

Dear interested party,

ADVANCED COMPOSITE SANDWICH STEEL STRUCTURES in short **SANDWICH** is a new research project funded by the European Union under the GROWTH programme.

The project started April 1, 2000 and offers to interested parties the participation in an industrial USER GROUP, intended to disseminate the project results and to increase the relevance of the project for industrial applications. This letter is to inform you about this USER GROUP and to invite you to apply for SANDWICH USER GROUP membership.

**AIMS of SANDWICH project:**

Development & improvement of lightweight structures is a continuous challenge in particular for land & marine vehicles production. SANDWICH will enhance the features and properties of metallic sandwich structures by optimising their design, creating easy to assemble structural joints and integrate additional functions into the panels. The aim is to develop sandwich panels according to the specific requirements of the transportation industries. Nonetheless, the results will also be of major importance for the application of metallic sandwich panels in other areas, like structural steel engineering, bridges, offshore etc..

The project consortium consists of the leading European experts in the fields of research, development and application of laser welded steel sandwich panels as well as composite lightweight solutions. Please find below a list of partners and the main targets of the SANDWICH project:

**Project targets:**

- developing composite steel structural sandwich products tailored for particular applications in land and sea transport environment
- enhance steel sandwich panels properties through different fillings
- analyse the composite sandwich capabilities and
- develop algorithms to predict its behaviour

**Project yardsticks:**

- weight reduction up to 50%
- 50% less space consumption
- enhanced fire safety and heat insulation
- reduction of manufacturing cost by accurate pre-manufacturing
- flexible use through modular solutions for panels and joints
- improved noise and vibration damping
- significantly improved crash resistance
- easy and fast assembly

**Project team:**

J.L.Meyer Werft	Ships- and Equipment-Industry
MACOR	
CETEC	
Talgo- Transtech	Railway Rolling Stock
Jünger	Land Vehicles and Trailers
Helsinki University	Properties testing and algorithms development
TU Gdansk	
TNO	
KTH -Stockholm	
INFERT GmbH	Classification and approval
DNV,	
TXT	
	Software development

For more detailed information about SANDWICH please check the attached a public project summary. You are also invited to visit the project website at <http://sandwich.balport.com>

**The SANDWICH USER GROUP:**

The SANDWICH consortium offers to industrial companies to share their project results. These results are in particular

- Test reports
- Design solutions for SANDWICH Panels
- Calculation guidelines for Sandwich design solutions
- Access to the SANDWICH design tool

As a mechanism of know how transfer and discussion SANDWICH organises two workshops per year for User Group members only. Further, User Group members will receive exclusive and classified documentation reflecting the current findings of the project.

User Group members will be invited to discuss and influence the test-profiles, load cases as well as the selection of specimens for testing through forwarding their particular requirements.

Industrial companies can apply for a membership in the SANDWICH USER GROUP. The SANDWICH consortium charges an annual fee of 10.000 EURO (25.000 EURO outside European Union (candidate states and associated states for R&D are considered inside EU). Applications are valid for the entire project duration of 36 months starting 1<sup>st</sup> April 2000. Later entries have to burden the fee for the entire period. Companies can retract from the USER GROUP whenever the wish, payment of the User Group Fee is then limited the project years before and including the date of retraction (project year: April to April). Applications are subject of approval by the SANDWICH project assembly.

For applications please use the attached SANDWICH Application Form. After the approval of your application through the SANDWICH Project Assembly you will receive a SANDWICH User Group Contract for signature.

Applicants until 30<sup>th</sup> June, 2000 will receive an invitation for the inauguration workshop for the SANDWICH User Group, which is scheduled for September 7<sup>th</sup>, 2000. The participation for this workshop will be free of charge, allowing interested industrial companies to make a final decision on their application.

If you have questions please do not hesitate to contact:

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