



single-use Fluid Management

2D & 3D assemblies, filtration, storage, and transportation solutions

[Get Started](#)

The life science business of Merck operates as MilliporeSigma in the U.S. and Canada.

Millipore®

Preparation, Separation,
Filtration & Monitoring Products

Our Portfolio Brands

Millipore®

The Millipore® portfolio offers an ecosystem of industry-leading products and services, spanning preparation, separation, filtration and monitoring – all of which are deeply rooted in quality, reliability and time-tested processes. Our proven products, regulatory and application expertise are a strong foundation you can rely on to consistently perform at the highest level.

 Denotes Millipore® Products

BioReliance®

The BioReliance® portfolio encompasses biopharmaceutical characterization, safety testing and process development, as well as clinical and commercial biomanufacturing. Our experienced teams and operational expertise make us the partner who supports you all the way and always has your vital goal in mind.

 Denotes BioReliance® Services

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- Transfer & storage

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- 2D assemblies and hardware

- Drum assemblies and hardware

- Collapsible bin assemblies and hardware

- Stainless steel bin assemblies and hardware

- Transport bin assemblies and hardware

Introduction: Safe and Efficient Fluid Management

Mobius® 2D and 3D assemblies, filtration, storage and transportation solutions are key components for efficient, ergonomic and scalable fluid management, from media and buffer preparation to final fill applications.

Choose from a variety of container options, including polyethylene drums, stainless steel bins, collapsible plastic containers and carts. Our assemblies and solutions are designed to reduce operator error and process risks, and improve efficiency. With a full spectrum of solutions to choose from, at varying levels of certification, you get greater flexibility, mobility and support for your single-use technologies.



A Single Fluid Contact Layer: PureFlex™ Films.

Our family of PureFlex™ films offers a single fluid contact layer with a low extractables profile, flexibility, robustness, and chemically resistant materials of construction for Mobius® single-use process containers. All 3D bag assemblies are folded using our proprietary EZ Fold technique, making filling and deployment easy for operators.



Pureflex™ Spec Sheet



PureFlex™ Single-Use
Process Container Films



EZ Fold Deployment
Video

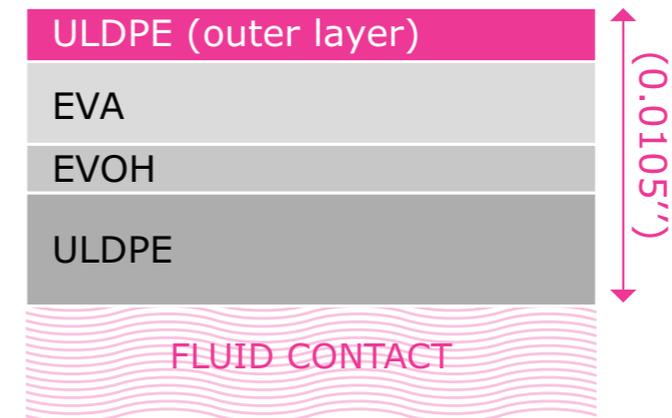
PureFlex™ Film

PureFlex™ film is a high-purity, medical grade, monolayer, coextruded film designed to provide strength, flexibility, excellent gas barrier performance, and inert contact.

More Details

- **Fluid contact material:** Made of ultra low-density polyethylene (ULDPE). Materials of construction for this layer meet the specifications of 21CFR.1520
- **Gas barrier:** Made of polyethylene vinyl alcohol-copolymers (EVOH).
- **Interior layer:** Made of ethylene vinyl acetate (EVA) contributes to overall film flexibility particularly at lower temperatures.
- **Outer layer:** Made of ultra low-density polyethylene (ULDPE).

PureFlex™ film



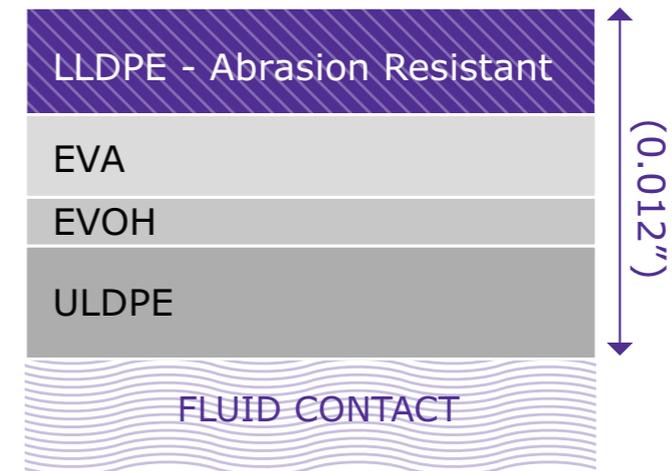
PureFlex™ Plus Film

For particularly demanding applications often encountered in large volume operations (>500 L), the additional robustness of PureFlex™ Plus film may be required to assure single-use process container integrity. This film is also suitable for use throughout the manufacturing process.

More Details

- **Fluid contact material:** Made of ultra low-density polyethylene (ULDPE), which is identical to PureFlex™ film and maintains the same extractables profile. Materials of construction for this layer meet the specifications of 21CFR.1520.
- **Gas barrier:** Made of polyethylene vinyl alcohol-copolymers (EVOH), which is identical to PureFlex™ film and maintains the same gas barrier properties.
- **Interior layer:** Made of ethylene vinyl acetate (EVA) contributes to overall film flexibility particularly at lower temperatures.
- **Outer layer:** Constructed of a linear low density polyethylene (LLDPE) that increases the film's resistance to leak formation through abrasion, puncture, stretching, and tearing.

PureFlex™ Plus film



Mobius® MyWay Portfolio: the design flexibility you want with the delivery speed you need

The Mobius® MyWay portfolio is a three-tiered design and delivery offering to help biopharmaceutical manufacturers implement flexible manufacturing with greater speed and enhanced supply security.

You have the flexibility to configure a “fit for purpose” design, while still receiving the benefits of a standard, off-the-shelf product in terms of delivery time, documentation support, and extractables data. Our unique approach reduces consumable management burden and costs, enhances supply transparency, security, and enhances quality, and increases implementation speed.



Mobius® Stock

On-demand repeat assemblies, ships in just 24 hours

- Standard off-the-shelf assemblies with guaranteed minimum supply levels
- High-volume custom assemblies with monitored raw material and finished-good supply levels



Mobius® Select

Configure-to-order assemblies using a prequalified design space, ships in 6 weeks

- The perfect balance of off-the-shelf speed and custom flexibility
- Monitored component supply levels for reliable delivery dates
- Comprehensive documentation for fast and easy implementation



Mobius® Choice

Highly customized solutions, ships in 12 – 14 weeks

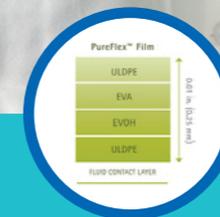
- Access to our full component library for even greater customization
- Designs for critical and complex applications backed by our technical and engineering expertise

6-weeks lead time represents the time when assemblies (Silver and Bronze) are available, for Gold assemblies another week needs to be added. Also, the lead time doesn't include the transit time from Taunton, MA, USA to customers for the rest of world (except USA).



Emprove® Program and Dossiers

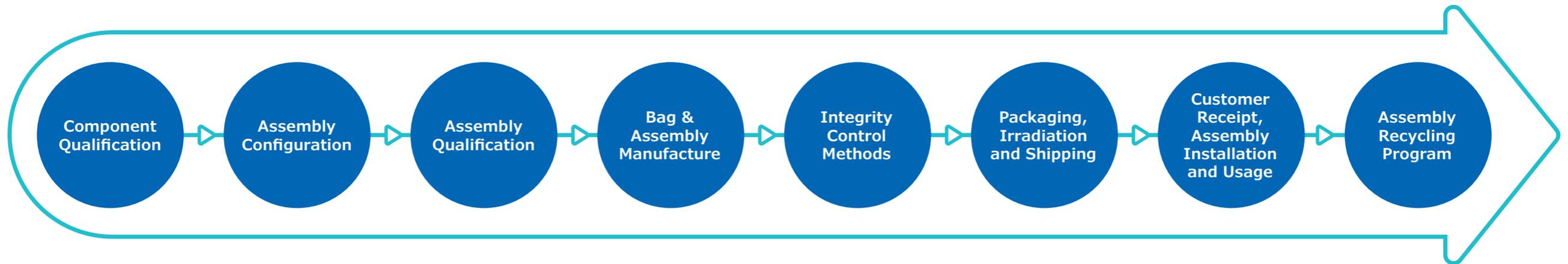
The Emprove® program supports your risk assessment and assists in developing more robust processes. It provides comprehensive and thorough documentation of our filters and single-use components as well as pharma raw and starting materials. It not only covers the latest regulatory requirements, but also anticipates industry expectations not yet covered by regulation. The Emprove® program is organized in three different types of dossiers. Every dossier supports you throughout different stages of your operations: material qualification, risk assessment, and process optimization.



Quality Control and Assurance

We take a holistic risk mitigation and life cycle approach

Choose a step and get started.



Webinar

Criteria for Qualification of Components

- All components must be qualified for use in pharmaceutical and single-use system (SUS) manufacturing processes:
 - Fit-for-use in pharmaceutical process:
 - Animal origin status
 - Low bioburden, endotoxin & particles
 - Physicochemical compatibility
 - Fit-for-use in SUS manufacturing process
 - Low bioburden with Bacteriostasis and Fungistasis
 - Gamma stability with established shelf life

Criteria	Non-Fluid Contact Components	Fluid Contact Components
Gamma compatibility > 40 kGy	✓	✓
Statement of animal origin		✓
USP <88> Class VI post gamma		✓
USP <661> Physicochemical testing post gamma		✓
USP <788> Particulates		✓
USP <85> Endotoxin post gamma		✓
Shelf life, post-gamma	✓	✓
Bioburden pre-gamma	✓	✓
Bacteriostasis/Fungistasis, post-gamma		✓

Assembly Configuration

Your Partner for Single-Use Assembly Design & Implementation

Expertise

- Sales development specialists & engineers dedicated to single-use system (SUS) design and implementation
- Validation experts
- Internal design configuration tool to ensure robust engineering and quick turnaround of drawings

Global Network

- 10 Customer Collaboration Centers throughout the world
- BioReliance® testing labs
- Two single-use manufacturing facilities globally

Support

- System demonstration
- SUS design & implementation
- At-scale process simulation
- Feasibility studies
- Validation studies & documentation

Assembly Qualification

Single-Use Validation Services

BioReliance® Validation Services

BioReliance® Services are customized to address your specific needs and backed by an industry leading team of scientists, engineers and validation specialists.

Custom Offerings

- Shipping validation

Standard Offerings

- Early phase validation service bundle
- Filter compatibility study
- Bacterial retention
- Product specific bubble point
- Standard model solvents extractables study
- Filter leachables study
- Mobius® Select assembly extractables report
- Mobius® compatibility study
- Mobius® extractables study
- Mobius® leachables study
- Patient toxicological assessment
- Particle shedding study

 Denotes BioReliance® Services



Bag and Assembly Manufacture

Particulate Controls & Mitigation

Particle mitigation and control spans the entire single-use assembly life cycle, from raw material supply to customer receipt

Focus Area

Raw Materials

Manufacturing Area

Process Inspection

Finished Goods

Corrective Actions

Examples of Mitigation Steps

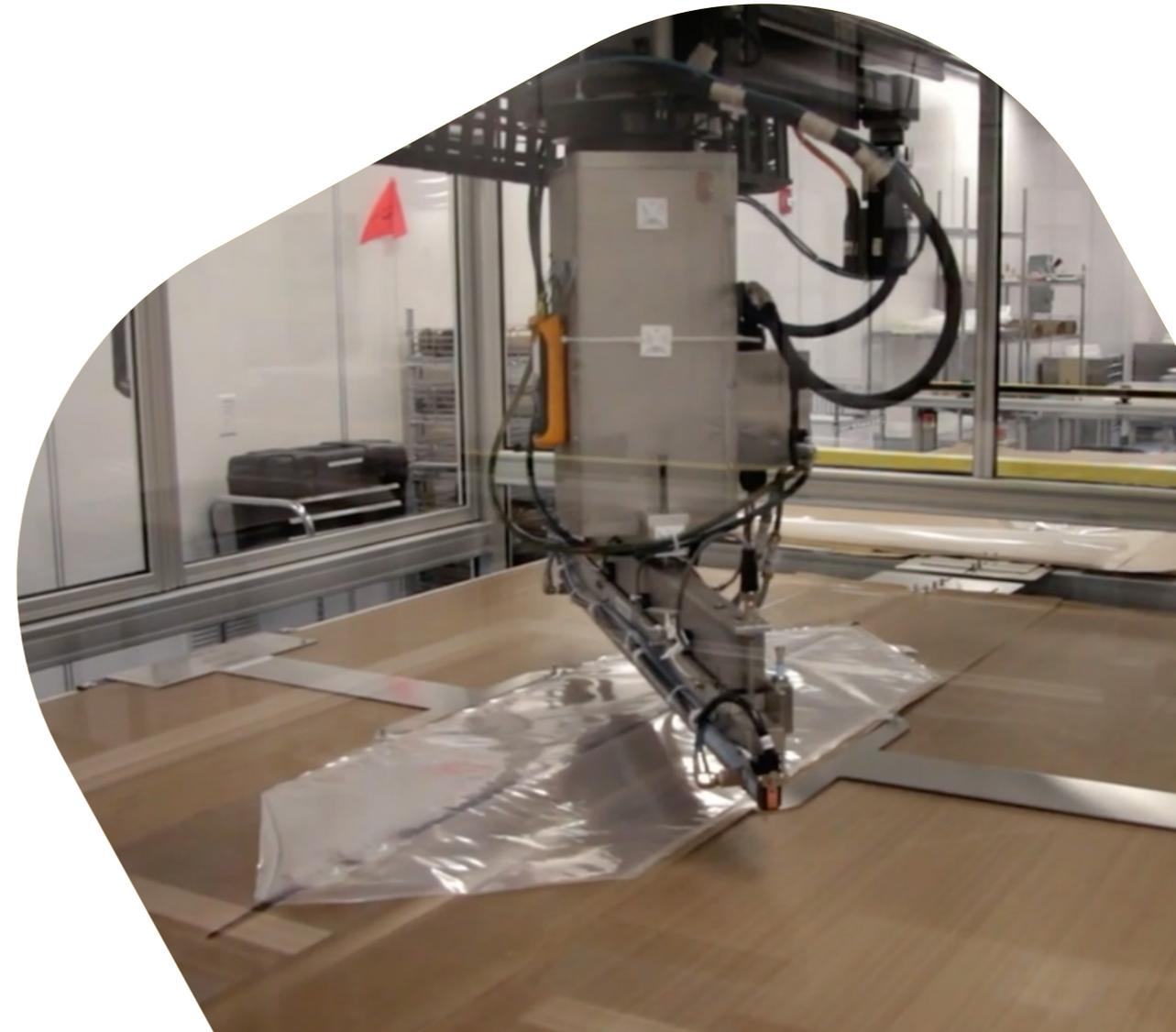
- Raw material control
- Particle control
- Frequency of monitoring
- Clean room classification
- Raw material process flow map & points for inspection
- Procedures for particle control
- Inspection methods for finished goods
- Result monitoring & trending
- Specification for product release
- Methods to control future contaminations
- Planned future improvements

Bag and Assembly Manufacture

Validation of Single-Use Systems Manufacturing Processes

All equipment and process operations are validated and documented, based on user requirement specifications:

Operation	Validated Specifications
Equipment validation	User requirement, system specification, operation
Film and tube cutting	Dimension specification and tolerance
Film sealing and port bonding	Weld strength and integrity
Finish good assembly	Various specifications for use and release testing
Connection qualification	Hose barb and tube connection with fastener
Leak/integrity testing	Defect detection, process verification



Bag and Assembly Manufacture

In-process Testing

In-process controls

- Visual inspection
 - Material selection, particulate contamination, critical dimensions, proper assembly, fastener actuation
- Verification of process performance
 - Verification of film bonding
 - Review and verification of data from automated systems
- In Process leak testing
 - According to certification quality level requirements

Operator training

- Operators must be trained for the procedures which they perform.
- Training must be documented
- Training should be updated continuously for new and revised procedures

Equipment maintenance- Performance and documentation of planned (preventative) and unplanned maintenance

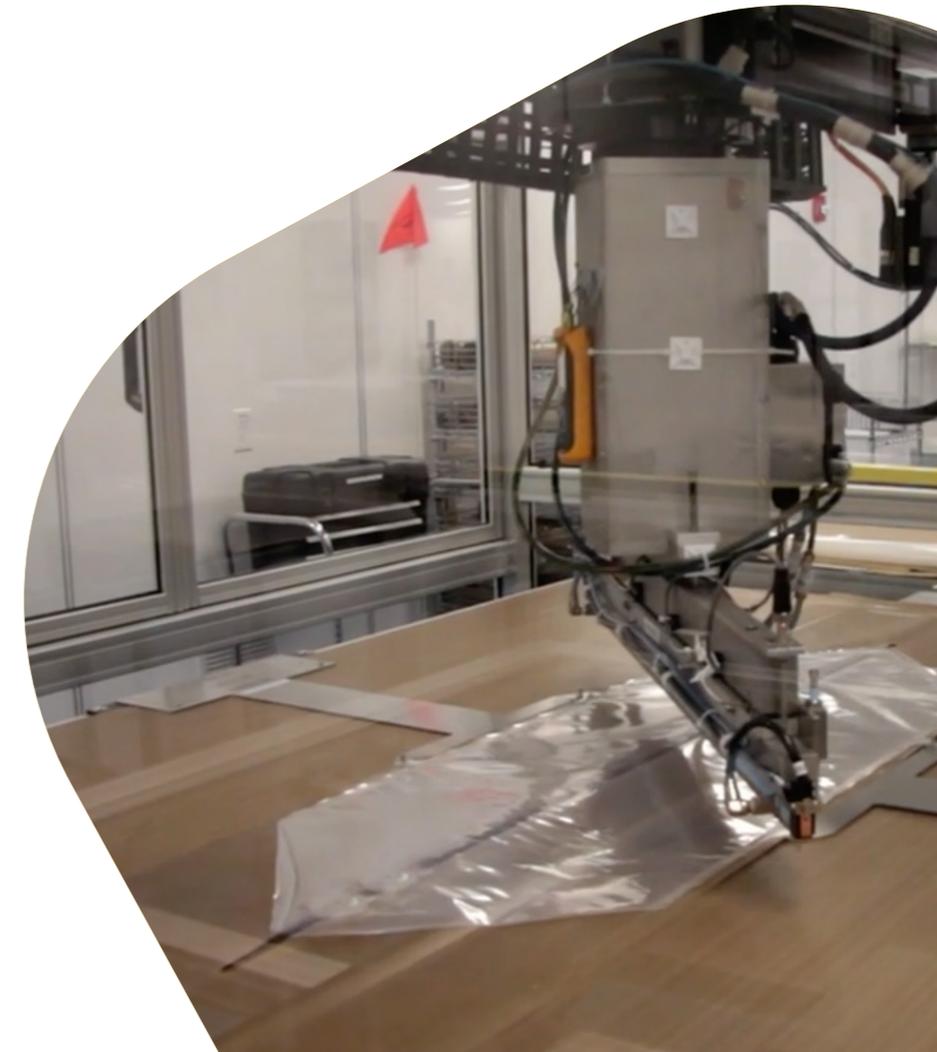


Bag and Assembly Manufacture

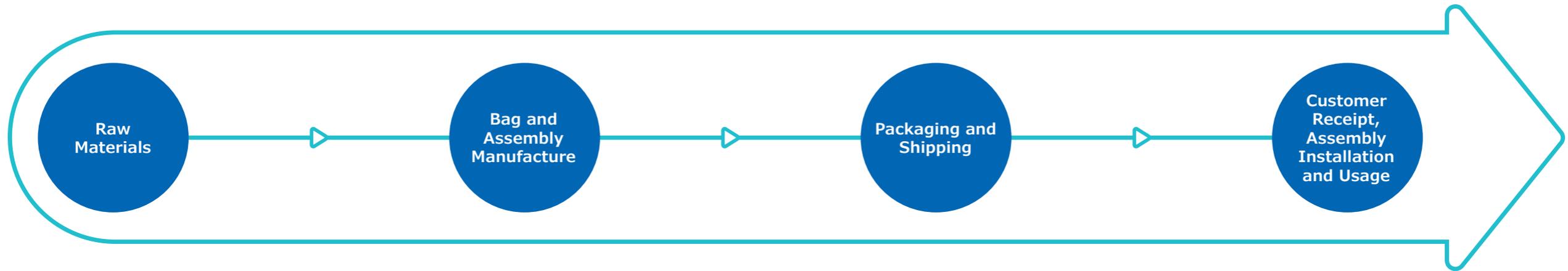
Certification and Release Testing

Mobius® assemblies are available in several levels of certification. Certification of an assembly is based on the qualification of the components in the assembly, the level of leak testing performed during manufacturing, and the testing performed on the assembly lot after manufacturing. The certification level also impacts the shelf life and sterility claims that are made for the assembly. Non-gamma irradiated assemblies receive a Basic certification. Gamma irradiated assemblies are available at Bronze, Silver, and Gold certifications. Details of the certification levels are summarized in the table below.

Gold	Shelf Life	Sterility	USP <85> Endotoxins, USP <788> Sub-visible particulates	Leak Testing	USP <88> Biological reactivity <i>in vivo</i> (Class VI), USP <661> Physicochemical tests
	2 years	Sterile (Quarterly dose audit)	One assembly per lot tested	100% assembly leak tested	Post-gamma irradiation
Silver	Shelf Life	Sterility	USP <85> Endotoxins, USP <788> Sub-visible particulates	Leak Testing	USP <88> Biological reactivity <i>in vivo</i> (Class VI), USP <661> Physicochemical tests
	2 years	Sterile (Quarterly dose audit)	Quarterly review of results	In process testing	Post-gamma irradiation
Bronze	Shelf Life	Sterility	USP <85> Endotoxins, USP <788> Sub-visible particulates	Leak Testing	USP <88> Biological reactivity <i>in vivo</i> (Class VI), USP <661> Physicochemical tests
	No claim	No claim	No testing performed	No testing performed	Post-gamma irradiation
Basic	Shelf Life	Sterility	USP <85> Endotoxins, USP <788> Sub-visible particulates	Leak Testing	USP <88> Biological reactivity <i>in vivo</i> (Class VI), USP <661> Physicochemical tests
	No claim	Non-sterile	No testing performed	In-process	Post-gamma irradiation



Integrity Control Methods



Film Properties:

- Multi-layer tear resistant films (PureFlex™ and PureFlex™ Plus film)
- Superior bond strength via unique fluid contact layer

Manufacturing:

- Automated bag assembly process to reduce handling defects and increase bonding consistency
- Visual inspection
- Pressure decay leak test

Validation:

- Component and connection validation
- Shelf life validation
- Packaging & shipping validation (ISTA 2A)

Customer Guidance:

- Best practices for design and handling of single-use assemblies

Packaging, Irradiation and Shipping

Sterility Validation and Quarterly Dose Audit Approach

Sterility is assured through validation and periodic testing

1 Sterility validation

- ANSI/AAMI/ISO 11137, Sterilization of Health Care Products

2 Quarterly dose audits

- Performed to substantiate the sterilization dose on an on-going basis

3 Certificate of irradiation

- Certificate of Irradiation certifying the minimum dose recorded by the batch dosimeters

4 Transport validation

- ISTA Integrity-Plus Test Procedure 2A performed on "worst-case" representative assemblies
- Packaging bubble emission & single-use systems integrity test

Packaging, Irradiation and Shipping

Packaging and Shipping

ISTA Integrity-Plus Test Procedure 2A performed on “worst-case” representative assemblies

- Compression force
- Vibration tests
- Drop test
- Packaging and product integrity test



Customer Receipt, Assembly, Installation and Usage

Customer Guidance

- Best practices for design and handling of single-use assemblies

Training

- Bag handling & installation
- Hands-on product and systems training
- Software and automation recipe development
- Best practices

Best Practice Handling Videos

- Unhooking and Removing a 2000 L Bag
- Filling and Draining a 2000 L Bag
- Installing a 2000 L Bag into its Bin
- Inspecting, Opening and Certifications
- Warehouse, Handling and Transport



[View Safe Handling Videos](#)

Assembly Recycling Program

Biopharma Product Recycling Program

As part of our commitment to reducing the environmental impacts of our products, we have worked together with an environmental services company to design a product recycling program. Facilities located in the eastern part of the U.S. can take part in this program today. This first-of-its-kind process is changing the way we look at waste. We continue to expand our collaboration efforts for this program across the globe.

Multiple Products and High Volumes

- Clarification, cartridge and capsule filters
- Bioreactor bags, tubing and assemblies
- Chemical containers and packaging
- PPE such as nitrile gloves, shoe covers, etc.

Difficult Waste Streams

- Bio-hazardous can be accepted without autoclaving
- Logistics customized to individual facility
- Work directly with environmental services vendor

Alternative Process and Traceability

- ~98% of product is recycled
- Creates plastic lumber
- Fully traceable program

Achieving Sustainability Goals

- Zero Landfill Targets
- % Recycling Goals



Supply Security

Robust materials management, supplier quality management, quality control, and business continuity planning are essential to ensure continuous supply of single-use bags.

As part of the business continuity planning (BCP) process, a cross-functional team of subject matter experts assess risks related to demand volatility/forecast accuracy, manufacturing capacity, process and equipment, sole/single-sourced raw materials, facilities, such as water, utilities, and power, IT/systems, and more. Risks above a certain risk priority number are mitigated and monitored. BCPs are revisited on a regular basis and risk mitigation activities are updated continually.

In addition to BCP and change control, suppliers should ensure the continuity and reliability of single-use bags. We do so by maintaining design ownership of our film formulation, robust supplier agreements, and considerable safety stock.

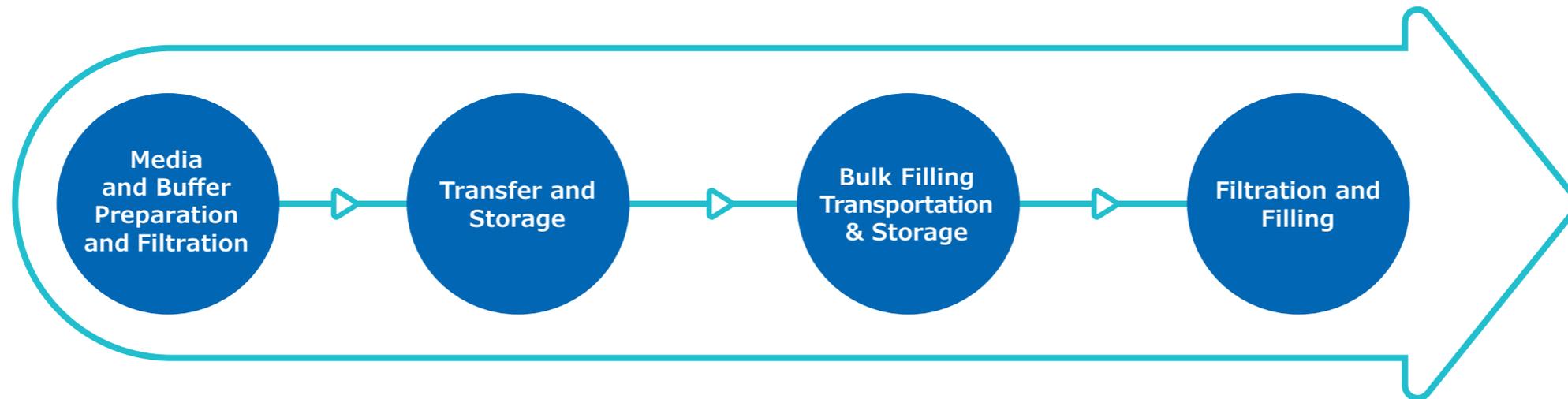
**Supply chain
management**

**Demand and
capacity planning**

**Supply Robustness
and Control**



Applications



Media and Buffer Preparation and Filtration

Key Filtration Challenges

- **Chemical compatibility & exposure time**
- **Filter clogging**
- **Bioburden protection vs. sterilizing-grade**
 - Level of protection required is a risk-based business decision
- **Designing an optimized mitigation filtration process is multi faceted:**
 - Filter selection – membrane, device
 - Optimizing number and filter size
 - Integrity testing design
 - System design



Transfer and Storage

Key Challenges

- **Complicated sub-aliquoting into smaller storage volumes from a large batch size**
- **Footprint availability for storage**
- **Maintaining sterility of solution throughout transfer and storage. Should solutions be filtered pre and post-storage?**
- **Stability of solution during storage period**

Mitigation

- **Implementation of advanced sterile connectors**
- **Single-use storage units to minimize turnaround time e.g. stackable bins, self deploying bags, Lynx® CDR and Lynx® S2S connectors**
- **Lynx® ST connector for connection to stainless steel or hybrid systems**



Connectors, Crimping
and Tubing

Bulk filling, Transportation and Storage

Key Challenges

- **Complicated sub-aliquoting into smaller storage volumes from a large batch size**
- **Maintaining sterility of solution throughout transportation. Should solutions be filtered pre and post-transport?**
- **Stability of solution during storage period**
- **Safe transportation of liquids from one building or site to another**

Mitigation

- **Implementation of advanced aseptic connectors**
- **Pre-validated shipping solution for liquid volumes from 100 L – 500 L**
- **Single-use storage units to minimize turnaround time e.g. stackable bins, self deploying bags**



[View webinar: Shipping Guidelines for Transporting Bulk Drug Product](#)

[Shipping Validation Tech Brief](#)

Final Filtration and Filling

Key Challenges

- **Single-use assembly design**
 - Single or redundant filtration
 - Flush bags or barrier filters
 - Filters inside or outside the isolator
 - Pre-use post-sterilization integrity testing
 - Specific to filling machine
- **Maintain constant flow rate to ensure filling accuracy**
- **Maintain sterility of system and process throughout prep and processing**
- **Extractables**

Mitigation

- **Lynx[®] S2S sterile connector for modular assemblies**
- **Closed sampling capabilities**
- **Tubing and filling needles in a range of sizes and styles to fit a variety of filling machine models**
- **Millipak[®] Final Fill Filter for maximum product recovery and protection**
- **Millipak[®] barrier filter to support pre-use post-sterilization integrity testing**
- **Emprove[®] dossiers**
- **BioReliance[®] validation services**



Our Offering



2D assemblies and hardware



Drum assemblies and hardware



Collapsible bin assemblies and hardware



Stainless steel bin assemblies and hardware



Transport bin assemblies and hardware

Single-Use Assembly Options

	2D assemblies & hardware	Drum assemblies & hardware	Collapsible bin assemblies & hardware	Stainless steel bin assemblies & hardware	Transport bin assemblies & hardware
Standard Options	✓	✓			✓
Configurable Options	✓	✓	✓	✓	✓



Use the Mobius® Select tool to design your custom bag assembly

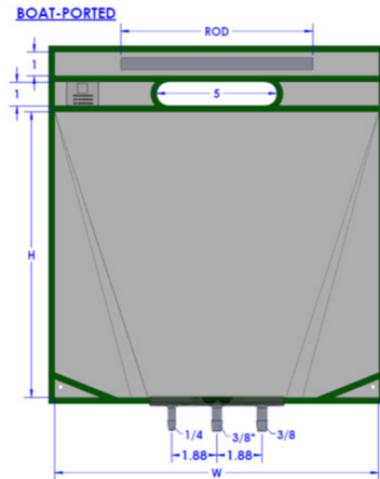
2D Assemblies – Standard Options



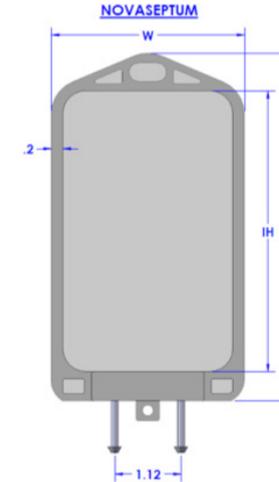
- Available in 50 mL to 50 L
- Sterilized and ready to use
- User-friendly hanger design for convenient fluid management
- Mobius® Silver certificate of quality with every package
- Sterile disconnects with NovaSeal™ sealing technology

Volume	Part Number	Description	Pack Size
50 mL	SAU050ML20EP10	Mobius®, Silver, 50mL STD PureFlex™ end-ported bag	10
100 mL	SAU100ML20EP10	Mobius®, Silver, 100mL STD PureFlex™ end-ported bag	10
250 mL	SAU250ML20EP10	Mobius®, Silver, 250mL STD PureFlex™ end-ported bag	10
1 L	SAU0001L20EP10	Mobius®, Silver, 1L STD PureFlex™ end-ported bag	10
5 L	NAU0005L30EP5	Mobius®, Silver, 5L STD PureFlex™ end-ported bag	5
10 L	NAU0010L30EP5	Mobius®, Silver, 10L STD PureFlex™ end-ported bag	5
20 L	NAU0020L30EP15	Mobius®, Silver, 20L STD PureFlex™ end-ported bag	15
20 L	NAU0020L30EP5	Mobius®, Silver, 20L STD PureFlex™ end-ported bag	5
50 L	NAU0050L30EP5	Mobius®, Silver, 50L STD PureFlex™ end-ported bag	5

2D Assemblies – Configurable Options



- End-ported with 3 ports



- End-ported with 2 ports

Bag Part Numbers		Volume	Bag Details (in)			Bag Details (cm)		
PureFlex™ Film	PureFlex™ Plus Film		W	H	ROD	W	H	ROD
N0005L03BP	PLN0005L03BP	5 L	12.5	11.75	8	31.75	29.85	20.32
N0010L03BP	PLN0010L03BP	10 L	11.5	21.5	8	29.21	54.61	20.32
N0020L03BP	PLN0020L03BP	20 L	16.5	22.75	12	41.91	57.79	30.48
N0050L03BP	PLN0050L03BP	50 L	22.5	29.5	17	57.15	74.93	43.18

Bag Part Numbers	Volume	Bag Details (in)			Bag Details (cm)		
PureFlex™ Film		W	H	ROD	W	H	ROD
00011930PU-1	50 mL	3	5.6	4.5	7.62	14.22	11.43
00011930PU-2	100 mL	3.3	6	4.75	8.38	15.24	12.07
00011930PU-3	250 mL	5.13	7.3	5.9	13.03	18.54	14.99
00011930PU-4	1000 mL	5.9	12.3	10.75	14.99	31.24	27.31

2D Assemblies – Cart Hardware

2D Container Cart

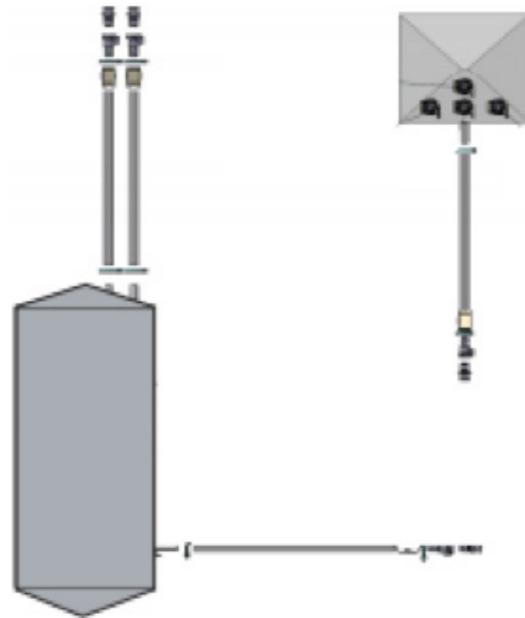
- Storage of process fluids in 2D single-use bags
- Supports up to six process containers in 10 L, 20 L and 50 L sizes
- Mobile with a small footprint
- Handle to tilt the racks for better drainage
- Removable container cradles for easy loading and unloading



Cart Materials			Dimensions & Weight (in)				Dimensions & Weight (cm)			
Frames	Wheels	Racks	H	W	D	Weight	H	W	D	Weight
Stainless steel 304 L, epoxy paint	Two fixed wheels, two wheels on swivel and with brakes. Polyurethane and stainless steel 304 L	Six tilt-able racks (20° max), all movable at the same time. Polyoxymethylene (acetal)	75.4 in.	31.5 in.	33.86 in.	approx. 286.6 lbs.	1915 mm.	800 mm.	860 mm.	130 kg.

Container Cradle Materials	Dimensions & Weight (in)				Dimensions & Weight (cm)			
Cradles Six cradles	H	W	D	Weight	H	W	D	Weight
Removable and autoclavable. Stainless steel 316 L with PTFE sliders	7.64 in.	22.64 in.	31.5 in.	approx. 13.2 lbs.	194 mm.	575 mm.	800 mm.	6 kg.

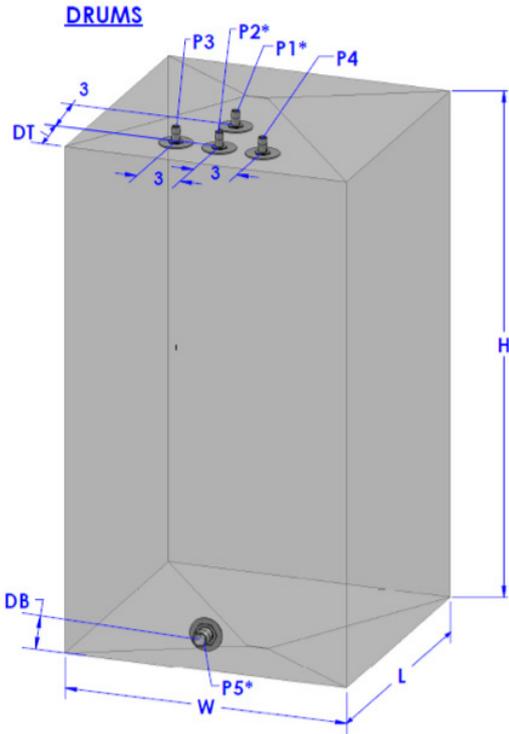
Drum Assemblies – Standard Options



- Available in 50, 100 and 200 L

Volume	Part Number	Description	Pack Size
50 L	SAU0050L41DP5	Mobius® Silver 50L STD PureFlex™ Drum Assy, Side – bottom ported 3D bag	5
100 L	SAU0100L41DP5	Mobius® Silver 100L STD PureFlex™ Drum Assy, Side – bottom ported 3D bag	5
200 L	SAU0200L41DP5	Mobius® Silver 200L STD PureFlex™ Drum Assy, Side – bottom ported 3D bag	5

Drum Assemblies – Configurable Options



Bag Part Numbers		Vol.	Bag Details (in)										Bag Details (cm)										Associated Bin Part Number
PUREFLEX™ FILM	PUREFLEX™ PLUS FILM		W	L	H	DT	DB	P1	P2	P3	P4	P5	W	L	H	DT	DB	P1	P2	P3	P4	P5	
SBD0050L20P	PLSBD0050L20P	50 L	11.5	11	26	0.5	2.5	1/2	1/2	-	-	-	29.21	27.94	66.04	1.27	6.35	1/2	1/2	-	-	-	DRUM0050L01
SBD0050L21P	PLSBD0050L21P	50 L	11.5	11	26	0.5	2.5	1/2	1/2	-	-	1/2	29.21	27.94	66.04	1.27	6.35	1/2	1/2	-	-	1/2	DRUM0050L01
SBD0050L40P	PLSBD0050L40P	50 L	11.5	11	26	0.5	2.5	1/2	1/2	1/2	1/2	-	29.21	27.94	66.04	1.27	6.35	1/2	1/2	1/2	1/2	-	DRUM0050L01
SBD0050L41P	PLSBD0050L41P	50 L	11.5	11	26	0.5	2.5	1/2	1/2	1/2	1/2	1/2	29.21	27.94	66.04	1.27	6.35	1/2	1/2	1/2	1/2	1/2	DRUM0050L01
SBD0100L20P	PLSBD0100L20P	100 L	16	15.5	29	2.75	2.5	1/2	1/2	-	-	-	40.64	39.37	73.66	6.99	6.35	1/2	1/2	-	-	-	DRUM0100L01
SBD0100L21P	PLSBD0100L21P	100 L	16	15.5	29	2.75	2.5	1/2	1/2	-	-	1/2	40.64	39.37	73.66	6.99	6.35	1/2	1/2	-	-	1/2	DRUM0100L01
SBD0100L40P	PLSBD0100L40P	100 L	16	15.5	29	2.75	2.5	1/2	1/2	1/2	1/2	-	40.64	39.37	73.66	6.99	6.35	1/2	1/2	1/2	1/2	-	DRUM0100L01
SBD0100L41P	PLSBD0100L41P	100 L	16	15.5	29	2.75	2.5	1/2	1/2	1/2	1/2	1/2	40.64	39.37	73.66	6.99	6.35	1/2	1/2	1/2	1/2	1/2	DRUM0100L01
SBD0200L20P	PLSBD0200L20P	200 L	19.5	19	35	4.5	2.5	1/2	1/2	-	-	-	49.53	48.26	88.90	11.43	6.35	1/2	1/2	-	-	-	DRUM0200L01
SBD0200L21P	PLSBD0200L21P	200 L	19.5	19	35	4.5	2.5	1/2	1/2	-	-	1/2	49.53	48.26	88.90	11.43	6.35	1/2	1/2	-	-	1/2	DRUM0200L01
SBD0200L40P	PLSBD0200L40P	200 L	19.5	19	35	4.5	2.5	1/2	1/2	1/2	1/2	-	49.53	48.26	88.90	11.43	6.35	1/2	1/2	1/2	1/2	-	DRUM0200L01
SBD0200L41P	PLSBD0200L41P	200 L	19.5	19	35	4.5	2.5	1/2	1/2	1/2	1/2	1/2	49.53	48.26	88.90	11.43	6.35	1/2	1/2	1/2	1/2	1/2	DRUM0200L01
SBD0500L20P	PLSBD0500L20P	500 L	26.5	26	48	8	2.5	1/2	1/2	-	-	-	67.31	66.04	121.92	20.32	6.35	1/2	1/2	-	-	-	-
SBD0500L21P	PLSBD0500L21P	500 L	26.5	26	48	8	2.5	1/2	1/2	-	-	3/4	67.31	66.04	121.92	20.32	6.35	1/2	1/2	-	-	3/4	-
SBD0500L40P	PLSBD0500L40P	500 L	26.5	26	48	8	2.5	1/2	1/2	1/2	1/2	-	67.31	66.04	121.92	20.32	6.35	1/2	1/2	1/2	1/2	-	-
SBD0500L41P	PLSBD0500L41P	500 L	26.5	26	48	8	2.5	1/2	1/2	1/2	1/2	3/4	67.31	66.04	121.92	20.32	6.35	1/2	1/2	1/2	1/2	3/4	-

Drum – Hardware

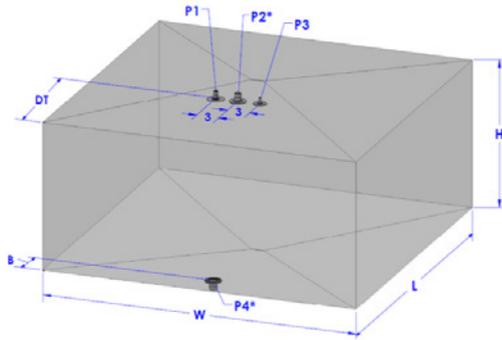


Volume	Part Number	Description	Accessories
50 L	DRUM0050L01	Mobius® Polyethylene Drum, 50 L	DOLLY0050L01, Mobius® Drum Dolly, 50 L
100 L	DRUM0100L01	Mobius® Polyethylene Drum, 100 L	DOLLY0100L01, Mobius® Drum Dolly, 100 L
200 L	DRUM0200L01	Mobius® Polyethylene Drum, 200 L	DOLLY0200L01, Mobius® Drum Dolly, 200 L

Mobius® drums

- Storage of process fluids in 3D single-use bags
- Top & bottom container ports
- Supported by an optional dolly
- Available in 50, 100 and 200 L
- Easy to setup and use
- Robust support devices for 3-D process containers
- Chemical compatibility

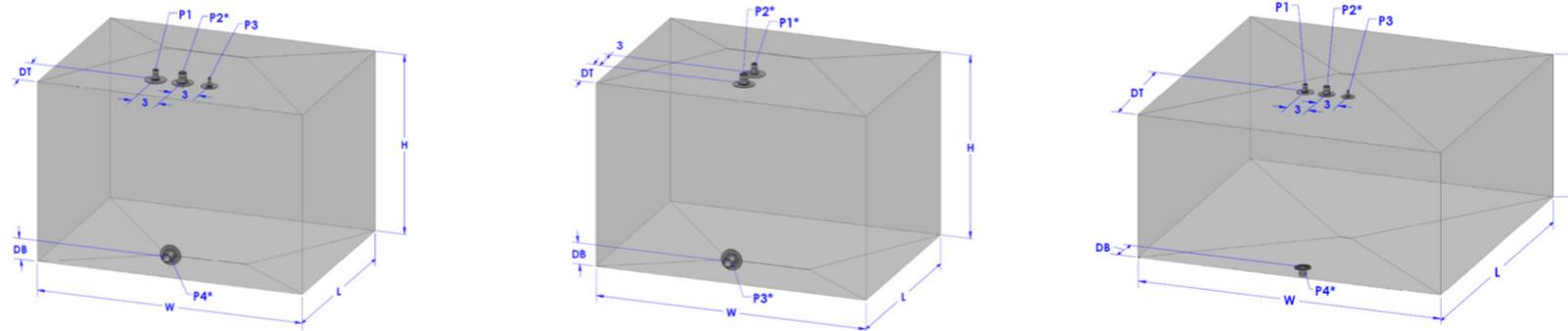
3D Bottom Ported Collapsible Bin Assemblies – Configurable Options



Mobius® collapsible bins are easy to use storage vessels that support single-use process containers. They are designed to provide assistance for handling process containers of 100 L to 1000 L sizes during various manufacturing stages, ranging from media and buffer preparation and storage, to final product formulation and filling. Stackable and collapsible for easy storage when not in use, Mobius® collapsible bins provide optimal space utilization.

Bag Part Numbers		Vol.	Bag Details (in)										Bag Details (cm)						Associated Bin Part Number		
PUREFLEX™ FILM	PUREFLEX™ PLUS FILM		W	L	H	DT	DB	P1	P2	P3	P4	W	L	H	DT	DB	P1	P2		P3	P4
SBC0100L31P	PLSBC0100L31P	100 L	29.5	21.75	11	5.4	3.6	1/2	3/4	1/4	3/4	74.93	55.25	27.94	13.72	9.14	1.27	1.91	0.64	1.27	BIN0100L002
SBC0250L31P	PLSBC0250L31P	250 L	29.5	21.75	25.25	4.88	3.6	1/2	3/4	1/4	3/4	74.93	55.25	64.14	12.40	9.14	1.27	1.91	0.64	1.27	BIN0250L002
SBC0500L31P	PLSBC0500L31P	500 L	45.5	29.5	26	9.75	7.75	1/2	3/4	1/4	3/4	115.57	74.93	66.04	24.77	19.69	1.27	1.91	0.64	1.27	BIN0500L002
SBC0500L31P1	PLSBC0500L31P1	500 L	45.5	29.5	26	9.75	7.75	1/2	3/4	1/4	1	115.57	74.93	66.04	24.77	19.69	1.27	1.91	0.64	2.54	BIN0500L002
SBC1000L31P	PLSBC1000L31P	1000 L	42.5	41.75	37	14.88	6.44	1/2	3/4	1/4	3/4	107.95	106.05	93.98	37.80	16.36	1.27	1.91	0.64	1.27	BIN1000L002
SBC1000L31P1	PLSBC1000L31P1	1000 L	42.5	41.75	37	14.88	6.44	1/2	3/4	1/4	1	107.95	106.05	93.98	37.80	16.36	1.27	1.91	0.64	2.54	BIN1000L002

3D Side Ported Bin Assemblies – Configurable Options



Bag Part Numbers		Vol.	Bag Details (in)										Bag Details (cm)								Associated Bin Part Number
PUREFLEX™ FILM	PUREFLEX™ PLUS FILM		W	L	H	DT	DB	P1	P2	P3	P4	W	L	H	DT	DB	P1	P2	P3	P4	
SBA0100L31P1	PLSBA0100L31P1	100 L	29.5	21.75	11	4.88	2.5	1/2	1/2	1/4	1/2	74.93	55.25	27.94	12.40	6.35	1.27	1.27	0.64	1.27	BIN0250L001
SBA0200L21P1	PLSBA0200L21P1	200 L	29.5	21.75	21	4.88	2.5	1/2	1/2	1/2	-	74.93	55.25	53.34	12.40	6.35	1.27	1.27	1.27	-	BIN0250L001
SBA0250L31P	PLSBA0250L31P	250 L	29.5	21.75	25.25	4.88	2.5	1/2	3/4	1/4	3/4	74.93	55.25	64.14	12.40	6.35	1.27	1.91	0.64	1.91	BIN0250L001
SBA0250L31P2	PLSBA0250L31P2	250 L	29.5	21.75	25.25	4.88	2.5	1/2	3/4	1/4	1	74.93	55.25	64.14	12.40	6.35	1.27	1.91	0.64	2.54	BIN0250L001
SBA0250L31P4	PLSBA0250L31P4	250 L	29.5	21.75	25.25	4.88	2.5	1/2	1/2	1/4	1/2	74.93	55.25	64.14	12.40	6.35	1.27	1.27	0.64	1.27	BIN0250L001
SBA0500L31P	PLSBA0500L31P	500 L	42.5	41.75	20	4.88	2.5	1/2	3/4	1/4	3/4	107.95	106.05	50.80	12.40	6.35	1.27	1.91	0.64	1.91	BIN1000L001
SBA0500L31P1	PLSBA0500L31P1	500 L	42.5	41.75	20	4.88	2.5	1/2	3/4	1/4	1	107.95	106.05	50.80	12.40	6.35	1.27	1.91	0.64	2.54	BIN1000L001
SBA0500L31P3	PLSBA0500L31P3	500 L	42.5	41.75	20	4.88	2.5	1/2	1/2	1/4	1/2	107.95	106.05	50.80	12.40	6.35	1.27	1.27	1.27	1.27	BIN1000L001
SBA1000L31P	PLSBA1000L31P	1000 L	42.5	41.75	37	4.88	2.5	1/2	3/4	1/4	3/4	107.95	106.05	93.98	12.40	6.35	1.27	1.91	1.91	1.91	BIN1000L001

3D Collapsible Bin – Hardware



Bottom-Ported Bins

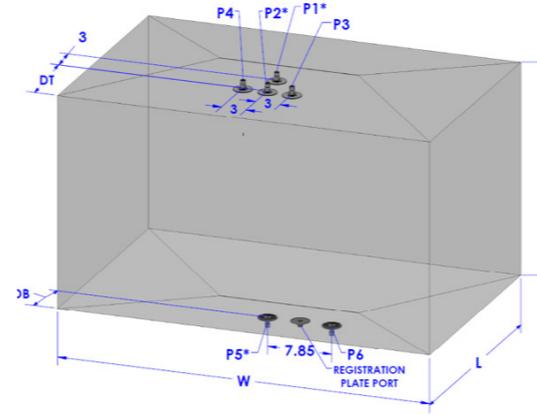
Side-Ported Bins

Volume	Part Number	Description
100 L	BIN0100L002	100 L Bottom-Ported Collapsible Bin
250 L	BIN0250L002	250 L Bottom-Ported Collapsible Bin
500 L	BIN0500L002	500 L Bottom-Ported Collapsible Bin
1000 L	BIN1000L002	1000 L Bottom-Ported Collapsible Bin

Volume	Part Number	Description
250 L	BIN0250L001	Mobius® Side-Ported Collapsible Bin, 250 L, 1/pk
1000 L	BIN1000L001	Mobius® Side-Ported Collapsible Bin, 1000 L, 1/pk

- Storage of process fluids in 3D single-use bags
- Stackable & Collapsible
 - Four-high empty or filled
- Dollies available upon request - Contact your sales development specialist

3D Stainless Steel Bin Assemblies for Mobius® Bins – Configurable Options



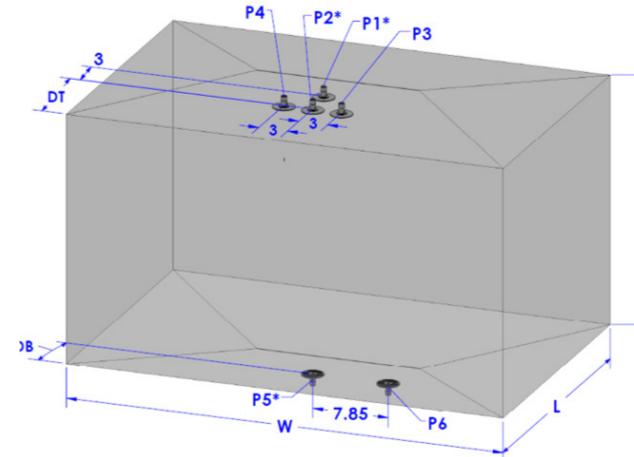
*Registration plate for ease of installation and alignment

*Permits only one



Bag Part Numbers		Vol.	Bag Details (in)												Bag Details (cm)						Associated Bin Part Numbers					
PUREFLEX™ FILM	PUREFLEX™ PLUS FILM		W	L	H	DT	DB	P1	P2	P3	P4	P5	P6	W	L	H	DT	DB	P1	P2	P3	P4	P5	P6	304 STAINLESS STEEL	316 STAINLESS STEEL
SBM0200L21P	PLSBM0200L21P	200 L	29.25	21.5	22	5.75	3.5	1/2	1/2	-	-	1/2	-	74.30	54.61	55.88	14.61	8.89	1.27	1.27	-	1.27	1.27	-	M0200L304B[1,2,3,4,5,6]	M0200L316B[1,2,3,4,5,6]
SBM0200L41P	PLSBM0200L41P	200 L	29.25	21.5	22	5.75	3.5	1/2	1/2	1/2	1/2	1/2	-	74.30	54.61	55.88	14.61	8.89	1.27	1.27	1.27	1.27	1.27	-	M0200L304B[1,2,3,4,5,6]	M0200L316B[1,2,3,4,5,6]
SBM0200L42P	PLSBM0200L42P	200 L	29.25	21.5	22	5.75	3.5	1/2	1/2	1/2	1/2	1/2	1/2	74.30	54.61	55.88	14.61	8.89	1.27	1.27	1.27	1.27	1.27	1.27	M0200L304B[1,2,3,4,5,6]	M0200L316B[1,2,3,4,5,6]
SBM0500L21P	PLSBM0500L21P	500 L	45.5	29.5	26	9.75	7.75	1/2	1/2	-	-	3/4	-	115.57	74.93	66.04	24.77	19.69	1.27	1.27	-	-	1.91	-	M0500L304B[1,2,3,4,5,6]	M0500L316B[1,2,3,4,5,6]
SBM0500L41P	PLSBM0500L41P	500 L	45.5	29.5	26	9.75	7.75	1/2	1/2	1/2	1/2	3/4	-	115.57	74.93	66.04	24.77	19.69	1.27	1.27	1.27	1.27	1.91	-	M0500L304B[1,2,3,4,5,6]	M0500L316B[1,2,3,4,5,6]
SBM0500L42P	PLSBM0500L42P	500 L	45.5	29.5	26	9.75	7.75	1/2	1/2	1/2	1/2	3/4	3/4	115.57	74.93	66.04	24.77	19.69	1.27	1.27	1.27	1.27	1.91	1.91	M0500L304B[1,2,3,4,5,6]	M0500L316B[1,2,3,4,5,6]
SBM1000L21P	PLSBM1000L21P	1000 L	45.5	36.5	41	13.25	7.75	1/2	1/2	-	-	3/4	-	115.57	92.71	104.14	33.66	19.69	1.27	1.27	-	-	1.91	-	M1000L304B[1,2,3,4,5,6]	M1000L316B[1,2,3,4,5,6]
SBM1000L41P	PLSBM1000L41P	1000 L	45.5	36.5	41	13.25	7.75	1/2	1/2	1/2	1/2	3/4	-	115.57	92.71	104.14	33.66	19.69	1.27	1.27	1.27	1.27	1.91	-	M1000L304B[1,2,3,4,5,6]	M1000L316B[1,2,3,4,5,6]
SBM1000L42P	PLSBM1000L42P	1000 L	45.5	36.5	41	13.25	7.75	1/2	1/2	1/2	1/2	3/4	3/4	115.57	92.71	104.14	33.66	19.69	1.27	1.27	1.27	1.27	1.91	1.91	M1000L304B[1,2,3,4,5,6]	M1000L316B[1,2,3,4,5,6]
SBM1500L21P	PLSBM1500L21P	1500 L	45.5	36.5	61	13.25	7.75	1/2	1/2	-	-	3/4	-	115.57	92.71	154.94	33.66	19.69	1.27	1.27	-	-	1.91	-	M1500L304B[1,2]	M1500L316B[1,2]
SBM1500L41P	PLSBM1500L41P	1500 L	45.5	36.5	61	13.25	7.75	1/2	1/2	1/2	1/2	3/4	-	115.57	92.71	154.94	33.66	19.69	1.27	1.27	1.27	1.27	1.91	-	M1500L304B[1,2]	M1500L316B[1,2]
SBM1500L42P	PLSBM1500L42P	1500 L	45.5	36.5	61	13.25	7.75	1/2	1/2	1/2	1/2	3/4	3/4	115.57	92.71	154.94	33.66	19.69	1.27	1.27	1.27	1.27	1.91	1.91	M1500L304B[1,2]	M1500L316B[1,2]
SBM2000L21P	PLSBM2000L21P	2000 L	45.5	36.5	82	13.25	7.75	1/2	1/2	-	-	3/4	-	115.57	92.71	208.28	33.66	19.69	1.27	1.27	-	-	1.91	-	-	-
SBM2000L41P	PLSBM2000L41P	2000 L	45.5	36.5	82	13.25	7.75	1/2	1/2	1/2	1/2	3/4	-	115.57	92.71	208.28	33.66	19.69	1.27	1.27	1.27	1.27	1.91	-	-	-
SBM2000L42P	PLSBM2000L42P	2000 L	45.5	36.5	82	13.25	7.75	1/2	1/2	1/2	1/2	3/4	3/4	115.57	92.71	208.28	33.66	19.69	1.27	1.27	1.27	1.27	1.91	1.91	-	-

3D Stainless Steel Bin Assemblies for General Bins – Configurable Options



APPROX. INTERNAL BIN DIMS (in)	APPROX. INTERNAL BIN DIMS (cm)	Bag Part Numbers		Vol.	Bag Details (in)												Bag Details (cm)											
		PUREFLEX™ FILM	PUREFLEX™ PLUS FILM		W	L	H	DT	DB	P1	P2	P3	P4	P5	P6	W	L	H	DT	DB	P1	P2	P3	P4	P5	P6		
29W X 21L X 23H	73.66 X 53.34 X 58.42	SBU0200L21P	PLSBU0200L21P	200 L	29.25	21.5	22	5.75	3.5	1/2	1/2	-	-	1/2	-	74.30	54.61	55.88	14.61	8.89	1.27	1.27			1.27	1.27		
29W X 21L X 23H	73.66 X 53.34 X 58.42	SBU0200L41P	PLSBU0200L41P	200 L	29.25	21.5	22	5.75	3.5	1/2	1/2	1/2	1/2	1/2	-	74.30	54.61	55.88	14.61	8.89	1.27	1.27	1.27	1.27	1.27	1.27		
29W X 21L X 23H	73.66 X 53.34 X 58.42	SBU0200L42P	PLSBU0200L42P	200 L	29.25	21.5	22	5.75	3.5	1/2	1/2	1/2	1/2	1/2	1/2	74.30	54.61	55.88	14.61	8.89	1.27	1.27	1.27	1.27	1.27	1.27		
45W X 29L X 32H	114.30 X 73.66 X 81.28	SBU0500L21P	PLSBU0500L21P	500 L	45.5	29.5	26	9.75	7.75	1/2	1/2	-	-	3/4	-	115.57	74.93	66.04	24.77	19.69	1.27	1.27			1.91			
45W X 29L X 32H	114.30 X 73.66 X 81.28	SBU0500L41P	PLSBU0500L41P	500 L	45.5	29.5	26	9.75	7.75	1/2	1/2	1/2	1/2	3/4	-	115.57	74.93	66.04	24.77	19.69	1.27	1.27	1.27	1.27	1.91			
45W X 29L X 32H	114.30 X 73.66 X 81.28	SBU0500L42P	PLSBU0500L42P	500 L	45.5	29.5	26	9.75	7.75	1/2	1/2	1/2	1/2	3/4	3/4	115.57	74.93	66.04	24.77	19.69	1.27	1.27	1.27	1.27	1.91	1.91		
45W X 36L X 42H	114.30 X 91.44 X 106.68	SBU1000L21P	PLSBU1000L21P	1000 L	45.5	36.5	41	13.25	7.75	1/2	1/2	-	-	3/4	-	115.57	92.71	104.14	33.66	19.69	1.27	1.27			1.91			
45W X 36L X 42H	114.30 X 91.44 X 106.68	SBU1000L41P	PLSBU1000L41P	1000 L	45.5	36.5	41	13.25	7.75	1/2	1/2	1/2	1/2	3/4	-	115.57	92.71	104.14	33.66	19.69	1.27	1.27	1.27	1.27	1.91			
45W X 36L X 42H	114.30 X 91.44 X 106.68	SBU1000L42P	PLSBU1000L42P	1000 L	45.5	36.5	41	13.25	7.75	1/2	1/2	1/2	1/2	3/4	3/4	115.57	92.71	104.14	33.66	19.69	1.27	1.27	1.27	1.27	1.91	1.91		
45W X 29L X 62H	114.30 X 73.66 X 157.48	SBU1500L21P	PLSBU1500L21P	1500 L	45.5	36.5	61	13.25	7.75	1/2	1/2	-	-	3/4	-	115.57	92.71	154.94	33.66	19.69	1.27	1.27			1.91			
45W X 29L X 62H	114.30 X 73.66 X 157.48	SBU1500L41P	PLSBU1500L41P	1500 L	45.5	36.5	61	13.25	7.75	1/2	1/2	1/2	1/2	3/4	-	115.57	92.71	154.94	33.66	19.69	1.27	1.27	1.27	1.27	1.91			
45W X 29L X 62H	114.30 X 73.66 X 157.48	SBU1500L42P	PLSBU1500L42P	1500 L	45.5	36.5	61	13.25	7.75	1/2	1/2	1/2	1/2	3/4	3/4	115.57	92.71	154.94	33.66	19.69	1.27	1.27	1.27	1.27	1.91	1.91		
45W X 29L X 62H	114.30 X 73.66 X 210.82	SBU2000L21P	PLSBU2000L21P	2000 L	45.5	36.5	82	13.25	7.75	1/2	1/2	-	-	3/4	-	115.57	92.71	208.28	33.66	19.69	1.27	1.27			1.91			
45W X 29L X 83H	114.30 X 73.66 X 210.82	SBU2000L41P	PLSBU2000L41P	2000 L	45.5	36.5	82	13.25	7.75	1/2	1/2	1/2	1/2	3/4	-	115.57	92.71	208.28	33.66	19.69	1.27	1.27	1.27	1.27	1.91			
45W X 29L X 83H	114.30 X 73.66 X 210.82	SBU2000L42P	PLSBU2000L42P	2000 L	45.5	36.5	82	13.25	7.75	1/2	1/2	1/2	1/2	3/4	3/4	115.57	92.71	208.28	33.66	19.69	1.27	1.27	1.27	1.27	1.91	1.91		

3D Stainless Steel Bin - Hardware



Stainless Steel Bins

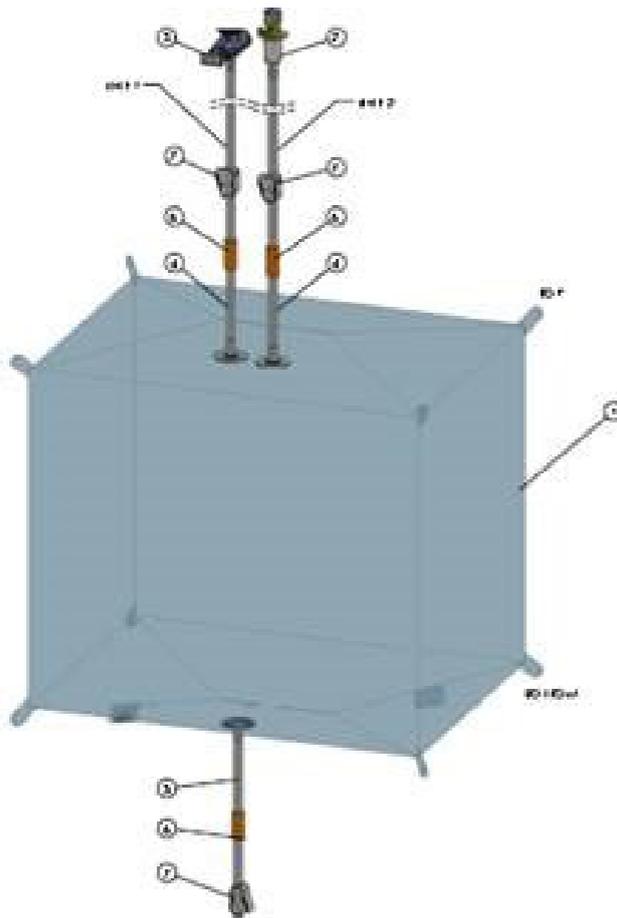
- Storage of process fluids in 3D single-use bags
- Single large door facilitates easy operator access and bag installation
- 304/304 L SS and optional 316 SS
- Base units are stackable (two-high)
- Tray design with slide-out capability
- 200 L and above
- Pallet jack & fork lift compatible
- Custom features including load cells, dimensions, jackets, door modifications and size (up to 3000 L)

Legend

- 1 – basic unit
- 2 – with tray
- 3 – with casters
- 4 – with cart
- 5 – with tray and casters
- 6 – with tray and cart

304 STAINLESS STEEL	Volume	316 STAINLESS STEEL
M0200L304B[1,2,3,4,5,6]	200 L	M0200L316B[1,2,3,4,5,6]
M0200L304B[1,2,3,4,5,6]	200 L	M0200L316B[1,2,3,4,5,6]
M0200L304B[1,2,3,4,5,6]	200 L	M0200L316B[1,2,3,4,5,6]
M0500L304B[1,2,3,4,5,6]	500 L	M0500L316B[1,2,3,4,5,6]
M0500L304B[1,2,3,4,5,6]	500 L	M0500L316B[1,2,3,4,5,6]
M0500L304B[1,2,3,4,5,6]	500 L	M0500L316B[1,2,3,4,5,6]
M1000L304B[1,2,3,4,5,6]	1000 L	M1000L316B[1,2,3,4,5,6]
M1000L304B[1,2,3,4,5,6]	1000 L	M1000L316B[1,2,3,4,5,6]
M1000L304B[1,2,3,4,5,6]	1000 L	M1000L316B[1,2,3,4,5,6]
M1500L304B[1,2]	1500 L	M1500L316B[1,2]
M1500L304B[1,2]	1500 L	M1500L316B[1,2]
M1500L304B[1,2]	1500 L	M1500L316B[1,2]

Transport Assemblies – Standard Options



Volume	Part Number	Description
200L	SAT0200L101	Mobius®, Gold, 200L Bag Non Aseptic* TRN
200L	SAT0200L102	Mobius®, Gold, 200L Bag Aseptic** TRN
500L	SAT0500L101	Mobius®, Gold, 500L Bag Non Aseptic* TRN
500L	SAT0500L102	Mobius®, Gold, 500L Bag Aseptic** TRN

They address the need for a holistic fluid management solutions that enable biopharma manufacturers to safely move large liquid volumes via road and air.

Configurable options are available, please contact your sales development specialist to design a custom configuration.

* terminated with Colder MPX connectors

** terminated with Lynx® connectors.

Transport - Hardware

3D Large Liquid Transport Bins

- Fluid management solution that enables users to safely move large liquid volumes of media, buffers, process intermediates and bulk drug substance between different sites, via road or air
- Bag working volumes of 100L to 500L, aseptic and non-aseptic versions, PureFlex™ Plus Film
- 304L stainless steel
- ISTA 3E shipping validation, 2°C to 45°C
- Stackable up to two units high
 - 200L: 4 high (non-filled) and 3 high (filled)
 - 500L: 4 high (non-filled) and 2 high (filled)

*NA units for North America
**EU units for rest of world



Volume	Part Number	Description	Accessories
200L	TRN0200L001EU	200L SS Transport Bin EU**	TRND0L0200L01EU, 200L Transport Dolly EU
200L	TRN0200L001	200L SS Transport Bin NA*	TRND0L0200L01, 200L Transport Dolly NA
500L	TRN0500L001EU	500L SS Transport Bin EU**	TRND0L0500L01EU, 500L Transport Dolly EU
500L	TRN0500L001	500L SS Transport Bin NA*	TRND0L0500L01, 500L Transport Dolly NA

Custom options for assemblies and hardware are available, please contact your local representative.

For additional information, please visit

[MerckMillipore.com](https://www.MerckMillipore.com)

To place an order or receive technical assistance, please visit

[MerckMillipore.com/contactPS](https://www.MerckMillipore.com/contactPS)

The life science business of Merck operates as MilliporeSigma in the U.S. and Canada.

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