## **INNOVATION & EXCELLENCE**

#### STAR FASTENERS

## Huck® Fasteners improve manufacturing efficiencies, cost and product performance

The Huck® fastening system exemplifies innovation and excellence in the fastening industry; the diverse product range plays a crucial role in high-demand applications ensuring reliability, durability and efficiency.

### Revolutionising Industrial Fastening

In the ever-evolving landscape of industrial manufacturing, efficiency, reliability, and durability are paramount. The Huck® fastening range is a brand synonymous with innovation in the fastening industry. Renowned for LockBolt® and structural blind fastener technologies, Huck® fasteners provide solutions that enhance manufacturing processes across a multitude of industries where structural integrity is critical and where a strong, permanent, and tamper-resistant joint is required.

#### The Legacy of Huck® Fasteners

With over 80 years of fastener innovation, Huck® fasteners have consistently delivered performanceengineered solutions designed to withstand extreme conditions and demanding applications. This legacy of innovation and reliability has made Huck® fasteners a trusted name in the industry. The Huck® LockBolt, based on Lou Hucks' original design, provides high stability and facilitates lightweight, stronger and more durable structures. Hucks' ever evolving LockBolt and structural blind fastener capabilities continue to solve problems in in a wide variety of applications - no torque, easier evaluation, maintenance free and high corrosion standards are some of the benefits of using the Huck® fastener product range.

#### **Manufacturing Efficiencies**

Speed of Installation: Huck® fasteners are designed for rapid installation. The installation process is often faster compared to traditional fasteners such as bolts and nuts, reducing assembly time.

Consistency and Reliability: The installation process of Huck® fasteners is consistent and reliable, reducing the likelihood of installation errors and rework, which saves time and resources. They benefit from rigorous testing, certifications, and quality management systems, ensuring consistent performance and building confidence in their use.

#### **Cost Reduction**

Reduced Labor Costs: Huck® fastener installation offers significant advantages in terms of efficiency and speed due to the straightforward process and visual inspection methods.

Reduced Material Costs and Weight reduction: Huck® fasteners are designed to create strong, durable joints, often requiring fewer fasteners compared to traditional fastening methods.

Maintenance and Longevity: Huck® fasteners typically have a long service life and require less maintenance, leading to cost savings over the product's lifecycle.

#### **Product Performance**

Strength, Durability and Performance Evaluation: Huck® fasteners provide high joint strength and are resistant to vibration and loosening; they are subjected to various tests to assess their performance under static and dynamic loads. Depending on the

fastener type, tests include tensile, shear, slip-load and creep testing as well as fatigue testing to emulate realworld conditions.

Aesthetic and Structural Integrity: They can be installed without causing significant distortion or damage to thin sheet metal, preserving the material's integrity and appearance.

Corrosion Resistance: Huck® fasteners are perfect for safety-critical applications; they are often subjected to harsh environmental conditions, including moisture, saltwater exposure, and chemical agents. Huck® fasteners are manufactured with coatings that resist corrosion, enhancing the longevity and performance of the final product. The coatings act as a barrier, shielding the fasteners from corrosive elements and preventing the onset of rust and degradation. By effectively sealing the surface of the fasteners, coatings significantly extend their lifespan, reducing maintenance requirements and replacement costs over time. This is particularly crucial in industries such as marine, offshore, and transportation, where corrosion can pose significant safety risks.

#### Advanced LockBolt Technology

Huck® LockBolts are renowned for their strength and vibration resistance. Unlike traditional nuts and bolts, Huck® LockBolts form a permanent joint that resists loosening, even under extreme conditions. This makes them ideal for high-vibration environments.

Huck® LockBolts are installed using direct tension and swaging. The Huck® installation tool grips the pintail of a LockBolt and then pulls to close the gaps in the materials being joined.



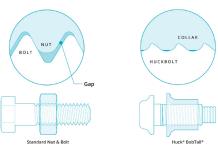
One standout product is the Huck® BobTail®, which has been proven to increase manufacturing efficiency. The BobTail® LockBolt eliminates the need for torque and re-torque procedures, ensuring consistent and reliable installations while significantly reducing labour costs, and unlike traditional LockBolts® no pin-break is required, therefore leaving no corrosion-prone area of bare metal or spent mandrels to be collected.

Huck LockBolts Positive Locking Mechanism: Threaded bolts rely solely on frictional



Huck BobTail® Pin and Collar

forces, in contrast, LockBolts consist of a pin and a collar and are installed using direct tension and swaging - there are no gaps between collar and pin 'threads' - a common source of loosening in conventional nuts and bolts.



Standard Nut and Bolt Frictional Force compared with Huck LockBolt Direct Tension Swaging

Huck® LockBolts High and Consistent Clamp Force: The installation process ensures a precisely controlled clamp force. This high and consistent clamp force minimises any potential movement within the joint, further enhancing the resistance to vibration. Huck® LockBolt brand names include, BobTail® Magna-Grip®, C6L®, C50L®, C120L® and Hucktainer® (also available in encapsulated Hucktainer which can be colour matched to customers' requirements).



'Huck® Structural Blind Fastener Range'

#### **Versatile Blind Fasteners**

When accessibility is an issue, Huck® structural blind fasteners offer a robust solution. Designed for applications where only one side of the joint is accessible, these fasteners provide high-strength, reliable joints often replacing welding. A key benefit is their internal locking mechanism that retains the 'pin' after installation.

Huck® structural blind fastener brand names include, Auto-Bulb®, BOM®, FloorTight®, HuckLok®, Magna-Bulb®, Magna-Lok®, Magna-Tite®, and Penta-Lok™.

Star Fasteners are the UK's largest distributor of the Huck® fastener product range and stock a wide range of sizes, head styles, materials, and plating's; this versatility ensures a wide range of applications and industries are accommodated. As industries evolve, Star Fasteners remains committed to providing advanced fastening solutions that meet the rigorous demands of modern engineering and manufacturing.

#### **Comprehensive Tooling Systems**

Complementing their extensive range of fasteners, Star Fasteners offers a suite of installation tools designed for ease of use and efficiency - offering a versatile range of battery and air-powered options that enhance productivity on the shop floor. These tools ensure that Huck® Fasteners are installed correctly and efficiently, further boosting the overall performance of the fastening system.



Huck® BV13 / BV17 Battery Installation Tool



Huck® Range Force Battery Installation Tool

#### **Commitment to Customer Success**

Star Fasteners prides itself on its customer-centric approach. Through detailed case studies and customer feedback, the company continuously improves its product range to meet realworld challenges. This commitment to excellence ensures that Huck® fasteners remain at the forefront of the fastening industry, providing solutions that drive success for their customers.

In conclusion, Huck® fasteners represent the pinnacle of fastening technology. Their innovative designs, superior performance, and proven customer satisfaction make them an invaluable asset in modern manufacturing. Whether it's enhancing the efficiency of assembly lines, ensuring the reliability of components and safety critical products, or supporting the sustainability of green energy projects, Huck® fasteners deliver solutions that meet and exceed industry demands.



# **AUTHORISED HUCK TOOLING** SALES, HIRE & REPAIR RIVETS, THREADED INSERTS























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