

CENTRITECH® CELL II



Features:

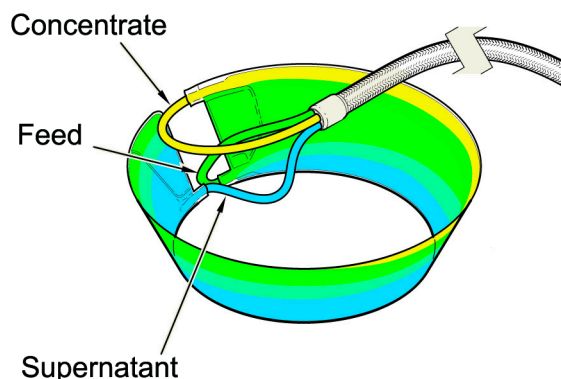
- Automated continuous separation
- High cell viability
- Sterile, disposable separation insert
- No rotating seals
- No cleaning or sterilization required
- Easy process scale-up
- Simple and reproducible operation
- Reduced validation procedures
- Separation and removal of dead cells
- PLC with color touch screen control panel
- Password protected user levels
- Remote monitoring/operation via Ethernet Option
- Flow rates ranging from 6 to 120 liters per hour
- Variable g force up to 320 x g
- Noise level 68.4 dBA
- Five modes of operation - manual, pump, intermittent pump, valve and feed

Barry-Wehmler

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The CENTRITECH CELL II Separation System is a continuous flow centrifuge for mammalian and insect cell processing. It is designed to concentrate cells and clarify media for purposes such as cell harvesting, cell recycling in perfusion systems and cell washing (separating live cells from dead cells and debris).

Like the smaller bench top model, the Lab III, the CELL II System uses a gentle separation process. Fluid from a bioreactor is pumped peristaltically into the CELL II System, which gently separates viable cells, dead cells, cell debris and clarified liquid. In a perfusion system, live cells can then be recycled automatically back into the bioreactor, resulting in increased biomass density and product yield.



The separation takes place in a pre-sterilized, disposable bladder known as a separation insert. The separation insert and attached tubing is the only part of the system that comes in contact with the cell culture. Typical applications include harvesting cells for viral vaccine manufacturing, cellular therapy, perfusion for monoclonal antibody production and media exchange. The separation insert enables closed system processing, reducing the chance for contamination of the culture and leakage of potentially harmful products.

Utilizing a three-step process of separation, isolation and discharge, the CELL II System controls the sedimentation rate of the cells as well as the flow rate and flow direction of the fluid streams entering and leaving the separation chamber. An inflatable barrier segregates the cell-rich material from the supernatant, ensuring a complete discharge of cells during each cycle.

Successful harvesting has been achieved with:

Mammalian cell lines

CHO	Jurkatt
HEK	293
Hybridoma	HeLa
Myeloma	
Microcarrier-based systems	

Primary cells

Islet, Hepatocytes, Stem Cells

Insect Cells

Sf9, Sf21, High-Five

In addition, process development studies can be performed on the smaller capacity, bench-top Centritech system, the CENTRITECH LAB III, and results are readily scalable to the CELL II System.

Installation Site Requirements:

Length: 50.24" (127.6cm)
Width: 34.8" (88.4cm) (with hood open)
Height: 74" (188cm) (with hood open)
Weight: 1,036 lbs (450 kg)

Electrical Requirements:

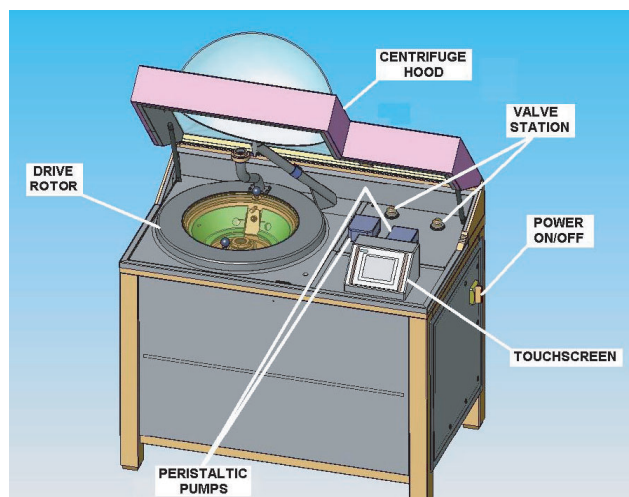
208-230V, 50/60 Hz, 30A

Cooling Water Requirements:

Temp. range 15°-25°C
Minimum flow rate 450 L/hr

Air Supply Requirements:

Clean Dry Air @ 90-120 psi (6-8 bar)



For more information, please contact your CARR Representative at the Clearwater location below.

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