

SUNLIT HEAT PUMP DEHYDRATORS

Working Principle

A heat pump is an electrical device that extracts heat from one place and transfers it to another. A compressor pumps the refrigerant between two heat exchanger coils. In one Coil, the refrigerant is evaporated at low pressure and absorbs heat from its surroundings.





Dehydration process

Dehydration means the process of removal of moisture by the application of artificial heat under controlled conditions of temperature, humidity, and air flow. Dehydration is a complex mechanism as this involves simultaneous exchange of moisture and heat. The relationship between the moisture content and temperature of the air during the drying process is referred to as 'psychometric' relation.

Drying or dehydration removes biologically active water thus stopping the growth of micro organisms. This also results in a reduced rate of enzyme activity and chemical reactions. The processing should be done in such a way that the food value, natural flavor, and characteristic cooking quality of the fresh material are retained after drying. Fruits are considered to be dry when they show no sign of moisture or stickiness when held firmly in the hands. Vegetables is considered to be dry when they become brittle. The residual moisture in the vegetables should not be more than 6 to 8 percent and in fruits 10 to 20 percent.



BENEFITS

-  Accurate temperature control
-  Energy saving, Even Heating
-  70%* Cheaper than any other sources of heating
-  No Toxic gases

SOLAR WATER HEATER | SOLAR ON/OFF GRID POWER PLANTS | SOLAR STREET LIGHTS | SOLAR PUMPS

Focusun Energy Systems

New No.30, Dr.Jaganathan Nagar, 3rd Street, Opp. CMC,
Avinashi Road, Coimbatore- 641 014
P : +91 422 2591069 M : 98422 91069
E : info@focusunsolar.com W : www.focusunsolar.com



HEAT PUMP DEHYDRATORS / DRYERS



PRODUCT CAN BE DRYED



TECHNICAL SPECIFICATION FOR HEAT PUMP DEHYDRATORS

Ambient Temp. Range °C	5 to 40
Rated Heating Capacity	kW : 6.BTU : 20473
Input Power kW(A)	2 to 10 Kw
Moisture removal L / Hr	6 to 30
Rated Air Temp °C	55
Maximum outlet Temp °C	60
Controllers	Humidity - 00-80%
	Temperature - 30 °C to 70 °C
	Timer - 22 - 24 Hrs
External Fan	kW 0.5 to 1 / m3/h : 6000
Inner Fan	kW : 0.078 – 1.5 / : m3/h : 1400
Circulation Fan	kw : 0.6 to 1.5 / : m3/h : 5000
Power Supply	240 / 50 Hz / 3 phase 415 volt
Refrigerant Type	R 134 A
Compressor Type	Rotary
Compressor Qty	Based on the capacity
Throtting	EEV
Noise Db	≤ 65
Outer cabinet	MS powder coated
Inner cabinet	SS 304 / GI
Insulation	Puf Panel Body
Drying Qty	25 to 500 Kgs
Drying Time	8 to 14 Hrs depends on the product
Trays and Size	SS 304
Trolleys	MS / GI

All in One Model

Description	FES-50	FES-100	FES-300	FES-500
Capacity	50kg / Batch	100kg / Batch	300kg / Batch	500kg / Batch
Moisture Removal	8-10kg / hr	6-8kg / hr	18-25kg / ht	30-40kg / hr
Power	2 kW	3 kW	7 kW	10 kW
Voltage	220v, 50Hz	220v, 50Hz	415v, 50Hz	415v, 50Hz
Min. Temp	15°C	15°C	15°C	15°C
Max. Temp	70°C	70°C	70°C	70°C

SOLAR WATER HEATER | SOLAR ON/OFF GRID POWER PLANTS | SOLAR STREET LIGHTS | SOLAR PUMPS

Focusun Energy Systems

New No.30, Dr.Jaganathan Nagar, 3rd Street, Opp. CMC,
Avinashi Road, Coimbatore- 641 014
P : +91 422 2591069 M : 98422 91069
E : info@focusunsolar.com W : www.focusunsolar.com

