

# Materials for a bright future in Aerospace and Defense

More than 150 years after its founding, ATI has transformed its Vandergrift Operations to become one of the most advanced materials finishing operations of its kind. Significant investments have catapulted the operations into the future.

# **Expanding Capabilities**

Vandergrift is the ideal site for this expansion based on its close proximity to our Brackenridge facility. With all production under one roof just miles from our best-in-class rolling, results in shorter lead times—significantly benefitting flow time, operational efficiency and transportation.

Upgrades to the hot and cold anneal lines now allow the ability to process titanium, which is in high demand for aerospace and defense. The addition of two light gauge slitters enable production of thinner, larger specialty coils. The new bright anneal line, with the best and newest technology in the industry, positions ATI to rise to any challenge.



# **Benefits of the Expansion**

- Operations now produce specialty materials, including titanium, for a global market.
- The world's quickest flow times, with production under one roof.
- Close proximity to Brackenridge Operations allows for shorter lead times.

# Melt, Roll, Finish

#### **Best Melt**

Our electric arc furnace in Latrobe, PA is a game-changer for production of nickel and cobalt alloys. It enables high-quality, efficient and accurate melt whole bringing the benefits of automation and significantly increasing use of lower-cost scrap-based hot metal. This joins our leading specialty melt operations for nickel and specialty stainless in Brackenridge, PA and titanium in Lockport, NY.

### **Best-in-Class Rolling**

The Hot Rolling and Processing Facility in Brackenridge, PA is one of the world's most powerful roughing mills, with unique combustion capability enabling multiple alloy systems. The HRPF delivers best-in-class gauge width tolerance capabilities, and has coiling capability to produce intermediate coils with thicknesses as thin as 0.08".



# Vandergrift at a Glance

**What:** Finishing operations for titanium, nickel alloys, and cold rolled engineered stainless steel.

**How:** Bright anneal tower, hot and cold annealing lines.

Where: Vandergrift, PA with a close proximity to ATI Specialty Rolled Products locations including Brackenridge, Natrona Heights, Washington, Monaca, Rochester, and Zelienople.

**Who:** Our engineers, operators and support staff are highly skilled in materials science and manufacturing.

When: Originally commissioned in 1849, transformed to state-of-the-art in 2023.



# **Industry Leading Finishing Operations**

The new Bright Anneal Line in Vandergrift, PA has state-of-the-art equipment and control systems to produce higher quality surface finish for a wide range of sensitive specialty materials; improved formability and dimensional control of thin gauge products; and wider coil sizes that provide customer flexibility for their fabrication needs. Our Washington, Monaca, Rochester and Zelienople, PA facilities further support best-in-class finishing.



# Better, Faster, Stronger

#### What is the bright anneal (BA)?

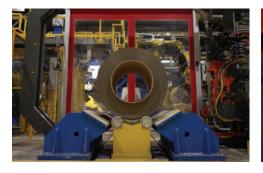
A BA is designed to relieve the stress from a wide variety of material that is produced by ATI. The BA takes coils that are rolled to various thicknesses on our cold rolling mills and welds one to another in a continuous strip. The line then cleans the rolling oil from the metal. Accumulation in the line allows time for welding and discharging coils, by creating large loops in the accumulation tower. Coils are then annealed in an inert atmosphere to eliminate oxidation. Coils are rewound and banded, then shipped to other operations within the plant or shipped to customers.

#### The Bright Anneal delivers advantages customers are hungry for:

- Best-in-class attributes including thickness, coil size and cycle times.
- Shortest lead times in the world.
- It lowers their costs to fabricate and reduces their metal risk, enabling them to win over their competition.

#### Compelling benefits for ATI:

- Interplant transit times are shorter, helping to lean our inventory and costs.
- The streamlined market-based focus and product mix enrichment significantly out-strips inflation.
- Capable of a wider range of product forms and materials.







Materials are heated to extreme temperatures ranging from 1000°F to 2250°F to achieve the desired strength.



The bright anneal tower stands 200 feet tall above ground level and is visible from around the town of Vandergrift.



The bright anneal can process coils weighing up to 52,000 lbs, in as short as 15 minutes or up to 3 hours.



One of the only facilities in the U.S. that processes titanium, nickel alloy, and stainless steel in one facility.



The speed of the bright anneal ranges from less than 10 feet per minute to more than 200 feet per minute.



Reclaim, purify, reuse: the new Bright Anneal line is designed to save hydrogen consumption during processing, through a several-step process involving a positivedisplacement blower, activated carbon filter and molecular sieve adsorber.

## Vandergrift Operations: Built on a Strong Foundation

#### 1849

The first factory on site opened as a water-powered mill.

#### 1901

As Allegheny Steel & Iron, first company to use the electric furnace in manufacturing alloys.

#### 1924

Commercialized stainless steel in the U.S., winning their first patent.

#### 1938

Merged with Ludlum Steel Company to become Allegheny Ludlum Steel Corporation.

#### 1996

Merged with Teledyne to become a founding part of Allegheny Technologies, now known as ATI.

#### **Today**

Vandergrift Operations is best-inclass specialty materials finishing.

# ATI at a Glance





ATI is an international company with **more than 6,000 employees** across nearly 20 locations in Europe and Asia, and more than 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