

Tetra Pak® Continuous Freezer S80 A1

Continuous ice cream freezer (pilot/laboratory scale) · 2019 · unused, available for sale

PERFORMANCE

Year / condition	Year of manufacture 2019 · unused
Capacity	10 – 100 l/h typical (depending on mix recipe); nominal output 100 l/h
Overrun	100 % at nominal output; adjustable approx. 10 % – 150 %
Nominal test conditions	Mix inlet +5 °C; ice cream outlet –5 °C; mix with 38 % total solids
Operating principle	Mix metered by gear pump; air whipped in by dasher inside the freezing cylinder; scraper blades remove frozen product from the cylinder wall; second gear pump discharges product at stable cylinder pressure

ELECTRICAL

Power supply	3 × 400 V, 50 Hz
Main motor	2.2 kW, variable speed (variable dasher speed)
Pump motors	2 × 0.37 kW, variable gear motors
Compressor power consumption	2.8 kW
Control	Built-in Siemens S7 PLC; graphic display control panel; main circuit breaker

REFRIGERATION & UTILITIES

Design	Self-contained freezer with built-in hermetic scroll compressor and water-cooled condenser
Refrigerant	HFC (R449A), approx. 4.5 kg
Cooling water	0.4 m³/h at 10 °C inlet / 25 °C outlet; 1.5 m³/h at 30 °C inlet / 34 °C outlet; min. 0.5 bar; 1/2" hose connection
Compressed air	Min. 6 bar, oil-free, max. 2.5 g/Nm³ water content; consumption approx. 0.15 Nm³/h



FUNCTIONS & CONTROL

Automatic control of	Overrun, capacity, viscosity, ice cream temperature
Functions	Automatic start-up · instant stop · freeze-up guard · hot-gas defrosting · CIP (cleaning in place)
Operating modes	Stop · Automatic production · Hold · End of production · Manual production · CIP / Flush
Monitoring	Outlet pressure, cylinder pressure, mix supply pressure, trend screens, maintenance counters and alarm history
Cleaning	Prepared for external CIP supply; cleaning procedure integrated in the automation and adaptable to local recipe

SCOPE OF DELIVERY

Scope of delivery	Tetra Pak CF S80 A1 continuous freezer on stainless steel frame, with Hoyer positive CIP mix and cream pumps (variable gear motors), variable main drive, built-in PLC with graphic display panel, and built-in refrigeration unit (hermetic scroll compressor, water-cooled condenser)
Included accessories	Approx. 10 l mix balance tank mounted on the freezer frame, incl. flexible hose and connection flanges; operation manual (OM)
Not included	External CIP plant, installation, utility connections, ice cream mix supply and downstream filling / extrusion equipment

PHYSICAL DATA & CONNECTIONS

Weight / volume	Net approx. 475 kg · packed approx. 575 kg · shipping volume approx. 2 m³
Pipe connections (OD)	Mix inlet 19 mm · Ice cream outlet 25 mm · Air inlet 6 mm
Materials	All mix and ice cream contact parts in stainless steel; chrome-plated freezing cylinder
Ambient / standards	10 – 30 °C · CE (EEA); 3-A sanitary standard (where applicable)

Intended use: freezing and aerating ice cream mix and similar fluid products. Data are nominal manufacturer values; the machine is unused and offered subject to prior sale. Technical details are subject to change without notice. Further information, documentation and inspection on request.