# SARTORIUS

# Celsius® CFT Logistic Accessories



## Product Information

Celsius® CFT provides safe and easy-to-use solution through a series of accessories designed to minimize manual handling of Celsius®-Pak and to mitigate the associated risks. This gives to the end-users the possibility to build an industrial process from filling and freezing to shipping, thawing and dispensing.
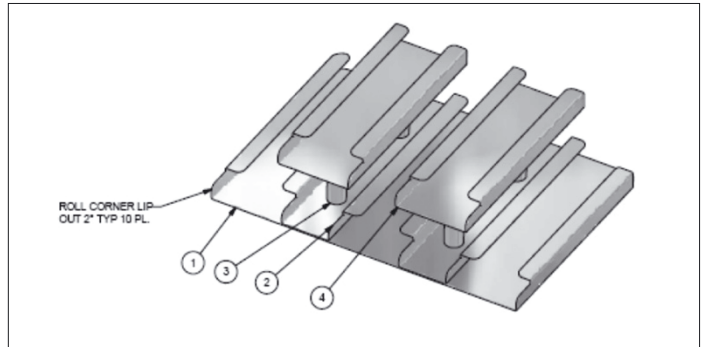
## Transfer Carts

The Celsius® System Transfer Carts are designed to minimize the operator efforts when transferring Celsius®-Pak from and to the Freeze-Thaw Modules. The Transfer Carts have a docking system that perfectly aligns with the bays in the Freeze-Thaw Modules allowing the Celsius®-Pak to easily slide in or out the modules with minimum effort and complete safety for both operator and product. The Transfer Carts area available in two sizes:
TC33 with a maximum carrying capacity of 33 L and TC100 with a maximum carrying capacity of 100 L.



## SM100 – Storage Module

The SM100 – Storage Module allows storage of up to 100 L of product in frozen Celsius®-Pak. This is a stainless steel cart with a reduced footprint compared to the Transfer Cart to optimize space in the storage area. The SM100 is mounted on a detachable trolley that permits the easy rolling of the module into freezers while allowing removing it for storage. The Trolley can also be docked with the Freeze-Thaw module or Transfer Cart for easy transfer of frozen Celsius®-Pak.



## Adaptor, Freezer Storage

The Adaptor, Freezer Storage, allows storage of up to 80 L of product in frozen Celsius®-Pak. This is a stainless steel rack especially designed to accomodate the Celsius®-Pak frames and enhance safely storage in common freezers. This accessory will maintain the frozen Celsius®-Pak in an upright and stable positioning preventing direct surface contact from one frozen Celsius®-Pak to another.



## Celsius® SSM shipper

The Celsius® SSM can be shipped to remote locations by using the Celsius® SSM Shipper. The shipper provides adequate insulation and refrigeration to maintain all Celsius®-Pak in a maximally or minimally loaded SSM below –40°C for at least 72h during ISTA 7D summer or winter temperature profiles.

## Celsius® SSM

The Celsius® Shippable Storage Module (SSM) allows storage of up to 100 L of product in frozen Celsius®-Pak. The Celsius® SSM is mounted on a Celsius® SSM trolley that permits the easy rolling of the module into freezers while allowing removing the SSM for storage. The Celsius® SSM Trolley can also be docked with the Freeze-Thaw module or Transfer Cart for easy transfer of frozen Celsius®-Pak.



## SSM Trolley



## Celsius® Shipper

The Celsius® Shipper allows shipment of individual Celsius®-Pak to remote locations. The shipper provides adequate insulation and refrigeration to maintain the Celsius®-Pak below -40°c for at least 116 h.



## Celsius®-Pak Carrier

The Celsius®-Pak Carrier allows processing the Celsius®-Pak 1L or 2L in the Celsius® Freeze-Thaw Modules. The Celsius®-Pak Carrier can receive up to 8 Celsius®-Pak 1L or 4 Celsius®-Pak 2L or a mix of both.

## Filling Station

The FS16 Filling Station optimizes the logistics of filling and pressurization of the Celsius®-Pak. The elevated mounting platform includes a docking system that allows the perfect aligning of the transfer carts to ensure the easy sliding of the Celsius®-Pak with no efforts for the operator and no risks for the contents. The Filling Station reproduces the placement and pressure of the Freeze-Thaw Modules plates over the Celsius®-Pak optimizing the container shape when filling and pressurizing. Connected to the platform balance, the controller with HMI (Human Machine Interface) allows accurate and automatic filling process with minimal operator intervention.



## Filling Station Insert

The Filling Station Insert allows using the FS16 to fill and pressurize Celsius®-Pak 1L and 2L.

# Technical Data

| Transfer Carts | TC33 | TC100 |
| --- | --- | --- |
| Materials | Type AISI 304 Stainless Steel (Polished) | Type AISI 304 Stainless Steel (Polished) |
| Dimensions (w × d × h) | 30" × 35.5" × 54.6" (76 × 90 × 139 cm) | 37" × 54" × 55" (94 × 137 × 139 cm) |
| Weight | 111 lbs (50.4 Kg) | 323 lbs ( 146.5 kg) |

| Filling Station | FS16-S2 |
| --- | --- |
| Materials | Stainless steel AISI304, grinded |
| Dimensions (w × d × h) | 58 $^{21}/_{32}$" × 20 $^{15}/_{32}$" × 76 $^{49}/_{64}$" (1490 × 520 × 1950 mm) |
| Weight | approx. 397 lbs (202 kg) |

| Adaptor, Freezer Storage, 80L, 20" deep | |
| --- | --- |
| Materials | Type AISI 304 Stainless Steel (Non-polished) |
| Dimensions (w × d × h) | 34" × 22" × 8" (86 × 57 × 20 cm) |
| Weight | 70 lbs (32 kg) |

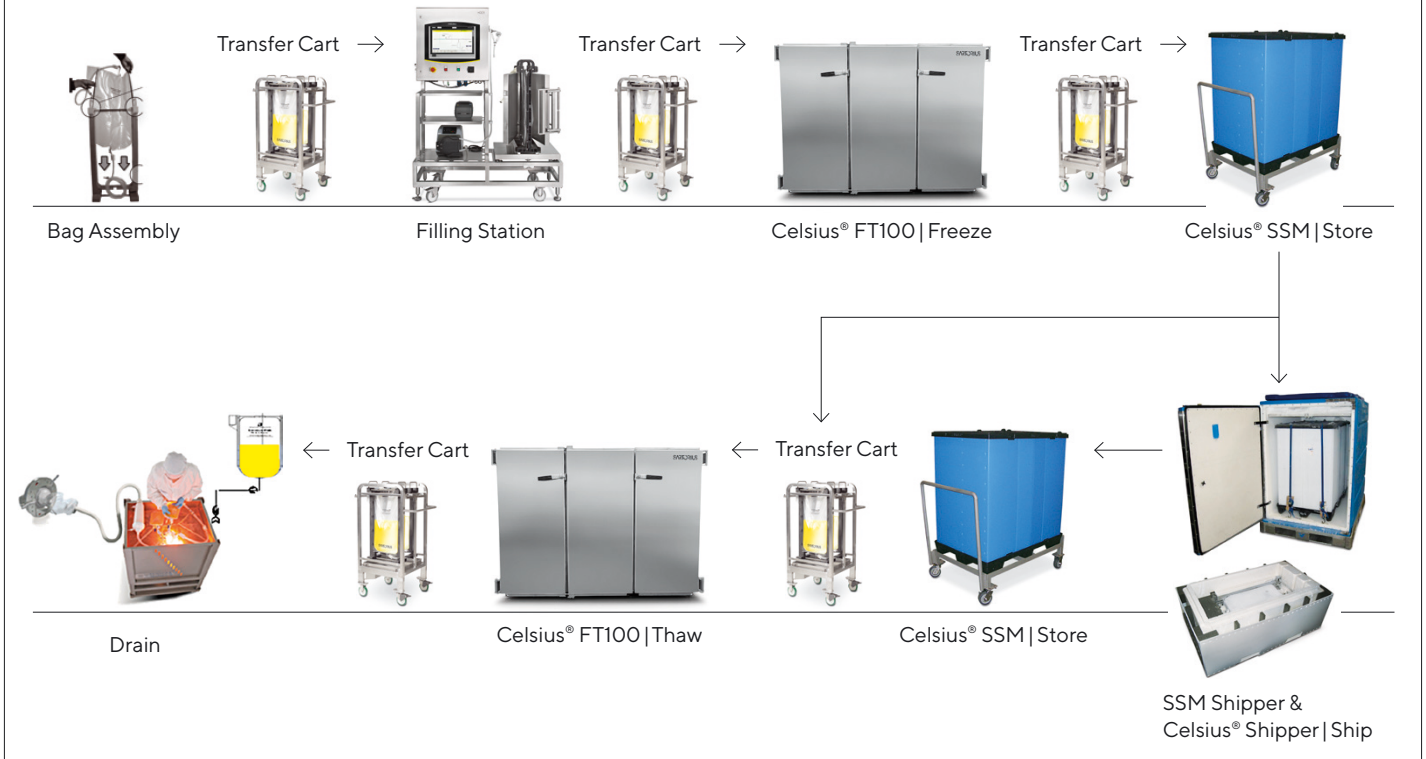| SM100 – Storage Module & Trolley | |
| --- | --- |
| Materials | Type AISI 304 Stainless Steel (Non-polished) |
| Dimensions (w × d × h) | 29" × 47" × 41 $^{7}/_{8}$" (without trolley)<br>29" × 47" × 56 $^{5}/_{8}$" (mounted on trolley)<br>74 × 119 × 106 cm  (without trolley)<br>74 × 119 × 144 cm (mounted on trolley) |
| Weight | 238 lbs (108 kg) empty<br>557 lbs (253 kg) loaded |

| Shippable Storage | |
| --- | --- |
| Module | SSM |
| Materials | HDPE pallet and dunnage, XLPE foam, stainless steel hardware |
| Dimensions (w × d × h) | 80 × 120 × 62 cm (collapsed) \| 80 × 120 × 127 cm (assembled)<br>32" × 47" × 25" (collapsed) \| 32" × 47" × 50" (assembled) |
| Weight | 155 lbs (70 kg) empty, 462 lbs (210 kg) loaded |

| Celsius® SSM Shipper | |
| --- | --- |
| Materials | Aluminum pallet base, LLDPE exterior, fiberglass interior, polyurethane insulation |
| Dimensions (w × d × h) | 48" × 61" × 70" (123 × 156 × 177 cm) |
| Weight | 550 lbs (250 kg) empty, 1619 lbs (735 kg) loaded |

| Celsius® Shipper | |
| --- | --- |
| Materials | Corrugated plastic exterior, HDPE-lined polyurethane foam insulation, polyethylene and polyurethane foam |
| Dimensions (w × d × h) | 33" × 57" × 26" (84 × 144 × 65 cm) |
| Weight | 44 lbs (20 kg) empty, 180 lbs (82 kg) loaded |

## Process Cycle

### Complete Logistics for Celsius®-Paks

Transfer Cart →   Transfer Cart →   Transfer Cart →

Bag Assembly          Filling Station          Celsius® FT100 | Freeze          Celsius® SSM | Store

← Transfer Cart   ← Transfer Cart   ←

Drain          Celsius® FT100 | Thaw          Celsius® SSM | Store          SSM Shipper & Celsius® Shipper | Ship

# Ordering Information

| Part Number | Description |
|---|---|
| FTH-TC00033-0001 | TC33 – Transfer Cart 33L |
| FTH-TC00100-0001 | TC100 – Transfer Cart 100L |
| Upon request | Filling Station |
| FTH-SM00101-0024 | Shippable Storage Module |
| FTH-SM00101-0028 | SSM Shipper |
| FTH-SM00101-0020 | SSM Trolley |
| FTH-SM00101-0027 | SSM Insulated Cover |
| FTH-SM00102-0002 | Celsius® Shipper |
| FTH-CF00004-0020 | Celsius®-Pak 1L and 2L Carrier |
| FTH-CF00004-0050 | Filling Station Insert for 1L and 2L Celsius®-Pak |
| FTH-SM00100-0070 | SM100 – Storage Module |
| FTH-SM00101-0010 | Trolley for SM100 |
| FTH-SR00080-0003 | Adaptor, Freezer Storage, 80 L, 20" deep |

# Sales and Service Contacts

## For further contacts, visit www.sartorius.com

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