



Sinitator™ (Scraped Surface Heat Exchanger [SSHE]) Skid

The Sinitators™ (SSHE) are high pressure tubular refrigerant flooded chillers with floating/ bulldog knife loaded on rotor shafts pressed against the chiller tubes by centrifugal force to ensure consistent scraping. Sinitators™ are the heart of the Crystallization Line in which the emulsion is shock chilled when passed through the annular space between the rotor shaft and the chilling tube

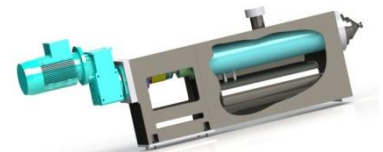


Features



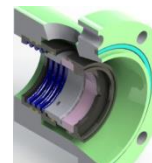
High Pressure Tubular Chillers are hard chromed carbon steel with corrugated outer surface designed to ensure effective heat transfer between the cooling medium and the product.

The cooling system comprising of specially **built-in drop tank** ensures no freeze during short production breaks and a surge drum to restrict liquid ammonia particles from going to the compressor. The automated refrigeration system of the evaporator ensures a constant temperature at the outlet of the Sinitators™



The Rotor Shaft comprises of floating/bulldog Delrin blades mounted intermittently to produce approximately 600 cuttings per minute.

Sinitators™ are assembled with a **single spring** high pressure **Mechanical Seals** with Sliding parts in Tungsten Carbide. The seals are designed for 120 Bar.



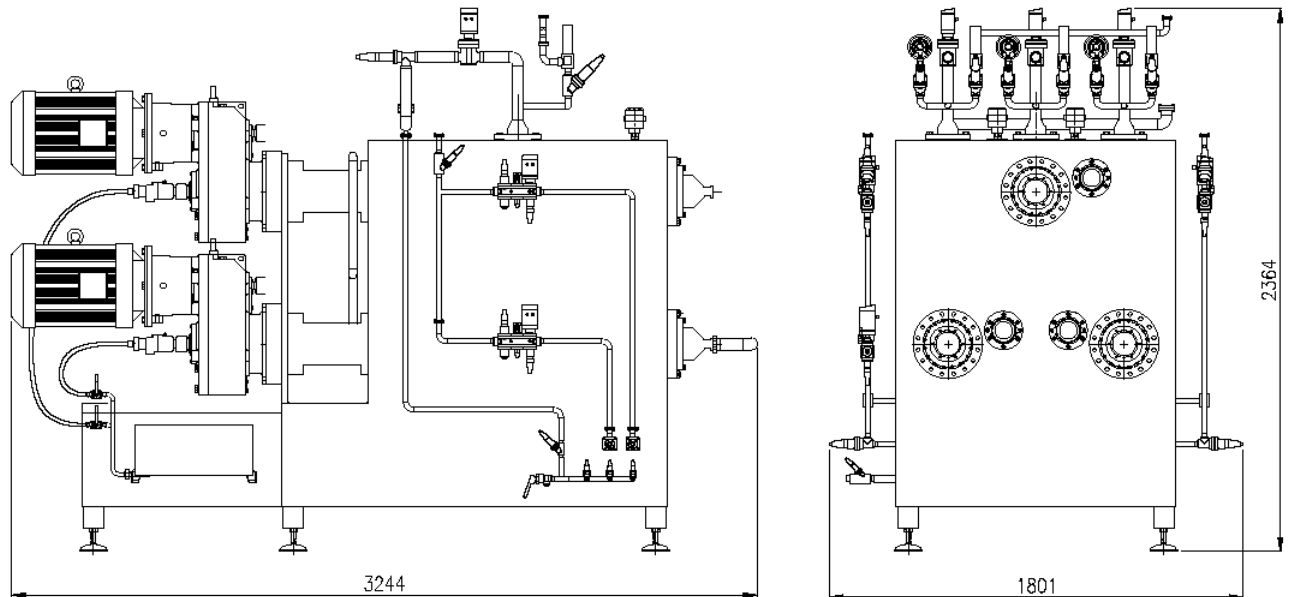
Specially designed **Rotary Joint** arrangement with mechanical seals mounted on the shaft end with continuous warm water supply from built-in water tank with heater assembly to ensure no deposition of fat on the rotor shaft during production

Custom Designed Gearboxes with integrated oil transfer pump, flexible coupling to the motor and labyrinth seals to achieve the torque required for scraping at an RPM of 600 at low noise levels and low temperatures





Machine Data



Sinitator™ Skid SI-34120 Capacities	
Soft Shortening, 2 % SFC @ 35°C - BIB Packing	2750
Cake margarine, 8 % SFC @ 35°C - BIB Packing	1850
Puff Pastry Margaine, 18% SFC @ 35°C - Resting Tube	1000
Sinitator™ Skid SI-34120 Technical Specifications	
Configuration	4" X 1.20 m - 3 Nos
Design Pressure	120 kg / cms ²
Refrigerant	Ammonia
No. of Refrigerant Circuits	3
Chilling Tube Diameter and Length	Ø 101.6 mm, 1.20 m long
Surface Area for Heat Transfer per Tube	0.3830 m ²
Refrigeration Controls	Inbuilt
Motors	S1 - 11 kW, S2 - 15 kW, S3 - 18.5 kW
Speed Reduction	Gear
Rotor RPM	≈600
Speed Variation	Fixed
Annular Space	S1 - 7 mm, S2, S3 - 6 mm
No. of Rows of Scrapers	2
No. of Scraping Blades per Tube / Material	18 nos / Delrin
Water Heater	1 X 9 kW
Water Tank Capacity	40 ltrs
PT 100 Sensors	At all Inputs and Outputs
End Connection	1 " NB Sch 40 Pipe
MOC: Contact Parts: SS 316L, Non Contact Parts: SS 304, Inner Tube: CS, Hard chrome Plated	

