

**ADVANCED AMERICAN
TECHNOLOGIES**

AT²LAS[®]

ONE RESIN REVOLUTIONIZING COUNTLESS INDUSTRIES.

AT²LAS[®] from Advanced American Technologies is a proprietary composite resin, uniquely engineered to outperform such materials as steel, lead, aluminum, concrete, and plastic across a variety of sensitive applications and critical industries. From radioactive shielding and transport to ballistics protection, electronics coatings and beyond, AT²LAS has you covered.

80%
**LIGHTER THAN
STEEL**

40%
**LIGHTER THAN
ALUMINUM**



A DISRUPTIVE TECHNOLOGY: AT²LAS FEATURES



LIMITLESS APPLICATIONS

- Customizable
- Durable
- Flexible
- Pumpable
- Castable



FORMULATED TO LAST

- Fire resistant
- Vibration resistant
- Fracture resistant
- Thermal protector



EASILY IMPLEMENTED

- Manufactured quickly
- Produced on- or off-site
- Environmentally safe



SAFE & SECURE

- Impermeable
- Non-corrosive
- Non-porous
- Non-conductive

ABOUT US

Advanced American Technologies (AAT) is a full-spectrum composite research, development and manufacturing company with facilities in Oak Ridge, Tennessee and Huntsville, Alabama.

A Service-Disabled Veteran Owned Small Business (SDVOSB),
AAT was established by retired US Army Colonel Rob Grigsby.



AT²LAS APPLICATIONS

The uses for our unique composite resin are infinite. AT²LAS[®] addresses the common vulnerabilities of other materials, such as resisting corrosion, fracturing and high temperatures, all while being easily and quickly deployable. AT²LAS has also undergone third party testing for the nuclear, ballistics, piping, mechanical and thermal markets.



NUCLEAR RADIATION SHIELDING & CONTAINMENT

Ideal for core encapsulation and nuclear waste storage, AT²LAS can be poured on-site and is structural in nature, adapting to the specifications needed. It has also been independently verified to shield against Cobalt-60 transmission similarly to steel.



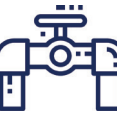
BALLISTIC PROTECTION

AT²LAS delivers a lightweight, customizable and configurable ballistic solution that can be deployed easily and affordably. That means that ballistic applications from anti-intrusion doors to modular ballistic walls to ambidextrous protective backpacks are more accessible.



ELECTRONIC COATINGS

Cutting-edge IP deserves equally cutting-edge protection. AT²LAS can secure electronic circuit cards, providing sensitive engineering with anti-tamper, conformal coating while decreasing operating temperatures.



PIPELINE REINFORCEMENT

Traditional materials in pipes have their weaknesses: corrosion in steel, fragility in plastic and PVC. Manufacturing with AT²LAS allows pipes to be lighter, and more resistant to vibration and degradation—and can repair or strengthen existing pipes.



AEROSPACE COMPONENTS

Being 40% lighter than aluminum, castable, non-corroding, and having the ability to absorb significant vibrations, AT²LAS is ideal for certain aerospace components. Recently passing the rigorous Federal Aviation Administration's challenging DO-160 test for shock, vibe, acceleration and flammable environments, AT²LAS was selected to replace traditional machined aluminum components for said project.



TOOLING SOLUTIONS

For new automotive parts or processes, AT²LAS can eliminate costly missteps by validating tool designs prior to production and implementation. It can be used to cast products and can also reduce vehicle weight, resulting in increased efficiency.

ENVIRONMENTAL CONSIDERATION

Our resin can have a positive environmental impact, both in application as a protective barrier and in the ability to return unused resin to AAT for recycling. For example, use of our composite in pipes can prevent the leaching of harmful products into waterways and unused resin can be reintegrated and reintroduced in future applications.

TESTED & APPROVED

Weight

102.7 lb/cu ft
20.4% weight of *INVAR*,
60.9% weight of *Aluminum*

Density

1.645 grams/cu cm

Compressive Yield Strength

18,000 psi

Coefficient of Thermal Exp.

24.1 x 10⁻⁵ in/in °F

Tensile Strength

7,200 psi

Chemical and Oil Strength

None

Corrosion

Non-corroding

Electrical Conductivity

None

Thermal Insulation Properties

<0.43 Btu/ft hour °F

Fire Resistant

Yes

Flexural Modulus (at 72°F)

.42 x 10⁶ psi

Hardness, Shore "D" (at 72°F)

90

Tensile Elongation (at break)

2.7%

Flexural Strength (at 72°F)

12,700 psi

Heat Distortion

425°

UV Sensitivity

None

CONTACT US

Want to see how Advanced American Technologies and AT²LAS can impact your industry? Please reach out at atlasaat.com or by calling 1(888) 988-8802.


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