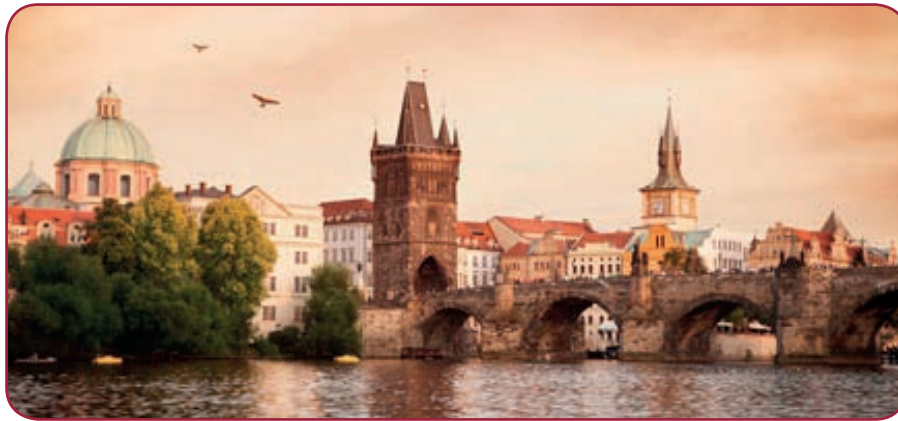


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9th European “Thermoforming” Conference ‘Forming a Sustainable Future’



3 – 4 April 2014 – Prague, Czech Republic

Conference organized by the European Thermoforming Division of the SPE.

The 4 main Topics of the conference will be:

Sustainability, Lightweight, Innovation and Competitiveness

Further evidence of the ETD board listening to its peers was the inclusion of a parallel commercial presentation session for sponsors of the event, which proved highly successful. This programme allows each Sponsor an open forum to present their new developments to a very relevant audience for duration of 15 minutes. This opportunity compliments their marketing strategy at the event adding yet more value to the package. It is important for us, you and the thermoforming industry as a whole, to benefit from this event and to do so, we need to ‘tailor’ it in the most efficient and economical fashion.

You can help us do that by indicating the likelihood of your sponsorship involvement on the attached slip and returning it to us as soon as possible. We stress that this response would be recognised as an indicator only and without any firm commitment at this stage. The main technical lecture programme promises to be the best ever with a number of eminent speakers. We very much appreciated your cooperation in this matter and look forward to your constructive and full involvement in 2014.

Marek Nikiforov

Chair ETD and Conference Chair



CONFERENCE PROGRAMME

Wednesday 2 April 2013

- 18.00-19.00 Conference Registration
19.00-21.00 Welcome Reception – A warm welcome to friends and colleagues

Thursday 3 April 2013

'Innovation morning I'

- 09.00-09.15 Introduction – Conference Introductions & Welcome
Marek Nikiforov, Conference Chair
- 09.15-10.00 Keynote – “The Quest for Growth” – A tale from reality on business development, innovation and branding.
Christian Majgaard, former global top manager at Lego, Denmark
- 10.00-10.30 Starting our innovation engine
Roger C. Kipp, R. Kipp C. Assos., Thermoformer of the year 2010, USA

10.30-11.15 **Coffee Break**

Technical Session (+ parallel Sponsor's presentations)

- 11.15-11.45 Latest Developments in micro-thermoforming technology
Roman Truckenmüller, University of Twente, the Netherlands
- 11.45-12.05 Improvements in Heavy Gauge thermoforming simulation by use of 3D digital image correlation
Bart Van Mieghem, KU Leuven, Faculty of Engineering Technology, Diepenbeek, Belgium
- 12.05-12.15 The latest achievements on Thermoforming Simulation Software T-SIM
Karel Kouba, Accuform, Czech Republic
- 12.15-12.45 Latest developments in extrusion and thermoforming of Liquid Crystalline Polymers (LCP)
Camilo Cano, Celanese, USA

12.45-14.00 **Lunch**

Thin and Thick Gauge Expert Panel (+ parallel Sponsor's presentations)

Leading machine builders from the industry will update you on today's and tomorrow's technology of Thermoforming and will answer questions from the audience

- 14.00-14.45 Thin Gauge experts: *Gabler, GN, Illig, Kiefel, TSL (TBC)*
14.45-15.30 Thick Gauge experts: *Cannon, FRIMO, Illig, MAAC, OMV (TBC)*

15.30-16.00 **Coffee Break**

Competitiveness (+ parallel Sponsor's presentations)

- 16.00-16.30 The future of plastics in design and daily use
Danish Design Center, Nille Juul Sorensen, Denmark
- 16.30-17.00 Demand of high performing thick wall packaging
Marc Ommeslagh, DS Smith Plastics - Ducoplast, France
- 17.00-17.30 Injection moulding – Threats or challenge for thermoforming?!
Sven Engelmann, Ferromatik Milacron, Germany
- 17.30-18.00 Update on Thermoforming IML – Early adapters & experts report
Coverie Finland, RPC Bebo, Polytype-OMV, Illig, Verstraete, TSL.... (TBC)
- 19.15 Departure for Dinner
19.30 Conference dinner and Sponsor's awarding

Friday, 4 April 2013

'Innovations morning II'

09.00-09.45 3-D Printing – do you want to learn latest and best from 3D printing?
David Bue Pedersen, PhD, Researcher at Denmark's Technical University

09.45-10.15 The green side of Thermoforming – Biofilms
Andreas Hartmann, ES Plastic, Germany
Johan Declerck, Proviron, Belgium

10.15-11.00 **Coffee Break**

Technical Session (+ parallel Sponsor's presentations)

11.00-11.30 Effects of thermoforming on mechanical properties of radiation cross linked PA 12
Andreas Seefried, Institute of Polymer Technology, Germany

11.30-12.00 Investigating the influence of forming and material parameters on permeability
of thermally oriented polymers
Andre Schult, Fraunhofer, Germany

12.00-13.30 **Lunch**

Sustainability (+ parallel Sponsor's presentations)

13.30-14.00 Thermoforming: technology of choice for microcars and special purpose
technology for automotive OEM's
Thomas Höfels, Senoplast, Austria

14.00-14.30 Planning for zero waste: Packaging success in the new-normal
Paul Scheers, Pactiv, UK

14.30-15.00 How to build a green Faerch?
Jesper Emiel Jensen, Faerch Plast, Denmark
Lightweight

15.00-15.30 Opportunities in thermoforming: structural parts, light weight, esthetics
Pim Raaben, CNH, Belgium

15.30-16.00 Competitive thermoforming in Turkey
Yavuz Eroglu, Sem Plastik, Turkey

16.00-16.30 General session
Presentation of the 'Parts Competition' Winners
Niklas Magnusson, Chair Parts Committee

16.30-16.45 Close remarks by
Marek Nikiforov, Chair ETD 2014-2016

16.45 **Drinks and iPad raffle**

Training Course **HANDS ON THERMOFORMING WORKSHOP** Thin and Thick Gauge

2 April 2014
08.30h-17.00h

Jihlava, Czech Republic



Peter Lichtherte and other SPE thermoforming experts

Don't miss this unique opportunity to learn more about fundamentals of thermoforming in theory but as well on Thermoforming machines at GN Thermoforming Technical Center. This workshop will not only give you more understanding of fundamentals of thermoforming but it enables to learn about all different thin and heavy gauge thermoforming technologies and as well you will be able to discuss directly details with SPE thermoforming experts.

Registration fee: €175

1 April 2014 – evening – Free Shuttle service from Prague Marriott hotel to hotel in Jihlava (1 hour driving from Prague)
2 April 2014 – 8h30-17h00 – HANDS ON THERMOFORMING Workshop at GN thermoforming Technical Center, Jihlava
2 April 2014 – 17h00 – Free Shuttle service back to Prague – Marriott Hotel

PROGRAMME

08h30 Start

- General part
- Basics of Plastics
- Extrusion technology
- Thermoforming principles
- Vacuum forming
- High Pressure forming
- Twin sheet forming

11h00-12h30

- Practical tests on thermoforming machines with different materials

12h30-13h30 Lunch

13h30 Start

- Basics of thermoforming
- Basics of tooling for thermoforming
- Reinforcement of thermoformed parts
- Simulation – Feasibility study
- Importance of Design

15h30- 17h00

- Workshop
- Presentation and discussion of Cases
- Comparison of different technologies
- Comparison of different materials and its behavior on thermoforming machines

5TH EUROPEAN THERMOFORMING PARTS COMPETITION

On the occasion of the next conference of the Society of Plastics Engineers – European Thermoforming Division from 3– 4 April 2014 in Prague, Czech Republic, thermoformers are invited to participate in the 5th European Thermoforming Parts Competition.

Originality, creativity, mould complexity and technical ability will be the judging criteria in order to promote advanced design and developments from a structural innovation perspective.

Entries with **thick gauge parts** will be possible in the categories :

Vehicle/Automotive, Industrial, Point of Purchase/Displays, Technical Applications and Sanitary.

Thin gauge parts will be judged in the categories : Food Applications, Medical Applications, Electronical Applications and General Packaging.

The essential points of the European Thermoforming Parts Competition are the design-orientated application of materials and the successful combination of technical innovation and design quality.

Exceed the bounds of materials applications, present new application opportunities, combine the traditional with the innovative, take new steps in combining material and design to present the importance of materials for a design-orientated application: these are the aims of the European Thermoforming Parts Competition.

The award winners will be presented at the 9th Biennial European Thermoforming Conference.

We look forward to receiving your contribution to the European Thermoforming Parts Competition 2014!

More details are available at www.e-t-d.org.

Niklas Magnusson Chair Parts Committee

Information about the Conference,
the Training course and the Parts Competition may be obtained from Yetty Pauwels

Society of Plastics Engineers / European Thermoforming Division – ETD

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2014 CONFERENCE SPONSORS



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Mission Statement

It is the purpose of the European Thermoforming Division to stimulate and diffuse knowledge of all aspects of the Thermoforming industry.

This will be achieved by providing conferences, training seminars and regular topical news bulletins. It will provide a dynamic network platform and encourage and promote technical and scientific participation by its members

We assure the
optimal shape!



Economical, fast, reliable processing. With innovative FRIMO technology, you set the benchmark in thermoforming. Rely on the competence of the technology specialists.



9th European Thermoforming
Conference 2014 „Forming
a Sustainable Future“
Prague, Czech Republic
03.04. – 04.04.2014



SAVE THE DATE!



SPE 2014 **Thermoforming Conference[®]**

September 15-18

Renaissance Schaumburg Hotel and Convention Center
Schaumburg, Illinois USA



www.thermoformingdivision.com