

Foundry Technology Investment Casting Aerospace

Courtesy of UTC Aerospace Systems Designed-by UTAS-Propeller-Systems-RATIER-FIGEAC® Produced by ZOLLERN Investment Casting



Reliable Investment Casting Components

Proven industry expertise, specific know-how and long-term partnership to the OEM and suppliers in the aerospace industry provides ZOLLERN FOUNDRY TECHNOLOGY to offer customized solutions resulting in highly sophisticated products for various applications in the aerospace and space industry. ZOLLERN delivers state-of-the art investment castings, made of a wide range of materials like **steel**, **aluminium**, **copper and super alloys (Ni- and Co-based)**.

Flexible and Economical

Capabilities

- Steel components up to 20 kg
- Aluminium components up to 1400 x 900 x 600 mm and 120 kg
- Super alloy components up to 25 kg
- DS / SX components up to 4 kg

Aerospace Applications

- Engine: vanes, blades and heat shields
- Structure: flap profiles, winglet and flap track fairings
- Airframe systems: actuator housings for flight controls and other systems, electronic boxes, fuel and hydraulic housings
- Equipment: fixtures and fittings, latches, clamps and hooks, housing for water & waste
- Space: housings for optical, electronic and fuel systems





The TNO Sinplex-Casting – winner of the Aluminum Award 2014 / category "Aerospace and Automotive" – is an ultra-thin-walled miniaturised and extremely lightweight navigation subsystem for future space missions. The casting with its complex structure gets its particular characteristics by being produced with the SOPHIA-process.

ZOLLERN Technologies

- Gravity casting
- Low-pressure casting
- Vacuum casting

Our Special casting and solidification methods open up extra aspects of feasibility and quality:

- SOPHIA® process for high-strength thin-walled aluminium components
- Single Crystal (SX), Directional Solidification (DS) and Equiax (CC) casting
- Stress and casting simulation ensure optimized process engineering and best economic process layout



Products for the Aerospace Industry

ŽOLLERN

ZOLLERN GmbH & Co. KG

Hitzkofer Str. 1 72517 Sigmaringen Germany T +49 7571 70-0 F +49 7571 70-602 info@zollern.com www.zollern.com