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""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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#### 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.

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