summary

Innovation is the lifeblood of any organisation; fresh ideas, innovative products and processes help create a competitive advantage and ultimately promote company growth. Queen's University, Belfast (QUB) has been at the forefront of rotomoulding innovation, research and development for over 30 years. This workshop, chaired by Mark Kearns, Rotational Moulding Manager of the Polymer Processing Research Centre, at Queen's University, Belfast, will involve a series of presentations from QUB Doctoral and Post-Doctoral researchers detailing and discussing a number of ongoing rotomoulding research and development projects.

Presentations will include developments in

- robot automation & control
- internal mould water spray cooling
- thermoplastic fibre rotomoulded composites
- multi-layer rotomoulding,
- powder flow optimisation & modelling

Workshop No. 2

FEA Analysis on rotomoulded products

Geert Vaes, TOTAL www.polymers.total.com

Vincent Bouwman, 4Realsim www.4realsim.com

Summary

Plastics are lightweight, easy to process and have a long lifetime. These characteristics of plastics make them an attractive raw material for many applications. For products that need to last many years, its performance over the entire lifetime has to be assessed and designed for. This is true for its UV performance, thermal ageing and also for its mechanical integrity. Especially for the latter the usage of tools like Finite Element Analysis (FEA) can reduce the design cycle, provide more knowledge about the behavior of the product and limit prototyping.

Basic knowledge of FEA is essential for rotomoulding companies that make use of FEA simulations. It will help in the communication with FEA-specialists, in the interpretation and understanding of FEA results and last but not least in the discussions with the final customer.

This workshop concentrates on the basics of FEA : the mathematics behind the method, the input required for the simulation and the output obtained from the actual analysis.

Workshop No. 3

ROTOMOULDING WILL NEVER BE THE SAME ONCE YOU LOOK THROUGH THE GLASS MOULD

Dr. Gareth McDowell, 493K Limited www.493k.com

Summary

Dr Gareth will offer a unique perspective into the world of rotomoulding using his RotoRocket, a 493K designed and top uni-axial rotomachine with glass mould. During this educational and enlightening workshop attendees will see, the first time ever in their rotomoulding career how powder the inside of a mould, melts, solidifies and releases from the

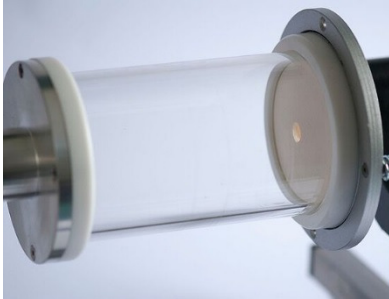


live
built bench
highly
possibly for
lays up on
mould.

The workshop will include a series of trials highlighting many of the key events in rotomoulding. Although we can't promise we will have enough time for everything we will try our best to get through the following demonstrations:

- See how material shot weight relates to wall thickness LIVE!
- Look at the moulding and see what's happening at key temperature points LIVE!
- See how powder flow in the mould is affected by grind quality and particle size distribution LIVE!
- See how different particle sizes lay up on the mould LIVE!
- See how internal cooling reduces cycle times and observe mould temperatures LIVE!
- Observe the temperature at which the part releases from the glass mould LIVE!
- Mould a selection of non-PE materials...LIVE!
- Mould a selection of multi-layer materials...LIVE!

Can you think of anything else? Let us know before the event! (sales@493k.com)



Seeing is believing... and it's also very educational! Getting back to basics and a better understanding of the process can help you choose the best material & process parameters for your rotomoulding production. Development on a RotoRocket allows you to rapidly accelerate your new product research without having to interrupt manufacturing schedules on a production machine. Learn how to apply graphics, calculate shot weights for different thicknesses, process and eventually demould parts, all while tracking the internal mould air temperatures.

This educational and practical seminar will be great for new employees, showing them what rotomoulding is all about and what goes on inside those big ovens on your shop floor!

Inspire your operators and get them involved, asking questions, taking an interest and eventually solving problems in the profit generating core of your business: the rotomoulding machine!

Guaranteed to be interesting, exciting and roto-life changing...send along your company's accountants and we'll even get them excited about hands-on rotomoulding!