

# SHAKE, RATTLE AND ROLL

## STAR FASTENERS

### Vibration has met its match with Huck® Fasteners

The Huck brand means one thing - reliably strong joints, even in the most extreme environments. They provide consistent, extremely-high shear and tensile strength and are proven to hold their clamp, even with constant vibration.

#### HUCK FASTENERS DO NOT SHAKE LOOSE

Huck fasteners are reliable performers in mobile and permanent structures and are used widely in the quarrying, mining, construction / demolition and recycling industries, as well as the concrete and asphalt production industries.

They are regularly installed in crushing, screening, aggregate washing, scrubbing / rinsing (fine material Screw Washers and wet processing equipment) conveyors (belt, roller, chute, wheel, vibrating), hoppers, feeders, mobile aggregate processing plants and heavy equipment – in fact anywhere where vibration is an issue and structural integrity and reliability are paramount.

Huck technology delivers one-time fastening that is completely maintenance-free, unrelenting in their performance, Huck fasteners are the future for manufacturers of all types of equipment used in demanding high-stress, high-vibration environments.

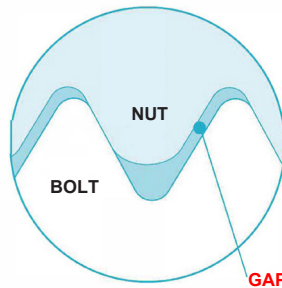
No re-checking. No re-torquing. No re-tightening, saving time, money and labour - reliable fasteners with outstanding performance.

#### HOW DIRECT-TENSION HUCKBOLTS WORK

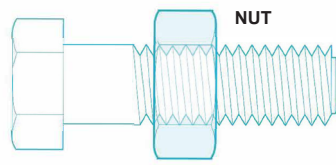
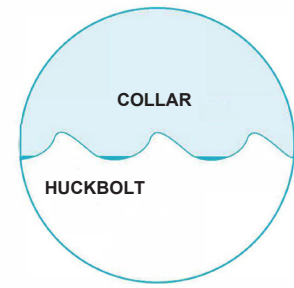
HuckBolts are precision engineered two-piece fasteners that, once installed with direct-tension swaging, maintain clamp force.

There's no fastener, more vibration-resistant fastener than a Huck LockBolt. Even in the most vibration-intensive environments, Huck fasteners maintain their structural integrity for the life of the joint.

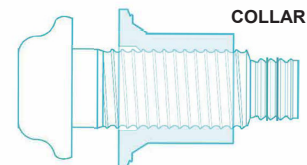
HuckBolts are not subjected to the twisting force of torsion that a torque wrench applies to a conventional bolt, they can safely be taken to higher preload values, resulting in higher clamp, higher strength and the



Swaged HuckBolt direct metal to metal contact compared with standard nuts and bolts



STANDARD NUT & BOLT



HUCK BOBTAIL

#### Two-Piece HuckBolts®



#### BobTail®

Huck's swaged-on fastener with no break-off pintail. Corrosion resistant and installs with lightweight ergonomic tooling.

1/4" - 3/8", 1/2" - 1" and 12mm - 20mm

Steel, Aluminum, Stainless

Grade 2, Grade 5 (Class 8.8), Grade 8 (Class 10.9)



#### C50L®

Superior vibration resistance and durability for heavy-duty applications. Meets or exceeds all ASTM A-325 standards for shear, tensile and fatigue life.

1/2" - 1-3/8"

Steel, Aluminum, Stainless

Grade 5 (Class 8.8), Grade 8 (Class 10.9)



#### C6L®/C120L/C150L

The classic 6-groove locking fastener ideal for a wide range of applications. Available in grades 2, 5, and 8.

3/16" - 3/8"

Steel, Aluminum, Stainless, Steel Pin with Stainless Head

Grade 2, Grade 5 (Class 8.8), Grade 8 (Class 10.9)

highest level of vibration resistance of any fastener. HuckBolts use direct-tension to deliver consistent clamp; spreading the tensile load evenly between the LockBolts provides stronger, fatigue-resistant joining power every time.

LockBolts consist of a headed pin and a collar that is swaged over locking grooves in the pin. The pin is made with a series of pulling grooves at its tail end. The installation tool (driven by pneumatic, hydraulic or battery power) grips these grooves, pulls the work together, the conical shaped cavity of the nose assembly is forced down the collar. This progressively cold forms (swages) it into the grooves of the harder pin. The squeezing action reduces the diameter of the collar, increasing its length. This in turn stretches the pin, generating a clamp

force over the joint. The pin and swaged collar combine to form the installed fastener providing a permanent and completely vibration resistant joint.

#### CONSISTENT CLAMP IS THE ULTIMATE GOAL

To maintain structural integrity consistent clamp is the ultimate goal, without it, you risk bolt failure. The consistent clamp of direct tension HuckBolts ensures a more secure joint than conventional nuts and bolts.

When the same torque is applied to standard nuts and bolts, a wide range clamp-force can be recorded among each fastener. The tightest bolt can end up carrying the load of 4 or 5 bolts, causing it to fail from fatigue strength, this puts even more tensile force on fewer bolts.



HuckBolts are applied with direct tension to provide consistent clamp, time after time.



*Installed C50L Huck Fasteners in Screening Equipment*

### SPOTLIGHT THE HUCK C50L® LOCKBOLT®

The C50L has defined LockBolt for more than 50 years. It offers superior vibration resistance and overall durability for heavy-duty fastening jobs and is ideal for use within applications where consistent, uniform high clamp force is required. Testing has proven that C50L fasteners meet, or exceed the performance of torqued bolts in both shear and tensile strength, as well as fatigue life. For applications ranging from railcar to mining equipment manufacturing, the C50L is the strong, reliable choice.

- Superior vibration resistance and overall durability for heavy-duty applications.
- Meets or exceeds torqued bolts in shear and tensile strength, and fatigue life.
- Offers consistently high, uniform clamp force.
- Exceeds ASTM 325 specifications.

### SPOTLIGHT THE HUCK C6L® LOCKBOLT®

The Huck C6L is amongst the most popular and enduring fastening systems today. It's direct-tension design is stronger, easier-to-install, and more durable than welding, adhesives, or conventional nut and bolt threaded fasteners.

The C6L's exclusive locking 6-groove design and consistent, high clamp force ensure a secure, permanent fit and a strong, vibration-resistant seal.

- Available in grade 5.8 as C6L
- Available in grade 8.8 as C120L
- Available in grade 10.9 as C150L

Its exclusive locking 6-groove design and high-uniform clamp ensure secure, permanent fit.

Ideal for general manufacturing, HVAC, truck, trailer, and container assembly, rail applications.

### SPOTLIGHT THE HUCK BOBTAIL® LOCKBOLT®

HuckBolts such as C6L® and C50L® have been on the market for many decades and are well known and used. The Huck BobTail® is the next generation Lockbolt; offering up to 10 times the fatigue strength of conventional nuts and bolts, BobTail delivers ultimate strength, installation speed, and vibration resistance. It has been designed to provide superior joining strength in even the most extreme environments.

After lengthy and vigorous testing, the Huck BobTail® HuckBolt® (12mm, 14mm, 16mm, 20mm and 1" diameter) has been certified to be maintenance-free by



Even in the most vibration-intensive environments, Huck fasteners maintain their structural integrity for the life of the joint.

the DIBt. The world-renowned institute grants European technical approval for construction products and systems.

Engineered for high performance and reliability with a unique, pintail-less design, unmatched installation speed – often under 2 seconds. Benefits of installing BobTail include:

- Unique, low-swage technology allows lightweight, ergonomic tooling.
- No-break pintail means highest corrosion resistance in its class.
- High speed, easy to install systems reduce production time.
- Wide grip ranges minimise fastener inventory.
- Improves health and safety - replaces welded joints.
- Tamperproof – once installed cannot be removed without specialist tooling.
- Quick visual inspection assures quality joint.
- Fit up ability – helical lock-grooves allows for pre-assembly / project alignment before the final swaging process.
- Installation indicator on collar for visual inspection to ensure correct installation – a red collar is also available that gives a clear visual installation that the collar has been fully swaged.

In addition, if necessary, the fastener can also be removed which is ideal for a project where maintenance is required. Users can simply change the nose assembly to a collar cutting nose assembly and quickly splice the collar in two.

We are Star Fasteners; fastener experts and the largest UK Huck fastener distributor. We work globally with a diverse range of end users and distributors from across a number of industries, offering technical application knowledge and customer support. Huck fasteners guarantee performance and help maximise your return on investment; get the right fastener for your project and achieve your business goals.