

RESEARCH

## TEXTILE HYBRID M1 THE WIND RESPONSE

REPORT

## TENS-SCL 2012 S(P)EEDKITS

PROJECTS

**Foil constructions fit  
for the highest mountains**  
SÖLDEN, AUSTRIA



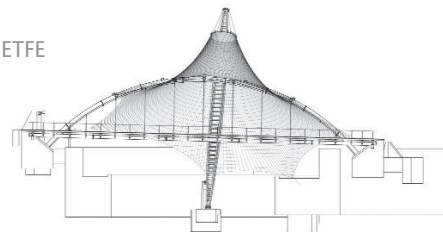
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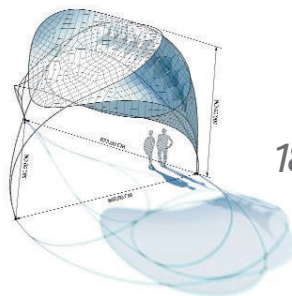


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[RE]THINKING LIGHTWEIGHT

Buro Happold  
www.burohappold.com

Canobbio S.p.A.  
www.canobbio.com

CENO Membrane  
Technology GmbH  
www.ceno-tec.de

Dyneon  
www.dyneon.com

FabricArt  
Membrane Structures  
www.fabricart.com.tr/

form TL  
www.Form-tl.de

Hightex GmbH  
www.hightexworld.com

Mehler Technologies  
www.mehler-  
technologies.com

Messe Frankfurt  
Techtextil  
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**E**dito  
Dear Reader,

Tensinet Symposium is now quickly approaching – in less than one month's time an international audience will meet in Istanbul – the modern and pulsing city connecting Europe and Asia. While preparing the event we have recognized an increasing interest in fabric structures with more than 80 abstract entries which reflects what we recognize in daily work life: Membrane and foil structures are a trend with overwhelming interest.

At the border of the Bosphorus at Mimar Sinan Fine Arts University is starting off Wednesday morning with a session on ETFE which has become a constant besides the historically much longer used coated fabric materials for wide span structures.

For the afternoon we have planned a special event inviting locals to take part at presentations on eye-catching projects in order to catch their interest and build a platform for discussions and contacts. This first-day event will be closed with the opening of the exhibition of the main sponsors and posters.

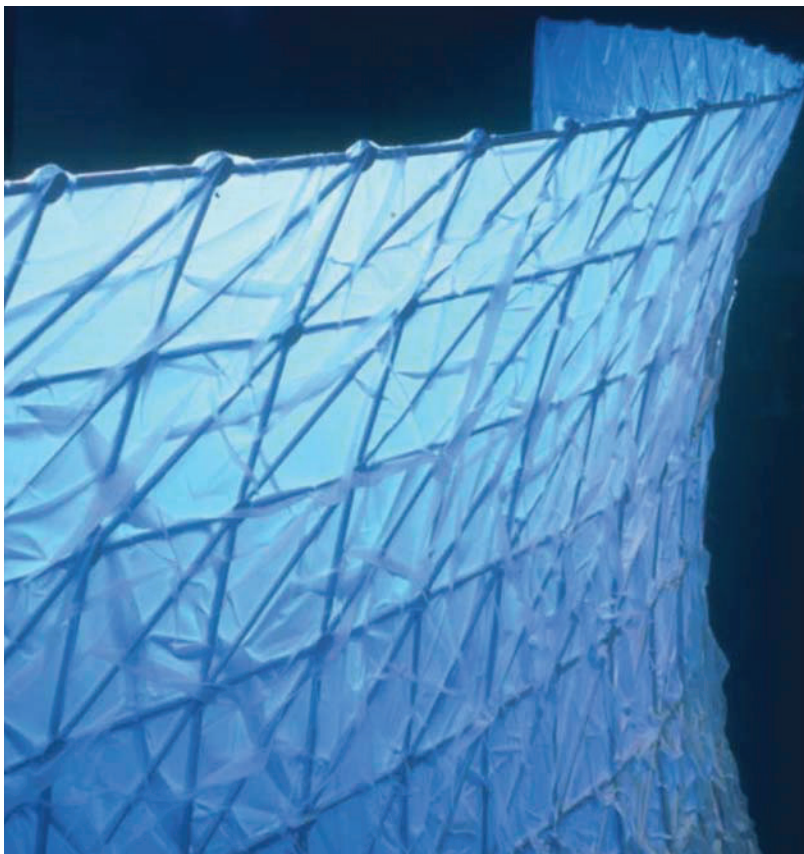
The second day will be characterised by the topic "materials and analysis" and ends with small eye-catching projects.

Friday the presentations in the fields of the young working groups Pneumatic structures and Life cycle Assessment will take place. The symposium will be closed honouring Prof. Dr. M. İhsan Mungan followed by a Sightseeing tour on the Bosphorus.

Again TensiNet is one of the main sponsors of the Student competition at Techtexsil to engage architecture and engineering students to design fabric structures. The topic has been "Textile Structure for New Building 2013". The award ceremony will take place at the opening of the exhibition. The award winning designs will be presented in a special show during Techtexsil from 11 till 13 June 2013.

As an inspiration source I wish you a pleasant time with the new issue of the TensiNews including topics from stimulating small experimental projects to highly developed shelters. Cable supported fabric structures to air and spline supported membranes.

*Heide Bogner-Balz*



Mero exhibition stand - architecture & engineering © Werner Sobek, Stuttgart

## Forthcoming Events

### TensiNet Symposium 2013

[RE]THINKING lightweight structures



Mimar Sinan Fine-Art University, Istanbul, Turkey  
[www.tensinet2013.org](http://www.tensinet2013.org) 8-10/05/2013

### Techttextil 2013

Messe Frankfurt, Germany 11-13/06/2013  
<http://techttextil.messefrankfurt.com/frankfurt/en/aussteller/willkommen.html>

### Textiles Roofs 2013

The Eighteenth International Workshop on the Design and Practical Realisation of Architectural Membrane Structures 17-19/06/2013  
Berlin Institute of Technology, Germany  
[www.textile-roofs.com](http://www.textile-roofs.com)

2<sup>nd</sup> International Conference on

### Structures and Architecture ICOSA 2013

Guimarães, Portugal 24-26/07/2013  
[www.icsa2013.com](http://www.icsa2013.com)

### Transformables 2013

Seville, Spain 18-20/09/2013  
[www.transformables2013.com](http://www.transformables2013.com)

### 2013 IASS - Annual Symposium: Beyond the Limit of Man

Wroclaw, Poland 23-27/09/2013  
<http://www.iass-structures.org>

**Structural Membranes 2013** VI Int. Conference on Textile Composites and Inflatable structures  
Munich, Germany 9-11/10/2013  
<http://congress.cimne.com/membranes2013>

### 7th Aachen-Dresden International Textile Conference "Adding Function and Value"

Aachen, Germany 28-29/11/2013  
[www.aachen-dresden-itc.de](http://www.aachen-dresden-itc.de)

## Forthcoming Meetings

### TensiNet meetings in Istanbul, Turkey

Thursday 09/05/2013

18:30 -19:00 Annual General Meeting

19:00 -20:00 Partner Meeting (1/2013)

Location: Mimar Sinan Fine-Art University

### Core group meeting CEN/TC250 WG5

in Frankfurt at Techttextil, Germany

Wednesday 12/06/2013, 13:00-18:00

### Core group Skypemeeting CEN/TC250 WG5

Friday 21/06/2013, 10:00-12:00

# Main Station

Salzburg , Austria

## A NEW TRANSLUCENT MEMBRANE ROOF FOR THE HISTORICAL ROOF CONSTRUCTION

Context: A masterly, on-track achievement. With the conversion of Salzburg Main Station from terminus and transit station to a transit station only, new design possibilities were created for the land marked barrel vault in the platform area. The final result is a skilful lighting effect and cosmopolitan atmosphere, protection from wind and weather, and conformity with the structural specifications. The greatest challenges were the historic arched roofs which were to be kept intact but relocated, plus the fact that a normal railway service was to operate during the redesign, re-organization, and renovation work.



### Structural specifications for transit traffic

For over a century, the elegant arched roofs of the main station have been a landmark on the city

skyline; their gently curving steel framework strong yet delicate to the eye of the passing traveller. However, the new requirements of a transit station coupled with

analysis of weather observations over many years concerning snow and wind load meant changes were necessary for the longitudinal roofing structural system.

The contractor therefore specified the construction of a membrane roof including a substructure on the basis of the historical roof construction. For this reason, the

CENO MEMBRANE TECHNOLOGY GMBH

## NEW PLATFORM ROOF MADE OF ETFE

# Main Station

Salzburg , Austria

### Context

Salzburg Central Station, which was originally planned to be a mixed terminus station and a through station, has now been converted into a through station only. Four new station platforms have now been roofed over with a new platform roof design, and a 1908 historical half-timbered building, classified as an historical monument, have been integrated into this roof.

### Concept

The roof design means that both the platforms and the railway line area have been given a connecting roof. The roof surface extends 327m in its longest extension towards the platform and 72m crosswise to the rail-way lines. The roof surface is divided up into five individual roof liners that

