Leibniz University Hannover
Institute for Steel Construction

About this organisation

The Institute for Steel Construction does research and teaching in classical topics of steel construction and bridge construction. But also special topics such as the behavior of onshore and offshore support structures of wind turbines and their connections (welds, bolts, grouted joints) are part of the research.

The expansion of offshore wind turbines will make a major contribution to the implementation of climate policy targets. However, for the installation of offshore wind turbines, very large, heavy steel structures are used as support structures. The institute investigates connections such as welds, bolts, grouted joints and suction buckets and optimizes their design and verification with regard to load-bearing behavior and fatigue resistance.

Appelstr. 9A
3016 Hannover
Lower Saxony
Germany
www.stahlbau.uni-hannover.de/en/

Organisation type
University or higher education institution

Sectors
Others:

Employees
10 up to 49

Turnover
n/a

Funding

Main areas covered	Offshore-Structures, Additive Manufacturing, Quality Assessment
Infrastructure	Testing laboratory, Clamping field, Universal testing machines
Certifications	
Keywords	Offshore-Structures, Additive Manufacturing, Connections
Memberships	

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Overview of lightweighting expertise

	Research	Development	Manufacturing & Supply
Offer			
Products			
Services & consulting Training, Consulting, Testing and trials, Standardisation, Validation, Simulation	✓		
Field of technology			
Design & layout			
Functional integration			
Measuring and testing technology			
Modelling and simulation			
Plant construction & automation			
Recycling technologies			
Manufacturing process			
Additive manufacturing			
Coating (surface engineering)			
Fibre composite technology			
Forming			
Joining			
Material property alteration			
Primary forming			
Processing and separating			
Textile technology			

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Overview of lightweighting expertise

	Research	Development	Manufacturing & Supply
Material			
Biogenic materials			
Cellular materials (foam materials)			
Composites			
Fibres			
Functional materials			
Metals			
Plastics			
Structural ceramics			
(Technical) textiles			

Contacts

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