

Nunc Cell Factory Shaker System

Eliminate traditional methods of cell detachment

The Thermo Scientific™ Nunc™ Cell Factory™ Shaker System offers a high-quality, automated solution for the consistent detachment of cells from Thermo Scientific™ Nunc™ Cell Factory™ systems; it eliminates the need for shaking and pounding of the Nunc Cell Factory systems, supporting workflow dependability and efficiency.

Features and benefits

- Can handle twelve 10-layer or four 40-layer standard Nunc Cell Factory systems (twelve 13-layer or four 52-layer Nunc High Density Cell Factory systems)
- Performs a continuous, horizontal accelerated and decelerated movement
- Programmable shaking time
- Shaking frequency can be adjusted between 0 and 2 Hz
- All visible components made of 304L stainless steel for easy cleaning
- Standard safety light curtain
- Can be part of a closed-system workflow

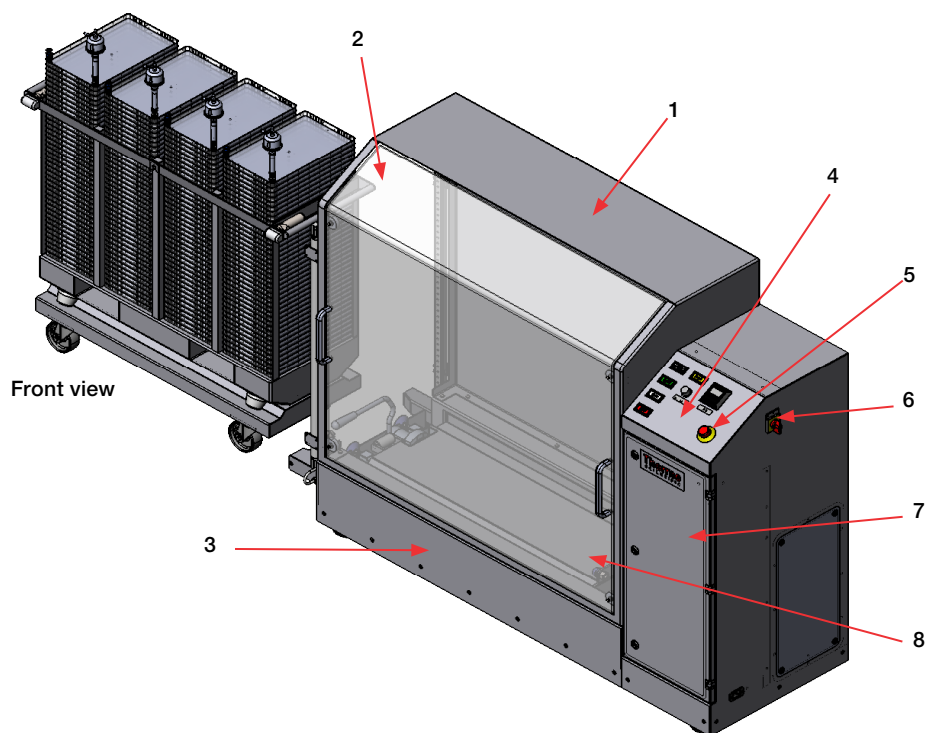


Designed to work seamlessly with:

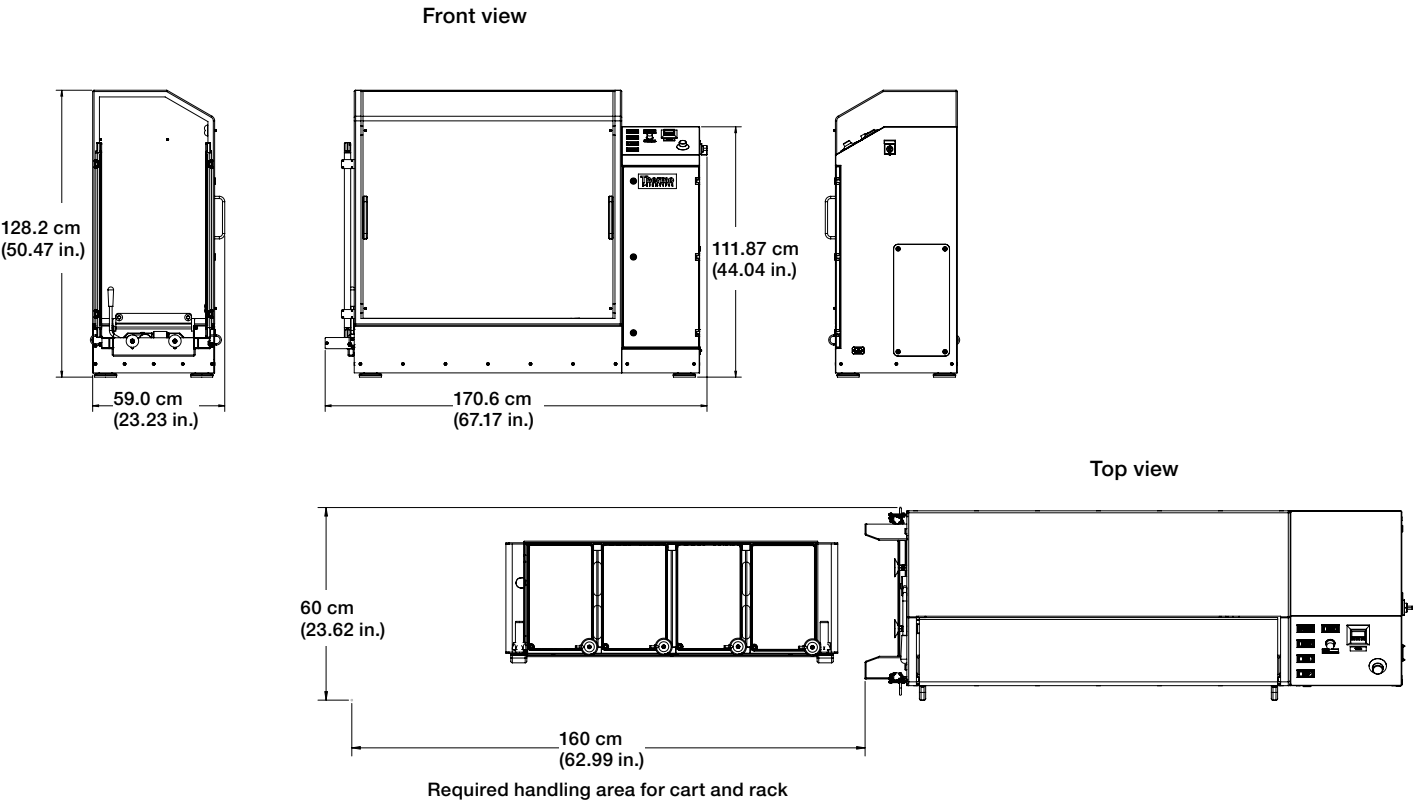
- Thermo Scientific™ Nunc™ Cell Factory™ racks and carts
- Thermo Scientific™ Nunc™ Cell Factory™ Incubator
- Thermo Scientific™ Nunc™ Automated Cell Factory Manipulator

Nunc Cell Factory Shaker System design features and options

1. Protective cover
2. Safety light curtain
3. Machine frame
4. Control panel
5. Emergency stop button
6. Main switch
7. Control compartment
8. Shaking carriage



Design specifications



Nunc Cell Factory Shaker System

Specifications	
Construction	1.4301 (AISI 304L) stainless steel
Footprint (W x D x H)	170.6 x 59 x 128.2 cm (67.2 x 23.2 x 50.5 in.)
Unit weight	650 kg (1,433.0 lb)
Load capacity	>125 kg (275.6 lb)
Rated voltage	208–240 V, single phase, 50/60 Hz
Rated power	1.0 kVA
Current draw	4.3 A
Connected load	1.0 kVA
Shaking motion	Fixed 150 mm, linear
Shaking frequency	0–2 Hz
Shaking time	Max 9 hr, 59 min, 59 sec.
Declaration of conformity	
EC machinery directive	2006/42/EC
EC electromagnetic compatibility directive	2104/30/EC
Ambient temperature range	
Lower limit temperature	5°C above ambient
Upper limit temperature	45°C above ambient
Relative humidity	<80%
System sound pressure level	<60 dB(A)

Accessories

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

Sterile polystyrene chambers with Thermo Scientific™ Nunclon™ Delta

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

Each Nunc Cell Factory system includes a set of:

White Tyvek™ filter adaptor caps (Cat. No. 167525)



Port cover caps, blue (Cat. No. 170615)



Nunc High Density Cell Factory systems

Thermo Scientific™ Nunc™ High Density Cell Factory systems provide a simple solution for increasing cell culture yields. With their 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 that of the standard Nunc Cell Factory system.



Nunc High Density Cell Factory systems

Sterile polystyrene chambers with Nunclon Delta surface.

No. of layers	Cell culture area	Nominal dimensions (L x W x H)	Quantity	Cat. No.
3	1,896 cm ²	333 x 204 x 54 mm (13.1 x 8.0 x 2.1 in.)	Case of 4	169160
13	8,216 cm ²	333 x 204 x 186 mm (13.1 x 8.0 x 7.3 in.)	Case of 3	169118
52	32,864 cm ²	333 x 204 x 698 mm (13.1 x 8.0 x 27.5 in.)	Case of 1	169102

Nunc EasyFill Cell Factory systems

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



Nunc EasyFill Cell Factory systems

Sterile polystyrene chambers with Nunclon Delta surface.

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

Nunc Cell Factory system accessories

Nunc Cell Factory accessories support the use of aseptic methods for fluid handling relating to filling, inoculation, feeding, and harvesting procedures of the Nunc Cell Factory system. These accessories enable the further development of applications requiring a more closed cell culture system, reducing the number of open interventions.

Key features

- Connect media bag or tubing set to any Nunc Cell Factory system for enhanced aseptic connectivity for filling and harvesting
- Prevent buildup of back pressure during filling
- Venting options provide additional air venting when filling and harvesting by gravity or with a peristaltic pump



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



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	2 Cases of 2	Case of 20	2 Cases of 40	Case of 10

Nunc Cell Factory racks and carts

Integration with all Nunc Cell Factory equipment

Easily store and transport Nunc Cell Factory systems safely and efficiently using Nunc Cell Factory Racks and Carts. Each rack can hold up to four Nunc Cell Factory 40-layer systems or twelve Nunc Cell Factory 10-layer systems. Racks and carts are designed to integrate perfectly with all Nunc Cell Factory equipment, adding consistency to and streamlining your process.

Features

- Can handle twelve 10-layer or four 40-layer standard Nunc Cell Factory systems (twelve 13-layer or four 52-layer Nunc High Density Cell Factory systems)
- Optional tubing clamp for 13.5 mm or 16 mm OD tubing
- Designed for use in clean room environments
- Side-loading design for easy loading and unloading
- Made of 316L stainless steel for easy cleaning
- Movable rack designed to come off from cart and interact seamlessly with other Nunc Cell Factory equipment
- Cart for Nunc Cell Factory 40-layer system can accommodate other layered adherent cell culture systems
- Cart for Nunc Cell Factory 10-layer system carts can be customized to accommodate other layered adherent cell culture systems



Nunc Cell Factory Racks and Carts

Specifications

Footprint (W x D x H)	103.5 x 36 x 96.6 cm (40.7 x 14.2 x 38 in.)
Construction	1.4404 (AISI 316L) stainless steel
Unit weight	65 kg (143.3 lb)
Load capacity	60 kg (12 Nunc Cell Factory 10-layer systems) 80 kg (4 Nunc Cell Factory 40-layer systems)

Integrates with:

- Nunc Cell Factory Incubator
- Nunc ACFM
- Nunc Cell Factory Shaker
- Nunc Cell Factory Hand Manipulator Systems
- Fluid transfer assemblies

Ordering information

Description	Cat. No.
Nunc Cell Factory Shaker System	
Nunc Cell Factory Shaker System, Gen 2, 208–240 V, 50/60 Hz, single phase	132849
Nunc Cell Factory Shaker, Gen 3, 208-240 V, 50/60 Hz, with data logging	132854
Nunc Cell Factory racks and carts	
Side Loading Rack with Cart for 40-layer Nunc Cell Factory systems and 52-layer Nunc High Density Cell Factory systems	140503
Side Loading Rack with Cart for 10-layer Nunc Cell Factory systems and 13-layer Nunc High Density Cell Factory systems	140504
Retrofit Clamping Kit for Racks for Use with Shaker	120289

Find out more at thermofisher.com/cfequipment