

CARR Centritech Separation Systems

CARR® ViaFuge® Pilot



Features:

- Gentle cell harvesting and supernatant recovery
- Simple operation
- Improved product processing
- Low-shear design
- Flexible optimization
- State-of-the-art manufacturing facility located in Clearwater, FL.

Barry-Wehmiller

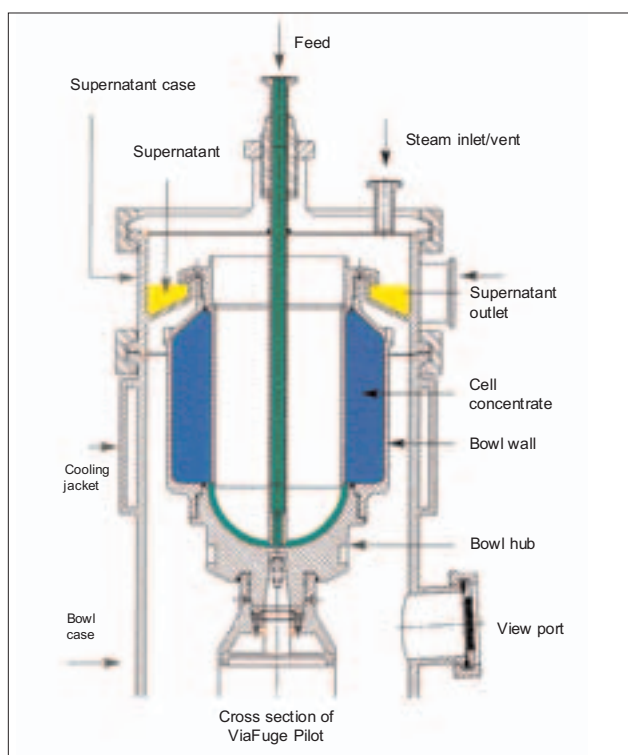
CARR Centritech Separation Systems

CARR® ViaFuge® Pilot

Pneumatic Scale's unique Carr ViaFuge Pilot is designed for fast, gentle, small- to medium-scale cell harvesting and supernatant recovery. Capable of separating a wide variety of mammalian and insect cells with little to no damage, the ViaFuge Pilot offers intact cell recovery efficiencies in excess of 99% with non-detectable cell concentrations in clarified supernatant.

Simple Operation

Cells are concentrated at the bowl wall while clarified supernatant is continuously discharged throughout the separation process. Once the bowl fills with cell concentrate to a capacity of 1.3 L, a simple manifold system and concentrate pump is utilized to recover the cells without breaking containment. Subsequent cycles are performed for recovery of larger batch sizes.



Improved Product Processing

Cellular damage can result in release of intracellular material such as DNA, which may increase downstream processing and in some cases impact product purity. Because the ViaFuge Pilot is gentle to cells, damage is minimized from the start of the process. For supernatant recovery applications, filtration requirements downstream may be reduced. For cell harvesting applications, intact cell recovery will be increased.

Low-Shear Design

The ViaFuge Pilot's unique design minimizes shear forces on cells. Incoming feed is matched to the bowl hub's rotational velocity, allowing fast, efficient harvesting of even the most shear-sensitive cells without causing cell damage.

**For more information, contact your CARR Centritech representative at the Clearwater facility listed below.*

Machine Specifications

UTILITY REQUIREMENTS:

Power configurations:	120V, 15A, 1.0 HP, 50/60Hz 230V, 15A, 1.0 HP, 50/60Hz
Pneumatics:	Instrument-quality air 5.5-7.0 bar, 0.3 m ³ /hour (80-100 PSI, 10 SCFH)

CONSTRUCTION:

Process parts:	316L SS/titanium alloy
Non-wetted parts:	316L SS
Elastomers:	EPDM

DIMENSIONS & ORDER INFORMATION - 120V VERSION:

Centrifuge w/SIP:	33.0 in W x 39.5 in D x 42.5 in H 840 mm x 1000 mm x 1080 mm
Centrifuge w/o SIP:	19.0 in W x 33.5 in D x 35 in H 480 mm x 850 mm x 890 mm
Controller:	13.0 in W x 13.0 in D x 23.0 in H 330 mm x 330 mm x 580 mm

Weights:

Centrifuge w/SIP:	270 lbs (123 kg)
Centrifuge w/o SIP:	240 lbs (109 kg)
Controller:	38 lbs (17 kg)

DIMENSIONS & ORDER INFORMATION - 230V X VERSION:

Centrifuge w/SIP:	33.0 in W x 39.5 in D x 42.5 in H 840 mm x 1000 mm x 1080 mm
Centrifuge w/o SIP:	19.0 in W x 33.5 in D x 35 in H 480 mm x 850 mm x 890 mm
Controller:	26.0 in W x 17.8 in D x 28.5 in H 660 mm x 450 mm x 720 mm

Weights:

Centrifuge w/SIP:	270 lbs (123 kg)
Centrifuge w/o SIP:	240 lbs (109 kg)
Controller:	108 lbs (49 kg)

OPERATING SPECIFICATIONS:

Feed flow range:	0.1 - 4 L/min*
Bowl capacity:	1.3 Liters
RCF range:	500 - 10,000 x g
RPM range:	2,420 - 10,832 rpm
Operating temp. range:	2° - 40° C (5° - 40°C - C _{Ever} - sion)
Maximum temp. for SIP:	134° C

* Actual capacity (throughput) is dependent on the characteristics of the fluids,

Flexible Optimization

Flexible operating conditions offer optimization for specific applications with a flow rate range of 0.1-4.0 L/min and a relative centrifugal force range of 500-10,000g. For mammalian cell culture, concentration to 2.5 ↔ 10⁷ cells/ml can be achieved.

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