

Single-Use Bioprocess Recirculating Mixing System

Simple and Effective Mixing Solutions

The Bioprocess Recirculating Mixing System from Saint-Gobain has been developed to create a simple and effective single-use mixing alternative for biopharmaceutical applications. The innovative design utilizes an externally mounted pump to recirculate and mix the fluid in a single-use bag system. The pump on the revolutionary mixing system has no bearings to wear out or seals to break. Utilizing magnetic levitation, the pump's impeller is levitated inside a sealed casing and driven by the magnetic field of the motor – resulting in zero particle generation.

The portable control unit allows for use on multiple carts, reducing capital investment while maximizing system flexibility. The fully validated, single-use mixing system ensures a robust system for either liquid/liquid or powder/liquid mixing needs.

The mixing system offers maximum flexibility and product security. Choose from a standard range of products or work with our team of engineers to develop a customized solution for your application.

Applications

- Buffer and media preparation and storage
- Cell culture and centrifuge transport
- Harvest hold and clarification operations
- Chromatography and concentration operations
- Product pooling
- Media distribution

Features

- Up to 3000-liter mixing volume
- Quick and simple bag installation
- Standard single-use mixing bags with 3-port design or a customized solution
- Magnetically driven, single-use centrifugal pump head integrated with the single-use mixing bag
- Integrated load cell for weighing of media (optional)
- Venturi for fast and simple powder/liquid addition (optional)
- Mixing bags gamma stable up to 40 kGy
- Contract testing and development for end-user process
- Open or closed system mixing

Benefits

- Faster than traditional single-use mixing systems
- Simple operation provides ease of use
- Low cost of ownership, flexibility to use multiple carts with a single control unit
- Easy bag deployment simplifies the filling process
- Saint-Gobain standard validation packages available for all single-use component materials

Bioprocess Recirculating Mixing System Specifications

Control Unit

- Input voltage 100-240 VAC, 50-60 Hz
- CE compliant

Pump Drive Unit

- Input voltage 100-240 VAC, 50-60 Hz, 1.5 A
- Operating voltage 48 VDC/600 W
- Digital control with touch screen interface
- Flow rate: up to 144 LPM depending upon mixing volume
- Max differential pressure @ 3.1 bar
- Max liquid temp: 60°C/140°F

Tote

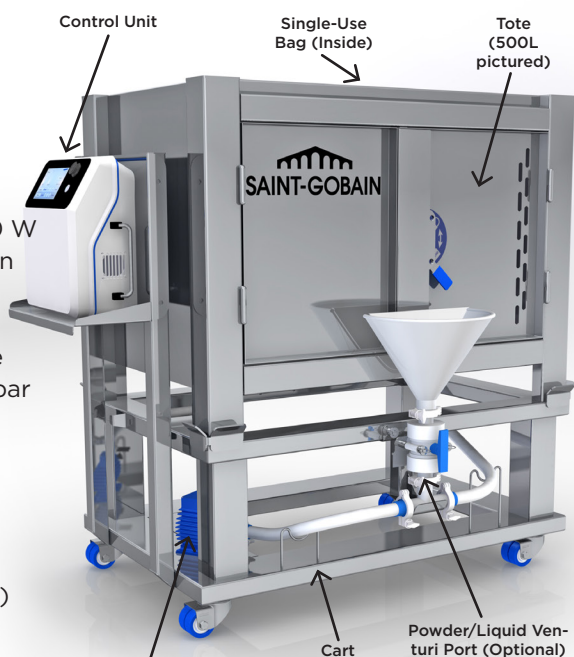
- 200, 500, 1,000, 2,000 and 3,000 liter options
- Constructed from 304 SS, (316 SS available as an upgrade)

Cart

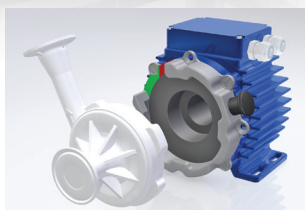
- Stainless steel construction
- Clean room rated wheels

Powder/Liquid Venturi Port (Optional)

- Stainless steel construction
- Clean room rated wheels



Pump Drive Unit with Single-Use Pump Head



Single-Use Bag

- 3D bag construction
- Mixing volume capacities: 200 to 3,000L
- Bag material: LDPE contact layer, EVOH gas barrier
- Bag validation includes:
 - ISO 10993-5 Cytotoxicity, In Vitro
 - USP <88> Class VI, In Vivo
 - ANSI/AAMI/ISO 11137 Sterility
 - USP <788> Particulate Matter
- Extractables
- ASTM Physical Properties
- USP <661> Physicochemical Test for Plastics
- USP <85>
- Sterilization: gamma up to 40kGy

Single-Use Pump Head

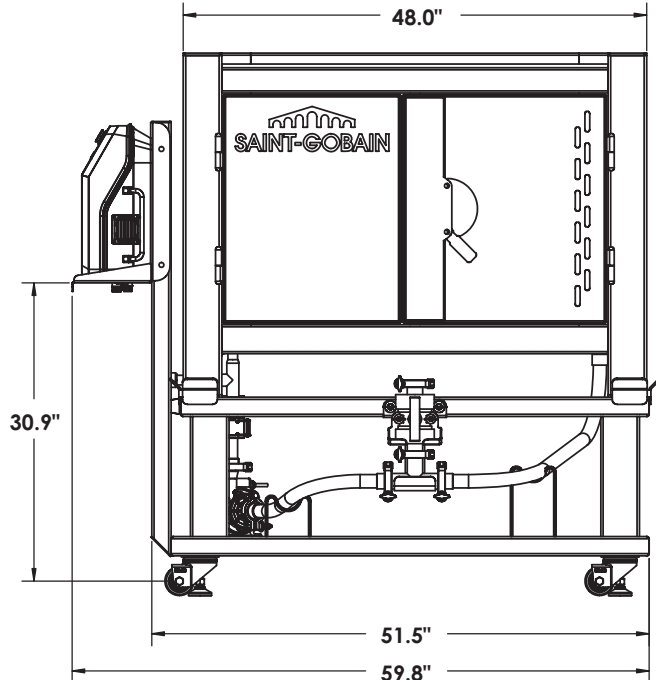
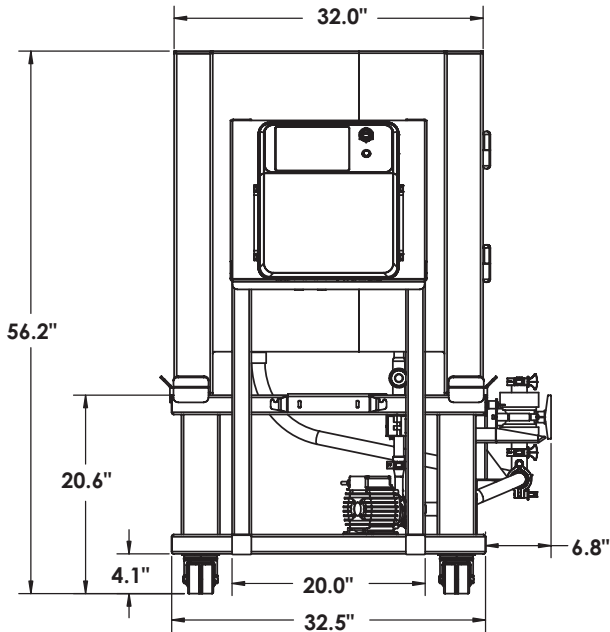
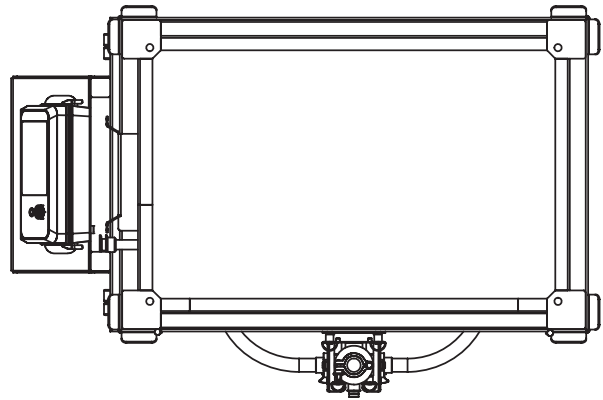
- Magnetic driven impeller is fully encapsulated in polypropylene
- Polypropylene pump housing
- 1" sanitary end connections

Bioprocess Recirculating Mixing System Components

Hardware 500L Recirculating Mixing System		
	Description	Part Number
Choose One	Cart, w/500L Tote	RxCARTR0500
	Cart, w/500L Tote & Load Cells	RxCARTR0500LC
Required	Controller, Motor, Flow Meter, Cable	RxCONT
Optional	Venturi Valve	RxBV
Optional	Venturi Funnel	RxFNL
Spare	Cable (Spare)	RxCABLE
Spare	Pump Drive (Spare)	RxPUMP

Single-Use Mixing Bags	
Volume	Part Number
500 Liter	Rx0500LR

System is customizable to meet a range of application mixing needs. Please call for further information.



Contact us today for:
Consultations • Samples • Quotes • Orders



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