



# Moulds & tools for Thermoplastic

## MOULDS & LAY-UP TOOLS FOR AEROSPACE STRUCTURES

- Biggest tool for Thermoplastics ever built
- Complex 3D shaped metal moulds & tooling structures of up to 25 x 6 x 5 meters (82 x 20 x 16 feet)
- Tooling for fuselages, wing & tail sections, nacelles, flap skins, nose caps, center wing boxes, etc.
- References include all major aircraft programs like: **A350XWB, B787, B777, A330neo, A320neo, A220, MC21, F-35, Eurofighter, A400M, CR929** etc.
- Integration of vacuum, sensor, heating & cooling systems
- Material: steel, stainless steel, INVAR, aluminium, special alloys
- In/Out autoclave solutions
- Your one-stop-shop
- Global logistics in place



### The company

Ostseestaal has built up an excellent reputation as partner for the supply of medium & large moulds, fiber placement mandrels and lay-up tools for the (composite) aerostructure and space industry.

We offer the entire production process, starting from the handling of the free form surfaces to the pre-cut and the 3D forming of the sheet metal plates right up to the assembly of the laminating and gluing devices. All production processes are inspected, analysed and documented by our quality assurance, guaranteeing the highest quality standards.

Made in Germany!

As a specialist in 3D formed metal components, Ostseestaals core capabilities focus on the design & manufacturing of moulds and tooling systems. This includes the expansion of free form surfaces, material cutting, 3D sheet forming, welding and heat/surface treatment, 5-Axis machining, as well as design development and engineering.

**Your Benefits:**

- 3D high precision forming of skinplates results in less machining and less costs
- 3D shaped skinplates are made from one segment (if possible) which reduces welding seams, and results in less potential risk of leakage

**Project:**

Enhanced Mould for Thermoplastic Fuselage in and out of Autoclave Consolidation

**Key facts:**

Length:	8.850 mm
Width:	5.700 mm
Height:	3.700 mm
Weight:	40 t

