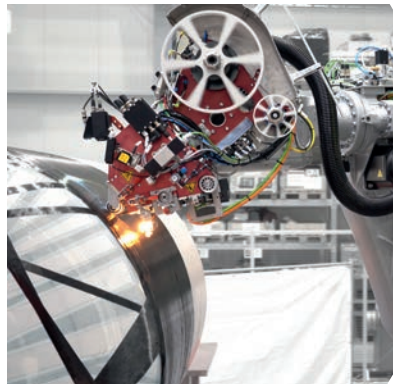


THE STAXX FAMILY - A MODULAR SOLUTION FOR YOUR SHOPFLOOR

The STAXX Family opens up the possibility to upscale the production of composite parts based on the individual needs of the customer. From R&T solutions to large scale robotic composite manufacturing, the STAXX Family provides a versatile and modular approach to composite manufacturing, giving the opportunity to efficiate your production and reducing cost. The multi material opportunity of the systems allows more flexibility in the production of parts – elevating production to the next level.



Scalable Endeffectors

- Flexible endeffectors for AFP manufacturing
- Modularity in tow width configuration
- Adaptable to a variety of base stations
- Extreme reliability and availability as well as efficiency
- Layup of simple and complex 2D and 3D parts
- Multiple material capability with thermoset and thermoplast



Plug and Play Cell Configurations

- Modular production centers for prototypes, testing as well as full production capacity for complex 3D parts
- Easy to handle plug and play solutions for a fast start of operation
- Full simulation of the cell layout to ensure a smooth process
- Easy maintenance accessibility
- User friendly operation



Positioning Systems

- Flexible use on a variety of positioning systems such as:
 - Industrial Robots
 - Machine Style Gantry
 - Open Gantry Systems
- Collision avoidance based on digital twin real time machine data
- Integrated quality control

EQUIPPING THE FACTORY OF THE FUTURE

Broetje-Automation strives to be the best companion for automated production solutions.

We build highest standard technologies to provide our customers with a tailored solution fit to their individual cases. Our strength is the individual integration of various processes into highly automated machine systems to make your shopfloor more efficient, ergonomic and flexible.

For our customers we naturally enhance the production and quality of simple and complex structures and therefore help to implement complex technologies and connected digital production possibilities for the Factory of the Future.

BROETJE-AUTOMATION WORLDWIDE

- We are global: 23 locations in seven countries
- We are experienced: More than 4 decades of expertise in automated solutions
- We are diverse: More than 20 nationalities in one global company



STAXX FAMILY

SCALABILITY FOR YOUR PRODUCTION NEEDS

- Prototyping to Scalable Production
- High Efficiency and Versatility
- Adaptability for Various Needs

Broetje- Automation GmbH
Am Autobahnkreuz 14
26180 Rastede
Germany

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STAXX AFP FAMILY

OUTSTANDING VERSATILITY AND ADAPTABILITY

The STAXX Family offers a cutting-edge lineup of automated fiber placement systems designed to meet the diverse needs of modern manufacturing. From the compact STAXX Box to the powerful STAXX Flex, each product in this versatile family offers unparalleled adaptability, precision, and efficiency for a wide range of applications. With advanced features like digital twin technology and seamless integration capabilities, the STAXX Family sets a new standard in automated composite production, empowering the Factory of the Future.

Engineered with exceptional material adaptability, supporting a wide range of composite materials, including PrePreg, TowPreg, DryFiber, and Thermoplastics. This versatility ensures that each system can handle various production requirements, from small scale prototypes to large, complex structures. Additionally, quality assurance is a core focus, with integrated features such as controlled compaction forces, camera-based inline layer inspection, and intelligent quality control systems. These innovations guarantee consistent, high-quality output, reducing waste and enhancing the overall efficiency of the production process.



Application

This compact, flexible and easy to use automated fiber placement machine is ideally suited for the automated production of small composite parts at low cost.

- Small Parts
- Material Layup Tests
- R&T

Compact Work Cell Configuration

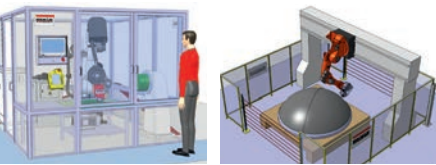


Application

The STAXX ONE Single Tow End-Effector is a highly flexible small and lightweight automated fiber placement end-effector. With its mass of about 60kg it can be mounted on a variety of standard industrial robots.

- Complex Parts
- Curved Structures
- Table Configurations possible

Flexible Work Cell Configuration



Application

Designed for high volume industrial production the system is ideally suited for the mass production of small composite parts. It achieves high workpiece quality while minimizing material waste.

- Serial production of small parts
- No limits in Fiber Orientation
- Easy Material Reloading

Enclosed Airconditioned Cell

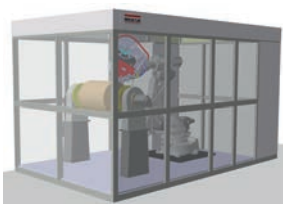


Application

The portable STAXX ONE Cell has a fully 3D-capable AFP robot system in a self-sufficient and self-contained environment. The configuration with either a rotary table or a tailstock, both fully integrated into the controller, enables a variety of applications.

- Complex Parts
- Prototyping
- R&T Applications

Compact Work Cell Configuration



Application

The system is ideal for automated fiber placement in serial production. It supports common materials such as PrePreg and Dry Fiber up to 50K per tow.

- Complex 2D and 3D Parts
- Easy Maintenance
- Automatic Changing Device

Flexible Work Cell Configuration

