Introduction – Riveting Systems

Minimum vibration, maximum productivity

Atlas Copco's top-of-the-line riveting systems are designed to minimize the riveter's exposure to vibration, while maintaining high tool performance. The RRH recoilless riveting hammer has an air cushion behind the hammer piston which efficiently kills vibrations. The same air dampening technique is used in RBB bucking bars. It raises individual productivity and boosts output in your plant.

The Atlas Copco riveting system includes vibration-damped hammers RRH and bucking bars RBB – as well as conventional riveting hammers RRN.

The vibration-damped riveting hammers – RRH – are available in different sizes.

Each size is available in "Trigger start" and "Push to start" models.

The conventional riveting hammer – RRN – is available in one size: RRN11P.

CRITICAL FACTORS

The number of blows and the power are critical factors which determine the strength of a riveted joint. A few powerful blows are needed to fill out the hole and form a head when upsetting the rivet. The impact force is critical to some extent when working with aluminum alloys, as too many blows can embrittle the metal.

In terms of capacity, the tools overlap. The selection guide below helps you to find the right tool for your particular application of riveting.

The vibration-damped bucking bars RBB are available in two versions – the simple spring damped – SP type and the air servo assisted SA type.



Selection Guide

| | Nominal Max. Rivet Diameter Capacity | | | | | | |
|---------------------------|--------------------------------------|-------------|-------|-------------|----------|-------------|------------------------------|
| | Dural | | Steel | | Titanium | | |
| Hammer model ^a | mm | in | mm | in | mm | in | Bucking bar model required b |
| RRN11 | 2-5 | 3/32 - 3/16 | 1-4 | 3/32 - 5/32 | | | |
| RRH04 | 2-5 | 3/32 - 3/16 | 1-4 | 3/21 - 5/32 | | | RBB04 |
| RRH06 | 4-7 | 5/32 - 1/4 | 3-6 | 1/8 - 1/4 | 2-4 | 3/32 - 5/32 | |
| RRH08 | 5-8 | 3/16 - 5/16 | 4-7 | 5/32 - 1/4 | 3-6 | 1/8 - 1/4 | |
| RRH10 | 5-9 | 3/16 - 3/8 | 6-8 | 1/4 - 5/16 | 4-7 | 5/32 - 1/4 | |
| RRH12 | 8-11 | 5/16 - 7/16 | 7-10 | 1/4 - 3/8 | 6-9 | 1/4 - 1/8 | |
| RRH14 | 11-13 | 7/16 - 1/2 | 9-12 | 3/8 - 15/32 | 8-11 | 5/16 - 7/16 | |

^a Hammer capacity depends on direct/indirect riveting as well as Panel density and stiffness.

^b Bucking bar capacity is dependent on dolly weight.