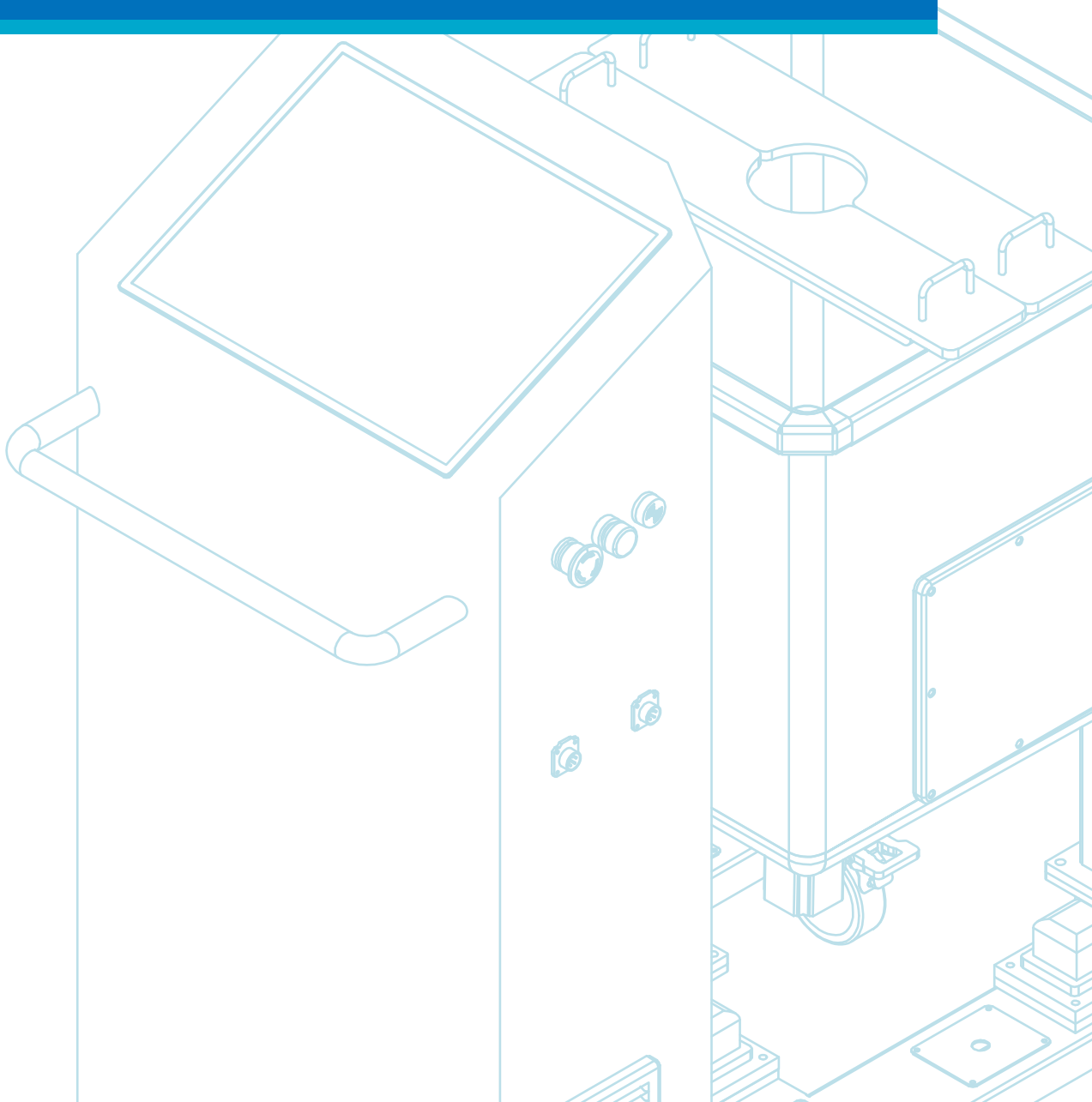


Lifecube Single-use Buffer Preparation and Storage System Brochure





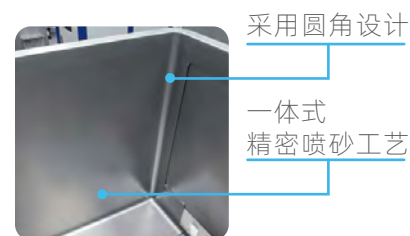
Cobetter Lifecube S-M single-use buffer preparation system

Cobetter Lifecube S-M single-use buffer preparation system consists of stainless steel support vessel, magnetic stirring drive motor and automatic control system. The buffer preparation system is designed with all high-precision accessories and the module control pursues high precision, which can provide a variety of stirring and mixing operation processes for liquid-liquid and powder-liquid mixing in biopharmaceutical process.

The automation system meets the requirements of 21 CFR Part 11 and can realize three-level authority configuration, online instrument calibration, batch report printing, alarm records and other audit trail functions, fully meeting the requirements of data integrity and reliability. The control unit is highly integrated and can be used offline as well as integrated with data upload according to the client's central control system. The configured HMI/IPC control interface can realize data such as pH detection, conductivity detection, temperature detection and dissolved oxygen detection.

The single-use buffer preparation system can be configured with integral and split agitator motors and top/bottom agitation modes to provide customers with optional dispensing solutions, from 20L to 2000L, Cobetter can provide customized buffer preparation system according to customers' production scale requirements. Pre-sterilized, no-clean mixing bags, with a window to observe the mixing inside the transparent mixing bag.

The Cobetter Lifecube S-M single-use buffer preparation system process vessel features a rounded bottom and a one-piece precision sandblasting process, making it easy to clean the stainless steel exterior surface before and after production, fully meeting sanitary requirements.



Product Feature

- Cobetter Lifecube S-M single-use buffer preparation system can be customized to meet various process requirements.
- Cobetter Lifecube S-M is a single-use buffer preparation system that can be customized to meet the needs of different processes in mode of top/bottom agitation and integrated/separated motor.
- Optional structure mode to reduce equipment cost.
- With multi-level electronic control system in compliance with cGMP standards, meeting the data integrity and reliability requirements in audit trail.
- Can be customized to carry all kinds of instruments and meters to meet the complex monitoring requirements in different processes.
- If thermal insulation is required, it can be equipped with jacket and thermal insulation layer, which has good heat exchange performance.
- No need for process cleaning between equipment use, reducing the lengthy and complicated cleaning process verification work and improving production efficiency.
- Customer-centric concept, to achieve a full range of customized design for customers.
- Adopt the most stringent Japanese quality management system in the industry to ensure the safety, stability and reliability of each product.

Application

- Culture medium preparation
- Buffer preparation
- Dilution preparation
- Purification intermediate product mixing process
- Intermediates preparation
- Virus inactivation
- Mixing of vaccine adjuvant



Specifications

Main body material	304 stainless steel
Surface treatment	Internal and external shot blasting Ra≤1.0μm
Casters	Polyurethane casters for clean area, can be moved flexibly
Stirring motor	Magnetic coupling stirring/ magnetic levitation stirring, can be equipped with servo drive for speed adjustment
Weighing sensor	Weighing module with C3 grade
Inline temperature (optional)	Real-time monitoring of liquid temperature, plug-in/non-plug-in temperature sensor, 4-20mA output, accuracy: ±0.1°C
Inline pH (optional)	Real-time monitoring of liquid pH, range 0-14
Inline conductivity (optional)	Real-time monitoring of liquid conductivity, range 1us-300ms/cm.
Inline dissolved oxygen (optional)	Real-time monitoring of liquid dissolved oxygen, range 4ppb-25ppm
Self-control	User data output, audit trail, PDF report, user rights management
Jacket (optional insulation system)	Three layers and five sides of honeycomb jacket design, test pressure 4 bar, the outside of the insulation cotton to prevent condensate seepage
TCU (optional insulation system)	Temperature control range 2 to 40°C, temperature rise and fall time 30-120 minutes, water temperature control accuracy within ±0.2°C
Design features	<ul style="list-style-type: none"> ·Side operation door and viewable window can be used to observe the liquid status; ·Side sampling port design support for the fixation of the sampling bag hose; ·Supporting the bottom of the container has a 1 ° angle of inclination, the lowest point of the opening can achieve no dead angle discharge ·Rounded corners inside the support container, no dead-end residue ·Testing instruments are optional ·Printing function can be added to the system

Function Selection Chart

Single-use buffer preparation system functional parameters table (standard ● optional ○ no △)

Enclosure material	304 stainless steel
Maximum speed	MP-type:0-300rpm±5rpm MG-type:0-220rpm±5rpm MK-type:0-600rpm±5rpm
Surface treatment	Internal and external shot blasting Ra≤1.0μm
Rated Voltage	220V±10%
Maximum power	800W
Stirring	●
Weighing	○
Jacket	○
Caster	●
TCU	○ 220V/380V
Online Temperature	○
Online pH meter	○
Online dissolved oxygen	○
Online conductivity	○
Printer	○
PLC	●
HMI	●
IPC	○
UPS	○

Single-use Buffer Preparation System Ordering Information

Name	Model	Shape	Working volume	Jacket	Remarks
Benchtop	S-MGXJ-20	Square	20L	Yes	MG paddles
	S-MKXJ-20	Square	20L		MK paddles
MP-type	S-MPX-50	Square	50L	No	MP paddles
	S-MPX-100	Square	100L		
	S-MPX-200	Square	200L		
	S-MPX-500	Square	500L		
	S-MPX-1000	Square	1000L		
	S-MPX-2000	Square	2000L		
	Jacketed MP-type	S-MPXJ-50	Square		
S-MPXJ-100		Square	100L		
S-MPXJ-200		Square	200L		
S-MPXJ-500		Square	500L		
S-MPXJ-1000		Square	1000L		
S-MPXJ-2000		Square	2000L		
MG-type		S-MGX-50	Square	50L	NO
	S-MGX-100	Square	100L		
	S-MGX-200	Square	200L		
	S-MGX-500	Square	500L		
	S-MGX-1000	Square	1000L		
	S-MGX-2000	Square	2000L		
Jacketed MG-type	S-MGXJ-50	Square	50L	Dimpled jacket	MG paddles
	S-MGXJ-100	Square	100L		
	S-MGXJ-200	Square	200L		
	S-MGXJ-500	Square	500L		
	S-MGXJ-1000	Square	1000L		
	S-MGXJ-2000	Square	2000L		
MK-type	S-MKX-50	Square	50L	No	MK paddles
	S-MKX-100	Square	100L		
	S-MKX-200	Square	200L		
	S-MKX-500	Square	500L		
	S-MKX-1000	Square	1000L		

Single-use Buffer Preparation System Ordering Information

Name	Model	Shape	Working volume	Jacket	Remarks
Jacketed MK-type	S-MKXJ-50	Square	50L	Dimpled jacket	MK paddles
	S-MKXJ-100	Square	100L		
	S-MKXJ-200	Square	200L		
	S-MKXJ-500	Square	500L		
	S-MKXJ-1000	Square	1000L		

* In addition to the above specifications, full size customization is available

Cobetter Lifecube SPP single-use buffer storage system

Cobetter single-use buffer storage system, which can be used with disposable 3D liquid storage bags and liner bags; including stainless steel square liquid storage support containers, stainless steel round liquid storage support containers, plastic square folding containers, plastic round support containers, matching stainless steel bases, etc. The outer surface of the stainless steel support container can be optionally shot blasted, with clean area special polyurethane universal casters, flexible movement, transfer of liquid easily.

Product Features

- Specifications can be customized for stainless steel products
- Stainless steel products inside and outside surface shot blasting $Ra \leq 1.0\mu\text{m}$, smooth and no dead angle
- Plastic support containers with lids are designed to reduce significant evaporation and contamination, and can be used with stainless steel bases for transit
- Plastic container injection molding process, lightweight and durable
- Good chemical stability, resistant to common reagents, such as alcohol wipe

Application

Widely used in storage and transfer of buffer and medium after filtration, transfer of intermediate products or stock solution, storage of ultrafiltration products, etc.

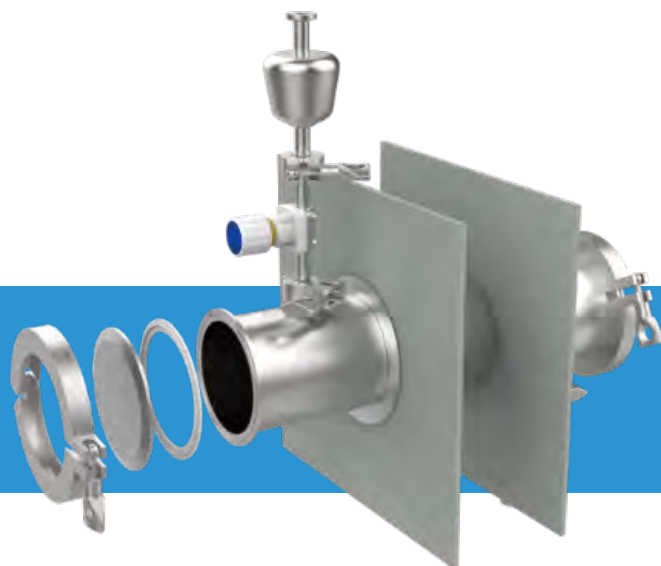


Buffer Storage System Ordering Information

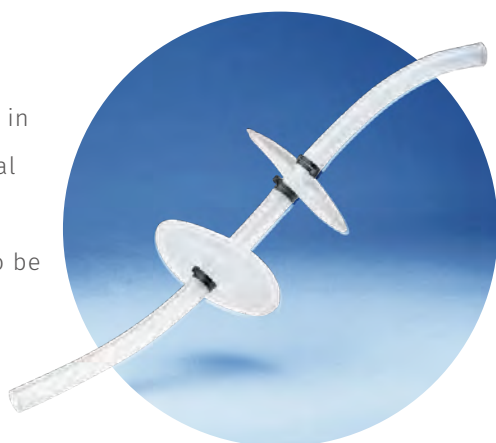
Name	Model	Shape	Working Volume	Material	Size
Stainless steel containers	SS-CY50L	Square/Round	50L	304	556×466×H950
	SS-CY100L	Square/Round	100L	304	716×556×H97
	SS-CY200L	Square/Round	200L	304	806×696×H1010
	SS-CY500L	Square/Round	500L	304	1200×903×H1010
	SS-CY1000L	Square	1000L	304	1400×1030×H1400
	SS-CY2000L	Square	2000L	304	1400×1030×H2300
	SS-CY2500L	Square	2500L	304	1400×1030×H2750
Plastic containers	SPP-CY50L	Round	50L	LLDPE	φ450×H490
	SPP-CY100L	Round	100L	LLDPE	φ450×H650
	SPP-CY200L	Round	200L	LLDPE	φ530×H1010
	SPP-CY50L	Round	57L	HDPE	φ330×H690
	SPP-CY100L	Round	113L	HDPE	φ457×H762
	SPP-CY200L	Round	208L	HDPE	φ559×H914
	SPP-CY250L	Square folding	250L	PP	809×609×H833
	SPP-CY500L	Square folding	500L	PP	1200×800×H910
	SPP-CY1000L	Square folding	1000L	PP	1100×1100×H1139
Round plastic base	S-DZ50L	Round	50L	304+ Polyurethane casters	φ461*H153
	S-DZ100L	Round	100L	304+ Polyurethane casters	φ461*H153
	S-DZ200L	Round	200L	304+ Polyurethane casters	φ601*H153
Square plastic base	SPP-DZ250L	Square folding	250L	304+ Polyurethane casters	819*619
	SPP-DZ500L	Square folding	500L	304+ Polyurethane casters	1210*810
	SPP-DZ1000L	Square folding	1000L	304+ Polyurethane casters	1165*1165

* In addition to the above specifications, full size customization is available

Wall Bushing Suite



This suite enables aseptic fluid transfer between pharmaceutical equipment located in different rooms (a single stainless steel channel enables aseptic transfer of multiple fluids at both ends of the channel), helping to isolate equipment from each other in different rooms and with different cleanliness requirements, and effectively reducing the risk of environmental contamination of the equipment in question. Avoid the risk of breakage or leakage due to the traditional physical (bags or other containers) method of fluid transfer. The system integrates many disposable components that do not need to be cleaned and validated, thus saving validation costs, validation time and related labor and material resources.



Aseptic Wall Bushing Suite Ordering Information

Name	Model	Material	Description
Wall bushing suite	SS-3-C	304	Both in grade-C
Wall bushing suite	SS-3-CB	304	Between grade-C and grade-B
Wall bushing suite	SS-4-C	304	Both in grade-C
Wall bushing suite	SS-4-CB	304	Between grade-C and grade-B
Wall bushing suite	SS-6-C	304	Both in grade-C
Wall bushing suite	SS-6-CB	304	Between grade-C and grade-B

Other Single-use Production

Single-use PP tray

Name	Model	Material	Remarks
2D 10L tray	SPP-DZTP-10	PP	
2D 20L tray	SPP-DZTP-20	PP	PP tray
2D 50L tray	SPP-DZTP-50	PP	

* Cobetter single-use PP tray can match the disposable 2D buffer storage bag, in addition to the above specifications, full size customization is available

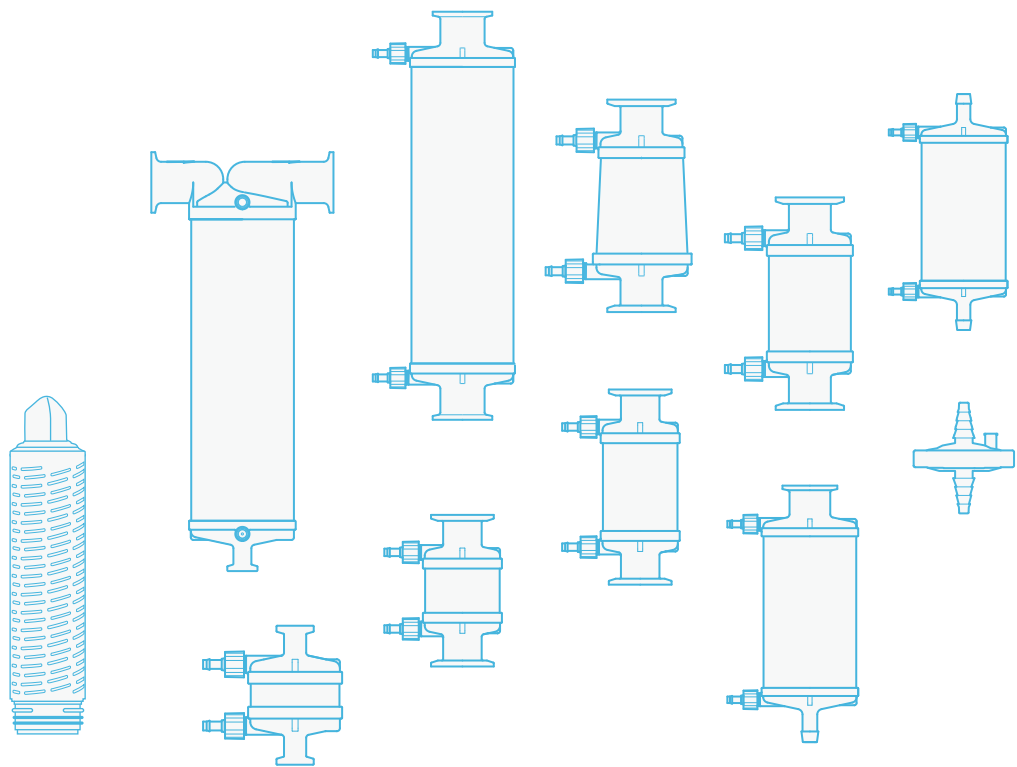
Hoister

Name	Model	Material	Remarks
Manual hoister	SS-Manual	304	
Electric hoister	SS-Electric	304	Feeding bracket

Name	Model	Remarks	Container Volume	Paddle Material	Paddle type
Top-mounted mixing system	MB35T-S	400mm	50L-500L	316L	Three-blade propeller (detachable)
Top-mounted mixing system	MB35T-L	500mm-600mm	600L-1000L	316L	Three-blade propeller (detachable)

Our Mission

Through Excellent Products & Sustainable Innovative Solutions,
We Help Customers Solve Process Problems & Increase Yield.



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