



Bioprocessing

Nunc Cell Factory systems

For consistent cell culture performance

The Nunc Cell Factory system difference

Assured performance 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 Thermo Scientific™ Nunc™ Cell Factory™ system that offers consistency, reliability, and confidence.

No adhesive, no solvent, no bubbles

The Nunc Cell Factory system is constructed of polystyrene chambers and assembled with welded technology—what you see is what you get.

Five manufacturing lines

With local manufacturing on three continents, we strive to offer continuity of supply, so you can rest assured knowing Nunc Cell Factory systems are there when you need them.

Customize with alternative port configurations and tubing sets

Further enhance your Nunc Cell Factory system with additional port options, including 3/8 in. (1.9 mm) OD barbed port and male MPC quick-disconnect fittings. Optimize your process with tubing sets pre-assembled directly onto your Nunc Cell Factory system.

Entrust your process to a truly aseptic design

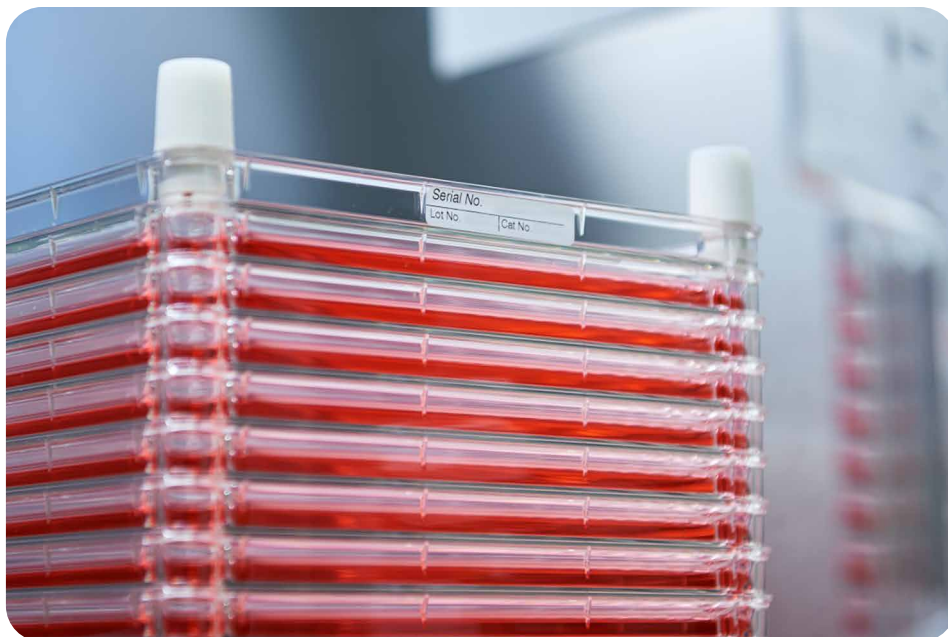
The Nunc Cell Factory system's direct plug-and-play ports enable you to optimize your process with confidence. No threaded screw caps to wet, exchange, or back off, which can cause contamination.

More confidence, less risk

Nunc Cell Factory multilayer systems are designed for a variety of biological and commercial applications. With a certified sterility assurance level of 10^{-6} achieved by following ISO 11137-2 guidelines and Nunclon Delta surface treatment, you can be assured of consistent performance from layer to layer and from lot to lot. Our cell culture certification includes verification of monolayer formation and cloning efficiency using four different cell lines.

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Compact, single-use systems for easy scale-up

Nunc Standard Cell Factory systems

Nunc Cell Factory systems enable faster results and lot to lot consistency. A proven 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.



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

Get consistent, high-quality results



Nunc Standard Closed Cell Factory system

Having a clean and closed system that helps provide consistent and high-quality results should be a standard among your adherent cell culture processes. The closed system Nunc Standard Cell Factory systems are built with standard components to help ensure quality and assurance of supply:

- 2- or 10-layer systems
- Sartopore™ 0.2 µm filter
- AseptiQuik™ G connector
- 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

Efficient, economic 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**—30% more surface area and yield* all within the standard Nunc Cell Factory system footprint
- **Enhance your productivity**—enables increased labor and handling efficiencies 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	333 x 204 x 54 mm (13.1 x 8.0 x 2.1 in.)	1/4	169160
13	8,216 cm ²	333 x 204 x 186 mm (13.1 x 8.0 x 7.3 in.)	1/3	169118
52	32,864 cm ²	333 x 204 x 698 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.

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 5 times faster compared to T-175 flasks
- **Achieve fast start-up**—to get started, simply pour your media 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

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 the 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 caps	 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

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 increases your process efficiency
- **Simplify your supply chain**—reduce complications from sourcing and purchasing from multiple vendors by leveraging our global capabilities

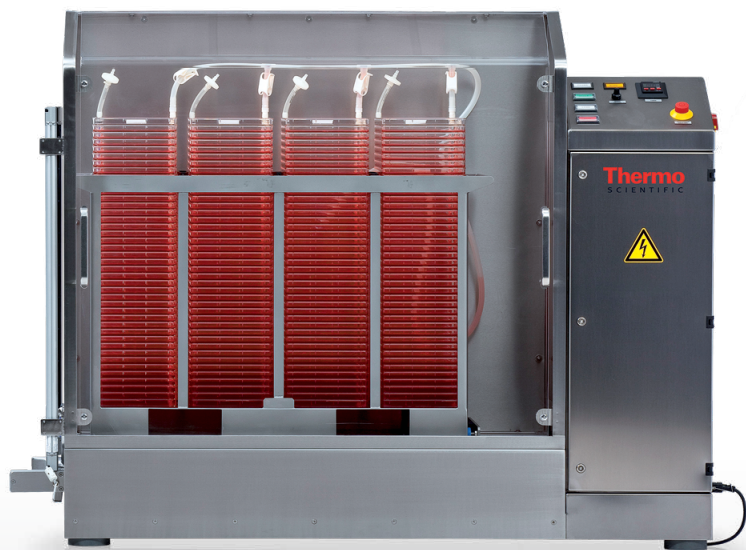


Maximize productivity with automation solutions

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 equipment and allow simultaneous processing of 12, 10-layer or 4, 40-layer Nunc Standard Cell Factory systems, and 12, 13-layer or 4, 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 achieve constant and reliable processes. Designed for use in clean room environments, all 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 48, 10-layer or 16, 40-layer Nunc Standard Cell Factory systems and for 48, 13-layer or 15, 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 Nunc Cell Factory 40-layer systems or twelve Cell Factory 10-layer systems. Racks and carts are designed to integrate perfectly with all Nunc Cell Factory equipment.

 Find out more at thermofisher.com/cfequipment

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