

# YPL Pressure Spray Congealer



## . Working Principle

Melted materials are pumped into the feed tube by high pressure pump, and achieve high pressure (adjustable), enters into the rotating chamber in tangentially. The materials liquid gains rotary force in the rotating chamber. In terms of the conservation law of spin angular momentum, rotating speed is in inverse proportion to the radius of the whirlpool; so the closer the liquid approaches to the axis, the greater the rotation speed will increase and the smaller the static pressure will be. Consequently, it forms a gust of air pressure in middle of the atomizer which is equivalent to the air cyclone of atmospheric pressure, and the liquid becomes the circular film revolved by the air core. Meanwhile, by means of hydrostatic pressure being converted into kinetic energy of liquid film, the liquid is sprayed out from the pressure nozzle in high speed. The liquid film stretches, attenuates and divided into small droplets finally.

The ambient air enters into air condenser, and heat exchanged to set temperature inside the condenser, then flows through the hot air distributor, and enters into the tower. The fine mist (the size of the mist can be adjusted) contacts with the cooling air and is solidified instantly, and cooled continuously in the process when it drops down. The cooled materials will be discharge from the congealing tower and the cyclone, and the air will be exhausted by the exhaust fan.

## . Notice of Inquiry

Please tell us the melting point, drop melting point, output and pellets requirements of the materials and product when to make an inquiry.

## . Applications

Spray congealing of stearic acid, wax, fat and the other products which could be melted under not too high temperature.



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## . Technical Parameters

Specification	YPL-50	YPL-100	YPL-150	YPL-200	YPL-300	YPL-500
Air Inlet Temp	-20°C to 30°C, adjustable					
Air Exhaust Temp	20-40°C (depend on the properties of the product, and URS)					
Nominal Processing Capacity (Kg/h)	50	100	150	200	300	500
Main Pellets Diameter Range (µm)	100-350	100-350	100-350	100-350	100-350	100-350
Cooling method	Cooling dehumidifier, cooler					
Cooling Tower Diameter (mm)	1300	1600	1800	2000	2300	2500
Overall Dimensions (m)	6×2.0×15	8×3×16	8×3×17	9×3.5×17	9×4×18	10×4.5×20
Collection rate	95-99.5%, depend on the properties of the product and configurations					

### Remarks:

1. The above parameters are calculated according to the most popular congealing material (stearic acid). Provided that the material is different, the parameters will also be different. Please contact us before choose the specifications. And it is suggested to make trial before finalize the order

2. Cooling source: when the cooling source is different, the capacity of the same equipment could be very different. Please make sure use the cooling source required by us.

