



The northernmost University of Technology in Scandinavia
World-class research and education

Innovative solutions for tubular tower for wind turbines, 2006-2013

Steel Structure Research Group

Main objectives

- Improve fatigue resistance of the connection
- Optimize use of steel in towers and concrete in foundations
- Minimize maintenance costs
- Remove transportation limits

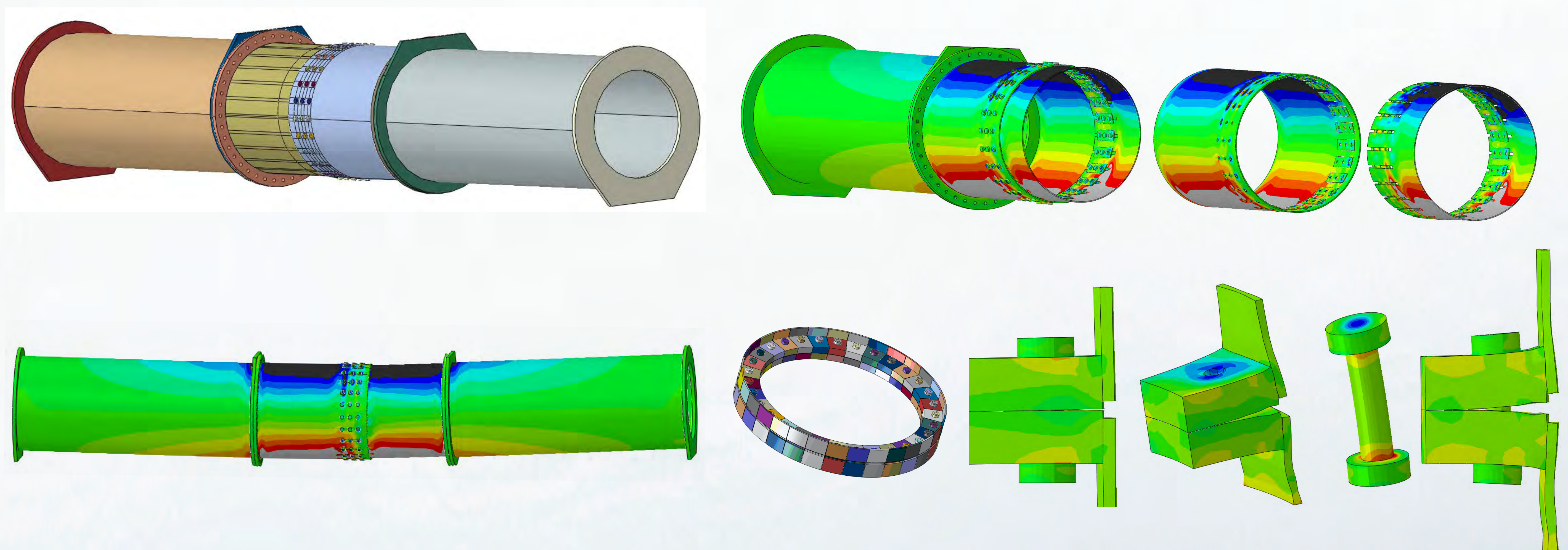
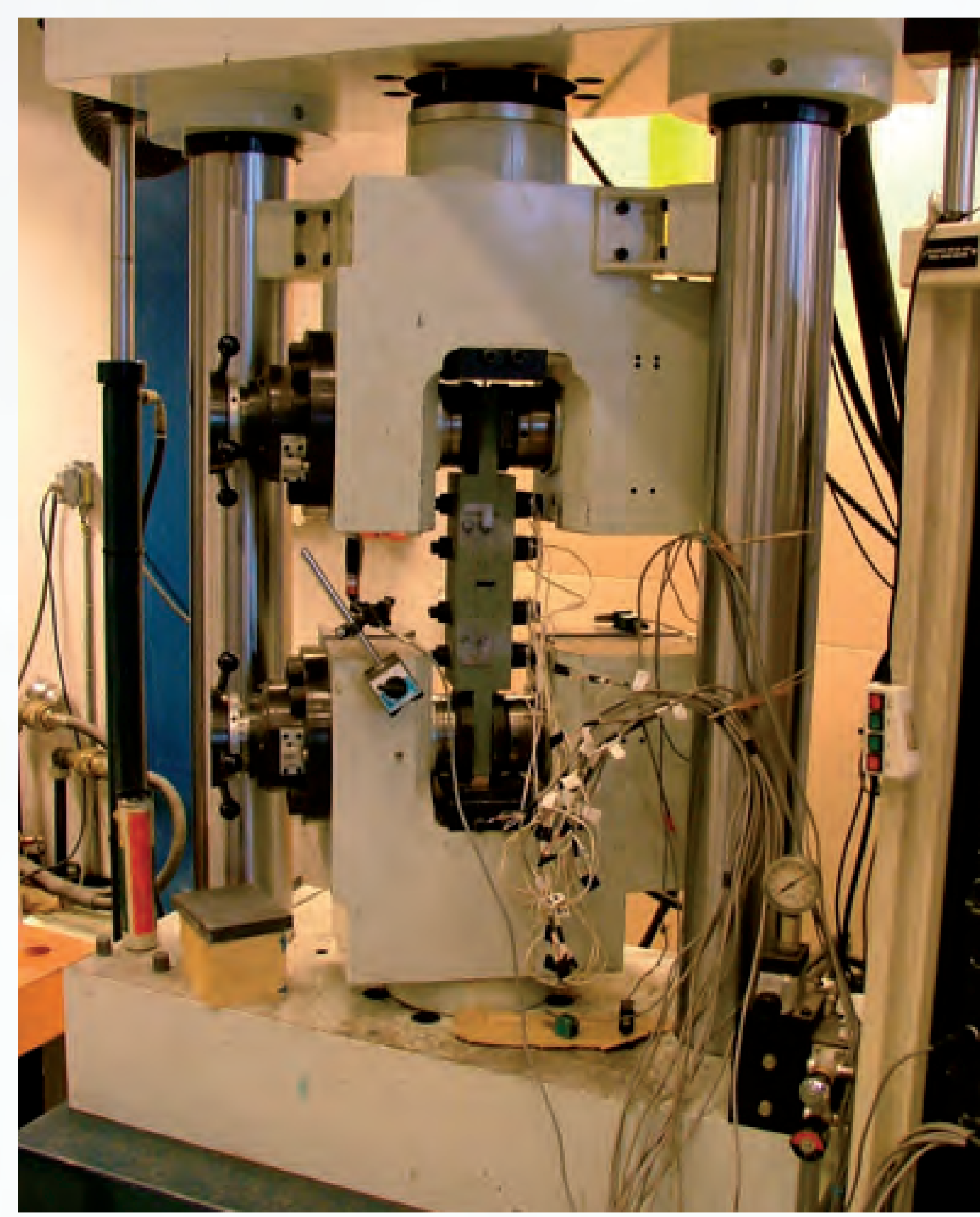
Academic partners

- RWTH, Aachen University
- FCTUC, University of Coimbra
- AUTH, University of Thessaloniki
- GLWind, Hamburg



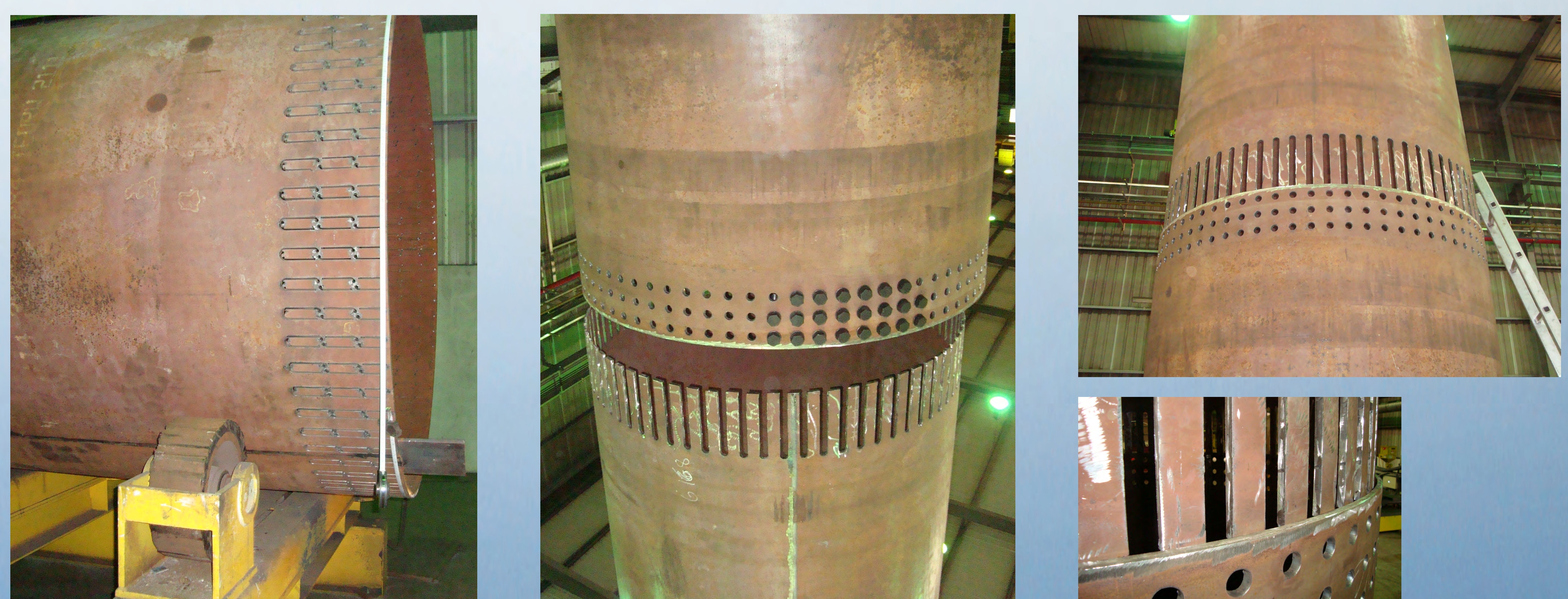
Experiments and FEA

Small-scale tests, down-scale tests, advanced analysis, recommendations



Feasibility test and piling

Production of the connection prototype: Ruukki (Fi) and Martifer (Pt)



HISTWIN group

