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**FACTORIES • PHARMACEUTICAL • DEFENCE INDUSTRY • SHIPS** 

**WAREHOUSES • COLD STORES • ARCHIVES • POWER STATIONS** 



# **DD900 DEHUMIDIFIER**

## WHY THE NEED FOR A DEHUMIDIFIER?

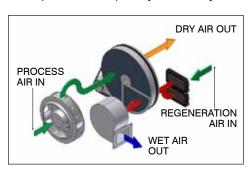
Dehumidifiers are required wherever there is a need to lower the humidity level to prevent corrosion, mould growth and condensation or maintain a low humidity condition during manufacture, packaging or storing of hygroscopic products.

#### METHODS OF DEHUMIDIFICATION

Dehumidification is possible using two possible principles, Condensation with refrigeration style dehumidifiers and Adsorption with desiccant dehumidifiers.

Desiccant dehumidifiers perform exceptionally well when used in cooler climates, or when a low dew-point, deep drying or low humidity levels are required. Since desiccant dehumidifiers do not produce water, they will work effectively down to sub zero temperatures.

Their operation is simplistic yet extremely effective and reliable. Air (Process Air)



is drawn into the dehumidifier, where is passes over a wheel impregnated with Silica Gel. As the air passes over this wheel, any moisture present in the air, is absorbed into the Silica Gel wheel before leaving the dehumidifier as warm dry air.

The Silica Gel wheel is continually, slowly rotating, typically at three revolutions per hour. As the wheel rotates a small

portion passes through the regeneration segment. During this phase a second air stream (Regeneration Air) is heated to a high temperature before passing over the wheel. Any moisture present in the wheel is released into this air stream, this hot wet air is then exhausted outside the area being dried.

#### WHY CHOOSE EIPL?

With over thirty seven years of experience, EIPL is Europe's leading manufacturer of dehumidifiers and the name you can rely on. No matter how extreme the conditions EIPL's efficiency copes comfortably even at the coldest temperatures.

# **DD900**

The DD900 desiccant dehumidifier is an upright, compact design, which makes it easily accommodated within space restricted areas. The unit incorporates a PTC Heater ensuring maximum drying is immediately reached, and constantly maintained while the unit is running. The DD900 incorporates two EC fans with variable speed allowing the unit to be easily installed and commissioned in a wide range of applications.

An electronic thermostat allows and fully variable EC fans, allows the user to select the desired drying preference, ie High Efficiency, Deep Drying, or High Extraction. The following table provides an example of capacities

27°C 60% - EXAMPLE SETTINGS				
	High	High	Deep	
	Extraction	Efficiency	Drying	
Process Airflow (m3/hr)	1100	900	700	
Regen Airflow (m3/hr)	350	250	350	
Regen Temperature Rise (K)	110	90	110	
Extraction (I/d)	172	135	152	
Dry Air Off (%)	12	14	6	

Facility for an external humidistat allows the humidity level to be maintained at a preset condition. The EIPL range of desiccant dehumidifiers incorporate a rotors with a 82% active Silica Gel, thereby ensuring optimum performance over the equipments wide operating range.

#### **SPECIFICATION:**

SPECIFICATIONS	DD900
MODEL NO.	10520GR-GB
Height (mm)	1220
Width (mm)	718
Depth (mm)	580
Weight (kg)	90
Voltage (V)	415
Phase	3
Frequency (Hz)	50
Current (A)	14
Power (kW)	9.8
Process Airflow - Dry Air (m3/hr)	900
Regen Airflow - Wet Air (m3/hr)	250
Process Duct Size - Dry Air (mm)	203
Regen Duct Size - Wet Air (mm)	152
Rotor Wheel Speed (rpm)	13.6
Typical Extraction @ 27°C 60% (I/day)	135
Min Operating Temperature (°C)	-20
Max Operating Temperature (°C)	40

## **FEATURES:**

FEATURES	DD900
MODEL NO.	10520GR-GB
On/Off Control	<b>V</b>
Electronic Controls	<b>✓</b>
Manual / Automatic Mode Selection	<b>✓</b>
Remote Humidistat Sensor Facility	
Hours Run Meter	<b>✓</b>
Mains Isolator	<b>✓</b>
Variable Fan Speeds (Speed Controlled)	<b>V</b>
High Capacity PTC Heater	<b>✓</b>
Process / Regen Air Fliter	<b>✓</b>
Dual Inlet Design	<b>V</b>
Free Standing	<b>V</b>
Humidistat	0
Stainless Steel Construction	0
Inlet Duct Attachements	0
High Temperature Safety Cut-outs	<b>V</b>

#### **APPLICATIONS:**

APPLICATIONS	
Warehouses	V
Factories	<b>✓</b>
Pharmaceutical	<b>✓</b>
Defence Industry	<b>V</b>
Confectionary	V
Laboratories	<b>V</b>
Medical	V
Stadiums	<b>V</b>
Ships	<b>V</b>

