



WORKSHOPS 2009

June 11-12

WS 07: Laminating of Heat Treated and other Speciality Glass

Presenters: Marc P. Verleyen, Solutia Europe; Mikko Rantanen & Jari Ala-Savikola, Glaston Finland Oy; Roberto Giovannini, Glaston Italy; Ari Uusikartano, Suomen Turvalasi Tambest; Charles Bostick, Consulting Architects; John Gilleeney, Independent Glass

Course Summary

This Workshop will provide a practical overview to the trends, modern process technology and use of different materials in demanding specialty laminates. The lessons focus in giving practical tips and best practises to the challenges that we are facing in processing of heat treated, Low-E, solar cell, sound control and other demanding applications.

Course timetable - Thursday 11.6.2009

- 9.00 Overview of the trends and possibilities in the laminating industry
- 9.20 Introduction into pre laminating process
- 10.10 Coffee/tea
- 10.30 Introduction into the autoclave process
- 11.00 PVB
- 12.30 Lunch
- 13.15 Test procedures
- 14.00 Tips and Practises for challenging high-end
- 15.40 Coffee/tea
- 16.00 Trends in architectural laminated glass
- 17.00 Workshop ends

WORKSHOP LOCATION:
UNIVERSITY OF TAMPERE, PINNI B
KANSLERINRINNE 1

Bullet Point Summary

Workshop Opening

- Overview of the trends and possibilities in the laminating industry

Introduction into pre laminating process

- Loading, washing, assembly, pressing
- Heating, pressing, unloading

Introduction to autoclave process

- Steps before autoclaving
- Loading possibilities, process / parameters / effects

PVB

- Preparation & handling
- Air removal
- Autoclave cycle
- Quality - troubleshooting

Test procedures

- Quality control - legal aspects

Tips and Practises for challenging high-end products

- Multilayer laminates
- Big glass sizes & Curved laminates
- Toughened laminates
- Coloured interlayers
- Acoustic laminates

Trends in architectural laminated glass

- Possibilities with sizes & shapes
- Building projects - case studies
- Laminated glass design & green values

Registration for Workshops at www.gpd.fi



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THURSDAY 11 June

Structural Properties of Laminated Glass

Presenters: S. J. Bennison & I. Stelzer,
E.I. DuPont de Nemours & Co. Inc

Milestones to better understand the Flat Glass Business (history - today - tomorrow)

Presenter: B. Savaëte, BJS. Différences

Industrial Glass Coating Technologies and systems powered by nanotechnology (Beneq)

Presenter: M. Saikkonen, Beneq Oy

Glass Tempering Process (level1): Fundamental steps in tempering and machine test runs

Presenters: V-J. Kuusiniemi & T. Pesonen &
M. Äppelqvist & S. Suominen, Glaston Finland Oy

Glass Bending & Tempering process: Theory and machine test runs

Presenters: V-J. Kuusiniemi & T. Pesonen &
M. Äppelqvist & S. Suominen, Glaston Finland Oy

Laminating of Heat treated and other speciality glass

Presenters: M.P. Verleyen, Solutia Europe; M. Rantanen & J. Ala-Savikola, Glaston Finland Oy; R. Giovannini, Glaston Italy; A. Uusikartano, Suomen Turvalasi Tambest; C. Bostick, Consulting Architects; J. Gilleeney, Independent Glass

Glass processing basics for Solar industry specialists

Presenters: R. Nieminen, Glaston America Inc.;
I. Hiekkanen & T. Pesonen, Glaston Finland Oy

Understanding glass strength, stress analysis and design methodologies for architectural glass

Presenter: Dr. L. Jacob, Jacob & Associates Pty Ltd.

FRIDAY 12 June

Cutting, Grinding, Washing: Three fundamental steps in Float Glass Processing

Presenters: P. Pokoern, Bohle AG; M. Emonds, ACW

Coated Glass - Applications and markets

Presenter: S. Nadel, Applied Materials

Seeing Through Glass Design

Presenter: C. Bostick, Consulting Architects

Basics of Glass Coating Processes and Coated Glass

Presenters: P. Vuoristo & T. Mäntylä,
Tampere University of Technology

Digital Printing on Glass

Presenters: Y. Ninoy & T. Salenius, DIP Tech Ltd.

Glass Tempering Process (level2): Glass Factory profitability and tempering technology know-how

Presenters: V-J. Kuusiniemi & T. Pesonen &
M. Äppelqvist, Glaston Finland Oy; F. Serruys,
Saint-Gobain Glass Solutions

Profitability of a Glass Processing Factory

Presenter: K. Heikkilä, Glaston Singapore

Solar Power - Opportunities for the glass industry

Presenters: R. Nieminen, Glaston America Inc.; I. Hiekkanen, Glaston Finland Oy; M. Rajala, Beneq Oy; A. Karpinski, Kuraray Europe GmbH; O. Mal, AGC Flat Glass; B. Szyszka, Fraunhofer IST; S. Byers, Ritec International Ltd.; V. Geyer, Scheuten Solar; G. Strij-Hipp, BSW Solar

New trends in the Infrared Non-contact Temperature Measurement for the glass industries

Presenters: R. Gärtner & E. Drews, Raytek GmbH

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