

FAST TOP TIPS: RIVETING

Riveting simplifies white goods assembly

Blind riveting as the name suggests is a fastening technique that is used to secure the applications where access to the joint is available from only one side. From

cess in providing a solution to a white goods manufacturer where a single rivet replaced the existing two part-piece applications and improved assembly time by

another part of the assembly process.

Trevor Christian, technical sales account manager at Gesipa UK takes up the story: "The cur-

Additional benefits to this solution include the flexibility of the riveting process, the speed of operation and the area for applying the rivet can be re-planned into any area with spare capacity, thus eliminating the labour cost of the previous process. These rivets can be set up using hand tools, power tools or fully automatic riveting units available from Gesipa.

As part of their Blind fastening range, Gesipa manufactures Polygrip Rivets that are available from 3.2 to 6.4 mm in three head styles with material choices including aluminium/steel, steel/steel, aluminium/stainless steel and A2-stainless steel. A PolyGrip rivet with a wide grip range replaces up to three conventional blind rivet sizes and can result in tighter joints retaining the mandrel core, which is locked into the eyelet providing



The rivet was specially designed for easy access installation

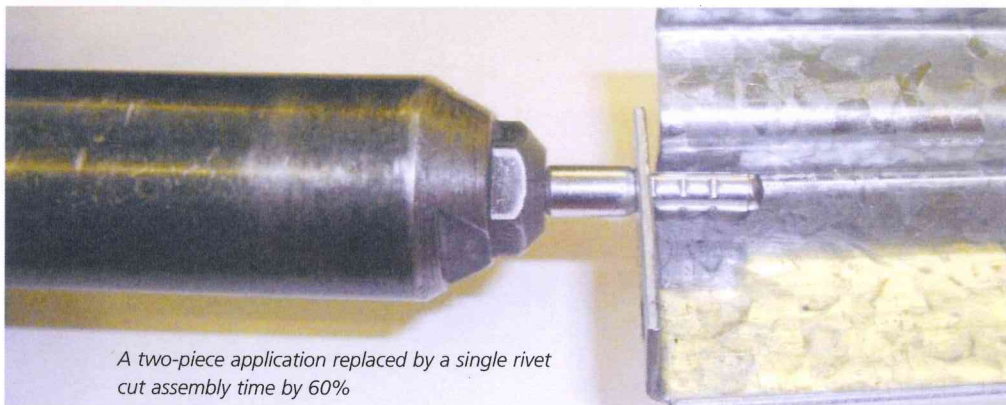
automotive to white goods to construction equipment all industries rely on this type of fastening technique that has evolved over the years broadening the design horizons for applications in these sectors.

With high-speed precision application, it is one of the fastest mechanical joining methods available, helping to reduce piece part and installation costs compared to other mechanical fixings such as weld nuts, weld studs, nuts, bolts and screw joining techniques. However, the benefits of blind riveting can also be achieved for applications where existing access may be available from both sides as in the case of stand offs, but is a complex process consuming a lot of time and labour.

Recently Gesipa Blind Riveting Systems achieved suc-

60% along with easy access installation. This rivet was specially designed to incorporate the function of the current brass stud in the form of a profile clinched Polygrip rivet. The profile

rent process was not only fiddly for the operator; it was also time-consuming and often needed rework, adding cost to the process and application. The single rivet operation provided easy



A two-piece application replaced by a single rivet cut assembly time by 60%

clinched rivet is a cold-formed rivet that when installed leaves a profile location peg for use in

access for installation, quick assembly time and a fit and forget fixing."

anti-vibration and weather tight solutions.

Gesipa Blind Riveting Systems manufactures and delivers an extensive range of rivet, rivet nuts, rivet nut studs, associated tooling and bespoke based solutions. With ISO 9001, ISO14001 and ISO/TS 16949:2009 accreditations the company offers a range of engineering solution for specific fastening requirements to the automotive, construction, railway, white goods, electronics and many other varied industries.

GESIPA BLIND RIVETING SYSTEMS 01535 212200



Blind rivets never come singly. There are blind rivets made of aluminium alloys with a steel, aluminium, or stainless steel mandrel, blind rivets made of steel with a steel mandrel and high rigidity, blind rivets made of A2 and A4 stainless steel, blind rivets made of copper with a steel or bronze mandrel, plastic and clamp-profile blind rivets. To make a long story short, there are more than 2,500 different types, but every single one is made up of an eyelet and a mandrel.

The eyelet is the rivet's head and is responsible for forming the closure and thus for creating a secure and durable connection. And that is where the eyelet core comes in, because this is the filler section of the part of the rivet that remains in the eyelet. The rivet body material is the key factor to mechanical strength and corrosion resistance of the fastening.

The blind rivet can connect a huge variety of materials without any difficulty and guarantees a high connection quality. The technology offers reliability by creating a permanent, unmovable connection, coupled with high tensile strength and shear resistance. It also saves a great deal of time and costs, for instance in lower acquisition prices and high processing speeds, without any preparatory or finishing work.