

Overview

With decades of experience in automation design and Medical device design, Benchmark's engineering team has focused innovation in precise fluid transfer and mixing.

These capabilities enable us to provide competitive solutions and services that respond to the needs of pharmaceutical and chemical industries.

With our complex automation expertise, advanced technologies and manufacturing we can customize systems for our customers needs.

Closed/Sterile Fluid Transfer System

Structured channels and valves for fluid transfer allow distribution of fluids and precise mixing to get exact fluid compositions. Fluids can be heated/cooled and dispensed to meet the specifications of our customer.

IV bags, incubators, dispensers, agitation tables, syringe pumps and peristaltic pumps are components that can be integrated in to the system.

This system is ideal for manufacturing sterile consumables for pharmaceutical and medical products.

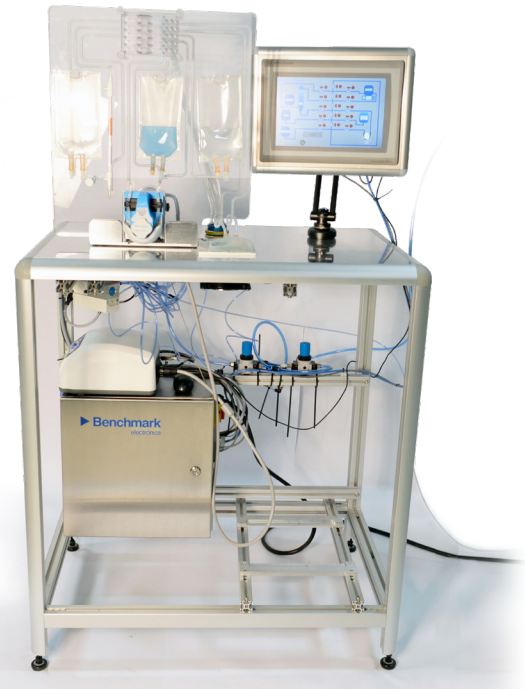
Precision Technologies

Precise electrical, mechanical and machining solutions allow us to ensure consistency and reliability for our customers.

We can integrate off-the-shelf components and seamless interactions for on-time implementation.

Fluid Processing

The fluid logic system allows for heating and cooling of fluids with accuracy. Separation procedures include: TFF (UF and MF) filtration, Ion exchange and centrifuge capabilities.



System Capabilities

- Flow control
- Measurement
- Timing
- Data collection & analysis
- Programmable Logic Control

Core Competencies

- Pump & pump controller
- User interface
- Disposable fluidic card
- Integrated fluid reservoirs & paths
- Integrated valves & sensors
- Process control software
- Pump & valve control software
- Sterile fluid control
- Enclosed system
- 20mL to 4L volumes
- Fluid path separation & cross contamination control
- Line purge & flush for process integrity

Our Medical Heritage

Since 1979, Benchmark has established a legacy of best-in-class medical device engineering and design. Our passion for innovation incorporates the latest technologies while ensuring the highest quality and adhering to the most stringent regulatory guidelines. As a result of our legacy and our specialized processes, Benchmark continues to flawlessly pass all FDA-related audits and inspections. We are proud of this hard-earned status and you can trust that we will deliver robust, highly-configurable, cost-effective solutions designed to address your unique needs.

Ongoing Research & Investments

Benchmark is continually investing in new research, designs, techniques and processes. Our goal is to reduce time in the product development cycle, help lower costs on capital design investments and alleviate design transfer challenges when preparing for production. We also work seamlessly with supply chain, operations and manufacturing to develop and deliver complete, customized solutions.

Complete Product Lifecycle Management

Benchmark's full-system solutions and global footprint of certified facilities provide you with a dedicated team to optimize all facets of design, development and production. Designs can be managed at both single and multiple locations to ensure the highest quality and go-to-market readiness.

Concept/Design Circuit Design Software Development Hardware Development Industrial, Interaction & Mechanical Design PCB Layout DFM Services	New Product Introduction Quick-turn Flexible Scheduling Mechanical Components Placement Build Feedback	Supply Chain Management Supply Chain Design Sub-tier Management Local Sourcing EDI Execution EOL/OBS Management Global Agreements	PCB Assembly Surface Mount Technology Ball Grid Array Chip on Board Multi-chip Module Plated-through Hole Inspection: Laser, X-Ray, Visual, ICT/ FCT Development
Precision Machining 5-axis Vertical Mills E-beam Welding Horizontal Mills Lathes Laser Cutting CMM Inspection Chemical Cleaning	System Integration/ Box Build Direct Order Fulfillment BTO, CTO B2B Hubbing & VMI Full Turnkey Manufacturing, Test, Debug Full Traceability	Test Development Requirements Specifications Prototyping Low-cost Solutions Dedicated testers Automation Large Scale Equipment Design & Build Advanced Technologies	Post-Delivery Support & Logistics Upgrades Field Spares Warranty Repair/Out of Warranty Repair Real-time SPC Local Partners Global Agreements

When It Matters

Navigating a complex world demands a forward-thinking partner with the technology, cutting-edge engineering, precision manufacturing, and supply chain agility to move quickly. From idea to realization, Benchmark is able to meet and adapt to your unique needs and requirements. To learn more, contact us today.

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