# Henrob T-Rivet

A new rivet that enables consistent joint quality in multiple layers of high-strength aluminum





### **Industrial Assembly Solutions**

Self-pierce riveting is rapidly becoming an invaluable solution for high-volume car production.

Manufacturers looking for strong and efficient joints in lightweight material – like 6000 grade aluminum – now have a reliable solution in the Henrob T-Rivet.

With a fully tubular design, the T-Rivet reduces the amount of material that is displaced during the riveting process – respecting the low ductility of aluminum to avoid tearing. It is designed for joining thick gauges and multiple layers of high-strength aluminum alloys.



### **Key features**



Can be used with existing equipment.
No further investment is needed.



The tubular design of the T-rivet displaces less material - perfect for joining low-ductility aluminum.



Consistently joins multilayer aluminum and thick stacks.

### Henrob T-Rivet

# Facing challenges in aluminum

A switch from steel to the lighter aluminum improves fuel efficiency and boosts performance in modern vehicles. However, working with aluminum has presented a number of challenges to the industry – especially when it comes to joining thick gauges and multiple layers of high-strength aluminum in safety critical areas.

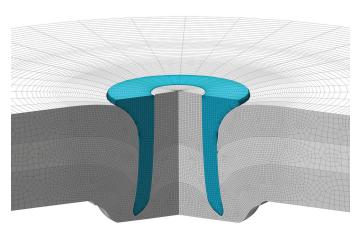


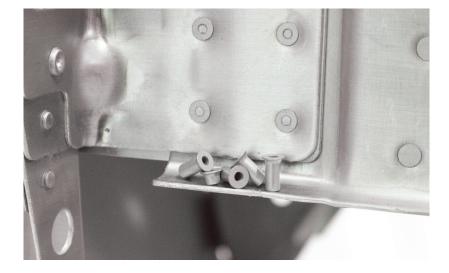
### Low ductility

Unlike welding, a cold joining technology like self-pierce riveting is highly suitable for joining aluminum. Using conventional semi-tubular rivets and deep dies often lead to non-uniform flaring or button tearing. This can cause corrosion and a weak joint due to the low ductility of aluminum and its tendency to crack when deformed to a certain point.



The Henrob T-Rivet is tailored for joining high-strength aluminum alloys like aluminum 6000. With a fully tubular design the T-Rivet reduces the amount of material that is displaced during the insertion and needs to be accommodated by the die. A special low-friction coating helps the aluminum to flow up and fill the bore. This enables to consistently join even thick gauges and up to four layers of high-strength aluminum.





#### Features in brief:

- Used primarily in the automotive industry
- Developed for lightweight design
- Joins high-strength aluminum
- Enables multi-layer stacks
- Best used with shallow dies
- Runs on 5 mm riveting equipment



### Henrob T-Rivet

## Part number build up

