

BÖLLHOFF

NEW

Portable C

Electro-hydraulic setting tool for
RIVSET® and WELTAC®



Portable C

The base unit

Ergonomics, design and power hand in hand

The new generation of the electro-hydraulic Portable C setting tool adds even more flexibility to your production. This generation is the result of consistent further development of the established Portable series.



The possibility to process RIVSET® fasteners as well as WELTAC® elements on the same base unit, is a particularly important asset that allows flexible combinations. The self-pierce riveting heads can be replaced directly on site. Further detailed information is provided on the following pages.

Further assets were added to the well-known advantages:

■ Defined setting cycle

The user is informed when the target pressure is reached and the process cycle completed.

■ Precise pressure setting at the display

For high-precision reproducibility, the required setting force is digitally set.

■ Digital pressure control

The success of any industrial production process is based on the control of the joining processes. Should the target pressure be exceeded, there is a visual and an acoustic alarm.

■ Battery power

Lithium-ion battery: high power and capacity; no memory effect.

Known properties

- Ergonomic two-component housing: safe-grip and anti-slip
- Base units: force levels from 10–50 kN and 40–80 kN
- High-quality charger: extremely short charging times of 15/22 minutes
- Optimal accessibility of the joining point due to small constraining contour
- Battery or mains operation
- Quick and easy replacement of wear parts
- Easy handling
- Different C-frame geometries

Scope of application

The range of use of the Portable C is 10,000 setting cycles per year.

- On-site fabrication
- Prototyping
- Reworking
- Repairs

Portable C

RIVSET® self-pierce riveting technology

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No pre-punching, no emissions, no noise. RIVSET® self-pierce riveting is a joining method to create mechanical high-strength joints from similar and dissimilar materials. Joints can consist of two or more layers.

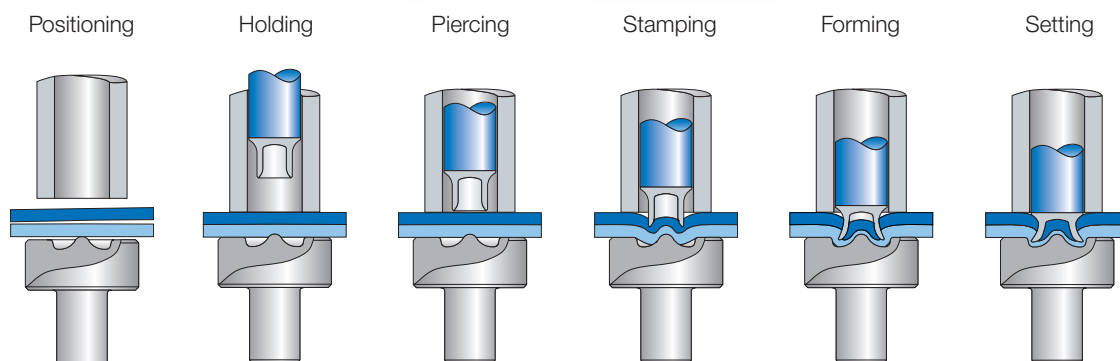
The RIVSET® self-pierce riveting technology allows to produce dynamic high-strength joints. There is no need to pre-drill or pre-punch the material components so they do not need to be positioned precisely.

In one step, the semi-tubular rivet pierces through the upper layer of the work piece and forms an undercut in the lower layer, making the characteristic locking head (see sectional view).

The Portable C is available in two variants: the tape feed version for tape-collated semi-tubular rivets and the magnetic punch version to insert a single semi-tubular rivet.



Setting process



To fulfil the requirements of multi-material designs, Böllhoff, the innovative partner for fasteners and assembly systems, has added one further technology to the product portfolio. WELTAC® resistance element welding offers flexibility:

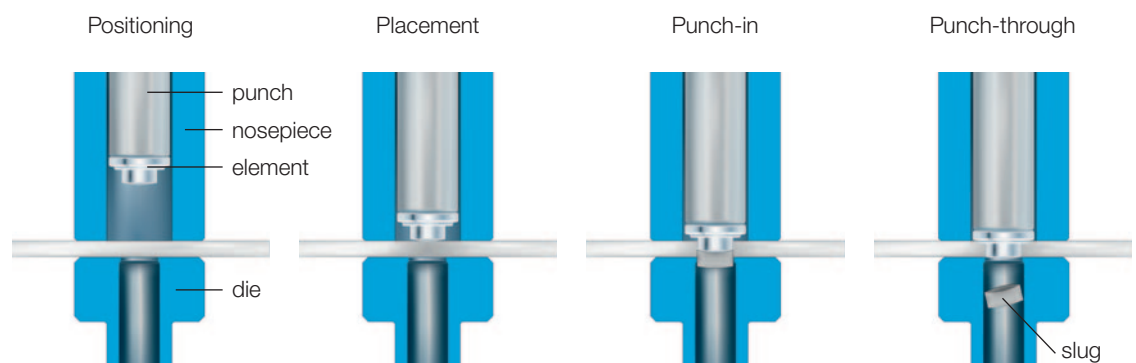
You can join lightweight materials (aluminium, sandwich materials, polymer materials) with steel of all grades.

You also benefit from the possibility to still use your existing spot welding equipment in the modern body construction as well as to combine different multi-material designs on one production line.

The sectional view below illustrates the first process stage – the pierced-in WELTAC® element. You also see the Portable C with the SNS5M self-pierce riveting punch incl. magnet without WELTAC® element as well as with WELTAC® element (detail view).



1. Process stage of the 2-stage process*



*The Portable C can be used for process stage 1.

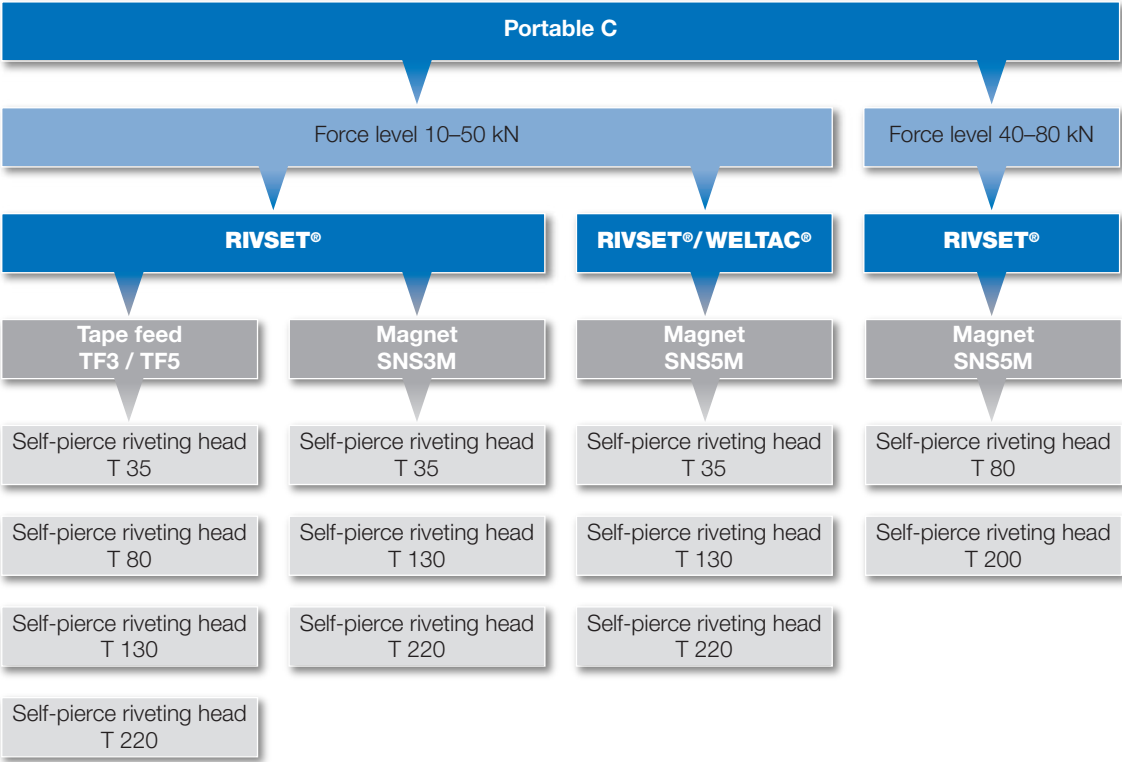


Portable C RIVSET® and WELTAC®

The focus is on flexibility.



Benefit from the possible combinations:



T = throat, TF = tape feed, SNS3M = self-pierce riveting punch with magnet for 3-mm rivets, SNS5M = self-pierce riveting punch with magnet for 5-mm rivets and WELTAC® elements

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Innovative partner for joining technology with assembly and logistics solutions.

Find your local partner at www.boellhoff.com or contact us at fat@boellhoff.com.

Passion for successful joining.