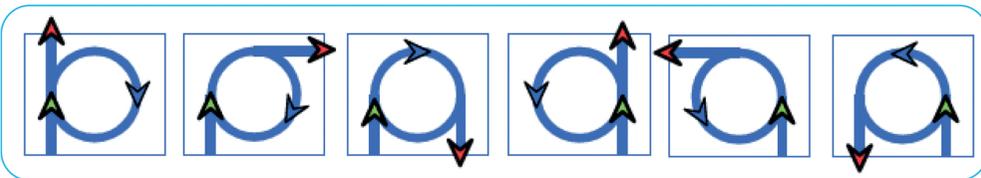


Features & Benefits

Polar-SF Spiral Freezer	SF660-95 RR 10 levels CC = 185	SF660-115 RR 12 levels CC = 155	SF660-135 RR 14 levels CC : 130
Prod. Capacity (kg/hr)	500	1000	1500
Length (mm)	4580	4580	4580
Width (mm)	4300	4300	4300
Height (mm)	3550	3550	3550
Inlet Height (mm)	850	850	850
Outlet Height (mm)	2700	2700	2700
Belt Width (mm)	660	660	660
Usable Belt Length (m)	65	80	95
Product Clearance (mm)	130	100	70
Cooling Medium	LIN or CO2	LIN or CO2	LIN or CO2
Power Supply	3x400V	3x400V	3x400V

CUSTOM LAYOUT

Choose from one of the six layouts below (straight through, L-Shaped, U-shaped and the mirrored counterparts) and determine whether product flow will be from bottom to top (top discharge) or from top to bottom (bottom discharge).



OPTIONS AND ACCESSORIES

- Product Guide Rails
- Variable Speed Exhaust Fan
- Stainless Steel Motors & Gearbox
- Stainless Steel Fan Motors
- Custom Design Units Available
- Remote Electrical Panel
- Clean-in-Place System
- Extended In-feed Conveyor
- Down-Cage Spirals
- Belt Layouts: 90-180-270 Degrees

STANDARD FEATURES

- Siemens PLC Controls
- Ethernet Ready
- Stainless Steel Mesh Belt B24
- Adjustable Overdrive
- One Day Installation (One Piece)
- Solid Welded Structure
- Proportional Controls
- Sloped Surfaces (Easy Drain)
- Programmable Recipes
- Safety Interlocks
- Sealed Closed Drum (Easy Clean)
- Touch Screen Operator Interface

POLAR-SF SPIRAL FREEZER-IQF



POLAR-SF SPIRAL FREEZER

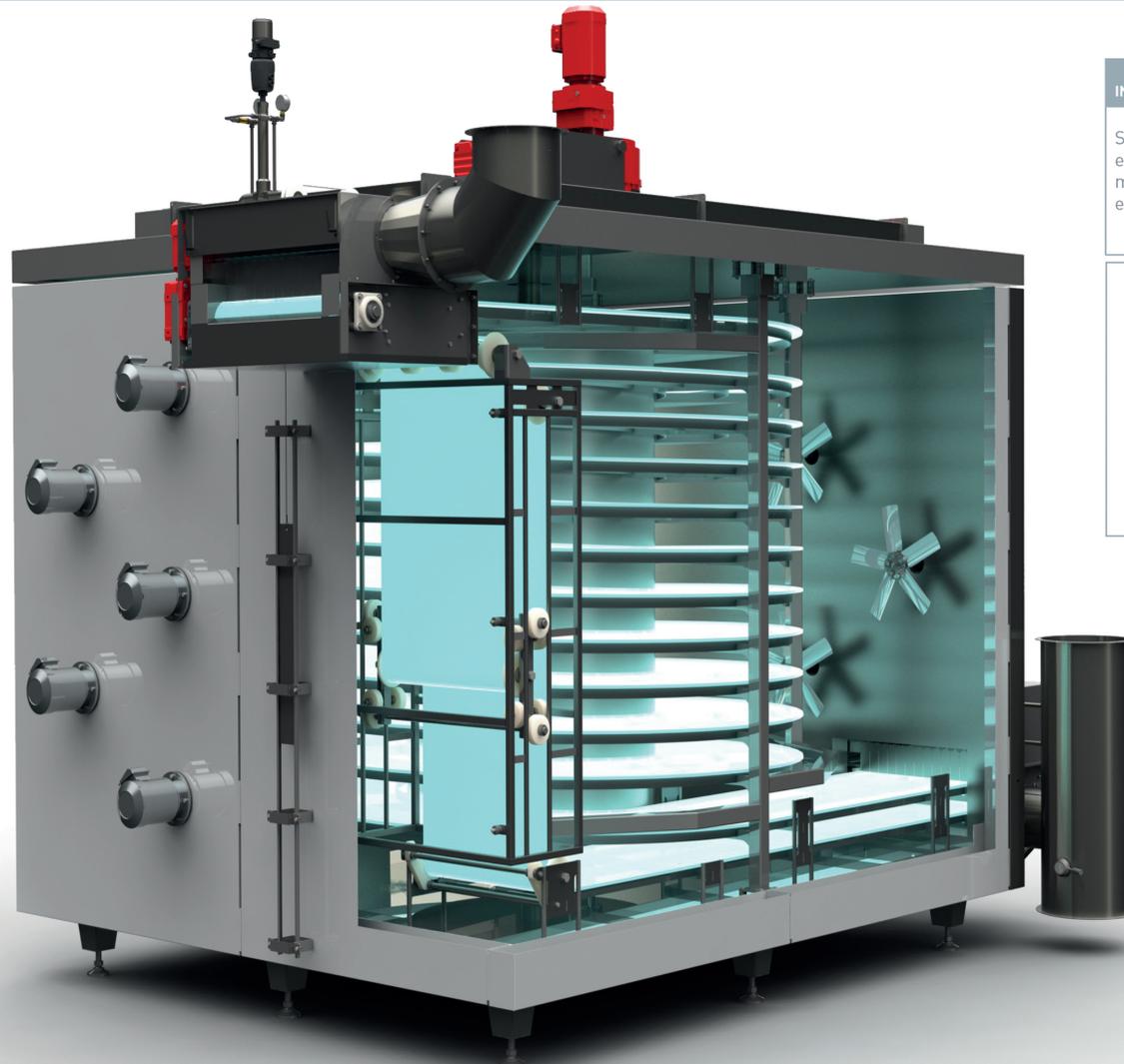
COOLING SYSTEM

Cryogenic cooling is achieved through use of a refrigerant such as liquid carbon dioxide (LCO2) or liquid nitrogen (LIN). CES custom designs despersal systems based on product parameters.



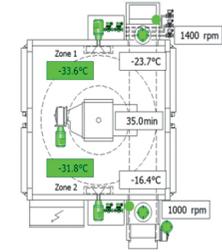
APPLICATIONS

Products typically seen in a CES spiral freezer include a wide variety of foods, from meat, poultry and fish to bakery, dairy products and prepared meals. Note that spiral freezers are not suitable for chilling or freezing of bulk products.



INTEGRATION

Siemens controls are arranged in a user friendly, easy-to-operate HMI and feature "plug-n-play" communication, via Ethernet for easy integration into existing lines.



FLEXIBILITY

The modular design allows for a variety of styles, available as both standard and made-to-order, up or down cage spiral freezer systems. All configurations utilize the same basic components, which results in reduced lead time. See back for more details.

SPACE

CES Spiral Freezers are mostly used for products that need long dwell times, when large chilling or freezing capacities are necessary, or when a minimum of floor space is available.



CES POLAR-SF SPIRAL FREEZERS

CES POLAR-SF SPIRAL FREEZERS consist of a freezer belt encircling a rotating drum. The freezer belt enters at the infeed location and wraps in a helix to the outfeed location, where it makes a discharge. Infeed and outfeed locations vary depending on the selected layout. The belt returns through an automatic tensioner, and take-up. The heart of the structural system is the cage or the drum. The drum is driven and acts as a friction drive for the contacting inside edge of the belt and performs the vast majority of the work. The injection system and its controls will depend of the cryogenic refrigerant used, the size of the spiral freezer and the products to be cooled or frozen.