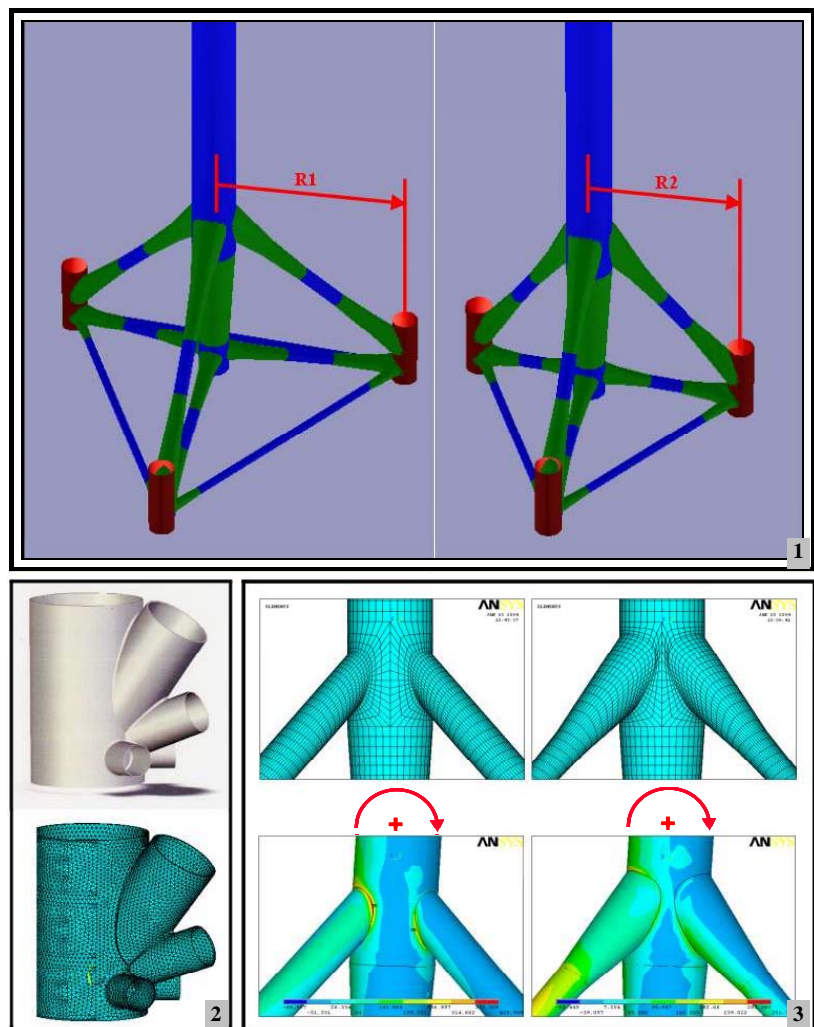


References

- Project:** Development and Optimisation of Tripod Support Structures
- Period:** 2003 - 2004
- Client:** Fraunhofer Institut Fertigungstechnik Materialforschung (IFAM), Bremen
Technologiekontor Bremerhaven (TKB)
- Short Description:** Development and optimisation of a cost efficient Tripod support structure for offshore wind energy facilities in the range 3 to 5 MW with particular consideration of weight, materials, steel quality, available manufacturing technologies, manufacturing phases and costs:
- Processing of environmental data for the design and metrics
 - Preliminary design and basic optimisation of a Tripod support structure of the 3 MW-class with varying, foot radius, the elevation of the central node and of brace and pile-sleeve-geometry.
- Detailed optimisation of node areas for Tripod support structures of 3 to 5 MW-class with application of Finite Element Method (FEM) for welded and cast nodes.



1) Variation of foot radius, 2) FEM-Analysis of Pile-Sleeve-Node,
3) FEM-Analysis of welded central node