

Why choose Huck® Fasteners?

Fasteners are an important engineering component; product reliability is key

Huck fasteners are used in many tough engineering applications, although their function is simple – to hold components together – there are a wide variety of designs and sizes available. These fasteners have been designed to cope with extreme stress and vibration, providing strength and facilitating lighter, stronger, more durable structures. Huck Fasteners are commonly used in railcars, railway tracks, rolling stock, aerospace, truck suspensions and chassis, bridge construction, heavy defense vehicles and mining/quarrying applications. In fact, anywhere that fastener failure is not an option.

Engineered for easy installation, and long, reliable life

Direct-tension HuckBolt's and structural blind fasteners can often be a faster, more cost efficient, and safer alternative to traditional processes. Fasteners are an important engineering component; therefore, product reliability is key. Due to the complex working environment, traditional bolted joints often experience self-loosening (gradual loss of preload) over their working life, which can cause a decrease in the structures strength and loss of joint integrity.

The key difference between HuckBolts and conventional fastener installations is found in the structure of the threads

of each of the fastening systems. Instead of the deep threads required to achieve a tolerance fit between conventional nuts and bolts, the HuckBolt pin requires only shallow locking grooves into which the collar is swaged. The shallow design of the locking grooves allows for a much larger pin root radius, which contributes significantly to the fatigue strength – up to five times that of a conventional nut and bolt.

Alternatives to welding

For years, welding was seen as the only way to ensure the integrity of joints in demanding load-bearing or high-vibration structures. Today there are alternatives to welding, the direct-tension, swaged Huck BobTail® Lockbolt is a uniquely engineered fastener. It is a two-part fastening system that consists of a pin and a collar. This enables the structure to be easily pre-assembled by hand allowing for additional alterations and checks. The fastener is then installed using a direct tension technique, in which the pin is pulled and the collar is simultaneously swaged into the locking grooves of the pin, deforming the collar into the grooves and swaging the material forward. This action develops the high clamp force.

The Huck BobTail has been designed to provide superior joining strength and offers fast, secure and simple installation. Even taking into consideration the need to drill holes, installing a Lockbolt is significantly



faster than welding a joint and a quick visual inspection is all that is required to confirm the accuracy and quality of the installation.

HuckBolt's can be effectively used with virtually any metal, and disparate metals with dissimilar coefficients of thermal expansion present no problems. Varying piece sizes in a joint are readily accommodated, and surface finishes are not harmed. Most importantly, HuckBolt's are proven to hold up over years of service in demanding high-stress, high-vibration environments.

Independently tested with third party approval

The Huck BobTail 12,14,16, 20mm and one-inch diameters, after lengthy and vigorous independent testing, have gained the prestigious Allgemeine bauaufsichtliche Zulassungen (German national technical approval) from the world renowned DIBt (Deutsches Institut für Bautechnik) for use in both static and dynamic applications in civil engineering. The approval concludes that retorquing/re-tension of an installed Huck BobTail LockBolt is not possible and also not necessary, and connections do not require maintenance regarding preload. Joints fastened together by BobTail large diameter LockBolts, within the range specified, are maintenance free.

Technical support that will add value to your project

Star Fasteners have been a Huck fastener distributor for over thirty years and are the UK's largest stockists. Star Fasteners work closely with their customers to understand their applications and suggest new products that they may not have initially considered for a project. They can do this thanks to the knowledge and experience that they have within the market.



Tel: 0115 9324939
Email: sales@starfasteners.co.uk
Visit: www.starfasteners.co.uk