



Technical Product Sheet

# RIFAST® C-FRAME WITH PNEUMO-HYDRAULIC DRIVE

Standardized modular design for installations in the body shop

## › THE RIFAST® SYSTEMS ADVANTAGE

**Systems expertise from designing, manufacturing clinch fasteners and automation equipment to consultation and realization in serial production**

With over 25 years of expertise as a full system provider RIFAST® is the partner for developing economical solutions for reliable integration of mechanically joined clinch fasteners. The systems approach of clinch fasteners through automation equipment for in-die and off-line operations guarantees the optimal joint connection. The mechanical joining with the RIFAST® staking die designed to the customer component ensures consistent performance values in addition to eliminating thermal influences and distortions observed during welding.

## › THE RIFAST® C-FRAME WITH PNEUMO-HYDRAULIC DRIVE

**High standardization, proven, universal**

RIFAST® C-Frames are characterized through high standardization and modular design. This allows the customer to select the right C-Frame for the respective application. Whether it's a full-automatic C-Frame for body frame construction in a robot cell, as a semi-automatic workstation, or as a flexible manual workstation. The RIFAST® C-Frame product program always offers the right solution for your application.

The pneumo-hydraulic drives are available with up to 320 kN, with the manual workstation being offered in a 159 kN variation available with integrated safety system.



◀ Application examples  
RIFAST® C-Frame

## › THE RIFAST® C-FRAME WITH PNEUMO-HYDRAULIC DRIVE ADVANTAGE

- High standardization → economic pricing, shorter lead times, long product lifetime thanks to robust and proven components
- Modular design → flexible usage for different customer applications and different RIFAST® clinch fasteners
- Universal tool carrier → flexible usage for various applications
- Optional remote diagnostic router allows for diagnosing of the C-Frame including remote consultation on trouble shooting
- QR code on the nameplate enables quick and easy access to technical documents for the C-frame on the RIBE server

## › TECHNICAL DATA

|                                    | CSH   | CSH Semi  | CSM / CSB   |
|------------------------------------|---|---|---|
|                                    |              |   |                |
| <b>Application</b>                 | Universal manual workstation for prototype and small series production                          | Semi-automatic workstation for small series production  | Full-automatic C-Frame for integration in a robot cell  |
| <b>Drive</b>                       | 159 kN drive with additional safety system  | Up to 320 kN drive with additional safety system  | Up to 320 kN drive without safety system  |
| <b>Safety technology</b>           | Protective sleeve   | Protective sleeve   | Integration within safety circuit of customer robot cell  |
| <b>Operational speed</b>           | 50 mm/s   | 50 mm/s   | Up to 150 mm/s  |
| <b>Cycle time without handling</b> | 8 – 10 s  | 8 – 10 s  | 5 s   |
| <b>Tool carrier</b>                | <ul style="list-style-type: none"> <li>• Easy replacement</li> <li>• For various CF1</li> </ul> | <ul style="list-style-type: none"> <li>• With downholder function</li> <li>• For (1) CF1</li> <li>• Convertible to other CF1</li> </ul> | <ul style="list-style-type: none"> <li>• With downholder function</li> <li>• For (1) CF1</li> </ul> |
| <b>Feeding functional element</b>  | Manual  | Automatic through feeding unit  | Automatic through feeding unit  |
| <b>Component handling</b>          | Manual  | Manual  | Robot   |

CF1 = functional elements

By using RIFAST® automation equipment for the installation of RIFAST® clinch fasteners, the optimal connection with the customer parts can be achieved.