

Zenith Metering Systems  
Customizing a packaged pumping solution

## >> System Solutions that Matter to You



### You are Busier than Ever

Your shrinking resources and growing customer demands have forced you to do more and more with less and less. Have you had to cut back on your engineering and design staffs? Or have you asked them to take on even more responsibilities than they already had? And at the same time, do you feel the growing demand for speed and cost efficiencies? Who do you turn to for help when you need an engineered pumping solution?

### The Reliable Solution

You have trusted our sales organization and Zenith Pump with many of your pump needs. Now, trust Zenith metering systems to design and engineer your pumping systems. We are the experts—experts with skills most companies do not possess in-house, and experts who can quickly produce drawings and designs that swiftly deliver a finished product. Package systems from Zenith are also application-specific. We can meet your unique needs because we are a trusted, single source for each component, so your in-house resources no longer have to cobble together all the pieces.

### The Right System, the Right Price

You will discover that Zenith packaged systems offer added value and lower overall costs through solutions custom-tailored for even your most complex applications.

Zenith builds metering systems where performance, quality, experience, and service are essential. From Zenith you also get:

- Outstanding ability to deliver precise, repeatable flow resulting from the use of highly accurate system components.
- Superior pressure viscosity capability resulting from special, high-strength materials and optimized component design.
- Packaged additive metering systems for continuous, accurate injection of processing aids, including colorants, plasticizers and others additives to the mainline process.
- Extensive experience and capability in service agreements and custom engineering.



## >> Engineering and Design Capabilities

Our engineering team is made up of an experienced staff of full-time project engineers. Their expertise and areas of know-how provide you:

- Maximized cost reduction
- A wide variety of pumping systems
- Streamlined manufacturability
- Electronics and creative design
- Fast deliveries, minimal lead times
- Application-specific solutions
- Custom piping, custom controls
- Single-source for all components
- Complete and specific manuals and documentation
- Custom 3-D CAD drawings

### Equipment Capabilities

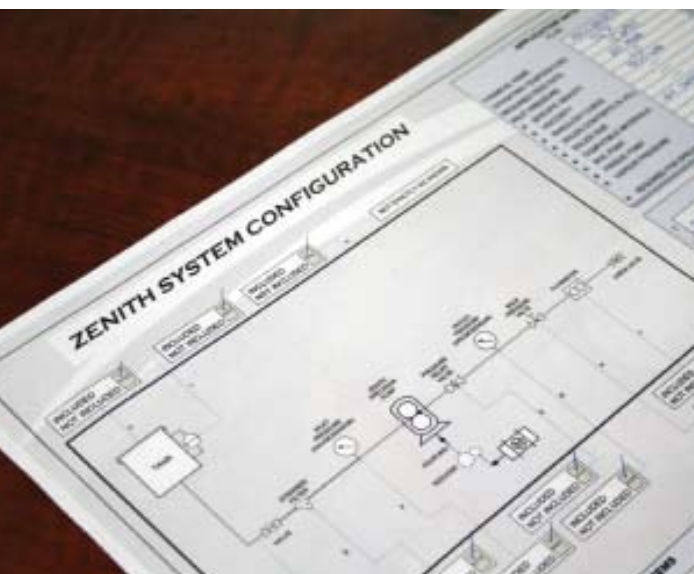
- Controllers: Speed controllers, PLC, pressure controllers and temperature controllers
- Modular designs: Mobil carts and base-plated assemblies
- Accessories: Tanks, mass meters, level sensors, mixers, sanitary equipment
- Custom layouts and system integration conforming to customer specification
- Test stands

### System Capabilities

- Metering accuracies to +/- 1%
- Pressures up to 10,000 psi
- Viscosities up to 2,000,000 cps
- Explosion proof designs
- Environmental friendly seal-less designs

### Technical & Software Services Available

- Owners manuals to support installation and maintenance
- Engineering design, modeling and integration including upgrades or modifications to your current system
- System troubleshooting support
- Training



## >> Products & Applications

### Industry Experience

Zenith produces systems for a wide variety of industries, applications and metering systems including:

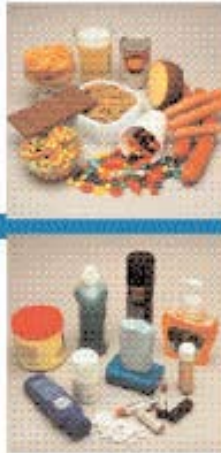
- Polymer Extrusion, Urethanes & Industrial, Adhesives & Sealants
- Polymer Fiber & Spinning
- Food & Beverage
- Paints & Coatings
- Paper Enhancement
- Clinical & Laboratory & Computer Chip Processing
- Chemical Metering
- Pharmaceutical, Personal Care & Cosmetics
- Biofuel Enzyme Metering
- Crude Oil Transport & Pipeline-Drag Reducing Agents



Zenith  
Metering  
Systems



Extrusion  
Paper



Food  
Personal Care



Urethanes  
Fiber



Adhesives  
Paintings & Coatings

## >> Zenith Advantage



### Ensuring Precise Metering Systems

Zenith offers metering systems that handle applications where high accuracy, reliability and durability are critical. We offer fluid handling solutions which go beyond the system components.

For years, engineers have relied on Zenith to provide precision fluid handling solutions for the most difficult pumping applications. This is why Zenith metering systems can be found wherever precise, pulseless and reliable fluid metering performance is required. We are here to help make metering applications simpler for you and your customers.

### Accuracy

Stable repeatable flows are assured under varying conditions of temperature, viscosity and pressure. The use of highly accurate system components gives Zenith the ability to deliver precise and repeatable flows in a simple, extremely accurate, and reliable fluid handling solution.

### Reliability

Understanding how costly lost production time is, we only include robust quality components that will ensure the reliability of the metering system. With two state-of-the-art, ISO certified, production facilities you can trust Zenith to deliver a reliable product.

### Durability

Zenith is committed to providing superior quality and dependable long term durability across a long production life. The quality of the materials of construction and our supplier qualification process ensures the long term durability of our metering systems.

### World Class Service

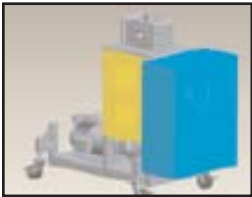
Customer service is a fundamental part of our business and has been instrumental in cementing solid customer relations. Our experienced sales and applications engineers are available to assist you with pump selection, system components, custom designs, materials of construction, drive systems, and troubleshooting when necessary.



## >> Total Metering System Solutions



- Inline pump system
- Heated Stainless Steel tank with level sensor
- Flow meter
- Pressure transducer



- Right-angle pump system
- Temperature, pressure and speed alarms
- Pump with cast-in electric heaters
- LCD touch screen and PLC
- Temperature control (two zones)
- Pressure monitor and control
- AC inverter duty motor with 1024 PPR encoder



- Two-level, dual pump system on a custom cart
- Swivel casters with height adjustment
- Belt driven, inline reducers
- Electric cartridge heaters for pumps
- AC inverter duty motors
- Electric wiring to low and high voltage junction boxes
- Temperature controller



- Inline pump system
- Locking swivel casters with brakes
- Sanitary connections
- St. Steel tank with mounting bracket for mixer
- Flow meter
- Feeder Controller



- Right-angle pump system
- Stainless steel push cart
- Relief valve
- Ball valve
- Welded tube assembly



- 3D models of Zenith metering systems
- Files compatible with AutoCad, Solid Works, Pro-E and others.

## >> Colfax and Zenith at-a-glance

### Colfax Corporation

Colfax Corporation is a world leader in the development, engineering, manufacturing, distribution, service and support of pumping and fluid-handling systems. Specializing in positive displacement and centrifugal technologies, our products support a wide range of industries, from Power Generation and Oil & Gas to Commercial and Navy Marine to a broad range of Industrial applications. For over 10 years, Colfax has remained at the forefront of fluid-handling management by focusing on customer needs for reliable performance around the world.

### Colfax Americas

Colfax Americas serves as the solution provider in fluid handling applications throughout North and South America. Our comprehensive network of direct salespeople, independent distributors and representatives allows us to provide our customers with the local sales support and inventory they require.

Our customers represent diverse end use markets including power generation, crude oil transport, refinery, machinery manufacture, marine, hydrocarbon processing, pulp and paper, polymer and various other process industries. Colfax products meet the strict requirements of our customers' applications and can offer precise, pulseless, and reliable performance. Our experienced engineering staff can help you solve complex design, application, and process issues. We design and develop systems to meet our customers' unique needs—in the Americas and throughout the world.

### Zenith

Since 1926, Zenith Pumps, a Colfax Business Unit, has provided the process industries with precise, pulseless and reliable precision gear metering pump systems. The founder of Zenith Pumps designed and built the first precision gear pump for the fiber industry in the 1920's to improve the quality of rayon yarns being produced. Zenith's ability to innovate, coupled with a desire to provide unmatched quality and service, has enabled it to remain the world's leading supplier of precision gear metering pump systems.

Zenith offers typical drive and control packages, as well as custom systems design to handle the many critical applications in the process industries. Zenith metering systems are used in numerous markets, including fiber, polymer processing, urethanes, adhesives, paints, chemical processing, and food. Our extensive experience and full engineering capabilities ensure you the best possible solution to your metering application.



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