

BROETJE
— AUTOMATION

Fastening Systems

Assembly Stations

Jigs & Tools

Mobile Systems

Process Technologies

Operational Tooling

Digital Solutions

Factory Integration

Manufacturing & Engineering

Project Management

Maintenance & Service

Composite Systems

EQUIPMENT

SERVICES

PROCESSES

INTEGRATION

Equipping
the Factory of
the Future

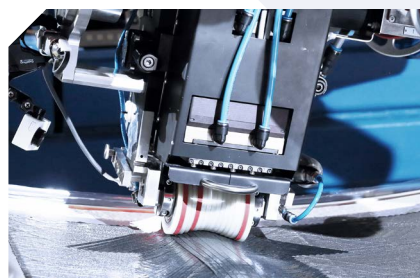
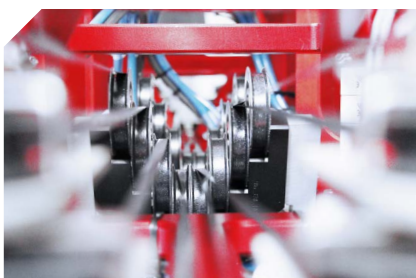
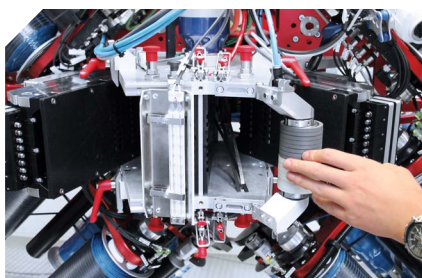
STAXX FLEX

robotic fiber placement

ROBOTIC FIBER PLACEMENT — STAXX FLEX

The **STAXX FLEX** is a high-performance automated fiber placement end-effector for complex 2D / 3D parts. Weighing just 440 kg with material, it can work with standard 500 kg-class industrial robots.

The system is ideal for automated fiber placement in serial production, supporting common materials like PrePreg and Dry Fiber up to 50K per tow. Its modular tool-free design allows easy maintenance and full component access. An optional automatic changer enables parallel maintenance and material loading during operation.



Net weight 280 kg / 620 lb
Including material 440kg / 970 lb

Max. layup speed 60 m/min, cut on the fly 45 m/min

Segmented compaction roller for even distribution of compaction force to all tows

16 x 8kg material spools on board

Female layup radius down to 800 mm

Material flexibility: Thermoset and Thermoplast ¼" and ½"

Heating unit utilizing IR lamps or laser diodes

Long-life cutting unit >10.000 cuts without rework

- » Contour-following compaction roller
- » Maintenance with interchangeable parts
- » Modular design for access to components
- » Camera-based inline ply inspection and CAM system with digital twin
- » Compatible with industrial robots, machine-style and open gantry configuration
- » Supports high-speed laying and cutting with 16 tracks
- » Various material types (e.g. Prepreg)