

# Tim Habekost

## Curriculum Vitae

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### Personal Details

Year of birth 1980  
Nationality German

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### Professional Experience

- 2019 – today **THEC Offshore GmbH**, Hamburg, Germany, Naval Architect, Founder.
- 2018 – today **DEWI-OCC Offshore and Certification Centre GmbH (a UL company)**, Hamburg, Germany, Naval Architect.
- Substation platform and floating offshore wind certification.
- 2017 – today **THEC UG (haftungsbeschränkt)**, Hamburg, Germany, Naval Architect, Founder.
- 2011 – 2017 **Overdick GmbH & Co.KG**, Hamburg, Germany, Naval Architect.
- Head of department hydromechanics,
  - Project management, project engineering,
  - Hydromechanic analyses, structural analyses.
- 2008 – 2010 **Overdick GmbH & Co.KG**, Hamburg, Germany, Trainee.

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### Projects (extract)

- 2021 Power barge hydrodynamic analyses
- Determination of ultimate and fatigue loads during transport of the power barge,
  - Quayside mooring design and analysis, assessment of the motion behaviour.
- 2021 Floating offshore wind turbine quayside mooring analysis
- Project engineer,
  - Quayside mooring analysis,
  - Determination of limiting environmental conditions,
  - Calculation of mooring line loads and floater excursions.
- 2021 Deck lifting analysis
- Project manager,
  - Calculation of rigging loads and deck structural strength verification (API code check) during lifting operations.

- 2021 Floating jacket upending
  - Project manager,
  - Buoyancy aid design and stability analysis for floating jacket upending
  - Calculation of rigging loads and jacket structural strength verification (API code check) during the upending process.
  
- 2020 – 2021 Wreck removal project
  - Project engineer,
  - Mooring analyses,
  - Definition of environmental conditions limiting the removal operations,
  - Lifting analyses,
  - Multi-body floating condition assessment
  
- 2020 – today Floating offshore wind turbine
  - Project engineer,
  - Intact and damaged stability,
  - Hydrodynamic mooring analysis,
  - Determination of structural loads,
  - Transport and installation analyses, simulation of ballasting process.
  
- 2020 1:10 model scale floating offshore wind turbine simulations
  - Project engineer,
  - Hydrostatic stability and hydrodynamic mooring analysis of a scaled floating offshore wind turbine of semi-submersible type.
  
- 2019 Multi-body marine analysis for the wave energy converter prototype of NEMOS
  - Project engineer,
  - Motion analysis, mooring and connection load analysis for a single point mooring system.
  
- 2019 Statistical estimation of weather windows
  - Project manager,
  - Monte-Carlo simulations and weather down-time analysis based on given time histories.
  
- 2019 Component structural verification as part of a type certification
  - Project engineer,
  - Structural verification, hub, pitch cylinder, rear frame, bearing housing.
  
- 2018 Project certification, offshore wind
  - Project engineer,
  - Verification of transport and installation engineering for installation cycles. Review of structural design documentation for vessel and seafastening integrity. Review of lifting plans and rigging gear. Load out surveillance of tower, nacelle and blades.

- 2018 Lifting analysis for substation repair operations
  - Project engineer,
  - Calculation of DAFs for a lift through splash zone.
  
- 2018 Load transfer simulation for a temporary fixation
  - Project manager, project engineer,
  - Simulation of a contact problem between structural members.
  
- 2018 Design of test stands carrying the RNA of an Enercon E-82, REpower MD70 and NEG Micon NM 72
  - Project manager, project engineer,
  - Design and structural verification for a wind turbine test stand.
  
- 2018 Updating vessel documentation for a change from Dutch to German class
  - Project manager,
  - Review of existing documentation, gap analysis, coordination with German flag, classification society, subcontractors and suppliers.
  
- 2017 Jack-up conversion for platform decommissioning in the North Sea
  - Project engineer,
  - Study on floater modifications and carrying capacity as removal floater, assessment of classification requirements and hydrostatic stability.
  
- 2017 Second design loop for a preliminary study of a RoRo ship
  - Project manager,
  - Update of general arrangement plan, weight control and weight estimation, hydrostatic stability and capacity calculation.
  
- 2017 Cable on-bottom stability analysis
  - Project manager,
  - Dynamic analysis for a cable on-bottom stability during wet storage in a cable lay operation.
  
- 2016 – 2017 Seafastening design for monopile and transition piece transports
  - Position: Deputy project manager,
  - Load calculations, structural finite element analysis of global cargo hold model. Buckling analysis, review and reporting.
  
- 2016 Jacket removal salvage engineering
  - Deputy project manager,
  - Multi-body dynamic analyses for item recovery (lifting analysis), modeling of heave compensation system characteristics, transport- and mooring analyses, deck barge layout optimization.
  
- 2016 T&I engineering for two gas platforms in the baltic sea
  - Project engineer,
  - Hydrostatics, motion analyses, mooring- and lifting analyses, multi-body dynamics.

- 2016 – 2017 Draft survey for a construction pontoon
  - Project manager,
  - Organization and execution of a draft survey and its certification, stability booklet update.
  
- 2016 Floating wind turbine foundation
  - Project engineer,
  - Optimization of floater and buoy geometry with regard to construction, hydrostatics and motion behavior.
  
- 2016 Mooring analysis
  - Project manager,
  - Various mooring analyses for shallow water and spooling operations.
  
- 2016 Quay-side mooring analyses
  - Project engineer,
  - Various quay side mooring analyses.
  
- 2016 Dolwin gamma substation, HVDC platform, North Sea design project
  - Project engineer,
  - Structural finite element analysis for jacket installation equipment, non-linear FEA and buckling check.
  
- 2015 Gap analysis for DP1 to DP2 conversion
  - Deputy project manager,
  - Analysis, comparison, reporting.
  
- 2014 – 2015 Gas wellhead platform installation engineering review and on-site consultancy
  - Project management and engineering,
  - On-site assignment abroad in Houston, Seattle and Nikiski (Alaska) in 8 months duration. On-site engineering, client representative. Marine analyses, engineering review, offshore installation procedure review, directional drilling and pipe-lay operations, on-site coordination.
  
- 2014 Mooring analysis for cable lay operations
  - Project manager,
  - Various mooring analyses.
  
- 2014 FPSO mooring and offloading study
  - Project engineer,
  - Mooring analyses, multi-body offloading analysis, assignment abroad in Kuala Lumpur, Malaysia.
  
- 2014 Floating water injection feasibility study
  - Project engineer,
  - Mooring and motion analyses, assignment abroad in Kuala Lumpur, Malaysia.

- 2014 Dolwin gamma substation, HVDC platform, North Sea design project
  - Project engineer,
  - Hydrostatic and dynamic transport analysis, T&I engineering.
  
- 2014 Jacket transport in crane barge hooks / connector force assessment
  - Project engineer,
  - Dynamic motion and body force interaction analysis using 3-body system. Static jacket lowering and tilting angle assessment.
  
- 2012 – 2014 Costa Concordia wreck removal project
  - Project engineer; senior on-site staff engineer based on Giglio, Italy,
  - Various transport, installation and lifting analyses, marine analyses for par-buckling and refloating of the wreck, monitoring and operations assistance for large underwater installations; parbuckling, refloating and final transport of the wreck to Genova.
  
- 2013 Jacket transport in crane barge hooks
  - Project engineer,
  - Hydrostatic analysis, dynamic transportation analysis with numerical 2-body system.
  
- 2012 – 2013 Series of bridge section transport analyses
  - Project manager,
  - Hydrostatics and dynamic transportation analyses.
  
- 2012 ISOPE 2012 conference in Rhodes, Greece
  - Subject: Floating Body Dynamics,
  - Paper Title: Experimental and numerical seakeeping analysis of a mobile offshore application barge (MOAB®).
  
- 2012 North Sea cable lay project
  - Project manager,
  - Hydrostatic, motion analysis, mooring analysis, cable lay analysis.
  
- 2012 Sylwin alpha substation, HVDC platform, North Sea design project
  - Project engineer,
  - Hydrostatic and dynamic transport analysis.
  
- 2012 Platform concept study
  - Project engineer,
  - Marine analysis and foundation assessment.
  
- 2012 Jack-up barge transport & installation project
  - Project engineer,
  - Hydrostatics, transportation and mooring analyses.

- 2012 Jack-up vessel conversion project.
  - Project engineer,
  - Hydrostatics, dynamic transportation analysis.
  
- 2011 LNG regasification offshore terminal transport & installation project
  - Project engineer,
  - Hydrostatics, transportation and mooring analyses, assignment abroad in Kuala Lumpur, Malaysia.
  
- 2011 Borwin beta substation, HVDC platform, North Sea design project
  - Project engineer,
  - Hydrostatic and dynamic transport analysis.
  
- 2011 Helwin alpha substation, HVDC platform, North Sea design project
  - Project engineer,
  - Hydrostatic and dynamic transport analysis.
  
- 2011 Platform concept study
  - Project engineer,
  - Marine analysis and foundation assessment.
  
- 2011 MOAB® North Sea substation transport & installation project
  - Project engineer,
  - Hydrostatic and dynamic transportation analysis.
  
- 2011 MOAB® middle east oil/gas production platform design project
  - Project engineer,
  - Hydrostatic and dynamic transport analysis.
  
- 2011 Heavy lift Jack-up vessel design project
  - Project engineer,
  - Hydrostatic and dynamic transport analysis, leg impact assessments.

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## Education

- 2003 – 2007 **Hamburg University of Technology "TU Hamburg-Harburg"**, Hamburg, Germany, Naval architecture.
- 2007 – 2008 **Norwegian University of Science and Technology "NTNU"**, Trondheim, Norway, Naval architecture.
- 2008 – 2010 **Hamburg University of Technology "TU Hamburg-Harburg"**, Hamburg, Germany, Naval architecture.

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## Skills

- Broad knowledge in the field of hydromechanics,
- Determination of motion characteristics and limits of application for ships and other floating objects by use of potential theory,
- Analysis of offshore operations, i.e. mooring and anchoring, crane operations, float-over installations and cable-lay analyses,
- Intact and damage stability assessments,
- Knowledge of relevant rules and regulations for modeling and analysis of offshore operations,
- Preparation of analysis reports and vessel documentation such as stability booklets,
- Preparation of transport and installation procedures,
- Structural analysis (linear and non-linear FEA, buckling).

## Software

Marine operations simulation	MOSES, OrcaFlex
Diffraction codes	MOSES
Hydrostatics	MOSES, DELFTShip, General HydroStatics (GHS), E4
Finite Element Analysis	Strand7, SOLIDWORKS Simulation, ANSYS Workbench, nCode
Office-application	Microsoft Office
CAD and 3D modelling	AutoCAD, SOLIDWORKS, Rhinoceros

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## Languages

German	Native speaker
English	Fluent

Hamburg, July 18, 2022  
Tim Habekost