



# Advanced Technologies. Tomorrow's Possibilities.

**Additive Manufacturing Products combines a start-up mentality built upon decades of ATI expertise:** the experience of ATI Forged Products—renowned for production of mission-critical finish-machined forgings; the metallurgical innovation and powder alloy leadership of ATI Specialty Materials; joined with our additive manufacturing production acumen, equipped to deliver high-quality production at scale.

## Building capability, layer by layer

ATI has expanded upon its traditional capabilities to leverage powder-to-print finished part solutions, becoming a key player in the aerospace and defense additive finished components market.

AMP is purpose-built to work with standard powder alloys (Ni 625, Ti64, F6NM stainless steel) as well as ATI's unique materials and made-for-additive advanced alloys (ATI C103™, Titan 23™, ATI 1700™ Nickel).

Layer by layer, our printers produce high-performing, high-complexity components. They are then machined and finished to meet final specifications.



## ADDITIVE MANUFACTURING PRODUCTS AT A GLANCE

Dedicated state-of-the-art facility to support development of highly engineered part solutions for aerospace and defense

- Capable of producing the **tallest metal additive parts** in western hemisphere
- **Vertically integrated:** advanced large format metal additive manufacturing, heat treating, machining and inspection capabilities under one roof
- 132,000 sq. feet with **room for growth, high-powered printers from the start**
- **Highly skilled workforce:** 20 engineers, technicians and experts with plans to double by 2030
- Located in Margate, Florida (near Fort Lauderdale) in **close proximity to key aerospace and defense primes**

## ATI Expertise Adds Up

### Design

- ▶ Parts are designed in-house with highly complex geometries based on customer needs.

### Powder

- ▶ ATI's wide range of new alloy powder materials are designed specifically for additive manufacturing.

### Print

- ▶ Using laser powder bed fusion and electron beam melting, parts are printed layer by layer, in 40-100 micron thicknesses. The result: near-net-shape components.

### Heat Treat

- ▶ Under vacuum, residual stress is "baked" out of the part as the layers become one.

### Machining

- ▶ Ultrasonic cleaning, grinding, and removal from the build plate along with 5-axis machining to customer specifications.

### Quality

- ▶ Precise testing and measurement confirms the dimensions and geometric features to customer specifications.



## CRITICAL PARTS FOR CRITICAL MISSIONS

ATI Additive Manufacturing Products serves the most demanding markets: aerospace, defense, and space.

Bechtel Plant Machinery Inc. (BPMI) awarded ATI its first contract, to support development of highly engineered part solutions in support of the U.S. Naval Nuclear Propulsion Program.

“As our customers blaze the trail of what’s possible, ATI is honored to partner with BPMI in developing and producing the materials and components that make these extraordinary achievements possible.”

— Kim Fields, ATI President and CEO, announcing ATI Additive Manufacturing Products facility

### Certified Quality is Imperative



Our customers — and their customers — rely on our absolute dedication to excellence. ATI AMP meets the highest quality management requirements, verifying with our on-site coordinate measuring machine, computed tomography scanning, and digital measuring.

## Diverse Capabilities

ATI’s “Printer Row” contains printers with capabilities ranging from gigantic with 12 high-powered lasers, to slow and steady single-laser machines. Key variations: the size and complexity of parts they produce, speed at which they print, and the materials they can print. Our core technology is laser powder bed fusion, building layer by layer. All machines produce complex components for aero engines and airplanes, helicopters, submarines, spacecrafts, hypersonic missiles and more.

### ATI’s additive manufacturing advantage:

- Start-up mentality with tremendous expertise and innovative equipment.
- Fully Integrated Supply Chain.
- Greenfield operation built on decades of ATI materials science capabilities.

### From Powder to Power

We are pioneers in ultra-pure melting and processing technology for custom Titanium, Nickel and exotic alloys.

- ATI Titan23™ offers superior performance in additive manufacturing applications due to improved microstructure control, higher strength, and reduced residual stress.
- ATI 1700™ advanced, high-temperature patented new Ni alloy capable of wall structures down to 0.010”, ideal for heat exchangers and hypersonic structures.
- ATI C103™ ultra-high temp refractory alloy. Nb-10%Hf-1%Ti with Ta W, and Zr.



A crane rail system runs the entire length of the building, transporting parts up to 8,000lbs, enabling safe and efficient operational flow.



After builds, a coarse de-powdering occurs, capturing excess powder. This powder is sieved and reused, making the process more sustainable.

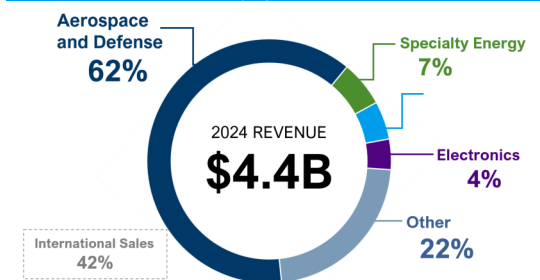


Across the facility, 55+ miles of wire connect machines to the power grid with full UPS and generator backup preventing build failures.



An 11,000-gallon Argon tank is utilized in our build process to displace oxygen and capture particles that come off the laser, providing increased safety and protecting the part from defect.

## ATI AT A GLANCE



ATI is an international company with **more than 7,000 employees** across 15 locations in Europe and Asia, and almost 30 in the United States.



Every decision we make and action we take is built on our shared commitment to ATI’s Core Values:

**Integrity**  
**Safety & Sustainability**  
**Accountability**  
**Teamwork & Respect**  
**Innovation**