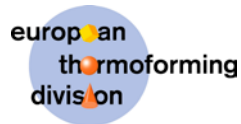




EUROPEAN  
THERMOFORMING



# Newsletter

A publication of SPE European Thermoforming Division - [www.e-t-d.org](http://www.e-t-d.org)

Winter 2015

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## "10TH EUROPEAN THERMOFORMING" CONFERENCE 'EVOLUTION THERMOFORMING DEVELOPMENT' 10-11 MARCH 2016

The SPE European Thermoforming Division is proud to announce the 10th Bi-Annual European Thermoforming Conference that is to be held in Sitges (Barcelona) on the 10th and 11th March 2016. It is a very special occasion as it celebrates the 20th Anniversary of the start of the SPE European Thermoforming Division (ETD).

This conference has grown to become an event that is totally unique attracting visitors from all over the world and leaders from the thermoforming industry.

You will be able to gain information on the latest opportunities and technology, as well as networking with other members of the Thermoforming industry.

We have the leading speakers on many subject associated with the Thermoforming industry. Senior personnel from major manufacturers will speak on what they expect and require from their thermoforming suppliers, extrusion companies talking about the latest improvements in their equipment, tooling companies on how they can improve productivity, heater manufacturers on how to improve productivity and reduce costs.



We have speakers from both Europe and USA reflecting on their thermoforming company's history and where they see the growth coming in the future. This will be a fascinating insight into major thermoformers history and forward looking plans.

3D will be another major topic as it is now becoming an important part of industry. Its impact is growing significantly and a number of companies have now embraced the technology.

Plastic Packaging will be a subject presented from not only the historical view but also the future expectations from material usage to design expectations.

Simulation programs used to replicate the forming process have been around for a period of time, however there are new and exciting developments in this field and we will have speakers explaining the new innovations at the conference.

The main thermoforming machinery, tooling, extrusion, material companies, as well as companies who supply heaters etc., will not only be presenting but will also have table top displays.

This gives all attendees the opportunity to meet and discuss directly with the suppliers. The 10th SPE ETD Thermoforming Conference will have a large number of tabletop displays manned by the major suppliers to our industry. These companies will show their latest innovations and product releases. As always, on 9th March, there will be a technical Training Program in both Thin and Heavy Gauge thermoforming. A Parts Competition is an integral part of the SPE ETD Thermoforming Conference and all are welcome to submit parts. The last competition produced a variety of specialised items and the winner was then put into a worldwide competition for all plastic products. It was held in the USA and the part submitted from the SPE ETD conference was voted the overall winner. The other reason why everybody should always attend the SPE ETD Conference is the great opportunity for networking, allowing the delegate to meet and discuss with people from all around the world who have experience in the industry. The SPE ETD Thermoforming Conference in Sitges (Barcelona) Spain on the 10th and 11th March 2016 is an important conference which will help all delegates stay ahead and be competitive.

**Ken J Braney**



***Vertical peripheral punching technology enables notch-free processing of formed parts***

***For punching and stacking of trays, lids and formed products with special requirements, the KIEFEL eccentric punch press KES 85 is the perfect solution.***

***Moreover, the KMD SPEEDFORMER combined with an eccentric punch press KES 85 ensures cost effectiveness when it comes to large-scale production and impresses with its vast range of applications.***

A robust machine design and an eccentric crank drive are technically indispensable to reach the highest performance level. The production speed of 120 cycles per minute is outstanding.

The vertical punching system minimizes the effect of transverse forces. All cycle movements are servomotor-driven. This concept combines low tool costs with the best stacking solutions. Combined hole punching and periphery punching is possible. The whole tool block can be changed easily and quickly with a crane. Convenient operation is achieved by the Siemens Simotion control system, which is especially adapted to the user's needs, and a touch screen with teaching function for new products.

The KES 85 is best suited for the production of parts of PS, PP, PE, PVC, PET and PLA and can be combined with every Inline Thermoforming Unit.



# 10th EUROPEAN THERMOFORMING CONFERENCE

10-11 March 2016 — Melia Hotel. Sitges (Barcelona). Spain



## WEDNESDAY 9 MARCH 2016

10.00-18.00

**Fundamentals of Thermoforming**  
**Training Course for Thin Gauge and Thick Gauge**  
Registration fee € 275

Conference Registration

19.00-21.00

Welcome Reception – *A warm welcome to friends and colleagues*

## THURSDAY 10 MARCH 2016

08.30-09.00

**Conference Registration**

**General Session**  
**Moderator: TBC**

09.00-09.15

**Welcome to Spain – Conference Introductions & Welcome**  
Marek Nikiforov, ETD Chair & Gabriel Bernar, Conference Chair

09.15-10.00

**Keynote – “The Future Use of Plastics”**  
Wim De Vos, SPE, USA

10.00-10.30

**Plastics pollution of our Oceans – What is the Solution?**  
Thomas Drustrup, Danish Plastics Federation, Denmark

10.30-11.00

**Case Study – Business Case for “Recycling”**  
Horst Roeder, Erema, Austria

11.00-11.30

**Coffee Break**

11.30-12.30

**3D Developments Session**  
**Moderator: TBC**

11.30-11.50

**The Latest Update on 3D-Tec – A technical review of Additive Manufacturing:**  
*When 3D Printing turns a Hyperflexible Manufacturing Method*  
David Bue Pedersen, Technical University, Denmark

11.50-12.10

**Tooling in Thermoforming by 3D – Improvements on Tooling for the Thermoforming Industry,**  
*promoted by the adoption of 3D Printing Fabrication*  
Djamila Olivier, Voxeled Materials, Spain

12.10-12.30

**3D Printing in the Industry – The Sweet Spots of 3D Printing for the Thermoforming Industry**  
Maarten Valckenaers, Materialise, Belgium

12.30-13.00

**Creative Design – a Philosophy to help develop Thermoforming Market Potential**  
*How can ‘Design Thinking’ help to create Thermoplastic Material Solutions that differentiate products and stands out in the Market Place?*  
Elina Kopola, Trendworks, UK

13.00-14.30

**Lunch**

**Thin Gauge Session**  
**Moderator: TBC**

14.30-15.00

**The Thermoformed Coffee Capsules Market 2016**  
*Delivering a great Cup of Coffee!*  
Reiner Albrecht, Illig, Germany

15.00-15.20

**IML-T - In Mould Labeling Technology Update**  
**Filed Report and New Applications for IML-T for Lids**  
Jürgen Merbach, RPC Beboplastik, Germany

15.20-15.40

**Thermoform or Injection IML?**  
Erwin Wabnig, Kiefel, Germany

**Parallel Sponsors ‘Heavy Gauge’ presentations: New Technologies presented by:**

**Brett Martin**

**MAAC:** the Rotary Advantage

**Plastics Machinery Group Intl**

**Senoplast**

**Self:** Smart Solutions, different approaches for Success

**Siemens:** Automation in Thermoform Machines

**Starlinger**



- 15.40-16.00 **Equipment-Panel**  
Illig, Reiner Albrecht  
Ilsemann, Daniel Kapp  
OMV, Norbert Hufnagl  
TSL, James Naughton
- 16.00-16.30 **Fresh Food Market** – *Latest Trends and how to grow and succeed?*  
Thomas Tang, Faerch Plast, Denmark
- 16.30-17.00 **Coffee break**
- Moderator: TBC**
- 17.00-17.30 **Thermoforming - a Spanish Experience**  
*Enhancing the Coffee experience with a barrier capsule*  
Carol Daunert, EDV Packaging, Spain
- 17.30-18.00 **3D Barrier Coating Technology**  
Wolfgang Cizic, Canovic (Waldorf Technik), Germany
- 19.00 **Departure from Melia Hotel for Conference Dinner in splendid Spanish surroundings at 'Finca Mas Solers' [www.fincamassolers.com](http://www.fincamassolers.com)**
- 19.30 **Conference Dinner and Sponsor's Awarding**

## FRIDAY, 11 MARCH 2016

- 08.30-08.45 **Opening**
- Heavy Gauge Session**  
**Moderator: TBC**
- 08.45-09.15 **Lean Manufacturing – Proof that the 'Old Way' isn't always the best Way!**  
*A case study of smart Production Techniques*  
Evan Gilham, Productive Companies, USA
- 09.15-09.45 **Workshop/Panel Heavy Gauge Thermoforming**  
**The exciting future of Thermoforming in the USA versus in Europe**  
*American Innovations over the last 20 years*  
Steve Murill, Profile Plastics, USA
- 09.45-10.15 **Heavy Gauge Thermoforming: Past and Future – Europe versus USA**  
Thierry D'Allard, Stylmonde, France
- 10.15-11.00 **Coffee break**
- Moderator: TBC**
- 11.00-11.45 **Keynote**  
**Future Trends in Automotive Lighting and the Contribution of Thermoformed Materials**  
Marta Gutierrez, SEAT Centro Tecnico, Spain
- 11.45-12.30 **Technology Workshop: Q&A with the Experts**  
**New Developments on Sheet Extrusion**  
Battenfeld-Cincinnati / AMUT / Senoplast / Sunwell
- 12.30-13.00 **Presentation of the 'Parts Competition' Winners**
- 13.00-14.00 **Lunch**

### Parallel Sponsors 'Thin Gauge' presentations: New Technologies presented by:

**Illig:** Next Generation of Pressure RDKP 72k/RDK 80k

**Kiefel:** Barrier Film applications – Visions for substitution

**Marbach:** Thermoform Tools and Golden Donkeys

**GN:** Thermoform Machines for tomorrow

### CGP Europe

**Kilde Automation:** Robotic Handling and Packaging

**OMV Polytype:** A novel 'Revolving Mold' Thermoforming System RM77

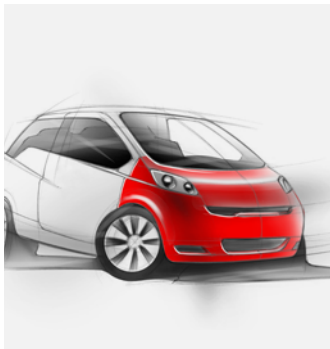
**Techno Tool:** From Slow Motion to High Speed production

**WM Wrapping Machinery:** Streamlined and efficient Thermoforming Process, the Way to satisfy Globalization requirements

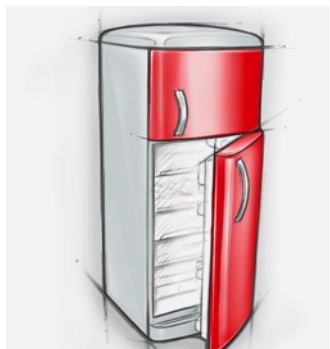
**General Session**  
**Moderator: TBC**

- 14.00-14.20 **Optimization of Thermoforming Processes by means of combined in-situ Measurements and Simulations**  
Bart Van Mieghem, KU Leuven - Technology Campus Diepenbeek, Belgium
- 14.20-14.40 **Increasing Material Efficiency by Inline Sheet Thickness Measurement**  
Kai Landsecker, University of Stuttgart - IKT, Germany
- 14.40-15.00 **Heat under Control – Novel Contact Heating Technology for Thermoform Evolutions**  
Sascha Bach, Technische Universität Dresden, Germany
- 15.00-15.20 **Determination of Temperature Profiles across Sheet Thickness during Heating Phase of Thermoforming Processes**  
Benjamin Neubig, University of Stuttgart – IKT, Germany
- 15.20-15.40 **Optimization of the Heating Process during Thermoforming of Thermoplastics**  
Bart Buffel, KU Leuven – Technology Campus Ostend, Belgium
- 15.40-16.00 **Close remarks by**  
Gabriel Bernar, Chair ETD 2016-2018
- 16.00 **Drinks and iPad raffle**

**Conference registration:** [https://www.e-t-d.org/index.php/registration-conference\\_en.html](https://www.e-t-d.org/index.php/registration-conference_en.html)

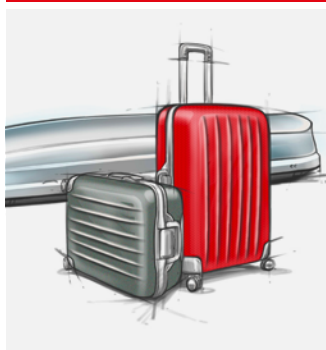


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**Senoplast exhibits at the  
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Thermoforming Conference**

Sitges (Barcelona),  
10<sup>th</sup> – 11<sup>th</sup> March 2016



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# TRAINING COURSE:

## HANDS ON THERMOFORMING WORKSHOP

### THIN AND THICK GAUGE THERMOFORMING

9 March 2016 –10.00h-18.00h • Melia Hotel, Sitges (Barcelona)

Don't miss this unique opportunity to learn more about fundamentals of thermoforming.

This workshop will not only give you more understanding on fundamentals of thermoforming but it enables you to learn about all different Thin and Heavy Gauge Thermoforming technologies and you will be able to discuss details directly with SPE thermoforming experts.

**Instructors: Peter Lichtherte and Mark Strachan**

#### **Peter Lichtherte**

University degree from K.I.H.O. in Gent and Aalst Industrial Engineer with an Electro-Mechanical degree. Member on the board of the SPE European Thermoforming Division. At Siemens (Belgium) he started as Product Development Engineer in the division developing electro-mechanical components. Siemens Oostkamp is producing connectors for several electronic applications (automotive, military, automation, main frames,...). In 1991, he was hired by Vitalo Belgium as Project Manager, to start up a thermoforming unit for food packaging made out of OPS (Bi-axial oriented polystyrene). As Technical Director of the Vitalo Plastics Group, he has managed several new investment programmes and acquisitions such as acquiring a PU department, an industrial modeling activity, a thermoforming plant SEA and the implementation of new technologies such as Twin sheet forming and Compression Moulding.

Starting March 1997, he's running his own independent consulting office, TC&M - Technical

Consulting & Management focusing on international market development, supply chain performance improvement and training. Today he's active as COO ad interim at Vitalo Industries & Acoustics.

Through his consulting activity, he had the chance working for several OEM's within different industries,

#### **Mark Strachan**

Mark Strachan's career in the Packaging Industry started in 1982 while serving his apprenticeship as an Electronics Engineer for Metal Box South Africa and soon after started his own plastics blister manufacturing business (PacMark, CC.) which later included the production of plastic cups for the airline catering business. He held Engineering and Production Management positions at large plastics packaging manufacturing firms in Europe with the intention to gain valuable hands on experience in both the thermoforming and extrusion processes. He later moved to the USA where he worked with numerous thermoforming and extrusion machinery OEMS such as Commodore Machine Company, Berlyn Extruders and Sencorp Systems, in the capacity of Thermoforming and Extrusion Product Specialist. Mark was responsible for new developments, commissioning and training of their customers around the world. During the past 32 years, Mark has gained valuable experience in the Plastics Thermoforming and Extrusion Industry. Mark has been presenting the thin gauge thermoforming workshop at the SPE Thermoforming Conference since 2008.

**REGISTRATION FEE: €275**

#### **PROGRAMME**

##### **Morning: Heavy Gauge Thermoforming**

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

**13h-14h Lunch**

##### **Afternoon: Thin Gauge Thermoforming**

- Feeding and Heating the sheet
- Forming the Part
- Fundamentals of TG Thermoforming
- Overview of Trimming and Stacking
- Importance of Design
- Presentation and discussion of Cases
- Workshop

**Registration form**

## 6TH EUROPEAN THERMOFORMING PARTS COMPETITION

On the occasion of the next conference of the Society of Plastics Engineers – European Thermoforming Division from 10 to 11 March 2016 in Sitges (Barcelona), Spain, thermoformers are invited to participate in the 6th 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 10th Biennial European Thermoforming Conference.

This 2-day conference will be held in **Sitges (Barcelona), Spain on 10 – 11 March 2016.**

We look forward to receiving your contribution to the **6th European Thermoforming Parts Competition 2016!**

**Niklas Magnusson - Chair Parts Committee**

**Tel: +46 142 80631 - [niklas@maplast.se](mailto:niklas@maplast.se)**

More details are available at [www.e-t-d.org](http://www.e-t-d.org).

**Parts Competition form**



**1st Prize Winner 2014:**

**Thick Gauge – Automotive**

*Company: Walter Pack, Spain,  
with part for Renault Twizy electrical car*



**1st Prize Winner 2014:**

**Thick Gauge – Point of Purchase/Display**

*Company: Logoform, Sweden, with part for Telia Design*

**Information about the Conference, the Training Programme and the Parts Competition may be obtained from  
Yetty Pauwels at SPE European Thermoforming Division – ETD**

Eric Sasselaan 51 - BE-2020 Antwerpen, Belgium

Tel.: +32 3 541 77 55 - E-mail: [spe.etd@skynet.be](mailto:spe.etd@skynet.be) - [www.e-t-d.org](http://www.e-t-d.org)



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**Newsletter Editor:**  
**Yetty Pauwels, [spe.eta@skynet.be](mailto:spe.eta@skynet.be)**

## 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



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# 10 - 11 MARCH 2016 SITGES (BARCELONA)

## CONFERENCE REGISTRATION FORM 10<sup>TH</sup> EUROPEAN THERMOFORMING CONFERENCE



- ☐ I will attend the Welcome Reception 9<sup>th</sup> March ☐ I will attend the Conference Dinner 10<sup>th</sup> March  
☐ I will be bringing my Spouse ☐ My Spouse will join the Spouse programme (Participation fee for Spouse: € 175)

Name   
Company   
Address   
Postcode  City   
Country   
Phone  E-mail

- ☐ SPE member: membership No.  ☐ non SPE member

### Advance Conference registration fees, valid till 25th January 2016

- ☐ SPE-member € 675 ☐ € 875 (incl. 2 years SPE membership renewal)  
☐ Non SPE-member € 875 (incl. 2 years SPE membership)

Note: an extra surcharge of € 100 will apply after 25<sup>th</sup> January 2016.

Conference fee includes Welcome Reception, Lunches for both days and Conference Dinner. Please note hotel room is not included.

Spouse's fee: € 175 including Welcome Reception, Conference Dinner and Spouse programme.

Student's fee: € 100 including Welcome Reception and Conference Lunches.

- ☐ **Thermoforming Training Workshop on 9<sup>th</sup> March: € 275**, fee includes lunch.  
☐ **Tabletop display:** SPE member € 1.450 ☐ Non SPE member € 1.650 (incl. 2 years SPE membership).  
Fee includes full conference registration for 1 person  
☐ **Sponsorship:** please send details regarding Sponsorship.

**Payment, money transfer preferred to:** Rabobank, Venray, Netherlands, Account: 15.39.89.297  
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Society of Plastics Engineers, European Thermoforming Division, Eric Sasselaan 51

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Conference registration: [https://www.e-t-d.org/index.php/registration-conference\\_en.html](https://www.e-t-d.org/index.php/registration-conference_en.html)



## 2016 CONFERENCE SPONSORS



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