

# Titanium



ALCOA HOWMET  
A division of Alcoa Power and Propulsion


T E C H N O L O G Y

D U R A B I L I T Y

R E L I A B I L I T Y

# Value

## YOU WANT COMPONENT AFFORDABILITY... WE'RE RESPONDING



Alcoa Howmet's titanium casting operations specialize in delivering best-value components by converting difficult-to-fabricate assemblies into more affordable single-piece, lightweight, high-strength titanium investment castings. Our customers experience savings that typically exceed 50 percent when fabricated assemblies are converted to single-piece castings. The resulting castings simplify the manufacturing process by reducing machining, handling, procurement, and administrative tasks.

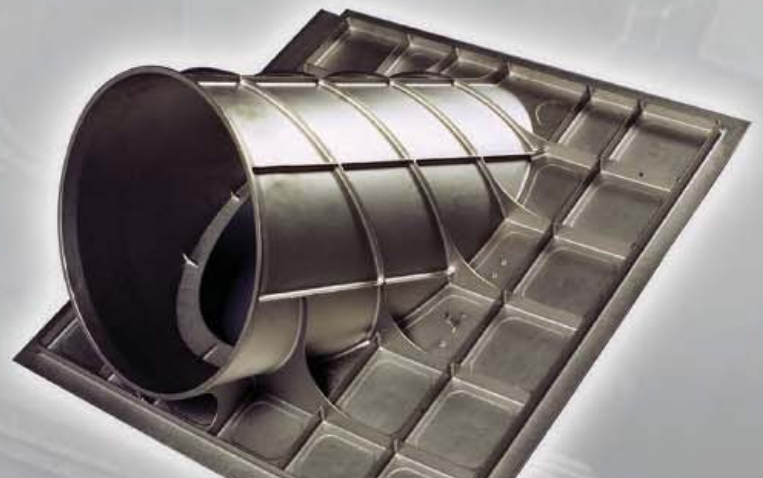
Our engineering team partners with your design team at the earliest stages of new part development to concurrently engineer your product and accelerate its time to market. This early collaboration and our streamlined SLA rapid prototyping capabilities open design options, improve product performance and cycle times, and lead to robust and reliable new product launches.



**Alcoa Howmet**, a division of Alcoa Power and Propulsion, produces titanium and superalloy ingots, and is a leading titanium investment casting supplier for the aerospace, defense, automotive, commercial and industrial markets. Our products are primarily used in aircraft engines, aircraft frames, industrial gas turbines, armament and many other industrial applications.

### > ALCOA HOWMET PRODUCES ADVANCED ALLOY INGOTS

- Ti-6Al-4V
- Ti-5Al-2.5Sn
- Ti-6Al-6V-2Sn
- Ti-CP
- Ti-5Al-5Mo-5Y-3Cr-0.5Fe
- Ti-6Al-2Sn-4Zr-2Mo



# YOU WANT QUALITY TITANIUM INVESTMENT CASTINGS... WE'RE RESPONDING

Alcoa Howmet facilities hold ISO certifications, and all special processes are approved to Nadcap standards. Our internal peer audit system and independent third-party auditors monitor Quality Assurance compliance. Major aerospace businesses, defense contractors, and a variety of customers servicing commercial and industrial markets approve our processes to ensure alignment with their requirements.

Our dependable quality systems and advanced process controls enable us to replicate your mature parts. These standard processes provide you the assurance to order with confidence time after time, year after year, on a delivery schedule to meet your production demands.

To deliver the most complete parts to your production facilities, Alcoa Howmet offers value-added products and services, such as hot isostatic pressing, airfoil machining, specialty coatings, research and development, supply chain management, and specialty tooling.



## > CASTING YOUR COMPLEX COMPONENTS WITH

- Thin- or thick-wall sections
- Intricate passageways
- Sculpted surfaces
- Struts and rings
- Webs

Our extensive portfolio of parts and casting capabilities, including design services and finish-to-print delivery, enable faster production and cost savings on fully processed components.

### Quality Assurance

ISO9001 Certified  
AS9000 Certified  
D1 9000 Certified