CRYSTALLIZER (PIN ROTORS)

Crystallizer (Pin Rotor) Skid

Crystallizers are jacketed horizontal cylinders with intermittently placed pins on the body and the gear driven rotor shafts alike which perform pinning action on the sub-cooled fat to achieve physical properties such as plasticity, structure, cluster, spread ability, penetration, creaming value, stability etc. which is achieved only when there is fine dispersion of these solids held by internal cohesive forces in the entire mass.

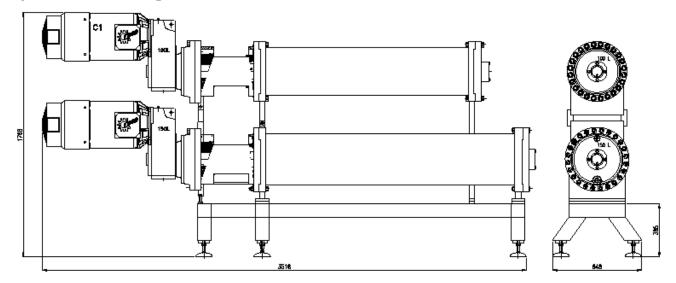


Though the crystallization time for various specialty fats depend on the oils used in the blend, the complete range of specialty fats can be manufactured with two to three Crystallizer units with a cumulative residential time of six to eight minutes. Sinitators and Crystallizers are arranged in different series of combinations using pre-fabricated pipelines making the machine versatile across the wide spectrum of fats.

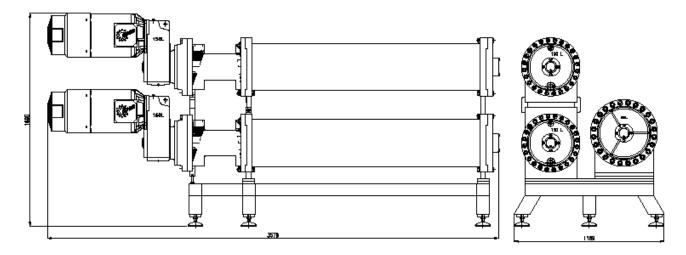
Crystallizer Specifications							
Configuration	37.5 L	50 L	75 L	105 L	125 L	150 L	200 L
Design Pressure	120 kg / cms ²						
No. of Rows of Pins on Body	3						
Diameter of Pins on Body	12 mm						
No. of Rows of Pins on Shaft	2						
Diameter of Pins on Shaft	16 mm						
Motors	7.5 kW	9.2 kW	11 kW	15 kW	18 kW	22 kW	30 kW
Speed Reduction	Gear						
Rotor RPM	0-300						
Speed Variation	Variable Speed						
Water Heater	1 X 9 kW						
Water Tank Capacity	30 ltrs		40 ltrs				60 ltrs
PT 100 Sensors	At all Inputs and Outputs						
Motor RPM	1440						
End Connection	1" NB Sc	h 40 Pipe	1 1/2" NB Sch 40 Pipe				
MOC	Contact Parts: SS 316L, Non Contact Parts: SS 304						

The Capacity of the Crystallizers are selected as per the requirement of the product and the configuration of the Sinitators in the plant and the different Crystallizers are mounted on a skid keeping in mind the floor space occupied and ease of maintenance as shown in examples below.

Crystallizer Skid configurations for Sinitator Skid, SI – 36135



Crystallizer Skid configurations for Sinitator Skid, SI – 48135



Pin Configurations

