

# 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. Chalmers University of Technology, 1946.
- [2] Nils Tengvik. "Den svenska byggnadsmaterialmarknaden. Produktion, distribution och prissättning av jord- och stenindustrins material". No. 7, 318 pp. (in Swedish). PhD thesis. Chalmers University of Technology, 1952.
- [3] Sven Ödman. "Studies of Boundary Value Problems". No. 10, 10 pp + app. PhD thesis. Chalmers University of Technology, 1955.
- [4] Gunnar Kärrholm. "Parallelogram Plates Analysed by Strip Method". No. 11, 196 pp. PhD thesis. Chalmers University of Technology, 1956.
- [5] Lars-Erik Larsson. "Bearing Capacity of Plain and Reinforced Concrete Walls". No. 20, 248 pp. PhD thesis. Chalmers University of Technology, 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. Chalmers University of Technology, 1960.
- [7] Per Anders Hedar. "Stability of Rock-fill Breakwaters". No 26, 119 pp. PhD thesis. Chalmers University of Technology, 1960.
- [8] Anders Losberg. "Structurally Reinforced Concrete Pavements." No. 29, 444 pp. PhD thesis. Chalmers University of Technology, 1960.
- [9] Alf Samuelsson. "Linear Analysis of Frame Structures by Use of Algebraic Topology". No. 36, 115 pp. PhD thesis. Chalmers University of Technology, 1962.
- [10] Bengt Åkesson. "On Lévy's Plate Solution". No. 36, 115 pp. PhD thesis. Chalmers University of Technology, 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. Chalmers University of Technology, 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. Chalmers University of Technology, 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. Chalmers University of Technology, 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. Chalmers University of Technology, 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. Chalmers University of Technology, 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. Chalmers University of Technology, 1973.
- [17] Arne Cajdert. "Laterally Loaded Masonry Walls". New Series No 346, No 865, Publication 80:5, 283 pp. PhD thesis. Chalmers University of Technology, 1980.
- [18] Olav Berge. "Armerade konstruktioner i lättballastbetong". New Series No 908. Publication 81:3, 373 pp. (In Swedish). PhD thesis. Chalmers University of Technology, 1981.
- [19] Stig Öberg. "Post Tensioned Shear Reinforcement in Rectangular RC Beams". No. 1021, Publication 90:1, 603 pp. PhD thesis. Chalmers University of Technology, 1990.
- [20] Björn Engström. "Ductility of Tie Connections in Precast Structures". Nos. 936, 999, 1023, 1052, Publication 92:1, 368 pp. + app. PhD thesis. Chalmers University of Technology, 1992.
- [21] Marianne Grauers. "Composite Columns of Hollow Steel Sections Filled with High Strength Concrete". No. 1077, Publication 93:2, 140 pp. PhD thesis. Chalmers University of Technology, 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. Chalmers University of Technology, 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. Chalmers University of Technology, 1995.
- [24] Magnus Åkesson. "Implementation and Application of Fracture Mechanics Models for Concrete Structures". No 1112, Publication 96:2, 159 pp. PhD thesis. Chalmers University of Technology, 1996.
- [25] Christina Claeson. "Structural Behavior of Reinforced High-Strength Concrete Columns". No 1105, Publication 98:1, 92 pp. PhD thesis. Chalmers University of Technology, 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. Chalmers University of Technology, 1999.
- [27] Jonas Magnusson. "Bond and Anchorage of Ribbed Bars in High-Strength Concrete". No 1113, Publication 00:1, 300 pp. PhD thesis. Chalmers University of Technology, 2000.
- [28] Morgan Johansson. "Structural Behaviour in Concrete Frame Corners of Civil Defence Shelters". No 1106, Publication 00:2, 220 pp. PhD thesis. Chalmers University of Technology, 2000.
- [29] Rikard Gustavson. "Structural Behaviour of Concrete Railway Sleepers". No 32, Publication 02:6, 180 pp. PhD thesis. Chalmers University of Technology, 2002.
- [30] Mathias Johansson. "Composite Action and Confinement Effects in Tubular Steel-Concrete Columns". No 33, Publication 02:8, 173 pp. PhD thesis. Chalmers University of Technology, 2002.
- [31] Peter Grassl. "Plasticity and Damage Mechanics for Modeling Concrete Failure". Publication 04:3, 159 pp. PhD thesis. Chalmers University of Technology, 2004.
- [32] Joosef Leppänen. "Concrete Structures Subjected to Fragment Impacts—Dynamic Behaviour and Material Modelling". No. 31, Publication 04:4, 125 pp. PhD thesis. Chalmers University of Technology, 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. Chalmers University of Technology, 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. Chalmers University of Technology, 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. Chalmers University of Technology, 2008.
- [36] Peter Harryson. "Industrial Bridge Engineering—Structural developments for more efficient bridge construction". Ny serie nr 2810. PhD thesis. Chalmers University of Technology, 2008.
- [37] Rasmus Rempling. "Modelling of Concrete Subjected to Cyclic Loading". Ny serie nr 2927, 169 pp. PhD thesis. Chalmers University of Technology, 2009.
- [38] Kamyab Zandi Hanjari. "Structural Behaviour of Deteriorated Concrete Structures". Ny serie nr 3142, 64 pp. PhD thesis. Chalmers University of Technology, 2010.
- [39] Anette Jansson. "Effects of Steel Fibres on Cracking in Reinforced Concrete". Ny serie nr 3233, 50 pp. PhD thesis. Chalmers University of Technology, 2011.
- [40] Hendrik Schlune. "Safety Evaluation of Concrete Structures with Nonlinear Analysis". Ny serie nr 3232, 45 pp. PhD thesis. Chalmers University of Technology, 2011.
- [41] Ulrika Nyström. "Modelling of Concrete Structures Subjected to Blast and Fragment Loading". New Series No 3486, 83 pp. + papers. PhD thesis. Chalmers University of Technology, 2013.
- [42] Filip Nilenius. "Moisture and Chloride Transport in Concrete: Mesoscale Modelling and Computational Homogenization". New Series No 3658, 29 pp. + papers. PhD thesis. Chalmers University of Technology, 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. Chalmers University of Technology, 2014.
- [44] Natalie Williams Portal. "Usability of Textile Reinforced Concrete: Structural Performance, Durability and Sustainability". New Series No 3914, 115 pp. + papers. PhD thesis. Chalmers University of Technology, 2015.
- [45] Mohammad Tahershamsi. "Structural Effects of Reinforcement Corrosion in Concrete Structures". New Series No 4108, 40 pp. + papers. PhD thesis. Chalmers University of Technology, 2016.
- [46] Jiangpeng Shu. "Structural Analysis Methods for Assessment of Reinforced Concrete Slabs". New Series No 4265, 54 pp. + papers. PhD thesis. Chalmers University of Technology, 2017.
- [47] Carlos Gil Berrocal. "Corrosion of Steel Bars in Fibre Reinforced Concrete: Corrosion mechanisms and structural performance". New Series No 4289, 69 pp. + papers. PhD thesis. Chalmers University of Technology, 2017.

- [48] Jonas Ekström. "Blast and Impact Loaded Concrete Structures: Numerical and Experimental Methodologies for Reinforced Plain and Fibre Concrete Structures". New Series No 4325, 30 pp. + papers. PhD thesis. Chalmers University of Technology, 2017.

## Licentiate Theses

- [1] Ralejs Tepfers. "Studium av förankrings och sprickproblem hos balkar armerade med Ks 60". No. 626, 99 pp. Licentiate Thesis (part I). Chalmers University of Technology, 1962.
- [2] Ralejs Tepfers. "Problem vid avkortning av dragarmering: Föredrag vid Smedjebackens Valsverks Byggdagar". No. 639, 24 pp. Licentiate Thesis (part II). Chalmers University of Technology, 1963.
- [3] Ralejs Tepfers. "Försök med hålbalkar". No. 66:1. Licentiate Thesis (part III). Chalmers University of Technology, 1966.
- [4] Kent Gustavsson. "Fogar i samverkande betongkonstruktioner med tunn pågjutning". No. 938, Publication 81:7, 111 pp. Licentiate Thesis. Chalmers University of Technology, 1981.
- [5] Krister Cederwall and Thomas Pettersson. "Spännarmerad betong—Tidsberoende spännförluster". No. 1053, Publication 85:5, 36 pp. Licentiate Thesis. Chalmers University of Technology, 1985.
- [6] Thomas Pettersson. "Tvärkraftskapacitet hos förspända balkar i snitt med stort moment". No. 1004, Publication 86:1, 45 pp. Licentiate Thesis. Chalmers University of Technology, 1986.
- [7] Steve Svensson. "Skivverkan i elementbjälklag. Skjuvkraftsoverföring i uppspruckna fogar". No. 1026, Publication 88:1, 59 pp. Licentiate Thesis. Chalmers University of Technology, 1988.
- [8] Elzbieta Saran. "Shear Capacity of Composite Prestressed Concrete Beams". No. 1081, Publication 89:1, 127 pp. Licentiate Thesis. Chalmers University of Technology, 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. Chalmers University of Technology, 1989.
- [10] Marianne Grauers. "Shear Capacity of Three-Layered Composite Concrete Slabs". No. 1065, Publication 89:3, 27 pp. + Appendix. Licentiate Thesis. Chalmers University of Technology, 1989.

- [11] Johan Hedin. "Långtidsegenskaper hos samverkanskonstruktioner av stål och betong". No. 1079, Publication 90:2, 53 pp. (In Swedish). Licentiate Thesis. Chalmers University of Technology, 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. Chalmers University of Technology, 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. Chalmers University of Technology, 1993.
- [14] Christina Claeson. "Behavior of Reinforced High Strength Concrete Columns". No. 1105, Publication 95:1, 54 pp. Licentiate Thesis. Chalmers University of Technology, 1995.
- [15] Karin Lundgren. "Slender Precast Systems with Load-Bearing Facades". No. 1098, Publication 95:2, 60 pp. Licentiate Thesis. Chalmers University of Technology, 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. Chalmers University of Technology, 1996.
- [17] Jonas Magnusson. "Bond and Anchorage of Deformed Bars in High-Strength Concrete". No. 1113, Publication 97:1, 234 pp. Licentiate Thesis. Chalmers University of Technology, 1997.
- [18] Rikard Gustavson. "Static and Dynamic Finite Element Analyses of Concrete Sleepers". No. 41, Publication 00:3, 58 pp. Licentiate Thesis. Chalmers University of Technology, 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. Chalmers University of Technology, 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. Chalmers University of Technology, 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. Chalmers University of Technology, 2002.
- [22] Ingemar Löfgren. "In-situ concrete building systems—developments for industrial constructions". No. 35, Publication 02:2, 125 pp. Licentiate Thesis. Chalmers University of Technology, 2002.

- [23] Joosef Leppänen. "Dynamic Behaviour of Concrete Structures subjected to Blast and Fragment Impacts". No. 31, Publication 02:4, 78 pp. Licentiate Thesis. Chalmers University of Technology, 2002.
- [24] Peter Grassl. "Constitutive Modelling of Concrete in Compression". No. 37, Publication 02:4, 95 pp. Licentiate Thesis. Chalmers University of Technology, 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. Chalmers University of Technology, 2003.
- [26] Helen Broo. "Shear and Torsion Interaction in Prestressed Hollow Core Slabs". Publication 05:2, 83 pp. Licentiate Thesis. Chalmers University of Technology, 2005.
- [27] Rasmus Rempling. "Constitutive Modelling of Concrete Subjected to Tensile Monotonic and Cyclic Loading". Publication 06:4, 59 pp. Licentiate Thesis. Chalmers University of Technology, 2006.
- [28] Kamyab Zandi Hanjari. "Load-Carrying Capacity of Damaged Concrete Structures". Publication 08:6, 108 pp. Licentiate Thesis. Chalmers University of Technology, 2008.
- [29] Anette Jansson. "Fibres in Reinforced Concrete Structures—analysis, experiments and design". Publication 08:3, 84 pp. Licentiate Thesis. Chalmers University of Technology, 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. Chalmers University of Technology, 2008.
- [31] Hendrik Schlune. "Improved Bridge Evaluation. Finite Element Model Updating and Simplified non-linear Analysis". Publication 09:01, 20 pp. + papers. Licentiate Thesis. Chalmers University of Technology, 2009.
- [32] Filip Nilenius. "On Mesoscale Modelling of Coupled Chloride-Moisture Transport in Concrete". Publication 11:3, 10 pp. + papers. Licentiate Thesis. Chalmers University of Technology, 2011.
- [33] David Fall. "Reinforcement in Tailor-made Concrete Structures". Publication 11:5, 25 pp. + papers. Licentiate Thesis. Chalmers University of Technology, 2011.
- [34] Natalie Williams Portal. "Sustainability and Flexural Behaviour of Textile Reinforced Concrete". Publication 2013:9, 53 pp. + papers. Licentiate Thesis. Chalmers University of Technology, 2013.
- [35] Mohammad Tahershamsi. "Anchorage of Corroded Reinforcement in Existing Concrete Structures: Experimental Study". Publication 13:10, 19 pp. + papers. Licentiate Thesis. Chalmers University of Technology, 2013.

- [36] Carlos Gil Berrocal. "Chloride Induced Corrosion of Steel Bars in Fibre Reinforced Concrete". Publication 15:01, 75 pp. + papers. Licentiate Thesis. Chalmers University of Technology, 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. Chalmers University of Technology, 2015.
- [38] Jonas Ekström. "Concrete Structures Subjected to Blast Loading: Fracture due to dynamic response". Publication 2015:04, 20 pp. + papers. Licentiate Thesis. Chalmers University of Technology, 2015.
- [39] Mattias Blomfors. "Reliable Assessments of Concrete Structures with Corroded Reinforcement: An Engineering Approach". Publication 2017:06, 46 pp. + papers. Licentiate Thesis. Chalmers University of Technology, 2017.
- [40] Daniel Ekström. "Integrated design and construction for bridges: Key aspects and benefits". 22 pp. + papers. Licentiate Thesis. Chalmers University of Technology, 2017.
- [41] Adam Sciegaj. "Multiscale Modelling of Reinforced Concrete". 18 pp. + papers. Licentiate Thesis. Chalmers University of Technology, 2018.