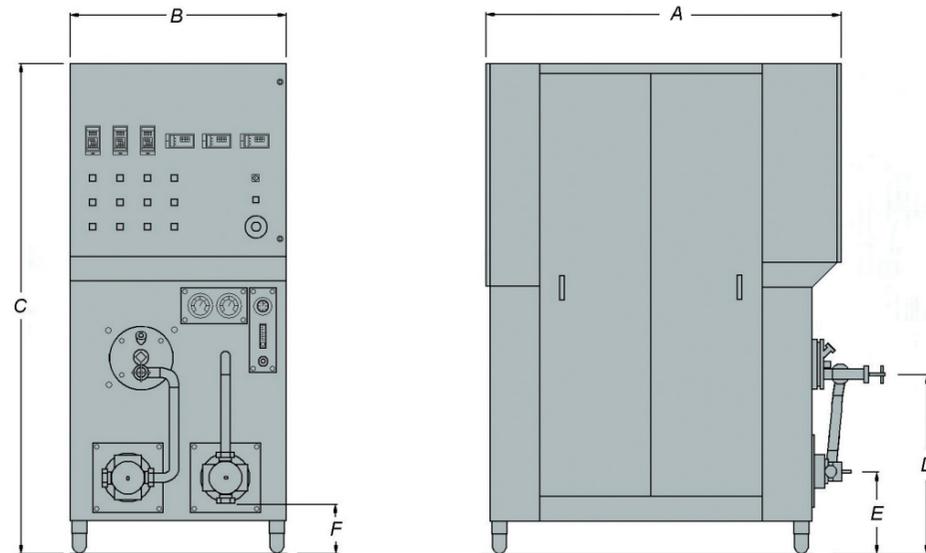


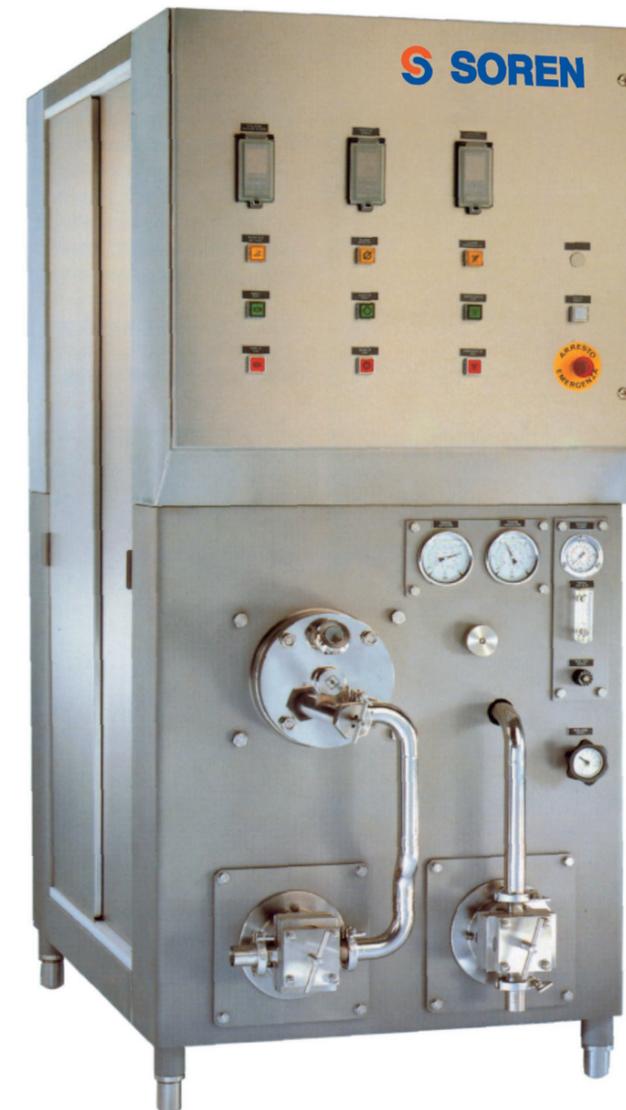
Continuous ice cream freezers - CS series

Technical features



Type	CS 100	CS 200	CS 400	CS 800	CS1100	CS 1500
Refrigerant	R404 A/NH3					
A (mm)	1.320	1.320	1.360	1.750	1.990	2.410
B (mm)	750	750	900	900	900	900
C (mm)	1.870	1.870	2.020	2.020	2.020	2.020
D (mm)	760	760	800	800	800	800
E (mm)	310	310	310	310	310	310
F (mm)	230	230	230	230	230	230
Electric power unit to be connected to central refrigeration plant (kW)	5,2	6,2	9,7	13,2	17,2	24,2
Electric power unit with self contained refrigeration plant (kW)	8,2	11,7	20,7	31,7	39,2	61,2
Cooling water (l/h)	1.500	3.300	8.000	10.000	13.000	20.000
Net weight unit to be connected to central refrigeration plant (Kg)	600	680	900	1.050	1.180	1.310
Net weight unit with self contained refrigeration plant (Kg)	685	790	1.150	1.330	1.480	1.640
Shipping volume (m ³)	4,2	4,7	5,0	6,3	7,0	8,3

Choosing Soren is adding value



Continuous ice cream freezers

CS series

To produce all kinds of ice cream:

- **stiff and dry** for extruded products,
- **smooth** for cups and cones,
- **soft and flowable** for mold products.

Features

- Designed to give you more control of critical process parameters.
- Offers different options which facilitate your ice cream production.
- Self contained freon refrigeration unit; or Freon/NH3 system to be connect with central refrigeration plant.
- Designed to reduce maintenance and enhance cleanability; all parts in contact with the product can be cleaned via your CIP system.
- All stainless steel frame, side panels and doors.

Continuous ice cream freezers - CS series

Dasher choices

SOREN offers you a choice of two dashers, suited to all varieties of frozen product formulations, viscosities, textures and overruns. Both feature rugged stainless steel scraper blades.

Type 30 standard Open Dasher

Suitable for most frozen desserts. Displaces approximately 30% of the cylinder volume.



Type 80 Optional Solid Dasher

For applications requiring stiffer, dryer appearing ice cream. Displaces 80% of the cylinder volume, resulting in rapid development of small and uniform ice crystals.



Overrun control

Manual: by metering the air with visual air flow indicator and controlling by means of a manual throttling valve.

Automatic (optional): based on a mass flow meter. The air is proportioned into the mix by an air mass flow meter at a pre-set ratio. The overrun will automatically be kept constant, when changing the mix flow.

Viscosity control

Based on the viscosity-dasher motor load ratio.

Manual: the operator controls the dasher motor load by regulating the barostatic valve, through a knob placed in the front panel.

Automatic: by setting the desired value of the dasher motor load on the viscosity control instrument, which controls the barostatic valve.



Control panel with 4 automatic functions

CS Freezers production range

Model	lph (min - max)*
CS 100	20 - 100
CS 200	40 - 200
CS 400	80 - 400
CS 800	140 - 780
CS 1100	200 - 1060
CS 1500	300 - 1500

* Capacities are based on 100% overrun ice cream

Continuous ice cream freezers - CS series

Standard features for all models:

- All AISI 304 st. steel frame with sliding doors
- Chrome-plated nickel cylinder, polished to mirror finish
- Dasher type 30 (open), AISI 316 St. steel
- St. steel scraper blades
- Mix pump: rotary type powered with variable speed motor drive
- Self-contained refrigeration unit:
 - R404A compressor
 - condenser with pressure controlled water valve
 - full flooded refrigeration system
 - back pressure valve for evaporation pressure control
 - evaporator made of St. steel
- Product back pressure valve, for manual cylinder pressure control
- Manual overrun control system with visual air flow indicator
- Control and power panel containing:
 - main switch
 - start/stop push buttons
 - motor starters for all motors
 - motor overload protections
 - load indicator for dasher motor with two level freeze-up protection
 - emergency switch
- Companion sanitary ferrules and clamps
- 2 copies Instructions and Parts Manual

Pump by pass for CIP

- Manual on models CS100 - CS200 - CS400
- Air operated on models CS800 - CS1100 - CS1500

Semi-hermetic compressor:

- Piston type on models CS100 - CS200 - CS400 - CS800
- Screw type on models CS1100 - CS1500

Optional features and equipment:

- Ammonia or freon refrigeration system, designed for the connection with central refrigeration plant.
- Freon refrigeration plant with thermostatic expansion valve, instead of freon full flooded system.
- Dasher type 80 (solid) instead of 30 (open)
- Rotary pump at product outlet, instead of back pressure valve
- Air mass flow meter for automatic overrun control
- Automatic cylinder pressure control (requires two pumps)



- Automatic ice cream viscosity control
- Dasher speed regulator
- Mix and ice cream temperature indicator
- Mix flow regulation with magnetic flow meter
- Preaeration of mix
- Built-in air compressor
- PED refrigerant pressure vessel certification (CS200 - CS400 - CS800 - CS1100 - CS1500)
- Additional Instructions and Parts Manuals
- Spare parts for two years