



RIVSET® Gen²

Self-pierce riveting in its new generation

Kel
BULGARIA

BOLLHOFF

RIVSET® Gen² – Self-pierce riveting in its new generation



Modular, flexible, efficient!

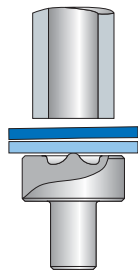
The next generation of semi-tubular self-pierce riveting technology RIVSET® Gen² enables the process time to be halved during the joining of mixed materials and high-strength steels. It is targeted towards applications in large-volume productions with a maximum flexibility in production planning.

Advantages

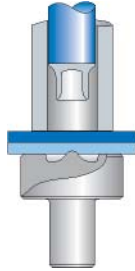
- Modular construction of the components
- Local control architecture for maximum configurations
- Speed: Optimised process cycle of $\leq 1,5$ seconds/rivet (depending on the setting tool)
- Stable machine availability: Rivet length control with a precision of $\pm 0,25$ mm
- Weight-optimised setting tools with max. 78 kN setting force at a robot load capacity of 80 kg
- Multi visualisation of 1 – 5 system(s) with only one control panel
- Optimised footprint
- Adaptability to customised configurations
- Low investment costs due to configuration management

Technology

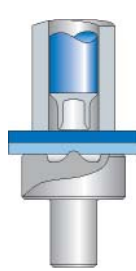
Positioning



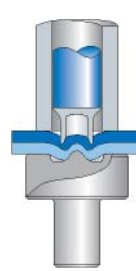
Holding



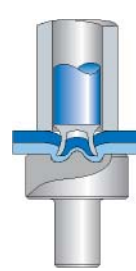
Piercing



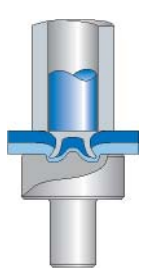
Stamping



Forming

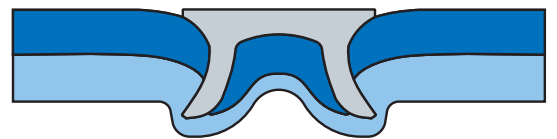


Setting



A simple and fast process:

In one step the semi-tubular rivet pierces through the upper layer/s of the workpiece and forms the locking head in the lower layer.



Materials

Joining materials and material combinations for your high-strength joints:

- Aluminium (pressure cast, extruded, sheet)
- Deep drawing steels with Rm up to 500 N/mm²
- High-strength steels with Rm up to 1600 N/mm²
- Also material combinations with magnesium, copper, films, metal mesh, wood, plastic (with fibre glass if applicable), sandwich materials
- Adhesive as a middle layer

RIVSET® Gen² – Module Configuration



Setting tool

Product features

- Setting tool size optimised by reduction of the setting tool weight
- Throat depth of C-frame up to 500 mm conventional and 750 with light frame design
- Removable die dome
- Media docking possible
- Optimal centre of gravity
- Better lifetime of hydraulic cylinder results in lower maintenance cost

Rivet feeding



Product features

- Delivery rate 60 rivets/minute
- Storage of approximately 15,000 rivets
- Minimal maintenance requirement
- Rivet pre-separation and length-measurement within a tolerance of $\pm 0,25$ mm available as an option

Böllhoff Control System (BCS)



Product features

- Local hardware configuration with central controlling of machine components by bus-system
- „Embedded PC“ based control
- Drive up to 3 rivet feeders (standard)
- Open interface to diverse robot cutting sites (ProfiNet, Interbus etc.)
- Manual control unit with complete visualisation of the process (plug & play)
- Optional panel pc and operator instruction via touch screen
- Multi visualisation of 1 – 5 system(s) by one control panel (optional)

Drive



Product features

- Modular and compact hydraulic system
- Suitable for setting forces up to 78 kN
- Local valve block (on the setting tool)
- Optimised cycle time of $\leq 1,25$ seconds/ rivet (depending on the setting tool)
- Integrated measurement of oil temperature
- Energy efficient valve drive
- Switchable additional cooler
- Reduced hydraulic hose connection



RIVSET® Gen² – Configurations of the system

Standard configurations

RIVSET® Gen² Single, Twin und Triple

System consisting of setting tool, drive, switching cabinet, process control and one separating stop.

Feeding: Blow feed

During blow feeding, the rivets are fed loosely by compressed air.

All systems offer the following parameters:

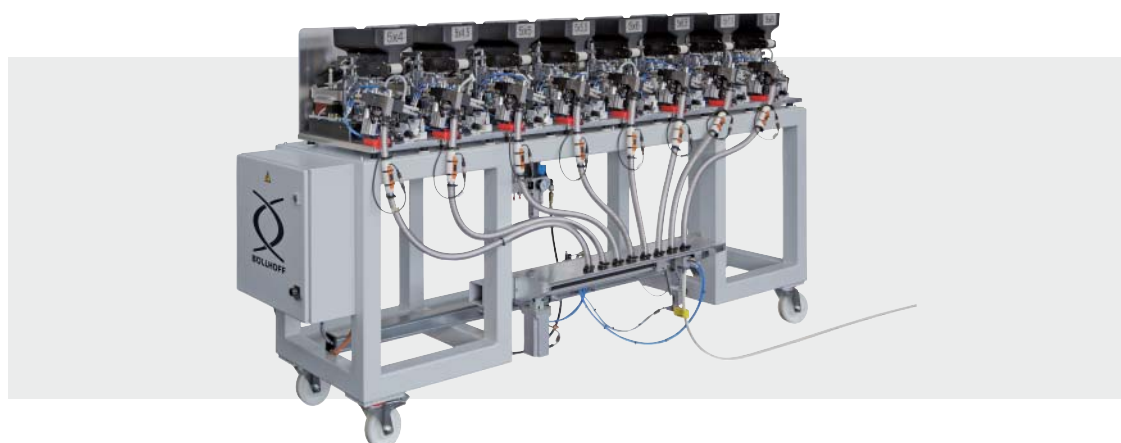
- Suited for small, medium, large and lightweight setting tools
- Designed for joints with a setting force of 50 kN and 75 kN
- Automatic or manual operation
- Attachment for setting tools available
- Process control included
- Docking, visualisation or control panel



Special configurations

In addition to our standard variants, we offer special configurations, e.g. multi feeding.

Please contact us – we will be pleased to advise you!



Böllhoff International with companies in:

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Brazil
Canada
China
Czech Republic
France
Germany
Hungary
India
Italy
Japan
Mexico
Poland
Romania
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Slovakia
Spain
Switzerland
Turkey
United Kingdom
USA

Apart from these 22 countries, Böllhoff supports its international customers in other important industrial markets in close partnership with agents and dealers.



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