# FASTENERS & FIXINGS PRODUCT SPOTLIGHT

### STAR FASTENERS

### Blind Rivets and Structural Fasteners

Star Fasteners product range includes a wide selection of rivets, including standard, sealed, multi-grip, peel, grooved, load spread and structural blind fasteners. They are predominantly used to permanently fasten sheet metals together; however, they are also suitable for composites, plastics and laminate materials.

### WHAT KINDS OF MATERIAL DO THEY COME IN?

Depending on the fastener type, they are available in a variety of materials such as aluminium, steel, stainless steel (A2 & A4), copper and plastic.

### HOW TO CHOOSE A RIVET?

The blind fastener that you choose depends upon the environment in which it is being used and the type and thickness of material that it is fastening together. Depending on the product, the diameter of the rivet can range from 2.4mm to 19.1mm for the more structural projects. Head types include dome / raised head, countersunk, flanged and large flanged. Star Fasteners can guide you to find a fastener that suits your application.

### WHAT TYPE OF INDUSTRIES ARE THEY USED IN?

Riveting is widely used in projects where a blind application requires high strength and a speedy installation; they are used wherever there is a need to fasten materials together. These are just a few examples industries that they can be found in: -

Automotive, bodyworks (commercial vehicle), cabinets, construction, electrical appliances, exhaust systems, guttering, HVAC (heating, ventilation and air conditioning) ladder manufacturing, metal industry and even sculptures and art installations!

The riveting process is environmentally friendly when compared to welding and bonding as it is chemical, smoke and fume free.

Star Fasteners offer a wide range of quality hand, hydraulic, air and battery tools that we know can stand up to the rigours of a busy workshop environment. We recognise that choosing a rivet tool can

#### Huck® Structural Blind Fasteners

When only one side of the joint material is accessible, performance-engineered Huck fasteners are a smart choice. Each Huck blind fastener has its own unique set of features. Their strength, consistency, easy installation and visual inspection ensures that there is a fastener for almost every application.



#### Magna-Lok®

Hole-filling fastener with excellent gap pull-out and moisture resistance. Solid circle lock creates internal lock that virtually eliminates pin push-out Material - Steel, Aluminium, Stainelss Steel (inc 316) Sizes - 3/16", 1/4", 3/8", 1/2" / Heads - Protruding, Truss, 100°Flush

#### HuckLok®

Wide grip range, double-locking action clamps assembly from both sides for maximum joint integrity.

Material - Steel / Sizes - 3/16", 1/4" Heads - Protruding, Truss, 100°Oval Countersunk



### Magna-Tite®

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Has water-resistant sealant for oversize holes and repairs. Large blind-side footprint for use in thin or low-strength materials.

Material - Aluminium / Sizes - 3/16", 1/4" Heads - Protruding, Shaveable, Low Profile, 100°Oval, Countersunk



#### Magna-Bulb®

Unique bulbing fastener with high shear strength offers a broader bearing surface for high pull-out strength in thin materials and / or oversized holes. Material - Steel / Sizes - 3/16", 1/4", 5/16" Heads - Protruding, Truss, Countersunk



For ultimate locking strength from blind-side install, choose the BOM (Blind, Oversize, Mechanically) locked fastener. It features a tapered lead-in with a 10.9 grade mandrel. It's unique push and-pull installation design results in a high strength fastening solution. Material - Steel / Sizes - 3/16", 3/4"

be fairly complicated; our service includes demonstrating the latest models and advising on tooling options best suited to both the application and the environment.

Every production environment, workshop and tool benefits from a regular

#### **FloorTight**®

Self-countersinking design for consistent installations in hardwood, plywood and plymetal vehicle floor applications. Material - Steel / Sizes - 1/4", 5/16" Heads - Standard, Wide Flange, Plymetal, 90°



#### Auto-Bulb®

Features a tapered lead-in point for automated, high-speed assemblies. Forms a bulb directly on the sheet line, preventing pull-through. Material - Steel, Stainless Steel Sizes - 3/16", 1/4" / Heads - Protruding, Countersunk



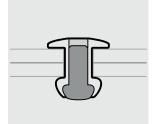
#### Penta-Lok®

Specifically designed for joining lightweight panels to steel, stainless steel and aluminium extrusion. No through hole required in lightweight panel. It has a high pull out strength as it unfurls inside the composite panel. Material - Steel / Size - 1/4"

maintenance program and Star Fasteners can help out with that too. Our in-house tool maintenance and repair workshop ensures that there's minimal down time and a quick turnaround for every job we do. We also have a large selection of short or long-term hire tools.

# Standard **Rivets**

Where structural strength is not required, standard rivets are a fast and simple way of joining all kinds of material.



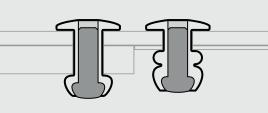
### **Multigrip Rivets**

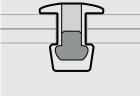
The body of the rivet forms when the fastener is installed. The mandrel head remains at the bottom of the rivet forcing the body to bulb.

Because the rivet forms a larger bulb at the back ('blind') side, it is also suitable for softer materials. It has excellent hole filling capabilities and is also termed as anti vibration and weather proof.

# Sealed **Rivets**

The head of the mandrel is retained inside of the rivet body and the deform is lateral. During installation the rivet body expands to fill the hole. enabling the rivet to withstand pressures up to 35 Bar (3500 kPa). If used correctly it will be gas and water tight.





Peel

### Triform **Rivets**

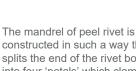
The triform rivet is constructed in a special way; during installation, the rivet body splits into 3 parts, preventing the material from being damaged. Ideal for assembling plastic and soft materials.

### Grooved **Rivets**

The grooved body enables the rivet to expand into the interior surfaces of the assembled pieces. They provide a strong connection into dense materials such as wood and plastics.

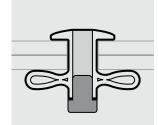
## Hammerdrive **Rivets**

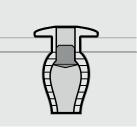
The mandrel passes through the body of the rivet as the pin is hammered in place. The body splits in o four pieces. Different material combinations, for example, wood, plastic, concrete, and metal etc. can be joined together.

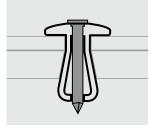


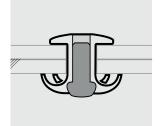
**Rivets** 

constructed in such a way that it splits the end of the rivet body into four 'petals' which clamp the material and spread the load over a wide area. Is ideal for soft, thin and hollow core materials









### **Rivet Head Styles**



Domed Head rivet is the most common rivet type.



Large Flange reinforces the hole and allows assemblies of soft materials such as plastic and wood onto metal. It helps to spread the load.



**Countersunk Head** offers a perfect flush finish.