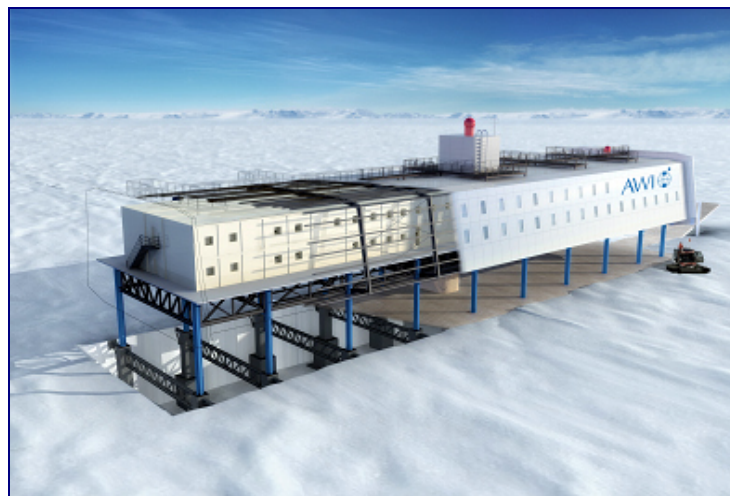


References

- Project:** New Antarctic Research Station Neumayer III
- General Planning-
- Period:** 2005 - 2006
- Client:** AWI Alfred-Wegener-Institut für Polar- und Meeresforschung,
Bremerhaven
- Short Description:** General planning (draft design, preparation of tender documents and participation in award of contract) for the new construction of the research station as a jackable construction on the snow of the Ekström Ice Shelf west of the Atka Bay/Antarctic as a self-sustaining summer- and winter-station. This station replaces the German Research Station Neumayer II.



Characteristics of the station:

- Foundation on the shelf-ice on jackable columns
- Covered garage (trench with a horizontal roof on ground level - 96 x 26 x 7,5 m)
- Platform (88 x 24 m) on 20 columns which support the two-storey station building (containing approx. 2,000 m² heated useable surface) within an exterior jacket
 - highly proof facade system from sandwich elements
 - station made up of containers in vapour-dense insulation canning
- hydraulic jacking construction (integrated into columns) which lift the station by approx. 0.8 m per year to compensate for the annual snow accumulation and ice deformation
- extreme weather conditions with temperatures down to -50 °C and wind velocities up to 45 m/s
- Planning and coordination under difficult environmental requirements and foundation conditions.

Further services: analysis of wind induced vibrations, supervision of wind tunnel tests, analysis of time-dependent loading/settling behaviour, development of a fire protection concept.