



Sustainable Construction & Design

Conference Proceedings



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Conference Proceedings

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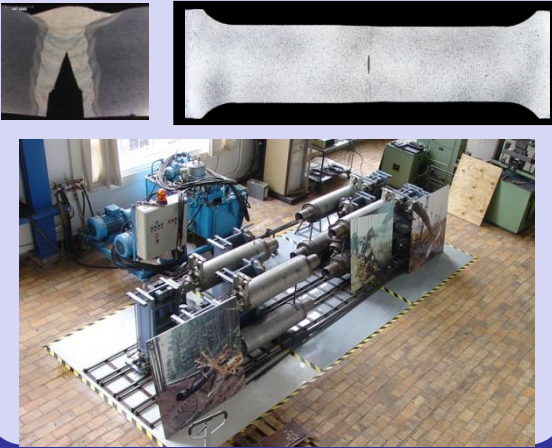
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Fracture mechanics

Experts in pipeline weld research.



Tribology

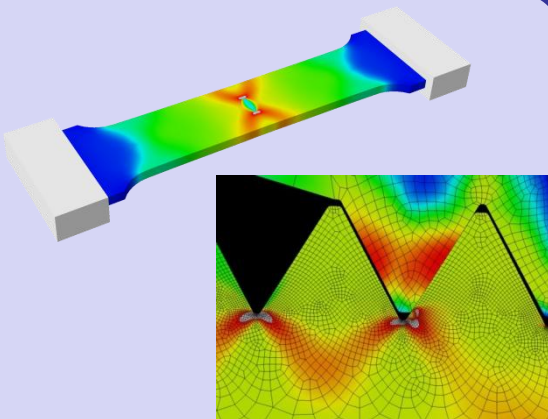
Small to large scale experimental testing.



Labo Soete

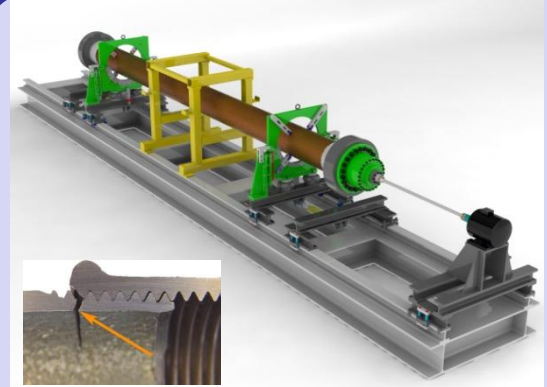
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Dept. of Mechanical Construction & Production
Technologiepark 903
9052 Zwijnaarde – BELGIUM

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*Modelling of engineering structures
and applications.*

Finite Element Analysis



*Fatigue testing and analysis. E.g.
research on pipe joints in a full scale
resonant bending fatigue setup.*

Fatigue

Preface

Welcome to all SCAD 2012 Participants

After an extremely successful third edition of the Sustainable Construction and Design (SCAD) conference last year, where contributions from industry were highly complementary to academic presentations, this year's fourth edition focuses on university contributions.

Emphasis is put on the research results of two research institutes of Ghent University: Laboratory Soete and the SYSTeMS research group. Their activities cover a wide scope of mechanical engineering sciences ranging from welding technology, fatigue and fracture mechanics, tribology, and biomedical engineering to the stabilization, regulation and optimization of dynamic systems. The collection of contributions is a healthy mix between experimental, numerical and analytical work.

Similar to the previous editions, special attention is devoted to our master thesis students, who aim to present the current status of their work to a wide audience. We hope that this challenge improves their presenting abilities and stimulates them to get in touch with other motivated students, researchers and delegates from international industry. Academic research results are additionally presented during a poster session.

Next to contributions directly related to Ghent University, this year's edition again highlights the international character of the SCAD symposium, with contributions and attendants from Szent István University (Hungary), Universidad Central de Venezuela (Venezuela), Technical University of Cluj-Napoca (Romania) and the Federal University of Rio Grande do Sul (Brazil).

High-quality conference papers will be selected for publication in the International Journal on Sustainable Construction and Design, which can be accessed from the Directory of Open Access Journals.

Many thanks go to our master thesis students, all other presenters, the review board and all people that contributed to the ongoing success of the SCAD concept.

Stijn Hertelé
Conference Chair

February 2012

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