thermo scientific

Flex for what's next

From reactor to harvest to purification in a single-use closed system

Thermo Fisher Scientific BioProcess harvesting solutions

Thermo Fisher Scientific brings flexibility to BioProcess harvesting with a suite of new and proven solutions. Centrifuge-ready single-use BioProcess Containers enable closed-system handling of critical sterile liquids from culture vessel to harvesting and downstream applications — because contamination of a biopharmaceutical batch between cell culturing and downstream purification steps is not an option.

The same old routines won't protect you from the same old risks.
Having the flexibility to react and think ahead will.

- Higher harvest yields
- Increase productivity
- Reduce contamination risks
- Save time

Flexible containment advantages

Single-use

- Simplifies cGMP compliance
- Requires no post-use cleaning
- Maintains ideal cell conditions
- Improves process efficiency

Sterilized, closed system

- Ready to use with no decontamination validation
- Helps reduce risk of cross-contamination
- Allows aseptic reconstitution and liquid transfer

Products for BioProcess harvesting

Next-generation centrifuge-ready BioProcess Containers provide a **single-use, sterilized, closed system** for cell harvesting in BioProcessing

Thermo Scientific™ Sorvall™ BIOS 16 BioProcess Centrifuge

High-efficiency harvesting, with 16L capacities

Thermo Scientific™ CentriPAK™ BioProcess Container

Single-use, sterilized, closed system for centrifugation

Key features:

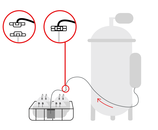
- **Product security:** Reduce contamination risk during each step of harvesting
- **Single-use:** Eliminate post-use cleaning steps required with reusable containers
- **Flexibility:** Independent of extra- or intra-cellular product
- **Process efficiency:** Designed for centrifugation, enabling gentle, high-throughput and high-efficiency separation
- **BioProcessing quality:** Rigorous quality controls and assurance practices, industry-standard material components and biocompatible product contact films

Applications:

- **Bench-scale reactor harvesting**
- **Single-use bioreactor/fermentor harvesting up to 500L**
- **Clarification prior to filtration**
- **QA/QC**
- **Starter culture harvest**
- **Post-sedimentation harvest**

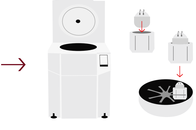
From reactor to downstream purification in a single-use closed system BioProcess Container

Cell culture/upstream: critical sterile liquid transfer



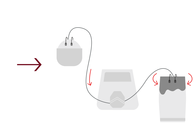
Aseptic connection between the CentriPAK BPC with the reactor

Closed-system harvest



CentriPAK BPC with adapter placed into the BIOS 16 Centrifuge swinging bucket rotor

Purification/downstream: critical sterile product transfer



Extraction using a pump

Compliance and traceability

Your processed product must comply with regulation and be audit-ready

- The BIOS 16 Centrifuge is enabled with software solutions such as Centri-Log™ Plus that allow for data collection by process control systems, reporting, archiving, regulatory and auditing activities in compliance with standard operating procedures
- Run-log data accessibility for batch-record keeping via direct connection to process control systems
- CentriPAK™ BPC systems conform to the quality standards expected in the BioProcess industry
- At the end of the manufacturing process, the production record is reviewed by the quality assurance team for completeness and correctness prior to the release of the lot and issuance of the certificate of analysis (CoA)

Look to Thermo Fisher Scientific for **performance** and **collaboration**

- Integrated solutions throughout the BioProcessing workflow
- Highly configurable options for varied lab needs
- Expert support for optimizing your lab operations
- Designed to assist with GMP/GLP compliance
- Worldwide manufacturing network

BioProcessing today is ready for a novel, more effective harvesting method that consistently delivers higher-quality yields, increases productivity, reduces contamination risks and saves time.

Find out more at thermofisher.com/flexforwhatsnext

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