

# Bibliography, Concrete Structures

Theses are given in order of time of publication. The numbers refer to the two series of dissertations at Chalmers University of Technology (the original, 1941-1975, and the new from 1971). The first PhD dissertation was arranged in 1948 although the first theses were published earlier. Theses until 1966 are in Civil Engineering, while theses from 1971 are in Concrete Structures.

## Doctoral Theses

- [1] Bertil Löfquist. "Temperatureffekter i hårdnande betong. Undersökning av några faktorer som påverka sprickbildningen i grövre konstruktioner—Jämförelse mellan två svenska cement." No. 3, 195 pp (in Swedish). PhD thesis. 1946.
- [2] Nils Tengvik. "Den svenska byggnadsmaterialmarknaden. Produktion, distribution och prissättning av jord- och stenindustrins material." No. 7, 318 pp. (in Swedish). PhD thesis. 1952.
- [3] Sven Ödman. "Studies of Boundary Value Problems." No. 10, 10 pp + app. PhD thesis. 1955.
- [4] Gunnar Kärrholm. "Parallelogram Plates Analysed by Strip Method." No. 11, 196 pp. PhD thesis. 1956.
- [5] Lars-Erik Larsson. "Bearing Capacity of Plain and Reinforced Concrete Walls." No. 20, 248 pp. PhD thesis. 1959.
- [6] Sven Hansbo. "Consolidation of Clay, with Special Reference to Influence of Vertical Sand Drains. A Study Made in Connection with Full-scale Investigation at Skå-Edeby." No. 25, 160 pp. PhD thesis. 1960.
- [7] Per Anders Hedar. "Stability of Rock-fill Breakwaters." No 26, 119 pp. PhD thesis. 1960.
- [8] Anders Losberg. "Structurally Reinforced Concrete Pavements." No. 29, 444 pp. PhD thesis. 1960.
- [9] Alf Samuelsson. "Linear Analysis of Frame Structures by Use of Algebraic Topology." No. 36, 115 pp. PhD thesis. 1962.
- [10] Bengt Åkesson. "On Lévy's Plate Solution." No. 36, 115 pp. PhD thesis. 1966.
- [11] Gunnar Backsell. "Experimental Investigations into Deformations Resulting from Stresses Perpendicular to Grain in Swedish Whitewood and Redwood in Respect of the Dimensioning of Concrete Formwork." No. 57, 113 pp. PhD thesis. 1966.
- [12] Krister Cederwall. "Time-dependent behaviour of reinforced concrete structures." No 109. Publication 71:3 by the National Swedish Building Research and as Publication 71:1 by the Division of Concrete Structures, 173 pp. PhD thesis. 1971.

- [13] Lennart Elfgren. "Reinforced Concrete Beams Loaded in Combined Torsion, Bending and Shear: A Study of the Ultimate Load-Carrying Capacity." New Series No 28, Publication 71:3, 230 pp., Second Ed 1972, 230 pp. PhD thesis. 1971.
- [14] Inge Karlsson. "Stiffness Properties of Reinforced Concrete Beams in Combined Torsion, Bending and Shear." No 126, Publication 73:1, 203 pp. PhD thesis. 1973.
- [15] Ingvar H. E. Nilsson. "Reinforced Concrete Corners and Joints Subjected to Bending Moment: Design of Corners and Joints in Frame Structures". New Series No 90. Also published as Document 1973:7 by the National Swedish Building Research and as Publication 73:6 by the Division of Concrete Structures, 249 pp. PhD thesis. 1973.
- [16] Ralejs Tepfers. "A Theory of Bond Applied to Overlapped Tensile Reinforcement Splices for Deformed Bars." Second edition 1976. No. 732, Publication 73:2, 328 pp. PhD thesis. 1973.
- [17] Arne Cajdert. "Laterally Loaded Masonry Walls." New Series No 346, No 865, Publication 80:5, 283 pp. PhD thesis. 1980.
- [18] Olav Berge. "Armerade konstruktioner i lättballastbetong". New Series No 908. Publication 81:3, 373 pp. (In Swedish). PhD thesis. 1981.
- [19] Stig Öberg. "Post Tensioned Shear Reinforcement in Rectangular RC Beams." No. 1021, Publication 90:1, 603 pp. PhD thesis. 1990.
- [20] Björn Engström. "Ductility of Tie Connections in Precast Structures." Nos. 936, 999, 1023, 1052, Publication 92:1, 368 pp. + app. PhD thesis. 1992.
- [21] Marianne Grauers. "Composite Columns of Hollow Steel Sections Filled with High Strength Concrete." No. 1077, Publication 93:2, 140 pp. PhD thesis. 1993.
- [22] Li An. "Load Bearing Capacity and Behaviour of Composite Slabs with Profiled Steel Sheet." No. 1075, Publication 93:4, 134 pp. PhD thesis. 1993.
- [23] Mario Plos. "Application of Fracture Mechanics to Concrete Bridges. Finite Element Analysis and Experiments." Nos. 1067, 1084, 1088, 1106, Publication 95:3, 127 pp. PhD thesis. 1995.
- [24] Magnus Åkesson. "Implementation and Application of Fracture Mechanics Models for Concrete Structures." No 1112, Publication 96:2, 159 pp. PhD thesis. 1996.
- [25] Christina Claeson. "Structural Behavior of Reinforced High-Strength Concrete Columns." No 1105, Publication 98:1, 92 pp. PhD thesis. 1998.
- [26] Karin Lundgren. "Three-Dimensional Modelling of Bond in Reinforced Concrete. Theoretical Model, Experiments and Applications." No 37, Publication 99:1, 129 pp. PhD thesis. 1999.
- [27] Jonas Magnusson. "Bond and Anchorage of Ribbed Bars in High-Strength Concrete." No 1113, Publication 00:1, 300 pp. PhD thesis. 2000.

- [28] Morgan Johansson. "Structural Behaviour in Concrete Frame Corners of Civil Defence Shelters." No 1106, Publication 00:2, 220 pp. PhD thesis. 2000.
- [29] Rikard Gustavson. "Structural Behaviour of Concrete Railway Sleepers." No 32, Publication 02:6, 180 pp. PhD thesis. 2002.
- [30] Mathias Johansson. "Composite Action and Confinement Effects in Tubular Steel-Concrete Columns." No 33, Publication 02:8, 173 pp. PhD thesis. 2002.
- [31] Peter Grassl. "Plasticity and Damage Mechanics for Modeling Concrete Failure." Publication 04:3, 159 pp. PhD thesis. 2004.
- [32] Joosef Leppänen. "Concrete Structures Subjected to Fragment Impacts—Dynamic Behaviour and Material Modelling." No. 31, Publication 04:4, 125 pp. PhD thesis. 2004.
- [33] Ingemar Löfgren. "Fibre-reinforced Concrete for Industrial Construction—a fracture mechanics approach to material testing and structural analysis." Ny serie nr 2378, 243 pp. PhD thesis. 2005.
- [34] Per-Ola Svahn. "Dynamic Behaviour of Reinforced Concrete Structures: Analyses with a Strong Discontinuity Approach." Ny serie nr 2366, 159 pp. PhD thesis. 2005.
- [35] Helen Broo. "Shear and Torsion in Concrete Structures. Non-Linear Finite Element Analysis in Design and Assessment." Ny serie nr 2786. PhD thesis. 2008.
- [36] Peter Harryson. "Industrial Bridge Engineering—Structural developments for more efficient bridge construction." Ny serie nr 2810. PhD thesis. 2008.
- [37] Rasmus Rempling. "Modelling of Concrete Subjected to Cyclic Loading." Ny serie nr 2927, 169 pp. PhD thesis. 2009.
- [38] Kamyab Zandi Hanjari. "Structural Behaviour of Deteriorated Concrete Structures." Ny serie nr 3142, 64 pp. PhD thesis. 2010.
- [39] Anette Jansson. "Effects of Steel Fibres on Cracking in Reinforced Concrete." Ny serie nr 3233, 50 pp. PhD thesis. 2011.
- [40] Hendrik Schlune. "Safety Evaluation of Concrete Structures with Nonlinear Analysis." Ny serie nr 3232, 45 pp. PhD thesis. 2011.
- [41] Ulrika Nyström. "Modelling of Concrete Structures Subjected to Blast and Fragment Loading." New Series No 3486, 83 pp. + papers. PhD thesis. 2013.
- [42] Filip Nilenius. "Moisture and Chloride Transport in Concrete: Mesoscale Modelling and Computational Homogenization." New Series No 3658, 29 pp. + papers. PhD thesis. 2014.
- [43] David Fall. "Steel Fibres in Reinforced Concrete Structures of Complex Shapes: Structural Behaviour and Design Perspectives." New Series No 3699, 68 pp. + papers. PhD thesis. 2014.

- [44] Natalie Williams Portal. "Usability of Textile Reinforced Concrete: Structural Performance, Durability and Sustainability". New Series No 3914, 115 pp. + papers. PhD thesis. 2015.

## **Licentiate Theses**

- [1] Ralejs Tepfers. "Studium av förankrings och sprickproblem hos balkar armerade med Ks 60." No. 626, 99 pp. Licentiate Thesis (part I). 1962.
- [2] Ralejs Tepfers. "Problem vid avkortning av dragarmering: Föredrag vid Smedjebackens Valsverks Byggdagar." No. 639, 24 pp. Licentiate Thesis (part II). 1963.
- [3] Ralejs Tepfers. "Försök med hålbalkar." No. 66:1. Licentiate Thesis (part III). 1966.
- [4] Kent Gustavsson. "Fogar i samverkande betongkonstruktioner med tunn pågjutning." No. 938, Publication 81:7, 111 pp. Licentiate Thesis. 1981.
- [5] Krister Cederwall and Thomas Pettersson. "Spännarmerad betong—Tidsberoende spännförluster." No. 1053, Publication 85:5, 36 pp. Licentiate Thesis. 1985.
- [6] Thomas Pettersson. "Tvärkraftskapacitet hos förspända balkar i snitt med stort moment." No. 1004, Publication 86:1, 45 pp. Licentiate Thesis. 1986.
- [7] Steve Svensson. "Skivverkan i elementbjälklag. Skjuvkraftsoverföring i uppspruckna fogar." No. 1026, Publication 88:1, 59 pp. Licentiate Thesis. 1988.
- [8] Elzbieta Saran. "Shear Capacity of Composite Prestressed Concrete Beams." No. 1081, Publication 89:1, 127 pp. Licentiate Thesis. 1989.
- [9] Johannes Svedin. "En modell för beräkning av sprickbredd i armerade betongkonstruktioner påverkade av statisk engångslast." No. 1083, Publication 89:2, 95 pp. Licentiate Thesis. 1989.
- [10] Marianne Grauers. "Shear Capacity of Three-Layered Composite Concrete Slabs." No. 1065, Publication 89:3, 27 pp. + Appendix. Licentiate Thesis. 1989.
- [11] Johan Hedin. "Långtidsegenskaper hos samverkanskonstruktioner av stål och betong." No. 1079, Publication 90:2, 53 pp. (In Swedish). Licentiate Thesis. 1990.
- [12] Mario Plos. "Shear Behaviour in Concrete Bridges—Full Scale Shear Test. Fracture Mechanics Analyses and Evaluation of Code Model." Nos. 1088, 1084, Publication 93:1, 70 pp. Licentiate Thesis. 1993.
- [13] Magnus Åkesson. "Fracture Mechanics Analysis of the Transmission in Zone in Prestressed Hollow Core Slabs." No. 1112, Publication 93:5, 64 pp. Licentiate Thesis. 1993.
- [14] Christina Claeson. "Behavior of Reinforced High Strength Concrete Columns." No. 1105, Publication 95:1, 54 pp. Licentiate Thesis. 1995.

- [15] Karin Lundgren. "Slender Precast Systems with Load-Bearing Facades." No. 1098, Publication 95:2, 60 pp. Licentiate Thesis. 1995.
- [16] Morgan Johansson. "New Reinforcement Detailing in Concrete Frame Corners of Civil Shelters. Non-linear Finite Element Analyses and Experiments." No. 1106, Publication 96:1, 77 pp. Licentiate Thesis. 1996.
- [17] Jonas Magnusson. "Bond and Anchorage of Deformed Bars in High-Strength Concrete." No. 1113, Publication 97:1, 234 pp. Licentiate Thesis. 1997.
- [18] Rikard Gustavson. "Static and Dynamic Finite Element Analyses of Concrete Sleepers." No. 41, Publication 00:3, 58 pp. Licentiate Thesis. 2000.
- [19] Mathias Johansson. "Structural Behaviour of Circular Steel-Concrete Columns. Non-linear Finite Element Analyses and Experiments." No. 48, Publication 00:4, 64 pp. Licentiate Thesis. 2000.
- [20] Gunnar Holmberg. "Fatigue of Concrete Piles of High Strength Concrete Exposed to Impact Load." No. 55, Publication 01:3, 69 pp. Licentiate Thesis. 2001.
- [21] Peter Harryson. "Industrial Bridge Construction—merging developments of process, productivity and products with technical solutions." No. 34, Publication 02:1, 90 pp. Licentiate Thesis. 2002.
- [22] Ingemar Löfgren. "In-situ concrete building systems—developments for industrial constructions." No. 35, Publication 02:2, 125 pp. Licentiate Thesis. 2002.
- [23] Joosef Leppänen. "Dynamic Behaviour of Concrete Structures subjected to Blast and Fragment Impacts." No. 31, Publication 02:4, 78 pp. Licentiate Thesis. 2002.
- [24] Peter Grassl. "Constitutive Modelling of Concrete in Compression." No. 37, Publication 02:4, 95 pp. Licentiate Thesis. 2002.
- [25] Per-Ola Svahn. "Impact Loaded Concrete Piles—Theoretical and experimental study of load effects and capacity." No 38, Publication 03:1, 51 pp. + papers. Licentiate Thesis. 2003.
- [26] Helen Broo. "Shear and Torsion Interaction in Prestressed Hollow Core Slabs." Publication 05:2, 83 pp. Licentiate Thesis. 2005.
- [27] Rasmus Rempling. "Constitutive Modelling of Concrete Subjected to Tensile Monotonic and Cyclic Loading." Publication 06:4, 59 pp. Licentiate Thesis. 2006.
- [28] Kamyab Zandi Hanjari. "Load-Carrying Capacity of Damaged Concrete Structures." Publication 08:6, 108 pp. Licentiate Thesis. 2008.
- [29] Anette Jansson. "Fibres in Reinforced Concrete Structures—analysis, experiments and design." Publication 08:3, 84 pp. Licentiate Thesis. 2008.

- [30] Ulrika Nyström. "Concrete Structures Subjected to Blast and Fragment Impacts, Numerical Simulations of Reinforced and Fibre-reinforced Concrete." Publication 08:4, 117 pp. Licentiate Thesis. 2008.
- [31] Hendrik Schlune. "Improved Bridge Evaluation. Finite Element Model Updating and Simplified non-linear Analysis." Publication 09:01, 20 pp. + papers. Licentiate Thesis. 2009.
- [32] Filip Nilenius. "On Mesoscale Modelling of Coupled Chloride-Moisture Transport in Concrete." Publication 11:3, 10 pp. + papers. Licentiate Thesis. 2011.
- [33] David Fall. "Reinforcement in Tailor-made Concrete Structures." Publication 11:5, 25 pp. + papers. Licentiate Thesis. 2011.
- [34] Natalie Williams Portal. "Sustainability and Flexural Behaviour of Textile Reinforced Concrete". Publication 2013:9, 53 pp. + papers. Licentiate Thesis. 2013.
- [35] Mohammad Tahershamsi. "Anchorage of Corroded Reinforcement in Existing Concrete Structures: Experimental Study". Publication 13:10, 19 pp. + papers. Licentiate Thesis. 2013.
- [36] Carlos Gil Berrocal. "Chloride Induced Corrosion of Steel Bars in Fibre Reinforced Concrete". Publication 15:01, 75 pp. + papers. Licentiate Thesis. 2015.
- [37] Jiangpeng Shu. "Structural Analysis of Existing RC Bridge Deck Slabs Structural Analysis of Existing RC Bridge Deck Slabs". Publication 15:03, 17 pp. + papers. Licentiate Thesis. 2015.
- [38] Jonas Ekström. "Concrete Structures Subjected to Blast Loading: Fracture due to dynamic response". Publication 2015:04, 20 pp. + papers. Licentiate Thesis. 2015.