



WIND POWER APPLICATIONS



For wind tower or nacelle and blade applications, Huck fasteners hold their own.

Towering height combined with extreme movement of equipment make your choice of fastening systems a critical one in wind turbine applications. With their superior vibration resistance and maintenance-free holding power, Huck fasteners from Howmet Fastening Systems are becoming the go-to solution for wind power joining challenges.

Designed to provide superior joining strength in even the most extreme environments, Huck BobTail®, Howmet's next-generation HuckBolt®, is the fastener of choice for wind power, especially towers and nacelle and blade applications. Offering up to 10 times the fatigue strength of conventional nuts and bolts, BobTail delivers all the strength, installation speed, and vibration resistance that has made Howmet Fastening Systems famous.



Maintenance-free. Guaranteed.

After lengthy and vigorous testing, the Huck BobTail® large diameter HuckBolt® (12mm, 14mm, 16mm, 20mm and 1" diameter) has been certified to be maintenance-free by the DIBt, the world-renowned institute that grants European technical approval for construction products and systems.

For your wind turbine tower operation, that means no re-torquing, re-tightening, or re-checking. Ever. Also, the approval states that BobTail connections require no maintenance regarding preload.

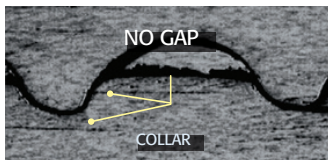
BobTail®. Huck's unique swaged-on fastening system.

The Huck BobTail® Fastening System has been designed to deliver the highest level of performance and reliability in an advanced HuckBolt® design. Benefits include:

- Certified maintenance-free by DIBt
- Quick visual inspection is all that's required
- Unmatched installation speed
- Low overall installed cost
- Superior strength
- Vibration resistance
- Ergonomically designed installation tooling

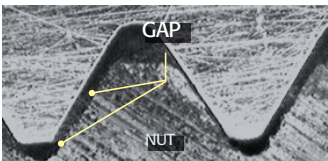


HuckBolt



The swaged collar forms over the lock thread, and eliminates the gap.

Standard Bolt

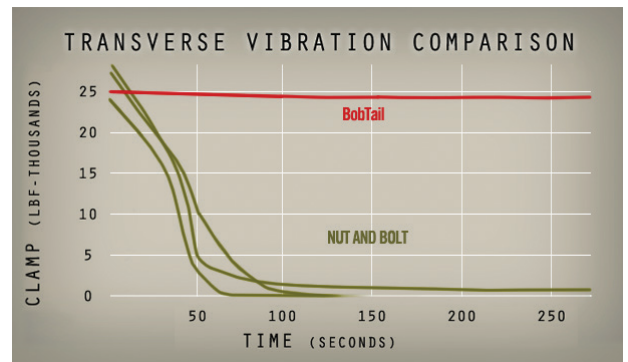


Regular nuts and bolts have gap, which allows for loosening by vibration.

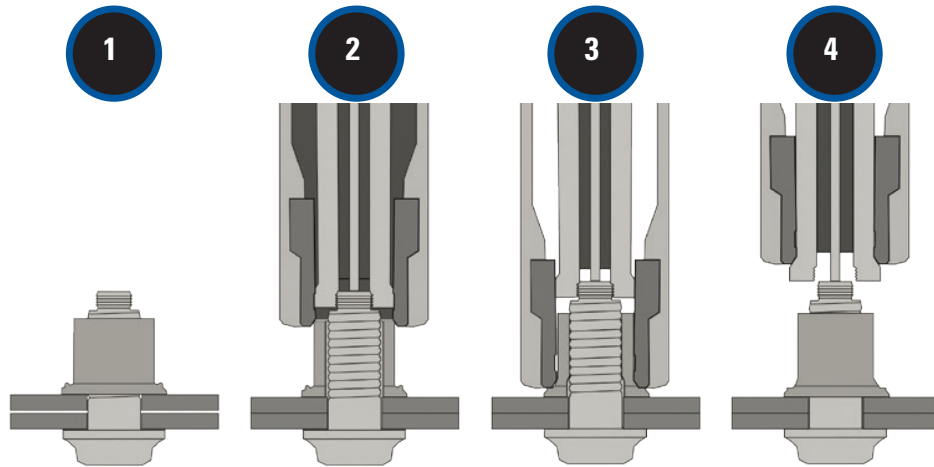
BobTail® is engineered with a shallow thread and large root radius, offering 5 to 10 times the fatigue strength of conventional nuts and bolts. Full metal-to-metal contact between the collar wall and the bolt threads eliminates the gap often found with ordinary nuts and bolts; the kind of gap that can lead to loosening under vibration intensive conditions.

Transverse Vibration Comparison

Once vibration begins, clamp load quickly decays with conventional nuts and bolts, while it holds constant with the BobTail®.



The BobTail Installation Process



1. The pin is inserted into the prepared hole, and the collar is spun onto the pin.
2. The installation tool is applied to annular pull grooves. When the tool is activated, a puller in the nose assembly draws the pin into the tool, causing the swaging anvil to press on the collar, drawing up any sheet gap.
3. At a predetermined force, the anvil begins to swage the collar into the pin's lockgrooves. Continued swaging elongates the collar and pin, developing precise clamp.
4. When swaging of the collar into the pin lockgrooves is complete, the tool ejects the fastener and releases the puller to complete the sequence.

Unmatched speed of installation.

The BobTail® system delivers quick installation cycle time for greater productivity – as fast as 2 seconds.* This quick cycle is due, in part, to the short time required to apply the tool to the pin and initiate the installation cycle. Once the operator engages the trigger, the swage and eject sequence is programmed to complete the cycle without any additional worker input.

*Based on a typical installation of a 5/8" Grade 8 fastener



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Howmet Fastening Systems

Industrial Division Brands



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North America

Waco Operations

PO Box 8117
8001 Imperial Drive
Waco, TX 76714-8117
Tel: +1 800-388-4825
Fax: +1 800-798-4825
sales.waco@howmet.com

Kingston Operations

1 Corporate Drive
Kingston, NY 12401
Tel: +1 800-278-4825
Fax: +1 845-334-7333
sales.kingston@howmet.com

Tracy Operations

1925 North MacArthur Drive
Tracy, CA 95376
Tel: +1 800-826-2884
Fax: +1 800-573-2645
sales.idg@howmet.com



hfsindustrial.com

[YouTube.com/HFSIndustrial](https://www.youtube.com/HFSIndustrial)

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Global

Telford Operations

Unit C, Stafford Park 7
Telford, Shropshire
England TF3 3BQ
Tel: +44 (0) 1952-290011
Fax: +44 (0) 1952-290459
sales.telford@howmet.com

Melbourne Operations

1508 Centre Road
Clayton, Victoria
Australia 3168
Tel: +613-8545-3333
Fax: +613-8545-3390
sales.melbourne@howmet.com

Tokyo Operations (Japan & Korea)

8F CIRCLES Nihonbashi-
Bakurocho Bldg
1-5-12 Nihonbashi-Bakurocho
103-0002 Tokyo Japan
Tel: +81-3-5642-8360
Tel: +81-3-5642-8361 x8365
Fax: +81-3-5644-5772

Suzhou Operations

58 Yinsheng Road,
SIP Suzhou, Jiangsu
215126 China
Tel: +86-512-62863800-8888



The UK's largest Huck Distributor

Star Fasteners (UK) Ltd
Unit 1, 44 Brookhill Road,
Pinxton,
Nottinghamshire
NG16 6RY
United Kingdom.

sales@starfasteners.co.uk | Tel: +44(0)1159324939

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