

System Solutions

# **TSS Spindle**

Setting System for Sandwich Structures



## **TSS Spindle**

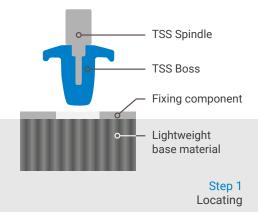
+ Model TSS Spindle as a robotic integrated system or fixed position assembly cell for joining lightweight materials

#### Features

- + The installation of plastic bosses in lightweight materials is possible with or without pre-hole
- + Individually adjustable process parameters
- + Feasibility study and check of completed joints at the WEBER laboratory
- + High resolution process results
- + For tasks with accessibility from one side only
- + Higher transmissible torque and pull out forces than with existing (familiar) joining components

### Applications

- + System for installing plastic bosses with a thermal adhesive bond for firm joints in lightweight materials
- For use with: Laminar structures (sandwich panels or honeycombs)
  Fibre composites (carbon or glass)
  Particle composite material

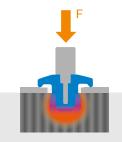






Step 2 Frictional heating

Step 3 Penetration / Melting





Step 4 Dwell time with down force

Step 5 Cooling / Tool retract

## Technical data



