

SSP Series Industrial Dehumidifiers



Product Guide

SSP-Series Heavy Duty Industrial Dehumidifiers

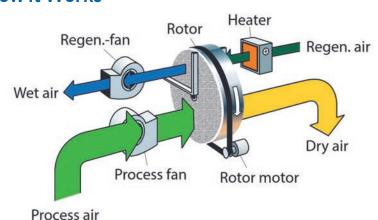
SG America dehumidifiers ventilate spaces with dry air, recirculate air within a space to low dew points, or simply remove moisture in bulk depending on end use.

Designed, engineered and manufactured in the USA using readily-available components, SSP Series units reliably and cost-effectively remove and control moisture in nearly any environment.

Typical Applications

- Bulk Powder and Solids Handling
- Pharmaceutical Manufacturing
- Electronics Manufacturing
- Cold Storage and Food Processing
- Corrosion and Condensation Prevention

How it Works



A Seibu Giken D-Max® desiccant rotor is the heart of every SSP Series unit, ensuring the maximum number of service hours in your application. The fluted rotor media rotates through a process air stream, adsorbing moisture in its silica-gel matrix. The adsorbed moisture is driven from the media by heated air in the regeneration air stream. The process and regeneration air streams are separated from one another by air seals on each rotor face.

Unlike refrigerant-based dehumidifiers, a solid desiccant unit will work in cold environments. Moisture adsorbing capacity is directly proportional to the relative humidity of the air being processed. Depending on end-use application, pre-cooling of the process air to increase its relative humidity will make the desiccant dehumidifier operate more efficiently overall and in a smaller package than would otherwise be required.

Main Features

- Seibu Giken D-Max® Desiccant Rotor
- Aluminum, Stainless or Coated Steel Construction
- UL Certified Control Panels and NEMA Enclosures
- Electric, Gas or Steam Reactivation Options
- Stainless Steel Chain Drive
- Made in the USA

Pre-Cooling Option

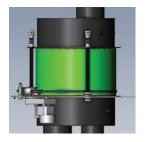
Adding a pre-cooling coil increases unit capacity



Mix and Match

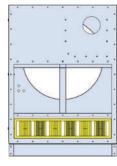
Whether you are a an original equipment manufacturer, a manufacturer's representative, a systems integrator, contractor, or end user of solid desiccant dehumidification, SG America can provide anything from the desiccant rotor to a full system supported by our modular design approach.

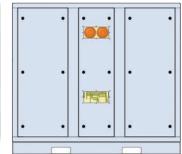
Desiccant Rotor Cassettes





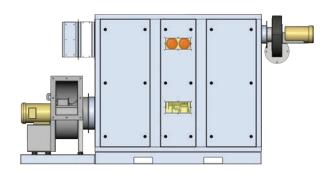
Core Dehumidifier Module





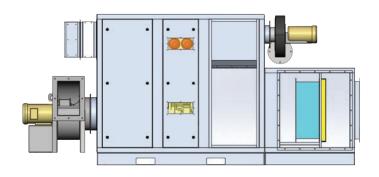
Standard SSP

The base dehumidifier contains a desiccant rotor housed in a Core Dehumidifier Module to which are added process and reactivation blowers, a regeneration heat source and a control system.



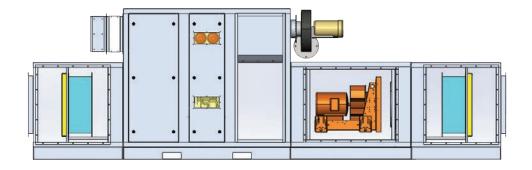
Standard SSP with Pre-cooling

An alternative to a larger unit for higher capacity, pre-cooling the process air makes a smaller-sized base dehumidifier more efficient at removing moisture and/ or maintaining lower dew points and delivers lower supply air temperatures.

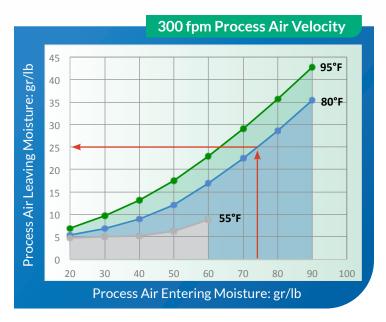


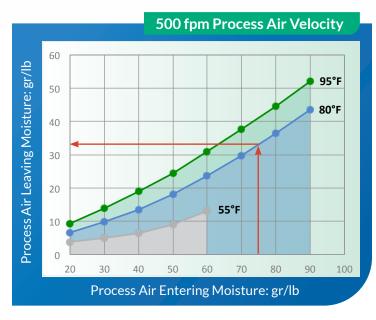
Modular SSP

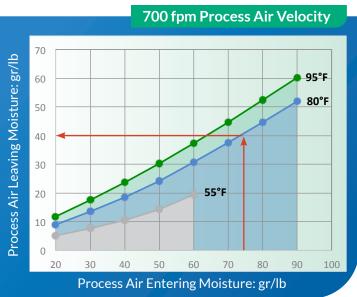
Flexibility to choose among several standardized process modules allows the standard SSP unit to be configured to a wide variety of end use applications.



Moisture Removal Capacity







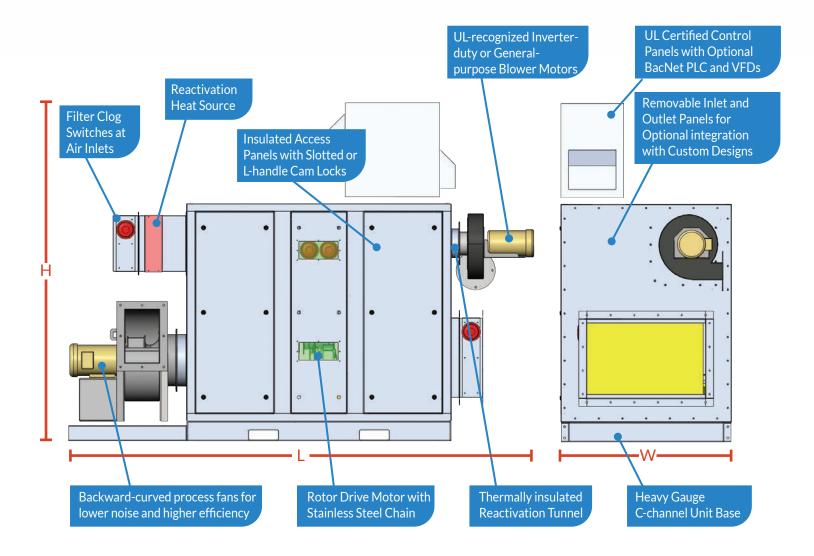
- Find the correct "Process Air Entering Moisture" (humidity) value in grains per pound (gr/lb) on the x-axis of the Moisture Removal Capacity graph.
- 2. Move vertically in a straight line to intersect the curve closest to the entering air temperature.
- 3. Move horizontally to the left and intersect the scale marked "Process Leaving Air Moisture." The value at this point represents the moisture/humidity leaving the dehumidifier in grains per pound.

NOTE:

Process Air Leaving Moisture content shown has 10% safety margins built in, with the regeneration air heater output set at the standard 284°F and rotational speed of the desiccant rotor set at 16 RPH.

The actual *Process Air Leaving Moisture* content will be lower whenever the heater output is set above the standard rated output. The outside air condition at the regeneration inlet is assumed to be 80FDB with moisture at 100 gr/lb.

Standard Components and Dimensions



SG America desiccant unit sizing is primarily dependent on airflow. The table below outlines the standard equipment sizing, along with weights and recommended airflows. Consult our factory for additional sizing options.

Model	Nominal Airflow* (SCFM)	Moisture Removal (lbs/hr@68F/60%RH)	Dimensions** (in.)			Weight*** (lbs.)
SSP-1525H20	9500	270	187	78	83	4400
SSP-1220H20	6100	175	158	70	75	3650
SSP-1060H20	4500	130	148	64	69	2900
SSP-0770H20	2300	66	138	46	51	1300
SSP-0550H20	1200	34	142	36	41	900
*at 700 SFPM			**standard unit **			**steel construction





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