BROETJE AUTOMATION

CPAC

C-FRAME PANEL ASSEMBLY CELL

- High Performance in Panel Assembly
- Proven Reliability and Efficiency
- High Workpiece Flexibility
- Improved Accessability

COMPOSED TO COMPETE

FASTENING SYSTEMS

CPAC - C-FRAME PANEL ASSEMBLY CELL

Area of Application

The C-Frame Panel Assembly Cell (CPAC) is a high performance panel riveting system. The system is one of the best-selling fastening machine concepts world-wide. It is ideal to fasten small to very large sized skin and wing panels.

The CPAC achieves fastest cycle times, while maintaining superb component quality. The highly adaptable system can be configured with a flexible fixture tooling to allow high workpiece flexibility as well as easy production process integration.

The CPAC´s compact design and adjustable station layout enables efficient use of precious shop floor space while keeping investment in building infrastructure to a minimum. The C-frame positioning system can be moved and thus maintained independently from the workpiece positioning system. The workpiece can be loaded vertically as well as horizontally.

With more than 50 installations world-wide the system is well proven in production.

Technical Data

Riveter

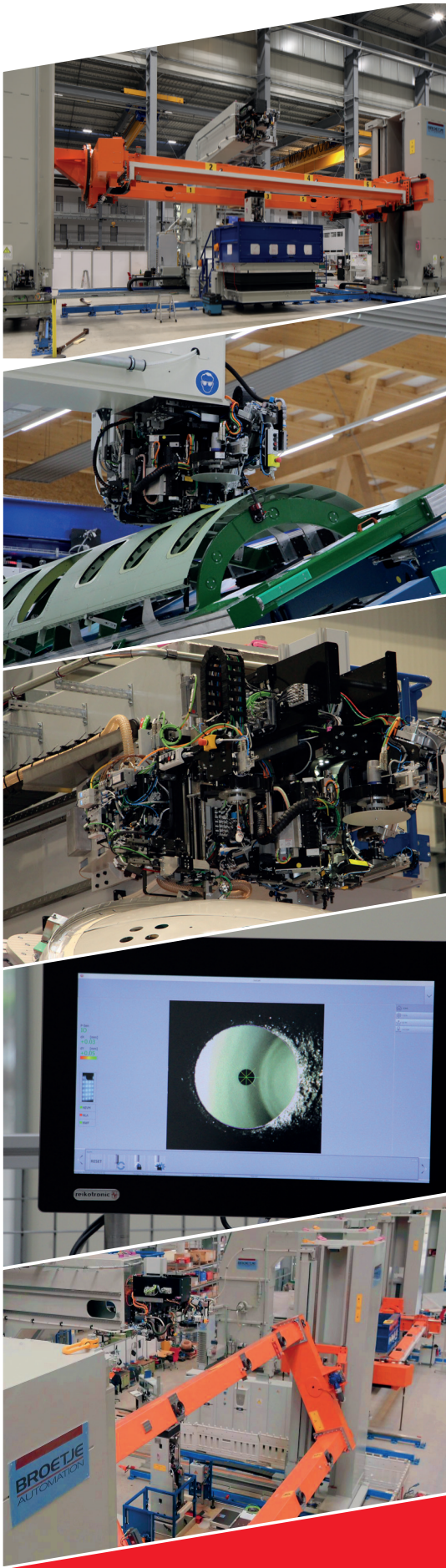
Capacity: up to 21ea rivets/min	Drill spindle feed: up to 300"/min (7,620 mm/min)
Drill speed: 50 - 18,000 rpm	Material: Aluminum / Titanium / Composite
Countersink repeatability: ± 0.0006" (± 0.015 mm)	Optional 10/32" (7.9 mm)
Fastener diameter (standard tool): 4/32" - 8/32" (3.2 mm - 6.4 mm)	Upset force: up to 18,000 lbs (8,000 daN)
Clamping force: 110 - 1,543 lbs (50 - 700 daN)	

Positioning System

Linear axes X, Y and Z	Positioning accuracy linear axis: ± 0.2 mm
Rotary axes A, B, C	Positioning accuracy rotary axis: ± 60 arc sec.

Special Features

- All electric fastening system
- High speed tool changer for drill chuck and upper anvils
- High speed / precise drill spindle
- Sensoric system for:
  Distance, Normality, Tack-rivet, Countersink Depth, Fastener Head Height, Hole Diameter, Sealant
  (on shaft or in counter sink)
- Edge detection system on lower tool
- Automated fastener feeding system
- Customer specific design of staging equipment for best ergonomics
- Offline Programming System (SOUL OLPS) incl. Virtual Twin Integration, Simulation and Production Optimization Tools
- Integrated state-of-the-art Human Machine Interface (SCORE) incl. 3D workpiece completion reports
- Optional slug fasteners
- Optional collar installation
- Optional automatic lower tool changer



Broetje-Automation GmbH
Am Autobahnkreuz 14
26180 Rastede
Germany

www.Broetje-Automation.com