

AEROVAC

COMPOSITES ONE



TOOLING SOLUTIONS



Innovative. Dependable. Results.

Tooling Solutions

Welcome to Aerovac, a major manufacturer, developer and supplier of process materials, tooling and services used in prepreg processing, vacuum infusion, glass lamination, and other industrial applications. As part of Composites One, North America's leading distributor of composites, we're uniquely positioned to provide customers with next-gen product and supply chain innovations that are stored locally, priced competitively, delivered on-time, every time, and supported by more than 100 technical product experts worldwide.

Innovative. Dependable. Results. That's Aerovac. The better way of doing business.

INNOVATIVE TOOLING SOLUTIONS

The depth of Aerovac's tooling expertise is unparalleled in the industry. For more than 30 years, we've focused on innovating tooling materials and technologies that meet or exceed customers' needs, today and in the future. Through our confidential design and engineering service, we also help customers take their tooling projects from initial concept through development, to prototyping and production.

Aerovac offers a complete range of tooling solutions, including:

- Tooling prepregs suitable for all markets (unidirectional and fabric, using carbon and glass fibers)
- Vacuum bagging consumables (for low and high temperatures)
- Tooling blocks, backing structures, sealing systems and ancillaries
- Tooling hardware, including composite tools and reusable silicone tools
- Worldwide manufacturing, design and technical support, backed by our commitment to short lead times

Composites Tooling Solutions

When it comes to the design and manufacturing of high-quality composite tooling, Aerovac brings a new level of performance to the marketplace. Composites are often

used for tooling because of the coefficient of thermal expansion (CTE) match between tooling and the composites parts being produced, enabling the manufacturing of more precise parts.

With its range of autoclave equipment, our Toulouse, France facility specializes in using glass epoxy, carbon epoxy or BMI carbon fibers to produce larger-sized tooling with tight geometrical tolerances. Created from relatively inexpensive masters, molds are duplicated at minimal cost, and can be mounted on adjustable frames or carbon couplings.

Aerovac solutions include:

- Composite lay-up molds
- Assembly works stations
- Drilling support mold
- Caulplates

Silicone Tooling Solutions

Aerovac is recognized for offering one of the most advanced lines of reusable vacuum systems, manufacturing techniques and sealing systems in the industry.

The line includes:

Reusable membranes for high temperature autoclave and out-of-autoclave applications.

- Increase productivity, reduce operating costs and minimize waste
- Can be easily applied to complex forms, for high volume production of quality parts

- Are built durably, eliminating tearing during curing
- Include seal systems fitted on elastomeric tools, to provide vacuum integrity and accommodate complex shapes

Heated membranes (flat mats and vacuuming membranes) for hot bonding or on-site repairs.

- Can be molded to shape
- Have a frame or ceiling skirt to ensure vacuum integrity; no additional consumables needed

IMS (Infusion Membrane Silicone) membranes.

Flexible and precisely molded to the part's shape, they provide a resin feed network for infusion.

Intensifiers preventing compaction issues on parts.

- Transmit vacuum bag pressure evenly to localized, detailed areas on the part part, with complex angular or concave features, where resin accumulation is possible
- Are made from silicone and fibrous carbon/epoxy reinforcements, providing rigidity and dimensional stability



**Multiple AS9120, AS9100,
EN9100 & ISO 9001
certified locations**



**Aerospace, Wind Energy, Marine,
Glass Lamination and other
Industrial Sectors**



**Product selection and technical
application experts located
around the world**

WHY SILICONE TOOLS?

- Increase efficiency and reliability
- Help reduce labor time
- Optimize material flow
- Improve process consistency
- Increase part quality
- Provide cost savings
- Eliminate the time and cost of purchasing, cutting and recycling films
- Seal instantly, preventing resin leakage during infusion
- Provide a smooth surface for infused parts
- Are suitable for counter-tools, and easy to implement, repair and modify
- Reusable vacuum bag assemblies that can be added to tool structures
- Fabricated pre-shaped vacuum bags, that can save time and reduce waste

WHY COMPOSITES TOOLS?

- Are lightweight and reusable
- Are good for complex geometries
- Can be processed at low temperatures
- Offer good mechanical performance and durability
- Excellent surface finish
- Allows for CTE match between tool and composites parts being produced



THE NEW AEROVAC

Our Mission:

To enable customer success by serving as their complete vacuum bagging and process materials solution.

Our Promise:

Innovative
Dependable
Results

Aerovac makes it easy for customers to source product, identify the right supply chain solutions, and efficiently utilize high quality process materials. So you can focus on engineering end-products, growing revenue, and delivering results. Aerovac. It's the better way of doing business.

Focused on Innovation

At Aerovac, innovation is at the heart of everything we do. It starts with listening to customers so we can understand their needs, and apply the right technologies and services to deliver proven results.

Focused Expertise

Aerovac's approach is to put the customer first. We listen. We advise. And then we respond, with innovative products custom formulated to meet each customer's requirements, setting us apart from the competition.

The Aerovac Difference



**Global
Footprint**



**Dependable
Service**



**Experienced
Technical Support**

AEROVAC
COMPOSITES ONE

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