

Orbital shaken bioreactor SB2500-Z for production



The next generation of the orbital shaken bioreactor (OSB) SB2500-Z is now available for the cultivation of human, mammalian, plant, and insect cells in a single-use bag. The bioreactor system has a working volume of **500 to 2500 liters**. This user-friendly system has comparatively short set-up times and can be easily deployed in **production**. The SB2500-Z complies with GMP requirements and regulations.

Advantages of orbital shaken bioreactors

- Orbital motion: efficient liquid mixing, high oxygen transfer rates, low shear forces
- Low mechanical stress on cells due to bubble-free surface gassing
- Trouble-free scale-up: from MTP to shake flasks to shaken bioreactors
- Reproducible cultivation conditions with consistent hydrodynamics of shaken motion throughout the scaling process



GMP Qualification



Single-Use Bag



5 Year Warranty

Facts about the SB2500-Z

- Orbital shaken bioreactor with single-use bag
- Shaking unit uses the robust and maintenance-free Kuhner direct drive system
- Control unit with the latest touchscreen technology and Siemens SCADA for data recording, calibration, programming, and controlling
- Temperature regulation with heating and cooling
- Pumping system for regulation of pH, feeding, and harvesting
- Gas mixing: integrated gas mixing device (FlowCon) with four mass flow controllers to ensure highly accurate and reproducible gas mixing
- IQ-OQ Documentation: IQ-OQ (Installation Qualification and Operation Qualification) is available if required for GMP procedures and can be supplied at the customer's premises
- pH and DO control

Single-use bag for fast and simple set up

- Gamma-irradiated 3D single-use bags (working volume of 500-2500 L)
- No additional mixing device required
- No cleaning or sterilizing procedures required
- 2x pH and 2x DO optical sensors built in
- Ports incorporated for inoculation, feeding, sampling, harvesting & pH regulation
- Option for customized bags

Production application areas

- Mammalian/human cells (e.g. antibodies, vaccines)
- Stem Cells (e.g. processed meat)
- Plant Cells (e.g. antibodies, food supplements)
- Insect Cells (e.g. antibodies, vaccines)



Efficient scale up from lab scale to production scale - scan the QR code for more information.

