

FILAMENT WINDING 2005

third international convention and
exhibition for filament winding technology

12-14 October 2005

Radisson SAS Hotel, Brussels, Belgium

Come to the world's biggest filament
winding conference and meet the industry's
most experienced professionals.

REGISTER NOW!

www.filamentwinding2005.com

organized by:  **MATERIAL**



Wednesday, October 12, 2005

08.00	Registration	
09.00	Welcome introduction to the convention program	Axel Seifert <i>MATERIAL, Belgium</i>
09.15	BASICS Filament winding technology - past, present, future history, applications, markets, future developments	John Green <i>GSG, USA</i>
09.45	Coffee break and exhibition	
10.30	AEROSPACE Composite rocket motor case development in Norway rocket production and spin-off products (CNG vessels, propane containers)	Dr. Alexander Fjeldly <i>FFI, Norway</i> Stein Tenden <i>Nammo Raufoss, Norway</i>
11.15	AEROSPACE Machinery for automated production of large space propulsion structures specialized winding and wrapping machinery for the Ariane and Vega space launcher program	Roberto Blasi <i>Avio, Italy</i>
12.00	Lunch and exhibition	
13.30	AUTOMATION Filament winding with increased efficiency winding with multiple individually controlled pay-out eyes	Michael Päßler <i>Institute for Composites (IVW), Germany</i>
14.15	Coffee break and exhibition	
15.00	DEVELOPMENT & PRODUCTION Development of a two meter diameter pressure vessel by means of filament winding product design, mandrel development, winding machine development, software, testing, production	Shekar Sardesai, P. K. Bagchi <i>Kineco, India</i>
15.45	SOFTWARE Celebrating 20 years of CADWIND evolution of the industry's standard filament winding software, the latest innovations, future ideas	Axel Seifert <i>MATERIAL, Belgium</i>
16.30	Discussion	
17.00	Exhibition	
18.00	Welcome reception and cocktail	

Thursday, October 13, 2005

09.00	ENERGY MARKETS	Filament winding and fiber placement advances in the oilfield, energy and wind energy markets industry, equipment, materials, design, markets	Dr. Scott Beckwith <i>Beckwith Technology, USA</i>
09.45		Coffee break and exhibition	
10.30	AEROSPACE	Filament wound grid structures for air and fluid filters product design, weight savings, serial production	Christophe Devillers <i>Sofrance, France</i>
11.15	LIFE CYCLE ANALYSIS	LCA of composite structures - theory and examples life cycle analysis, life cycle inventory, energy consumption, environmental impact	Dr. Luigi Torre <i>University of Perugia, Italy</i>
12.00		Lunch and exhibition	
13.30	DESIGN & ANALYSIS	Determining material properties of filament wound pressure vessels finite element analysis, split disk test, testing	Fuhwen Shiue <i>C-Text, Taiwan</i>
14.15		Coffee break and exhibition	
15.00	DESIGN & ANALYSIS	Design of composite pressure vessels using finite element analysis pre-dimensioning, winding simulation, FE analysis, optimization process	Jörg Multhoff <i>Isatec, Germany</i>
15.45	SOFTWARE	Composite Star - current status and future perspectives the database and design software for composites and its use for filament winding applications	Michael Sonnen <i>MATERIAL, Belgium</i>
16.30		Discussion	
17.00		Exhibition	

Table top exhibition

A table top exhibition will be on display in the lobby in front of the lecture room.

Suppliers of raw materials, machinery, software, engineering services and other equipment for filament winding technology will present their products. All visitors will have the opportunity to discuss their individual needs directly with the suppliers.

For a list of exhibitors please visit www.filamentwinding2005.com.

Friday, October 14, 2005

09.00	OFFSHORE TECHNOLOGY	Composites in the oilfield and beyond offshore petroleum production, drilling risers, production risers, choke and kill lines, logging housings, galvanic isolators, deep water reservoirs	Dr. Brian Spencer <i>Spencer Composites Corporation, USA</i>
09.45		Coffee break and exhibition	
10.30	HIGH TEMPERATURE APPLICATIONS	All oxide ceramic composite based on filament winding technique fabrication, microstructural analysis, properties, applications	Bernhard Kanka <i>German Aerospace Center (DLR), Germany</i>
11.15	HIGH TEMPERATURE APPLICATIONS	Filament winding technology in high-temperature applications carbon-carbon composites, ceramic material composites, manufacturing process, properties, applications	Thorsten Scheibel <i>Schunk Kohlenstofftechnik, Germany</i>
12.00		Lunch and exhibition	
13.30	THERMOPLASTICS	Twintex® filament winding - a new technology for the pressure vessel market thermoplastic winding now ready for industrial use, first applications, pressure vessels	Nicolas Bedouin, Christophe Ducret <i>Saint-Gobain Vetrotex, France</i>
14.15		Coffee break and exhibition	
15.00	AUTOMOTIVE	Filament winding - a key manufacturing process to bring fuel cell vehicles on the road high pressure carbon fiber vessels for hydrogen storage, adapting the winding process to achieve high quality standards and meet the cost targets	Dr. Wolf-Ulrich Herres <i>Adam Opel AG Fuel Cell Activities, Germany</i>
15.45		Discussion	
16.15		Close of convention	

Filament Winding 2005 Registration Form

Title: Mr. Ms. Dr. Prof.

Family name: _____

First name: _____

Job title: _____

Company / Organization: _____

Address: _____

City: _____

Post / Zip Code: _____

State / Region / Province: _____

Country: _____

Phone: _____

Fax: _____

E-mail: _____

Website: _____

VAT number (European Union only): _____

Please register me as

- delegate (795 EUR + 21% VAT 166.95 EUR = 961.95 EUR)
- table top exhibitor (1,745 EUR + 21% VAT 366.45 EUR = 2,111.45 EUR)

Payment

Full settlement of fees is due in advance. Confirmation of registration and a paid invoice will be sent to you after full payment has been received.

- I have arranged a bank transfer (KBC Bank Belgium, account number: 734-0139127-38, IBAN: BE24 7340 1391 2738, BIC/SWIFT: KREDBEBB)
- I enclose a cheque payable to MATERIAL
- Please charge my credit card:
 - Eurocard/MasterCard
 - Visa
 - American Express

Cardholder name: _____

Card number: _____

Expiry date: _____

Security code: _____

Date: _____

Signature: _____

Please return this form to:

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1932 Zaventem/Brussels, Belgium
Tel.: +32/2/715 94 94
Fax: +32/2/715 94 90
E-mail: konny.weber@material.be
Internet: www.material.be

You can also register online at www.filamentwinding2005.com.

Registration information

Language: The language of the convention will be English.

Delegate registration fee: The delegate registration fee is 795 EUR. This fee includes conference proceedings, lunch and mid-session refreshments, access to the table top exhibition and the reception. Full settlement of fees is due in advance.

Table top exhibitor fee: The fee for exhibitors is 1,745 EUR. This fee includes one table (1 by 2 meters with back panels), the presentation of the company logo on the convention website and the delegate registration for one person. Full settlement of fees is due in advance.

VAT: MATERIAL is obliged to charge 21% VAT (value-added tax) in addition to the above mentioned fees. However if you come from a country outside the European Union or from a country within the European Union and you have a VAT ID number you can reclaim the VAT from the Belgian tax authority. Either by yourself or through the service of a specialized VAT refund company. For more information please contact us.

Location: The venue for the convention will be the Radisson SAS Hotel. The hotel, one of the most prestigious in Brussels, is located in the very heart of the city in the middle of the main shopping, tourist and entertainment area.

Accommodation: A limited number of rooms have been reserved for use by delegates at the Radisson SAS Hotel at a rate of 180 EUR per night. A room reservation form will be sent to you on receipt of the registration form. Register early! If you look for a more economic accommodation, please visit www.filamentwinding2005.com.

Cancellation policy: Before September 21, 2005 - 90% refund, after September 21, 2005 - no refund. A substitute delegate is welcome at no extra fee.

Program: The convention program is correct at the time of going to print. However, MATERIAL reserves the right to make alterations without prior notice.

Latest news, presenters' biographies, list of exhibitors, previous conferences, register online and more at

www.filamentwinding2005.com