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Numerieke Mechanica TNO-Bouw:

W. Zijl, W., M.A.N. Hendriks, M.A.N., C.P. 't Hart
Numerical homogenisation of the rigidity tensor in Hooke's law using the node-based finite element method, Mathematical Geology, Volume 34, Number 3, 2002

H. Molenaar
Linear Solver methods in the finite element package DIANA., 26.11.2002, Conferentie: 27e conferentie van de Nederlands Vlaamse Numerieke Wiskunde Gemeenschappen,

ABT:

Van den Bos, A.A., Hofmeyer, H.
Prediction of Increased Slab-Punching Loads using Membrane Stresses, Diana-World 2002, issue No.1, page 12-14.

Bouwdienst RWS:

Vulpen, R.van,
Stripmethod to calculate the reinforcement of skew concrete plate viaducts, Master Thesis University of Technology Delft, Bouwdienst RWS, Utrecht, BSRAP-02026, March 2002 (Dutch)

Boer, A. de,
Dynamic analysis of the truss-variant of the surge barrier Oosterschelde, Bouwdienst RWS, Utrecht, BSRAP-02006, December 2002 (Dutch)

Numerieke Mechanica TNO Bouw:

Reportnr	**Author**	**Title**
2002-NM-R001	Branchett	Probabilistisch Rekenen Specifications
2002-NM-R002	Branchett	Probabilistisch Rekenen Core Design
2002-NM-R003	Hendriks, Frissen	Biaxial Tension Test of a RCCV Wall Specimen
2002-NM-R004	Witasse	Reinforcing bar models for DIANA-Maekawa crack model

2002-NM-R005	Branchett	Probabilistisch Rekenen End Stage 1 Report
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2002-NM-R007	Branchett	Probabilistisch Rekenen Storage Requirements
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2002-NM-R013	Gastebled	Dstabor 2.3 background theory manual
2002-NM-R014	Gastebled, V.d. Heuvel	Dstabor 2.3 software implementation manual
2002-NM-R015	Bauruelle	FE analysis of a brace joint of the L5-FA-1 platform
2002-NM-R016	Branchett	Probabilistisch Rekenen End Stage 2 Report
2002-NM-R017	Branchett	Probabilistisch Rekenen Core Design DARS
2002-NM-R018	Branchett	Probabilistisch Rekenen Output Design
2002-NM-R019	Schreppers, Kikstra, De Jong	Large deformation analyis in DIANA
2002-NM-R020	Witasse	Depletion induced arching versus draw down induced arching for well in the shearwater field
2002-NM-R022	Branchett	Probabilistisch Rekenen End Stage 3 Report
2002-NM-R023	Bauruelle	Validation of Diana 3-phase model
2002-NM-R024	Bauruelle	'Specification of a new beam element which take into account wrapping'

2002-NM-R025	Bauruelle	'Modelling of thin walled structures which take into account wrapping'
2002-NM-R026	Van Gogh, 't Hart, Rots	Studie zeggingsgevoeligheid ABN-AMRO gebouw
2002-NM-R027	Witasse	Draw down arching in the Shear Water field. Part II: Parametrical studies
2002-NM-R028	Witasse	Development of a Settari-like pilot for iterative coupling of poro-elastic problems

Content Diana congres Tokyo October 2002:

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Invited paper: Comparative study and crack models
J.G. Rots
The application of Meschke's damage model in engineering practice
A. de Boer, E.G. Septanika
Fracture Behaviour of High-Performance Concrete
V. Mechtcherine, H.S. Müller
A Coupled Damage-Viscoplasticity Model for Concrete Fracture
L.J. Sluys, J.F. Georgin, W. Nechnech, J.M. Reynouard
Application of the microplane model for three-dimensional reversed-cyclic analysis of reinforced concrete members
M. Hoehler, J. Ožbolt
Application of Finite Element Modelling to the Thermo-mechanical Behaviour of Refractories
K. Andreev, H. Harmuth
Effect of Particle Density on Tensile Fracture Properties of Model Concrete
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Application of Cohesive Element Approach to Analysis of Delamination Buckling and Propagation in Honeycomb Panels
T.-S Han, A.R. Ingraffea, S.L. Billington
Implementing an isotropic damage model in DIANA. Use-case for the user-supplied subroutine usrmat
P.H. Feenstra

2. Thema: Creep, shrinkage, durability & young hardening concrete

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H. Kumagai
Field Measurements versus Calculated Results for Norwegian High Performance Concrete Structures
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Heat- and Stress Development during Chemical Hydration in Concrete
J.A Øverli, K. Høiseth, D. Bosnjak
Deformation Behaviour of Concrete Highway Pavements
S. Foos, V. Mechtcherine, H.S. Müller
Finite Element Modeling of Early Age Concrete Behavior using DIANA
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Numerically Simulated Pore Structure and its Potential Application in High Performance Concrete
G.Ye, K. van Breugel, J. Hu
Numerical Modelling of Microstructure Development and Strenght of Cementitious Materials
K. van Breugel, Y. Guang, V. Smilauer
Development of Bond between Reinforcement Steel and Early-age Concrete
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3. Thema: Shear in Reinforced Concrete

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Finite Element Modeling of RC Members Subjected to Shear
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N. Shirai, K. Watanabe, T. Oh-Oka, S. Hakuto, T. Fujita
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J.H. Kim
Numerical Analyses of the Bargower Arch Bridge
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Strength of placed block revetments in dikes determined from field tests
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5. Thema: Geomechanics, steel and rubber

Invited paper: Advanced modeling to support innovative developments in tunneling for Amsterdam North/Southline
F.J. Kaalberg
Invited paper: Deformation of liquefied ground in shaking table tests and its prediction
I. Towatha
Finite-element modelling of stress development and fault reactivation in and around a producing gas reservoir: quantification of calculation results in DIANA
F.M.M. Mulders
Modelling of Deep Subsurface for Geohazard Risk Assessment
B. Orlic, R. van Eijs
Mechanism of remedial measures against soil liquefaction by shear deformation constraint method
N. Yoshida
New constitutive model in DIANA for rubber-like materials
Z. Guo, P. Stroeven, L.J. Sluys, Y. Chen
Shape optimization of plane trusses
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Finite Element Modeling for the High Damping Rubber Bearing
J. Yoshida, M. Abe, Y. Fujino

6. Thema: Reinforced Concrete Structures

Invited paper: Modal analysis versus time history analysis - concepts for the seismic design
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Invited paper: Integrated structural performance assessment for Reinforced concrete under coupled environment and seismic actions
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3D Finite element analysis of Multi-beam Box girder Bridges - assessment of cross-sectional forces in joints
C.M. Frissen, M.A.N. Hendriks, N. Kaptijn
Numerical Simulations of Tests on a Segmented Tunnel Lining
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Application of Diana in Concrete Building Design
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P. Dalmagioni, R. Pellegrini
FEM-Models applied for unreinforced underwater concrete
C. van der Veen, A. de Boer
3-D Finite Element Deformation Analysis of Concrete-Filled Tubular Steel Column
T. Matsumura, E. Minzuno
Analysis and design of concrete shells using ulta-high performace fiber reinforced concrete
E.M.R. Fairbairn, R.C. Battista, R.D. Tolêdo Filho, J.H. Brandão
Non-linear Behavior of Low Ductility RC Frame under Base Excitations
S.T. Quek, C. Bian
Finite element analysis in Natural Draught Cooling Towers
V.N. Heggade

Additional: Short papers

Constitutive Models for Reinforced Concrete: Challenges and Proposals for Future Research
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Degree of hydration for early age concreting using DIANA
G. de Schutter
Development of a Procedure for Crack Width Evaluation in Continious Composite Bridges
Q.U.Z. Khan, T. Honda, Y. Okui, N. Masatsugu, I. Eiji
Lateral reaction modulus for single piles - Simplified Modelling by linear finite elements
A. Bouafia, L. Belmouloud, A. Henniche
A Concrete Beam Finite Element Accounting for Shear Effects
F. Kaiser, H. Degée
Diana Test Procedures
J.C.M. Jansen
A Steel Beam Element Accounting for the Cross Section Deformation
H. Degée