Challenge: Forming processes for carbon-fibre stringers with complex contours.

- Stringers are widely used (4 to 6 km) in aeroplane structures to provide stiffness to the panels.
- Current technologies have low productivity and are unable to form contoured stringers without wrinkles.
- There is a need for a high productivity, automated system able to make different types of stringers.

A+ GLIDE FORMING

The revolution in stringer manufacturing

Applus+ has developed a new stringer manufacturing process to provide a versatile, high-productivity solution that overcomes the major drawbacks of existing forming technologies.

Forming Technologies Comparison
A+ Glide Forming Benefits

Better Quality

• No wrinkles

High Flexibility

• One single machine for different stringers: Ω, T, U
• Only a new male tool is needed to manufacture an additional stringer

Cost Saving

• OPEX: highly automated, low labor cost
• CAPEX: only one machine, very simple tools

Environmentally friendly

• Local heating: no heating tools, energy saving compared to current technologies
• Less scrap material
Contoured formed L and Ω