

CORNING

Corning® HYPERStack® Redesign
Launch

March 31, 2021
Life Sciences

Corning® HYPERStack® Cell Culture Vessels

Catalog Item Offerings – New design!

New Design

Cat. No.	Description	Growth Area (cm ²)	Qty/Pk	Qty/Cs
20012	Corning® HYPERStack® 12-layer cell culture vessel, Corning CellBIND® surface, sterile	6,000	1	4
20036	Corning HYPERStack 36-layer cell culture vessel, Corning CellBIND surface, sterile	18,000	1	2
20013	Corning HYPERStack 12-layer cell culture vessel, non-treated, sterile	6,000	1	4
20037	Corning HYPERStack 36-layer cell culture vessel, non-treated, sterile	18,000	1	2



The Properties



Corning HYPERStack 12-layer

Surface:	6,000 cm ²
Volume:	1.31L
Filled weight (approx.):	2.2 kg
Dimensions (L x W):	13.42 x 8.15 in. (342 x 207 mm)
Vessel Height:	2.8 in. (71 mm)
Height with Accessory Tray:	5.5 in. (140 mm)

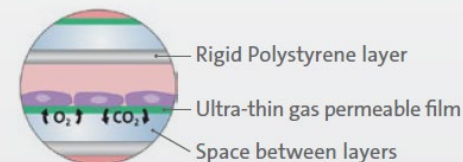


Corning HYPERStack 36-layer

Surface:	18,000 cm ²
Volume:	3.92L
Filled weight (approx.):	6.6 kg
Dimensions (L x W):	13.42 x 8.15 in. (342 x 207 mm)
Height with Accessory Tray:	10.97 in. (278 mm)

The Principle

Gas exchange across gas-permeable film enables up to 5X gain in cell growth surface area versus vessels of comparable footprint.



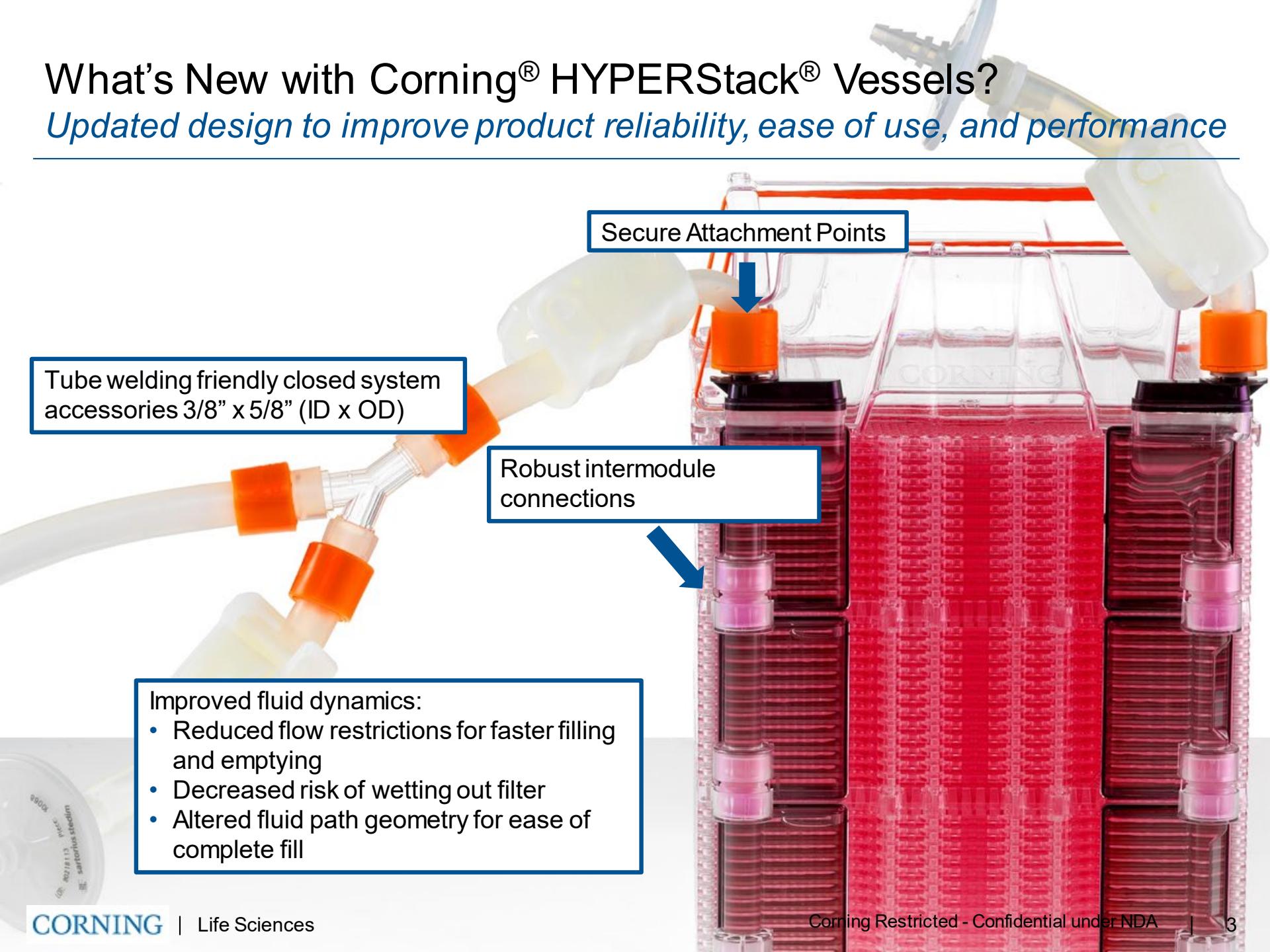
Original Design

Cat. No.	Description	Growth Area (cm ²)	Qty/Pk	Qty/Cs
10012	HYPERStack 12-layer cell culture vessel, Corning CellBIND® surface	6,000	1	4
10013	HYPERStack 12-layer cell culture vessel, non-treated surface	6,000	1	4
10036	HYPERStack 36-layer cell culture vessel, Corning CellBIND surface	18,000	1	2
10037	HYPERStack 36-layer cell culture vessel, non-treated surface	18,000	1	2



What's New with Corning® HYPERStack® Vessels?

Updated design to improve product reliability, ease of use, and performance



Secure Attachment Points

Tube welding friendly closed system accessories 3/8" x 5/8" (ID x OD)

Robust intermodule connections

Improved fluid dynamics:

- Reduced flow restrictions for faster filling and emptying
- Decreased risk of wetting out filter
- Altered fluid path geometry for ease of complete fill

Corning® HYPERStack® Cell Culture Vessels

North America Launch March 31, 2021

Corning HYPERStack Cell Culture Vessels

Closed System for High Yield Cell Growth

Product Description

Corning HYPERStack cell culture vessels combine the best features of Corning CellSTACK and HYPERFlask vessels. The utilization of gas-permeable film technology allows the High Yield PERFORMANCE (HYPER) technology to be the most efficient, scalable cell culture vessel platform for adherent cell culture available today. It can also be used as seed train for adherent cell culture bioreactors.

Upgraded features to the new HYPERStack cell culture vessel design include:

- **Secure connections** at accessory attachment points and intermodule assembly sites
- **Improved fluid path** geometry to achieve an efficient and faster filling rate
- Accessory tubing size of 3/8" ID x 5/8" OD for **tube welding compatibility**

Ordering Information

Cat. No.	Product	Features	Unit Size
20012	Corning HYPERStack 12-layer Vessel, Corning CellBIND® surface treated, sterile	<ul style="list-style-type: none">• 6,000 cm² surface area• CellBIND surface treatment• SAL 10⁻⁶	4/Case
20036	Corning HYPERStack 36-layer vessel, Corning CellBIND surface treated, sterile	<ul style="list-style-type: none">• 18,000 cm² surface area• CellBIND surface treatment• SAL 10⁻⁶	2/Case
20013	Corning HYPERStack 12-layer vessel, non-treated, sterile	<ul style="list-style-type: none">• 6,000 cm² surface area• Non-treated surface• SAL 10⁻⁶	4/Case
20037	Corning HYPERStack 36-layer vessel, non-treated, sterile	<ul style="list-style-type: none">• 18,000 cm² surface area• Non-treated surface• SAL 10⁻⁶	2/Case



- **More cells** – provides up to 5X the growth surface area of a traditional cell culture vessel of comparable footprint
- **Closed system** – no open fluid manipulations
- **Scalable** – multiple size offerings support scale-up and scale-out
- **Ergonomic design** – easier manipulation with handling equipment and accessories
- **Fixed media volume** – 0.2 mL/cm² fills vessel for less volumetric waste

Corning® HYPERStack® Cell Culture Vessels

Ninja Slide – New design!



Product Information:

- We have updated specific features of the HYPERStack vessel design to improve **product reliability, ease of use, and performance:**
 - **Secure accessory attachment** points utilizing BarbLock® retainers instead of cable ties
 - **Robust silicone intermodule connectors** for the 36-layer HYPERStack vessels eliminating the use of cable ties
 - **Improved fluid dynamics** enabling 66% faster fill rate
 - Standardized 3/8" x 5/8" (ID x OD) tubing size on the fill and vent accessories that is **tube welding friendly**
- While these new HYPERStack vessels offer design upgrades to our original HYPERStack item numbers (Cat. Nos. 10012, 10036, 10013, and 10037), they **continue to utilize the same gas-permeable film technology, providing an efficient, scalable adherent cell culture platform with closed system accessories in a compact footprint.**
- We will manufacture the redesigned HYPERStack vessels on our new manufacturing line in Durham, North Carolina, USA with the original manufacturing lines in Kennebunk, Maine, USA converting later.
- Corning will continue to offer the existing item numbers while the new redesigned vessels are launched, enabling customers the opportunity to evaluate and transition to the new design throughout the 1H of 2021.

Applications:

- Large-scale adherent cell culture (seed train)
- Viral Vector production for low dose therapy
- Stem cell expansion

Prospecting:

- Do you need to scale-up adherent cell types for screening, cell banking, or production?
- Are you producing viral vectors?
- Are you performing transient transfections?
- Do you need to expand stem cells?

Target customers:

- Viral vector production for rare disease clinical research programs, process development labs, and emerging biotechs
- CMO / CDMOs
- Cell therapy process development scientists
- Biotechs and Pharma scaling-up adherent cell types for screening, cell banking, cell processing and production

Tools:

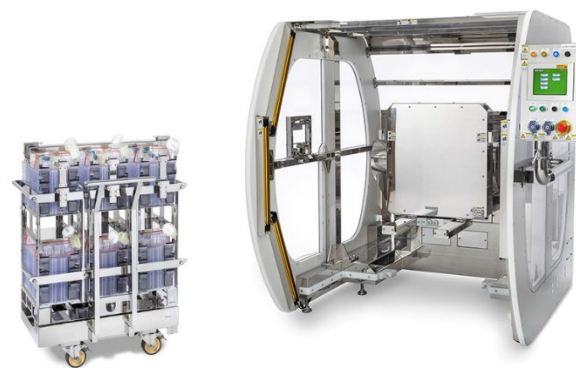
- New Sell Sheet
- New Guidelines for Use Document

Corning® HYPERStack® Cell Culture Vessel Accessories

Contact your local Corning FAS for training and technical support

Accessories

Cat. No.	Description	Qty/Pk	Qty/Cs
431518	2L Erlenmeyer flask with dip tube with 0.2 µm vent, male MPC, chemically resistant, heat sealable flexible tubing, ¼" ID, 3/8" OD	1	3
11501	5L Erlenmeyer flask with dip tube with 0.2 µm filter, male MPC chemically resistant, heat sealable flexible tubing, ¼" ID, 3/8" OD	1	2
10043	Disposable tubing set for use with 850 cm ² polystyrene roller bottle, 3/8" ID x 1/2" OD, chemically resistant, heat sealable, thermoplastic elastomer tubing, 0.2 µm filter, MPC	1	2
431644	Corning 850 cm ² polystyrene bottle, easy grip cap, non-treated, sterile	1	40
10047	Corning HYPERStack Nest accessory	1	1
6650	Corning Automated Manipulator platform, 180-254V, standard power supply	-	-
6651	Corning Automated Manipulator platform, 380-440V, standard power supply	-	-
6652	Corning Automated Manipulator cart	-	-
6655	Corning Automated Manipulator rack for Corning HYPERStack-36, holds six HYPERStack-36 vessels, compatible with Manipulator cart (Cat. No. 6652)	-	-



Corning Automated Manipulator Platform for automating the handling of multiple HYPERStack cell culture vessels

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