



Fasteners for safety critical applications

Wind Energy Fasteners & Studding Assembly For Direct Tension

Supplying WTGs for a greener future



Brand Promises & Mission Statement:

Dependable.
Adaptable.
Sustainable.

The Cooper Turner Beck Group's mission is to lead the industry in delivering innovative, safety-critical fastening solutions that drive the globe towards a more resilient and more sustainable future.

Our dedication to quality, sustainability, and customer satisfaction underpins our end-to-end comprehensive service.

From development to manufacture and distribution, we work together to fasten a secure and sustainable future for generations to come.

About Us

We have serviced the wind turbine market for more than 25 years, long before it became an integral part of the global energy supply.

The manufacture and provision of high quality, safety critical fasteners with the ability to operate in some of the most hostile environments in the world has gained us an unrivalled reputation in the wind turbine marketplace.

Product Ranges

We currently service all aspects of the wind turbine market, providing a range of fasteners, both standard and customer bespoke for:

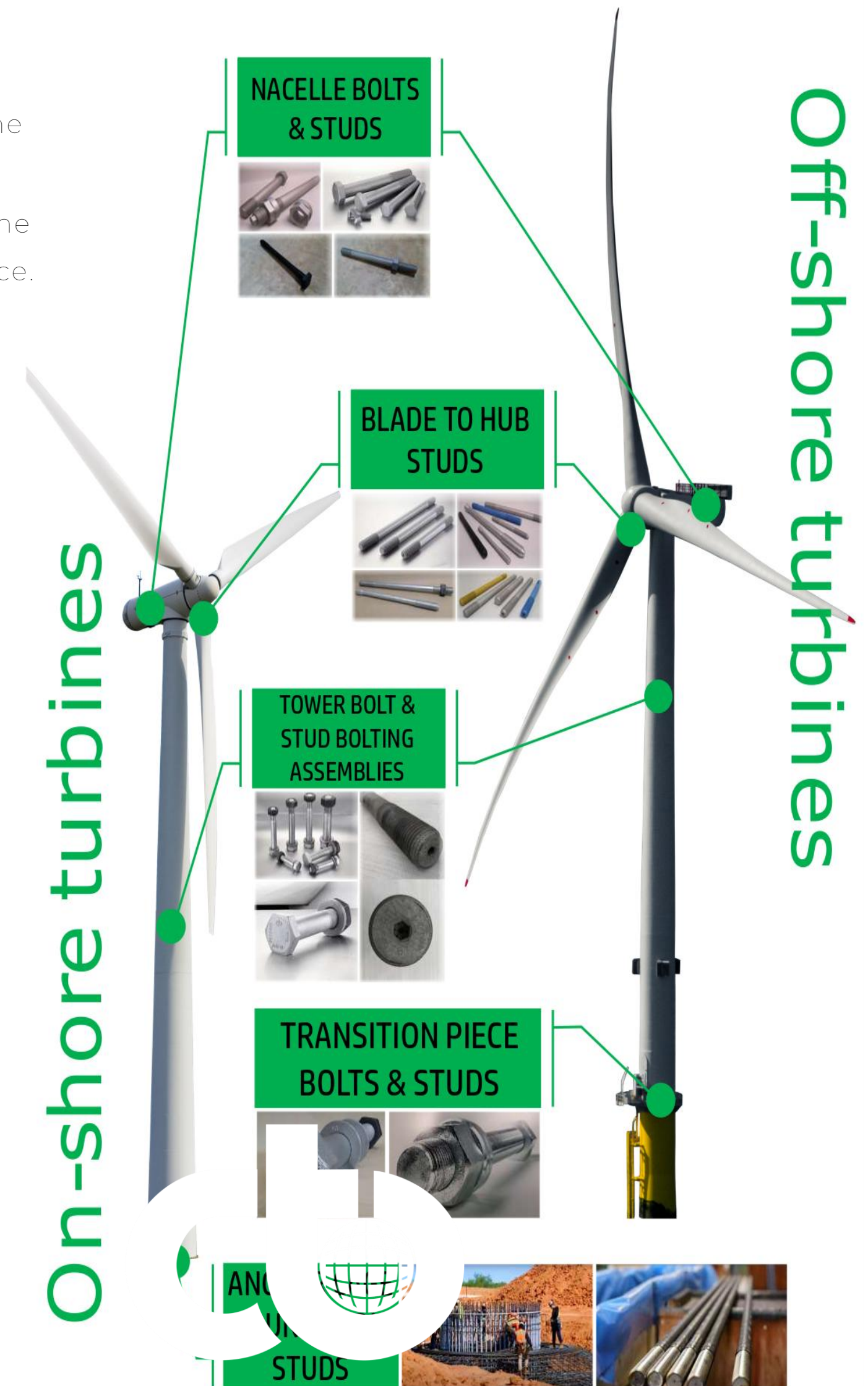
- Foundation
- Tower Construction
- Blade to Hub
- Nacelles
- Off-shore Transition Pieces

Our extensive range allows wind turbine manufacturers to 'single source' all their fastener requirements with all the advantages that this brings.

Our Market Advantages

Established brand for safety critical applications Long-standing expertise within the wind turbine market

- Wind industry specific technical knowledge
- Extensive product range
- Superior testing facilities
- TUV Nord certification
- ISO 9001, ISO 14001 and ISO 45001
- Proactive product development
- Cost competitive
- Business and production facilities ideally suited to the wind turbine marketplace





Wind Turbine Foundations

We manufacture a comprehensive range of anchor fasteners designed specifically for wind turbine towers.

Key Specifications:

Material:

- High tensile steel

Diameter Range:

- Metric: M24 (1") to M64 (2.5")
- Imperial: 0.75" to 2.50"

Strength Classes:

- Metric: Up to Grade 10.9 & 150
- Imperial: ASTM-A615 Grade 75, 90, 100 & ASTM-A722 Grade 150

Length Capabilities:

- Up to 5m (European manufacturing)
- Up to 7m (Asian manufacturing)
- Up to 25' (North American manufacturing)





Wind Turbine Foundations

Standards & Compliance:

- Manufactured to ISO and ASTM standards to meet global market requirements
- Full test certification provided with every batch

Corrosion Protection Options:

- Galvanizing &
- Sherardizing
- Zinc Flake Coating (providing up to 1000 hours corrosion resistance)

Additional Features:

- Studs can be fitted with heat shrink or rigid plastic debonding sleeves for uniform stress distribution after casting into concrete foundations
- Tensioning equipment and loading information available upon request

Custom fabricated one-piece cradles available to customer specifications





Tower Bolt and Stud Assemblies

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Blade-to-Hub Fastening Solutions

We manufacture a high-performance range of studs specifically designed for blade-to-hub connections.

Product Capabilities:

- Custom & Standard Studs:
- Fully machined, customer-specific designs
- Manufactured using state-of-the-art CNC machinery

Size Range:

- Diameters from M20 to M64

Strength Classes:

- Property class 8.8 and 10.9

Custom specifications available upon request

Corrosion Protection & Friction Control:

In-house Zinc Flake Plating to optimise:

- Coefficient of friction
- Corrosion resistance





Nacelle Bolts and Studs

We manufacture a comprehensive range of Nacelle bolts and studs to meet the demanding requirements of wind turbine applications.

Standard Bolt & Stud Range:

- ISO 4014 Bolts: Diameters from M16 to M72
- ISO 4017 Setscrews: Property classes 8.8, 10.9, and 12.9

Custom manufacturing available to meet special requirements

Custom & Special Fasteners:

- Machined studs designed to customer specifications
- Special studs available in diameters M16 to M100
- Strength classes 8.8 and 10.9

Corrosion Protection & Friction Control:

In-house Zinc Flake Plating for:

- Optimised coefficient of friction
- Enhanced corrosion resistance





Transition Piece Bolts and Studs

We manufacture a specialised range of fasteners for transition pieces (TPs) in offshore wind turbine towers.

Product Capabilities:

- Bolting & Studding Assemblies up to M80
- Manufactured in compliance with DAST Directive 021

HV Bolting Assemblies:

- Nominal Size: M72

Application in accordance with:

- DIN 18800-1
- DIN 18800-7





1

End-to-End Capabilities

Consultancy

Our experts collaborate with clients to define project requirements, ensuring precision in design, material selection, and regulatory compliance.

2

Prototyping

We bring initial designs to life through rapid prototyping, allowing clients to assess performance and confirm specifications before full production.

3

Testing

Our ISO-certified testing ensures every product meets the highest safety and durability standards through comprehensive stress and environmental trials.

4

Manufacturing

Using advanced techniques like CNC machining and automation, we deliver complex, high-quality fasteners tailored to each client's needs.

5

Storage

Our strategically located warehouses support just-in-time delivery, with optimal storage conditions that maintain product integrity.

6

Distribution

With 21 global facilities, our distribution network ensures timely, cost-effective delivery to keep client projects on schedule.



**Cooper
Turner
Beck**

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