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Autore	Beckh Matthias <1974->
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Sommario/riassunto Dr. Ing. Matthias Beckh was a research assistant in the Department of Structural Engineering at the Technical University of Munich and currently works for Buro Happold in Munich and Berlin		""Stress and stability failures""""Linear structural behaviour and stability analysis""; ""Non-linear structural behaviour and stability analysis""; ""Imperfections""; ""Parametric studies on differently meshed hyperboloids""; ""Intermediate rings at the intersection points (variant 1)""; ""Construction used by Vladimir G. Shukhov (variant 2)""; ""Reticulated shell (variant 3)""; ""Principles of the parametric studies""; ""Finite Element Analysis"; ""Modelling and member arrangement""; ""Load assumptions""; ""Choice of imperfections in determining the load capacity"" ""Calculation of load capacity""""Relationships between form and structural behaviour""; ""Comparison of circular cylindrical shells and hyperboloids of rotation"; ""Mesh variant 1: Intermediate rings at intersection points""; ""Influence of the rotation angle""; ""Mesh variant 2: Construction used by Vladimir G. Shukhov"; ""Influence of the rotation angle""; ""Influence of the rotation angle with flexurally stiff intermediate ring connections""; ""Influence of sizes of radii""; ""Influence of the number of vertical member pairs n""; ""Influence of the number of intermediate rings"" ""Influence of the stiffness of the intermediate rings""""Influence of multilayer construction"; ""Influence of an additional horizontal load""; ""Summary of the results from variant 2"; ""Mesh variant 3: Discretisation as reticulated shells"; "Influence of the number of vertical members on the load capacity:""; ""Influence of the node stiffness on the load capacity"; ""Summary and comparison of the results"; ""Structural analysis of selected towers built by Vladimir G. Shukhov"; ""Water tower for the All-Russia Exhibition in Nizhny Novgorod (1896)"; ""Water tower in Mykolaiv (1907)""
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