

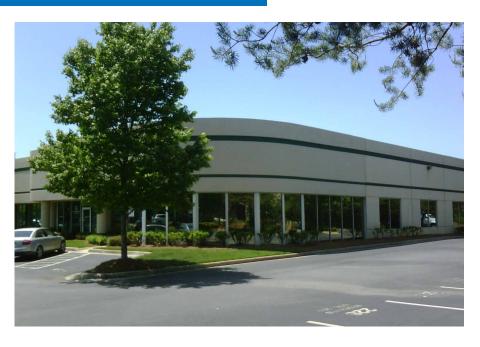


### ViscoTec America Inc.

ViscoTec, a German company, specializes in systems for the metering, dosing, applying, filling and emptying of low to high viscosity fluids.

Handling of all materials – in some cases with viscosities of up to 7,000,000 mPas – is performed virtually pulsation free and with extremely low shear stress. We provide detailed, customized consulting and perform extensive tests in the case of particulary challenging applications.

Our dosing pumps and systems are optimized to meet your individual requirements and are manufactured to the highest quality standards available in the various industries we participate in.



As well as providing sophisticated solutions to met even the most complicated requirements, ViscoTec offers the advantages that your system components all come from on single source in Germany. This ensures absolute quality control and component compatibility.

Info: www.viscotec-america.com

### ViscoTec Pumpen- u. Dosiertechnik GmbH



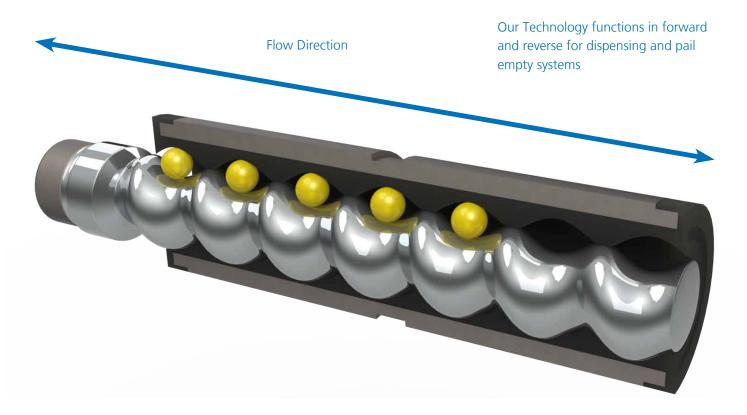
Headquarter of ViscoTec in Töging, Germany

## **Endless Pistion Principle**

### ViscoTec Operating Principle

We transport, dose and handle viscous, shear sensitive, solid particle loaded liquids and semi liquids volumetrically and therefore have 100% control over the entire dosing process. The priority is on the successful and controlled handling of high viscosity products.

### Our core technology



Dispenser sizes range: 0.05 ml/min to 2.2L/min

For two component systems, select appropriate dispenser combination to suit mix ratio needs. We can design complete tailored mixing head solutions to accommodate our customer's dispenser combination.



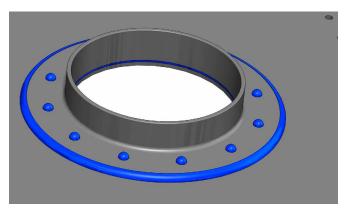
## Markets, Materials, and Processes

Modern aerospace structural design demands the use of high performance and lightweight materials. As fuel costs rise, the need to reduce airframe weight increases. In addition Aerospace component production processes are getting leaner. Manufacturers can guarantee customer first time quality and meet aggressive on time delivery schedules through the use of precise and repeatable automated equipment.

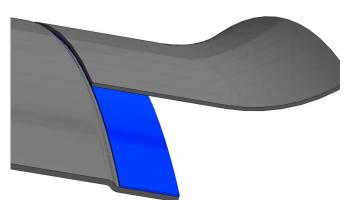
ViscoTec suits the growing needs of Aerospace with its unique technological advantages, personal experience, and customer responsiveness to novel needs and applications.

Our equipment is capable of efficiently processing materials that are traditionally difficult to handle - pasty consistency, thixotropic, highly viscous and highly filled with hollow glass and polymeric microspheres.

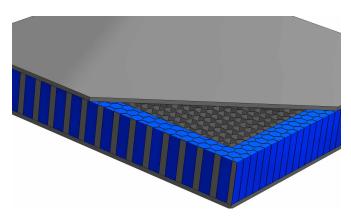
ViscoTec offers a broad range of system solutions to answer the growing needs of the industry.



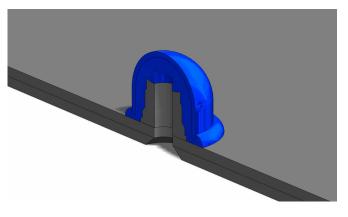
2-Component polysulfides Wet wing fuel tank sealing



Liquid shimming, bonding, filleting of aircraft structures

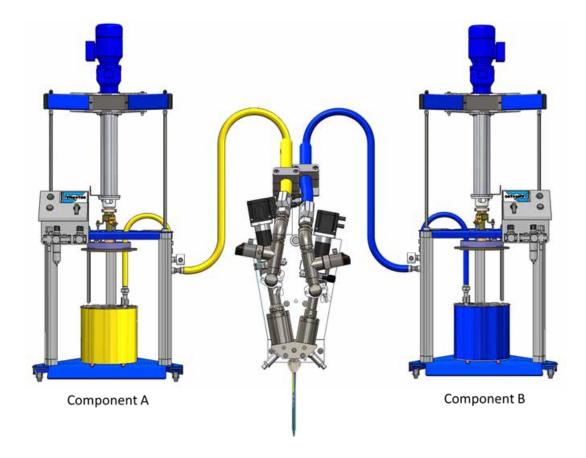


Low density, highly filled pasty materials



Molding and sealing of aircraft fasteners

### **Automation**



Dispensers operate in reverse to remove material from manufacturer pail with very little air pressure. Our unique pail empty systems remove 99% material from the manufacturer's pail.

Dispensers operate in forward direction to feed material to the mixing block based on customer requirements and within 1% accuracy.

### Well suited for Automated Robotic Applications

Our equipment and controls are specifically designed to be easily integrated into our customer's robotic cells. This is how most of our customers realize the full potential of our technology.

- Maintain consistent bead width with variable robotic feed rates
- Change mixing ratios on the fly

You have absolute control over your material.



### **Integrated Systems**

ViscoTec strives to advance the technological state of the industry. We have successfully incorporated our products into complete systems that target specific Aerospace industry needs. Several are listed below. Utilizing our technology and industry partnerships, we intend to reduce aircraft weight and streamline manufacturing processes.



#### ViscoTec Shimming

2-Component Stationary Low Viscosity manual adhesive application system. Base and accelerator components are gravity fed to dispensers that deliver material to operator.



#### ViscoTec Shimming

2-Component Highly Viscous Shim material mixed on demand Just-In-Time. Mobile Cart to position near operator in work cell.



#### ViscoTec Shimming

2-Component Stationary Highly Viscous shim material mixed on demand with a large mixing ratio. 55 Gal. Drum used for Base, 5 Gal. pail used for accelerator.



#### ViscoTec Sealing

2-Component mixing on a Rail System located along station or butt line of aircraft.

Operator points dispenser to point of interest and pulls pistol-grip trigger to dispense material.

ViscoTec machinery removes material from pail and delivers to the dispenser to dispense on demand.



#### ViscoDuo-S Mobil

2-Component Compact and Mobile cart for casting low to medium Viscosity materials.

Pistol grip hand-gun operation.

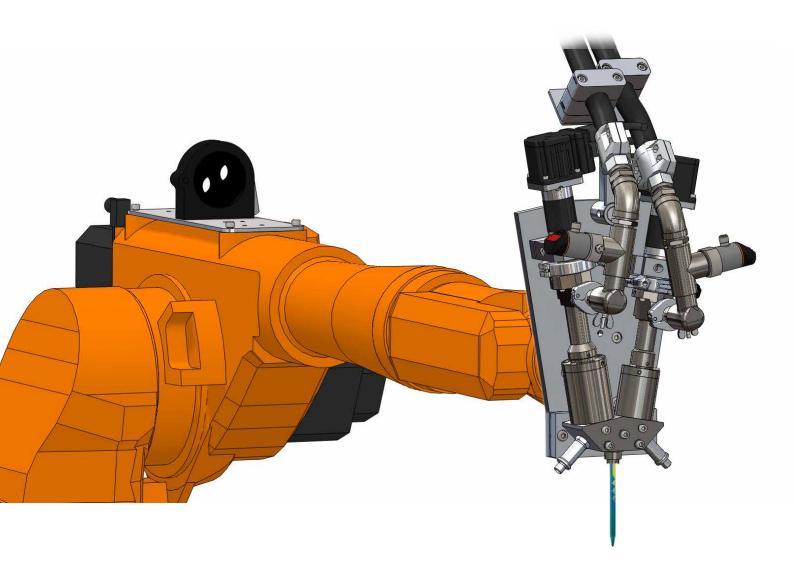
Operator dispenses to point of interest on demand.

## **Unique Tailored Solutions**

The aerospace industry is one of closely held trade secrets and customized materials. Often our customers require tailored system solutions for unique and proprietary materials and processes. We welcome the challenge and encourage an open dialogue to discuss opportunities. Our inhouse engineering and R&D team has an extensive knowledge base from which to develop a solution.

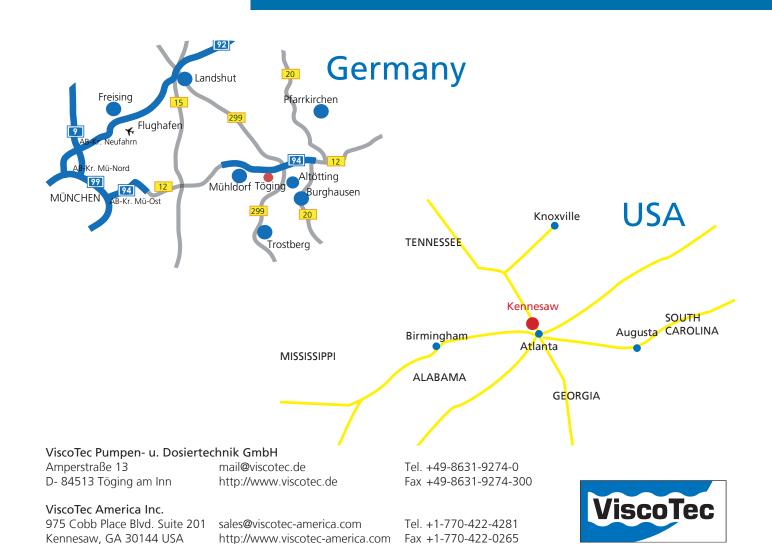
Our exposure in the industry throughout the supply chain, from material formulators to OEM part suppliers, affords the opportunity to develop a broad view of the needs of our customers.

### We look forward to working with you!





# Perfectly dosed!



http://www.viscotec-america.com