

# Publicationlist DIANA Users Association 2007

# Chalmers University of Technology, Department of Civil Engineering and Environmental Engineering.

Broo H., Lundgren K. and Engström B.: "Shear and torsion in prestressed hollow core units: Finite element analyses of full-scale tests.", Structural Concrete, Vol. 8, No. 2, pp. 87-100, 2007.

Broo H., Plos M., Lundgren K. and Engström B.: "Simulation of shear-type cracking and failure with non-linear finite element method.", Magazine of Concrete Research, Vol. 59, No. 9, pp. 673-687, 2007.

Broo, H., Plos M., Lundgren, K. and Engström, B.: "Reinforced and prestressed concrete beams subjected to shear and torsion.", Fracture mechanics of Concrete and Concrete structures, 17-22 June, Catania, Italy, Vol. 2 pp. 881-888, 2007.

Martin. M.: "Non-linear FE analysis of shear behaviour in reinforced concrete - Modelling of shear panel tests", Department of Civil and Environmental Engineering, Division of Structural Engineering and Mechanics, Concrete Structures, Chalmers University of Technology, Göteborg, Sweden, Master's Thesis 2007:46.

Jansson, A., Gylltoft K., Löfgren I.: "A fracture mechanics approach to material testing and structural analysis of FRC beams", Fracture mechanics of Concrete and Concrete structures, 17-22 June, Catania, Italy, Vol. 3 pp. 1491-1496, 2007.

K. Zandi Hanjari, P. Kettil, K. Lundgren: "Mechanical behaviour of Frost-damaged Reinforced Concrete Structures", The 6th International Conference on Fracture mechanics of Concrete and Concrete Structures, Catania, Italy, 2007, Taylor & Francis, Vol 2, pp. 1761-1766.

K. Lundgren, A. S. S. Roman, H. Schlune, K. Z. Hanjari, P. Kettil: "Effects on bond of reinforcement corrosion", International RILEM workshop on Integral Service Life Modeling of Concrete Structures, 5-6 November 2007, Guimaraes, Portugal, 2007, pp. 231-238.

Plos M.; Gylltoft K.; Lundgren K., Cervenka J., Thelandersson S., Elfgren L., Herwig A., Brühwiler E., Rosell E. (2007): Structural Assessment of concrete railway bridges. Sustainable Bridges: Assessment for Future Traffic Demands and Longer Lives. pp. 251-260. ISBN/ISSN: 978-83-7125-161-0.

Sustainable Bridges (2007): Non-Linear Analysis and Remaining Fatigue Life of Reinforced Concrete Bridges. Prepared by Sustainable Bridges- a project within EU FP6. Available from: www.sustainablebridges.net (Editor: Mario Plos, also main author of chapter 5 and co-author of chapter 3.)

Lundgren, K. (2007): Lap splice over a grouted joint in a lattice girder system. Magazine of Concrete Research, Vol. 59, Issue 10, pp. 713-727.

Lundgren, K. (2007): Effect of corrosion on the bond between steel and concrete: an overview. Magazine of Concrete Research, Vol. 59, Issue 6, pp. 447-461.

Tammo, K., Lundgren, K., Thelandersson, S. (2007): Crack Widths Close to the



Reinforcement. IABSE Symposium Improving Infrastructure Worldwide, Weimar, Germany, September 19-21, 2007.

*Master's Thesis from 2006:* 

H. Schlune: "Bond of corroded reinforcement: analytical description of the bond-slip response", Department of Civil and Environmental Engineering, Division of Structural Engineering and Mechanics, Concrete Structures, Chalmers University of Technology, Göteborg, Sweden, Master's Thesis 2006:107.

A. Soto San Roman: "Bond behaviour of corroded reinforcement: FE-modelling and parameter study", Department of Civil and Environmental Engineering, Division of Structural Engineering and Mechanics, Concrete Structures, Chalmers University of Technology, Göteborg, Sweden, Master's Thesis 2006:94.

# TNO - Built Environment and Geosciences, Geological Survey of the Netherlands

Papers/presentations:

Orlic, B., van Wees, J.D., Mulders, F., (2007). Impact of stress perturbations nearby salt bodies on fault stability: examples from reservoir geomechanics. AAPG Hedberg Conference, Basin Modeling Perspectives: Innovative Developments and Novel Applications, May 6-9, 2007, The Hague, The Netherlands (abstract).

Orlic, B., van Eijs, R., Mulders, F., Wassing, B., van Wees, J.D., (2007). Geomechanical modeling of subsurface and surface deformations with DIANA. International DIANA Users Meeting, 19-20 April 2007, Porto, Portugal (presentation).

## Reports:

Orlic, B, Fokker, P., Geel, K., (2007). Feasibility of CO2 Storage in Barendrecht / Barendrecht Ziedewij: Caprock and Fault Integrity Study. TNO report 2007-U-R0461/C, Utrecht, 81 pp.

Orlic, B, van Eijs, R., Mulders, F.M.M., (2007). Well Integrity Analysis Report. Report D3.3.6 of the EU-CASTOR project. TNO report 2007-U-R1270/A, Utrecht, 55 pp.

Burggraaf, H.G., Vervuurt, A.H.J.M., Overbeek van, A.B.M., Repairibility of Tunnels - Analysis of the "Wijkertunnel" with a plane stress model in DIANA, 2007-D-R1204/A, Delft, November 20, 2007 (Dutch)

## **University of Eindhoven**

Klamer, E.L. (TU/e-Beton), Hordijk, D.A. (TU/e-Beton) & Boer, A. de (RWS) (2007). FE-analyses to study the effect of temperature on debonding of externally bonded CFRP. In T.C. Triantafillou (Ed.), 8th International symposium on Fiber-Reinforced Polymer Reinforcement for Reinforced Concrete Structures (FRPRCS-8) (pp. 1-10). Patras, Greece: University of Patras.

Vermeltfoort, A.T. (TU/e-Steenconstructies) (2007). Laser speckle measurements and numerical simulations of the deformation of masonry loaded in compression. In Proceedings of the 3th International Conference on computational methods and experiments in Material Characterisation (pp. 147-157).



# **University of Delft**

A.J.T. Luttikholt, Ultimate Limit State Analysis of a Segmented Tunnel Lining, Results of full-scale tests compared to finite element analysis, Delft University of Technology, Faculty of Civil Engineering and Geosciences, Section Structural Engineering, Concrete Structures.

#### TNO DIANA BV

David Press, 3D FE Analysis of First Abu Dhabi Tower Piled Raft, 2007-DIANA-R001, 12 March 2007 (confidential)

Gerd-Jan Schreppers, Finite Element Analysis of Shams Tower 2 Foundation, 2007-DIANA-R002, 9 March 2007(confidential)

Gerd-Jan Schreppers, Pile-raft foundation analysis for Moscow City Tower, 2007-DIANA-R003, 24 April 2007 (confidential)

David Press, 3D FE Analysis of Palazzo Versace and D1 Tower Piled Raft, 2007-DIANA-R004, 7 June 2007(confidential)

Fedrico Prevosti, Numerical Analysis of a Thick Wall During Hydration, 2007-DIANA-R005, 26 August 2007 (confidential)

Gerd-Jan Schreppers, Nonlinear Analysis for Concrete Structures in DIANA, Autumn Conference of Korean Concrete Institute 2007, 3 November 2007

Gerd-Jan Schreppers & Giovanna Lilliu, Elastic analysis of an arch-gravity dam using DIANA, ninth benchmark workshop on numerical analysis of dams, Organized by I C O L D, Ad Hoc Committee on Computational Aspects of Analysis and Design of Dams of the International Commission on Large Dams, June 2007 St. Petersburg, Russia

# DHV

Johan van Sloten, Joris Truijens, Foundations of the windpark Distridam T6&7, A3137-2, report DHV, Zaandam, december 2006 (Dutch)

Johan van Sloten, Joris Truijens, Foundations of the windpark Anna Vosdijk, Z2158-07-1.2 rev.0, report DHV, Zaandam, january 2007 (Dutch)

Johan van Sloten, Joris Truijens, Foundations of the windpark Ouderlandertocht – T4, Z2158-25.2 rev.0, report DHV, Zaandam, june 2007 (Dutch)

Johan van Sloten, Joris Truijens, Foundations of the windpark Anna Vosdijk, Z2158-07-1.2 rev.0, report DHV, Zaandam, jan. 2007 (Dutch)

Johan van Sloten, Joris Truijens, Foundations of the windpark OLAZ Stort 2, Z2158-32.2 rev.0, report DHV, Zaandam, november 2007 (Dutch)



Johan van Sloten, Joris Truijens, Foundations of the windpark Izegem België, Z2158-33.2 rev.0, report DHV, Zaandam, november 2007 (Dutch)

Johan van Sloten, Joris Truijens, Foundations of the windpark Afrikahaven, Z2158-34.2 rev.B, report DHV, Zaandam, october 2007

Sander Meijers, Joris Truijens, 3D FEM Analysis of Foundation Design of VESTAS Onshore Wind Turbines, Z2158/0.1 version 0, report DHV, Rotterdam, May 2007

Johan van Sloten, Joris Truijens, Standard Gravity Foundation Vestas RRB India V47, B0014.2 rev.0, report DHV, Zaandam, May 2007

# **DHV** + Royal Haskoning (PSE)

PSE (DHV & Royal Haskoning), Global Analysis report, Singapore ECC project, P0002, E-00000-PN-1206-51040010 rev.0, augustus 2007

PSE (DHV & Royal Haskoning), Blast Analysis report, Singapore ECC project, P0002, E-00000-PN-1206-51040021 rev.0, september 2007

PSE (DHV & Royal Haskoning), Detailed Analysis Base Slab report, Singapore ECC project, P0002, E-00000-PN-1206-51040012 rev.0, september 2007

PSE (DHV & Royal Haskoning), Heat Radiation from PRV Fire report, Singapore ECC project, P0002, E-00000-PN-1206-51040032 rev.0, september 2007

PSE (DHV & Royal Haskoning), Detailed Analysis Wall report, Singapore ECC project, P0002, E-00000-PN-1206-51040013 rev.0, november 2007

PSE (DHV & Royal Haskoning), Detailed Analysis Temporary Openings report, Singapore ECC project, P0002, E-00000-PN-1206-51040015 rev.0, december 2007

## **RWS Bouwdienst**

Ane de Boer & Boyke Djorai, "Structural Damage Effects of the Growth of Lorries in the Netherlands", presentation FP7 meeting, February 2008, Dublin, Ireland

Ane de Boer & Lihua Lu, "Determination of Fatigue lifetime by S-N curves combined with smeared crack material models", Nafems World Congres 2007, May 2007, Vancouver, Canada

Ane de Boer & Boyke Djorai, "Damage to civil structures caused by the growth of heavy weight traffic", Civiele Techniek, july 2007 (Dutch)

Ane de Boer & Cornelis van der Veen, Reliability at all stages of the design of Structures", IABSE Symposium, Sept. 2007, Weimar, Germany