

Bioprocessing

Nunc Cell Factory systems

For consistent cell culture performance

The Nunc Cell Factory system difference

Built on proven Nunc system reliability—now with stronger connections

Enhance your trusted Thermo Scientific™ Nunc™ Cell Factory™ system with the Thermo Scientific™ BioTitan™ Retention Device, reinforcing critical connection points to help prevent leaks and boost reliability in high-throughput or automated workflows.

Consistency from lot to lot and format to format

The Thermo Scientific™ Nunclon™ Delta cell culture surface certification includes verification of monolayer formation and cloning efficiency across multiple cell lines. Scale up from Thermo Scientific™ Nunc™ Dishes and Flasks to the Nunc Cell Factory system that offers consistency, reliability, and confidence.

Ultrasonic welded design—strong, clean, consistent

Unlike conventional assembly methods that use adhesives, these systems are built with precision welding to create bubble-free chambers and stable growth environments for adherent cells.

Global supply you can count on

Five manufacturing lines across three continents help ensure reliable availability.

Flexible, ready-to-use options

Choose from alternative ports options or simplify setup even further with preassembled tubing sets for a ready-to-use solution right out of the box.

Entrust your process to a truly aseptic design

Direct plug-and-play ports enable you to optimize your process with confidence. No threaded screw caps to wet, exchange, or back off, which can cause contamination.

Confidence from layer to layer

With Nunclon Delta surface treatment and a certified 10^{-6} sterility assurance level by following ISO 11137-2 guidelines, Nunc Cell Factory systems help deliver consistent, reliable performance. Our cell culture certification includes verification of monolayer formation and cloning efficiency using four different cell lines.

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Versatile and easy to use

Nunc EasyFill Cell Factory systems

Thermo Scientific™ Nunc™ EasyFill™ Cell Factory™ systems are an out-of-the-box, multilayer solution and as easy to use as a T-flask. Scale up with confidence. These systems feature our certified Thermo Scientific™ Nunclon™ Delta cell culture surface, which is available on most Nunc cell culture products to enable consistent performance from lot to lot and format to format.

- **Save valuable space**—each 10-layer Nunc EasyFill Cell Factory system is equivalent to 36 T-175 flasks
- **Enhance productivity**—fill and empty up to 5 times faster compared to T-175 flasks
- **Achieve fast start-up**—to get started, simply pour your medium and cells directly into the large opening
- **Versatile port**—designed to facilitate pouring and aseptic filling techniques



Nunc EasyFill Cell Factory systems

Nunclon Delta surface. Polystyrene chambers. Sterile.

No. of trays	Cell culture area	Nominal dimensions L x W x H	Quantity per pack/case	Cat. No.
1	632 cm ²	335 x 205 x 35 mm (13.2 x 8.1 x 1.4 in.)	1/6	140000
2	1,264 cm ²	335 x 205 x 53 mm (13.2 x 8.1 x 2.1 in.)	1/6	140250
4	2,528 cm ²	335 x 205 x 87 mm (13.2 x 8.1 x 3.4 in.)	1/4	140360
10	6,320 cm ²	335 x 205 x 190 mm (13.2 x 8.1 x 7.5 in.)	1/2	140400
10	6,320 cm ²	335 x 205 x 190 mm (13.2 x 8.1 x 7.5 in.)	1/6	140410
40	25,280 cm ²	335 x 205 x 698 mm (13.2 x 8.1 x 27.5 in.)	1/2	140440

Compact, single-use systems for easy scale-up

Nunc Standard Cell Factory systems

Thermo Scientific™ Nunc™ Standard Cell Factory™ systems enable faster results and lot-to-lot consistency. A trusted solution for large-scale production of cells, vaccines, and therapeutic proteins, these systems have the same growth kinetics as laboratory-scale cell culture products. The ports of the system make it easy to customize and close, with custom tubing assemblies that facilitate venting, filling, and harvesting; available in 1-, 2-, 4-, 10-, and 40-tray versions.



Nunc Standard Cell Factory systems

Nunclon Delta surface. Polystyrene chambers. Sterile.

No. of layers	Cell culture area	Nominal dimensions (L x W x H)	Quantity per pack/case	Cat. No.
1	632 cm ²	335 x 205 x 35 mm (13.2 x 8.1 x 1.4 in.)	1/8	165250
2	1,264 cm ²	335 x 205 x 53 mm (13.2 x 8.1 x 2.1 in.)	1/6	167695
4	2,528 cm ²	335 x 205 x 87 mm (13.2 x 8.1 x 3.4 in.)	1/10	140004TS
10	6,320 cm ²	335 x 205 x 190 mm (13.2 x 8.1 x 7.5 in.)	1/2	164327
10	6,320 cm ²	335 x 205 x 190 mm (13.2 x 8.1 x 7.5 in.)	1/6	170009
40	25,280 cm ²	335 x 205 x 698 mm (13.2 x 8.1 x 27.5 in.)	1/2	139446

Preassembled systems with protective seals to help prevent leaks



Nunc Standard Closed Cell Factory systems with BioTitan Retention Devices

Thermo Scientific™ Nunc™ Standard Closed Cell Factory™ systems are now available with the BioTitan Retention Device, which enhances the connection between the fluid transfer assemblies and the Cell Factory system. This reduces the risk of leaks and helps improve operational reliability in high-stakes bioproduction environments.

- Improve reliability and reduce leak risk with the BioTitan Retention Device—an innovative alternative to traditional cable ties that offers a secure 360° seal for each assembly
- Scale confidently—with 2- or 10-layer system options
- Protect product quality—integrated Sartopore™ 0.2 µm filter
- Maintain a fully closed process—Aseptic™ G connector
- Enable consistent, sterile fluid handling—supported by high-quality silicone tubing



Nunc Standard Closed Cell Factory systems

No. of layers	Cell culture area	Nominal dimensions (L x W x H)	Quantity per pack/case	Cat. No.
 <p>2-layer system</p>	1,264 cm ²	335 x 205 x 53 mm (13.2 x 8.1 x 2.1 in.)	1/4	140471
 <p>10-layer system</p>	6,320 cm ²	335 x 205 x 190 mm (13.2 x 8.1 x 7.5 in.)	1/2	140472

True configured system

Design a closed Nunc Cell Factory system specific to your process

Attaching tube sets onto Nunc Cell Factory systems for closed system processes can cause difficulties in sourcing, purchasing, inventory, contamination risk, and assembly. With true configured custom Nunc Cell Factory systems, we take the burden of managing components and validating the systems in-house. Our commercial team will work with you to design a custom closed system that fits your specific process.

- **Closed system**—fit cGMP needs and reduce your risk of contamination with a sterilized full assembly that is ready to use straight out of the box
- **Designed specifically for your process**—work with our team to create a system that helps increase your process efficiency
- **Simplify your supply chain**—reduce complications from sourcing and purchasing from multiple vendors by leveraging our global capabilities

Ready to build the right closed system for your process?

Contact your local representative today to start configuring your custom Nunc Cell Factory system.

Elevate Nunc Cell Factory systems with BioTitan Retention Devices

Reinforce the connection between fluid transfer assemblies and the Nunc Cell Factory system to help reduce risk and improve reliability in high-stakes bioproduction environments:

- **Reduces the risk of leaks**—360° seal on critical tubing to Nunc Cell Factory system connection point can give peace of mind to users
- **Versatile application**—works with components on tubing sets (filters, connectors, etc.)
- **Enhanced user experience**—helps eliminate particulates resulting from snapped cable ties



Efficient, economical option for increasing production capacity

Nunc High Density Cell Factory systems

Thermo Scientific™ Nunc™ High Density Cell Factory™ systems provide a simple solution for increasing cell culture yields. With its additional layers, the Nunc High Density Cell Factory systems are designed to optimize your process by increasing your output while maintaining the same manufacturing footprint as with the standard Nunc Cell Factory system.

- **Increase your yield**—up to 30% more surface area and yield* all within the standard Nunc Cell Factory system footprint
- **Enhance your productivity**—enables increased efficiencies in labor and handling by achieving more output in a single process run
- **Improve your process economics**—helps increase your manufacturing capacity without capital investment
- **Seize environmental opportunities**—consume less and reduce your decontamination and waste disposal costs



Nunc High Density Cell Factory systems

Nunclon Delta surface. Polystyrene chambers. Sterile.






No. of layers	Cell culture area	Nominal dimensions (L x W x H)	Quantity per pack/case	Cat. No.
3	1,896 cm ²	33.3 x 20.4 x 5.4 mm (13.1 x 8.0 x 2.1 in.)	1/4	169160
13	8,216 cm ²	33.3 x 20.4 x 18.6 mm (13.1 x 8.0 x 7.3 in.)	1/3	169118
52	32,864 cm ²	33.3 x 20.4 x 69.8 mm (13.1 x 8.0 x 27.5 in.)	1/1	169102

* The increase in yield may vary depending on the type of cells cultured.

Connectivity made easy

A full line of accessories is available for the Nunc Cell Factory systems, supporting the use of aseptic methods for fluid handling related to filling, inoculation, feeding, and harvesting. These accessories enable further development of applications requiring a more closed cell culture system, reducing the number of open interventions.

Cat. No.	146008	147074	140067	140080	140815	140817
Description	 Nunc EasyFill replacement vent cap	 Nunc EasyFill vent/close cap	 1.0 µm air vent filter assembly	 0.22 µm air vent filter assembly	 Tubing set with female MPC connector	 Feed tubing set with male MPC connector
Material	HDPE	HDPE	HDPE closure	HDPE closure	–	–
Gamma irradiated	Yes	Yes	Yes	Yes	Yes	Yes
Quantity	Case of 10	Case of 100	Case of 2	Case of 2	Case of 2	Case of 2
System compatibility	Nunc EasyFill	Nunc EasyFill	Nunc EasyFill	Nunc EasyFill	All	All

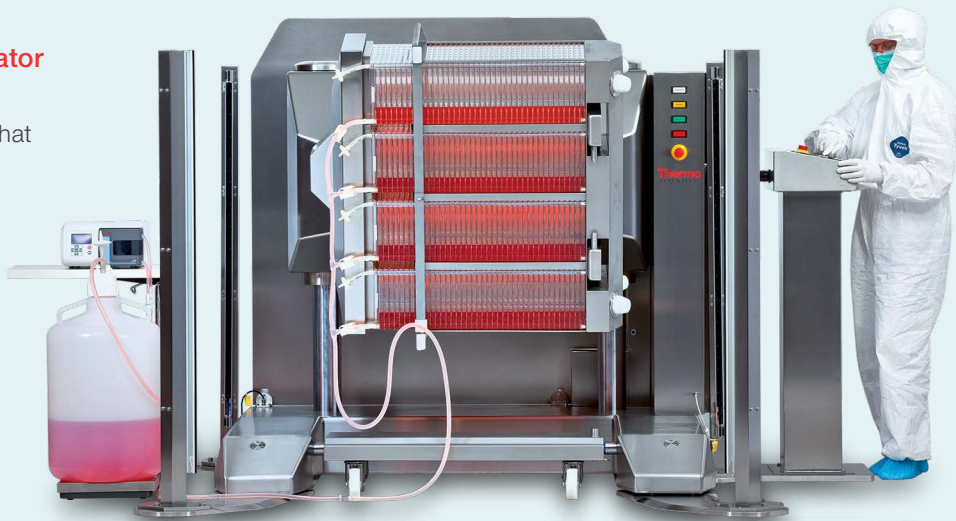
Cat. No.	140099	173250	167525	170615	179553
Description	 Nunc Cell Factory connector	 Nunc Cell Factory connector (autoclavable)	 White Tyvek™ filter adaptor cap	 Port cover cap, blue	 Individual 1.0 µm air vent filter
Material	PC	FEP	HDPE	HDPE	–
Gamma irradiated	No	No	Yes	Yes	Yes
Quantity	10 cases of 10	Case of 2	Case of 20	2 cases of 40	Case of 10
System compatibility	All	All	All	All	All

Boost productivity with automation solutions

Develop a fully commercial-scale process using Nunc Cell Factory systems. Equipment options include an automated manipulator, a CO₂ incubator, and a shaker. The versatile cart and racks systems are compatible with all Nunc Cell Factory equipment and allow simultaneous processing of twelve 10-layer or four 40-layer Nunc Standard Cell Factory systems, and twelve 13-layer or four 52-layer High Density Nunc Cell Factory systems.

Nunc automated Cell Factory manipulator

The Thermo Scientific™ Nunc™ Cell Factory™ manipulator is a fully programmable system that automates the handling of Nunc Cell Factory systems. Simplify and support constant and reliable processes. Designed for use in cleanroom environments, functions can be activated by the touch of a button. Note: A simple component adjustment is needed for use with Nunc High Density Cell Factory systems.



Nunc Cell Factory shaker system

The Thermo Scientific™ Nunc™ Cell Factory™ shaker system offers an automated solution for the detachment of cells from Nunc Cell Factory systems; it eliminates the need for shaking and pounding, and supports workflow efficiency.



Nunc Cell Factory incubator

The Thermo Scientific™ Nunc™ Cell Factory™ incubator is a mobile solution for incubation of forty-eight 10-layer or sixteen 40-layer Nunc Standard Cell Factory systems or for forty-eight 13-layer or fifteen 52-layer Nunc High Density Cell Factory systems. It is available with and without CO₂ control.



Nunc Cell Factory racks and carts

Manipulate, incubate, and transport product efficiently using Nunc Cell Factory racks and carts. Each rack can hold up to four 40-layer systems or twelve 10-layer systems. Racks and carts are designed to integrate with all Nunc Cell Factory equipment.

Learn more about our equipment on our [website](#).

Compatible products and accessories

Enhance and extend your adherent cell culture workflow with a full suite of Thermo Scientific™ products engineered to integrate easily with Nunc Cell Factory systems. Together, these solutions help strengthen closed-system performance, streamline operations, and support reliable scale-up.



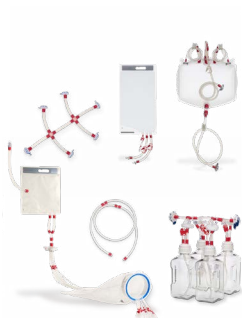
Cell culture media

Support consistent, high-quality growth with trusted Gibco™ formulations, including DMEM, MEM, and other optimized media designed for adherent cell expansion.



Fluid management and containment

Help ensure proper handling with a broad portfolio of Thermo Scientific™ bioprocess containers (BPCs)—like Thermo Scientific™ Labtainer™ BPCs and durable Thermo Scientific™ Nalgene™ bottles—built for storage, transfer, and transport across your workflow.



Tubing, connectors, and system enhancements

Strengthen your closed-system setup with:

- The BioTitan Retention Device for reinforced, 360° sealed connections
- Fluid transfer assemblies built for aseptic handling
- Films, connectors, and accessories that help protect workflow integrity from start to finish

Find out more at thermofisher.com/cellfactory

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