

BelloSafe-Iso™[®]

(Patent Pending)



Introduction

Specially designed for BelloSafe-Iso, the Esco OrbiCult™ CO₂ incubator integrates Esco's CO₂ incubator and shaking incubator technologies. Sleek and reliable Esco CO₂ incubators offer the best temperature and CO₂ control providing superior protection for your cell culture. Shaking function with Bello® bioreactor helps semi-automated seeding process with up to 90% seeding rate & auto-cell harvesting.

BelloSafe-Iso includes disposable bioreactor capable of high density cell culture. This bioreactor is designed based on the concept of bello-induced intermittent flow of media and air through porous matrices, where cells reside. Because of its high efficiency in nutrient and oxygen transfer with low shear, high aeration and foam-free culture environment, one BelloCell® bottle is capable of producing cell mass comparable to 18 to 20, up to 30 roller bottle-850cm².

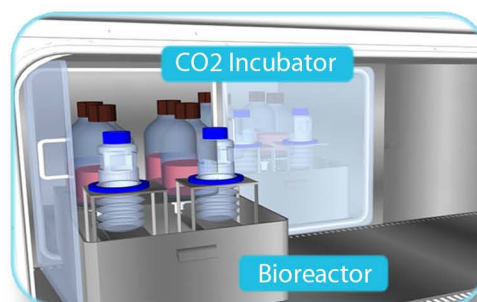
Applications

- Protein Expression
- Virus Production
- Monoclonal Antibody Production
- Cell Processing
- Cell Therapy
- Vaccine Research
- Phase III Vaccine Production Small Scale

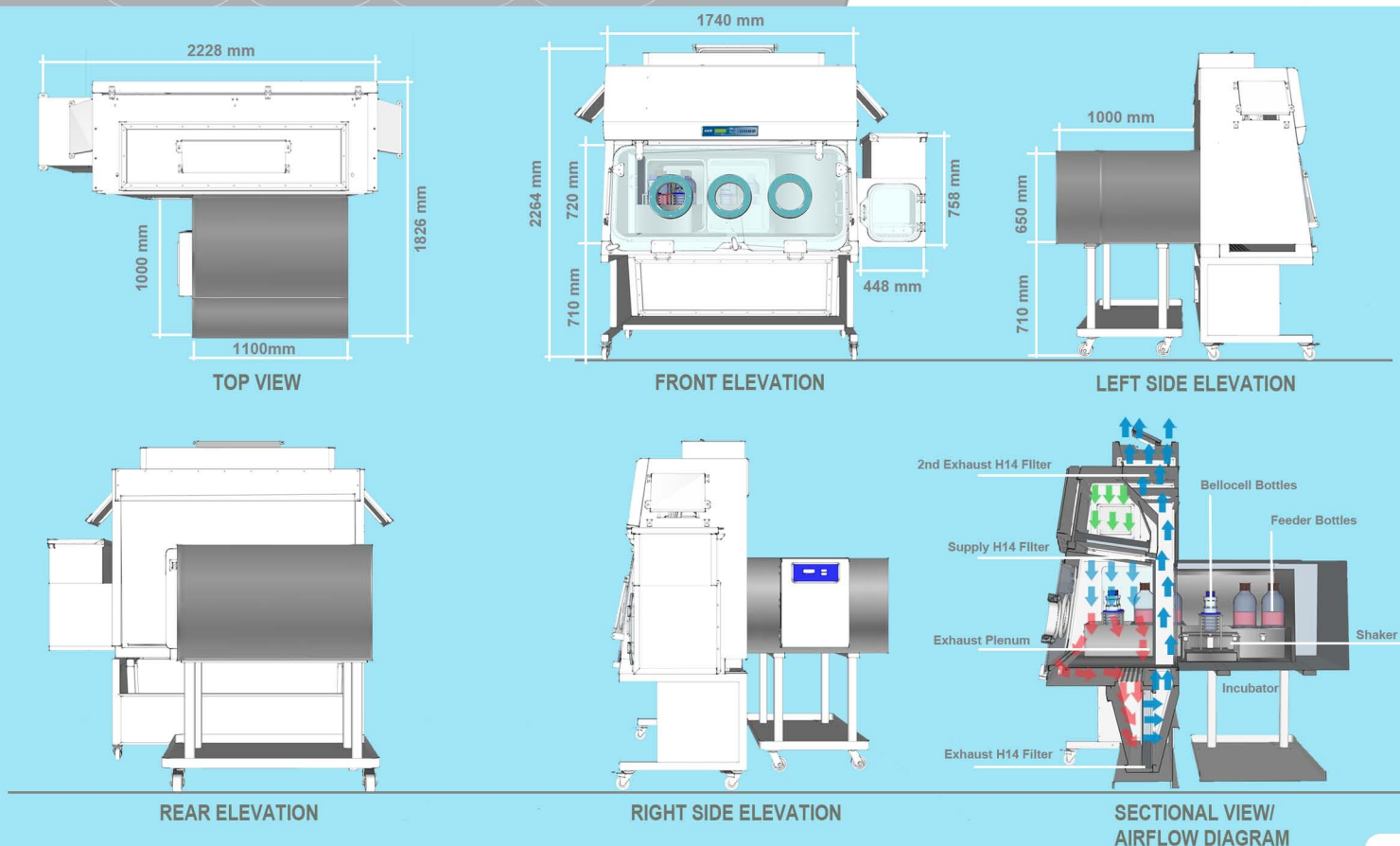
Features

BelloSafe: OrbiCult CO₂ incubator + Bellostage™ Bioreactor

- Specially designed for usage in isolator, using existing Esco technology, enables evenly heated incubation environment.
- Able to do pressure test ensures true isolated equipment and environment.
- SteriSafe™ ULPA filtered system, filtered gas injection lines.
- 0.22 um hydrophobic PTFE-PP filter in the BelloCell® bottle cap.
- Individual air cylinder-derived bellows pump and shaking function allow independent use of single BelloCell® bottle.
- Special treated matrices, BioNOC II™, enable most anchorage-dependent cells to be cultured.
- Cells entrapped in BioNOC II simplify media exchange and allow easy harvest of whole cells, cell components or downstream process such as secreted proteins.



Bellostage™, Bellocell™ & Bionoc II™ are registered trademarks of Cesco Bioengineering



Isolator : HPI-Gen3 (Standard Model)

- H14 filters with a typical efficiency of 99.999% at 0.1 to 0.3 microns provide superior ISO Class 3 air cleanliness.
- Work zone and pass through chamber are under negative or positive pressure to the room in order to maintain either operator protection or product protection. In case of a breach in the barrier isolation system, there will be either or inward rush in -ve mode or outward air rush in the +ve mode.
- Robust construction and enhanced safety features qualify the Esco Pharmacy Isolator for the most demanding applications.
- Ergonomically angled front and 200mm gloveports improve reach and comfort.
- Esco ISOCIDE™ antimicrobial coating on all painted surfaces minimize contamination.
- Bellosafe™-Iso® is able to be customized depending on client process requirements.

Optional Devices in Isolator

- Microscope to observe cells
- Benchtop Filling Machine
- Centrifuge
- Biovap Biodecontamination Hydrogen Peroxide Integration
- Liquid Transfer System
- Glove Leak Tester

Interior Views

