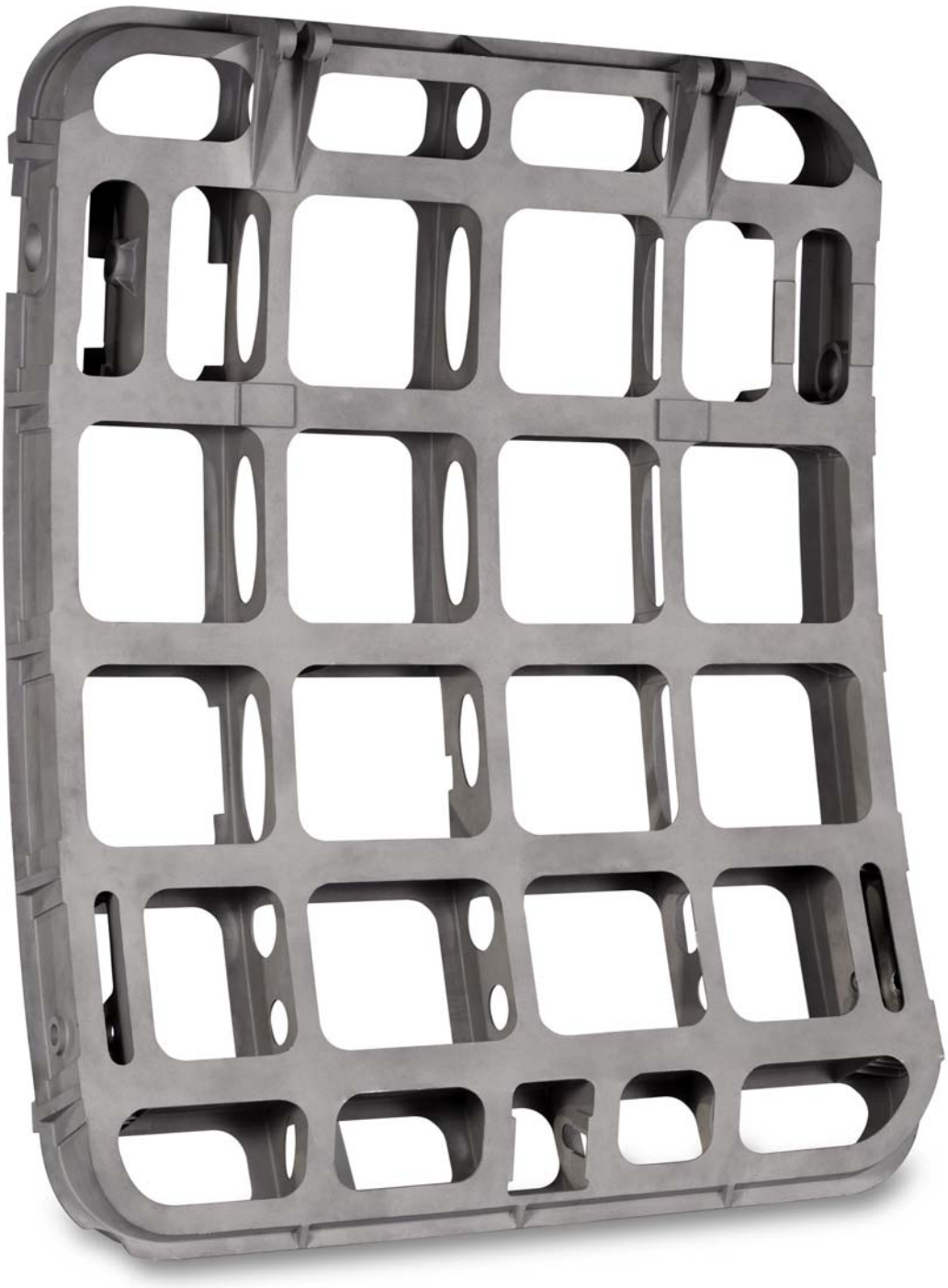
TiTAL®
THE VERY BEST IN CASTINGS



INVESTMENT CASTINGS FOR AEROSPACE

One Piece Cast Door (Investment Casting)

This door was converted from a traditional sheet metal fabrication to an investment casting solution. The casting method provides significant cost and weight savings.

Technical Details

This door has the following characteristics:

- Dimensions: 1300 x 1000 x 125 mm
  51” x 40” x 5”
- Wall thickness: 1.9 - 15 mm
- Weight: 20 kg / 705 lbs
- Alloy: Aluminium A 357
- Process: HERO Premium Casting®

Mechanical properties:

- YS: 270 N/mm²
- UTS: 320 N/mm²
- EL: 5 % (A_5)

Advantages for the Aircraft Manufacturer

Aircraft doors comprise a large proportion of the manufacturing cost of the fuselage in today’s aircraft. Through an integrally designed door, cost savings of up to 40 % over traditional fabrication can be achieved through assembly consolidation and reduced parts count. In addition, weight saving of more than 10 % is achieved regularly. The unparalleled design flexibility of investment castings allows the incorporation of separate components and topological optimization for efficient load path requirements at the same time.

The benefits of HERO Premium Casting® are found throughout the value added chain by:

- Large cost savings
  - Recurring manufacturing cost (i.e. labor cost)
  - Non recurring design, analysis and tooling cost
  - Less inventory and part management
- Weight reduction through Casting Factor 1.0
- Topological optimization for efficient load path design and weight reduction
- Minimum variation of shape and positional tolerances
- Shortened cycle time
- Reduction of inspection costs
- Near-net-shape production process leads to reduction of machining costs

Contact TITAL

Contact us for full technical details, ROM prices on your application and a technical meeting. Specific experience and technical information are critical to achieve a cost effective investment casting design. Please feel free to utilize our world-class engineering team to help you achieve your production cost targets and time-to-market objectives. The entire TITAL team is at your disposition to answer any question regarding titanium or aluminum investment castings.

Data transfer

If you wish to provide us with your part design, please use one of the following formats:

- CAD System CATIA V5 Version V5 R19 SP03
- Operating system: Windows XP
- Interfaces: STEP, IGS, stl, dwg, dxf
- Data communication: Odette, FTP and per E-Mail

Contact us:

TITAL GmbH
Kapellenstrasse 44
59909 Bestwig
Germany
www.tital.de
Phone: +49 2904 / 981 - 160
Fax: +49 2904 / 981 - 400
E-Mail: tital@tital.de