



COMPACT DEHUMIDIFIER



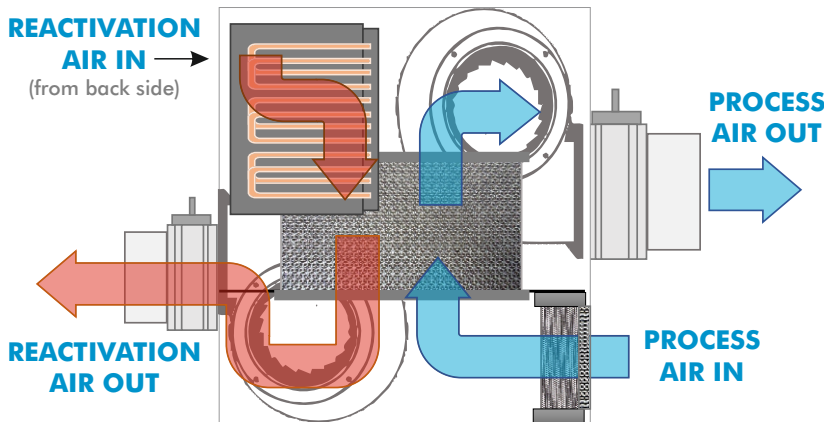
DRYPACT Series
Compact - more than your imagination!



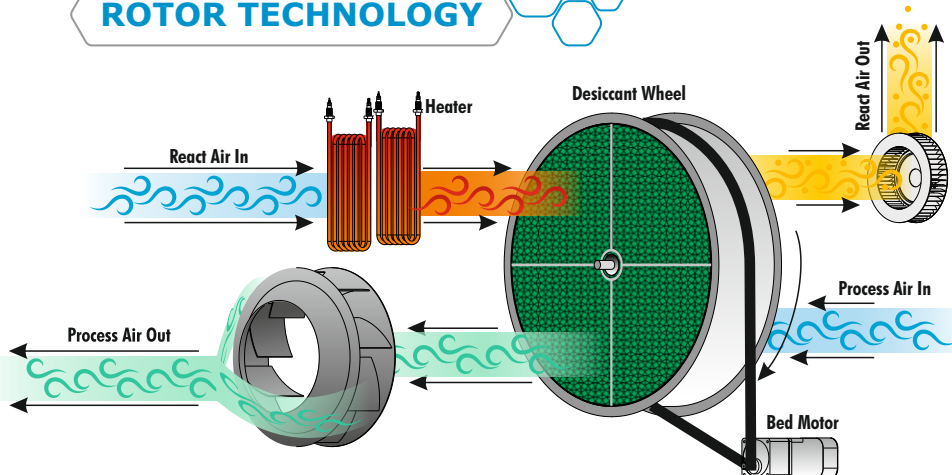


OPERATING PRINCIPLE

- ▶ REHOBOTH dehumidifiers operate on the principle of adsorption of water vapour from the air. The desiccant used is silica gel, MOC is of an inorganic substance
- ▶ The desiccant and substrate are arranged in a wheel-shaped rotor matrix having multiples of small parallel air passages extending through its thickness.
- ▶ The desiccant rotor is housed in a cabinet that is separated into process and reactivation sections. In the process section, moist air passes through the rotor, and the silica gel adsorbs the moisture.
- ▶ To remove the moisture absorbed out of the desiccant, the rotor at lower RPM rotates crossing the reactivation zone, where the heated air stream by steam or electrical heaters is blown through the desiccant. The moisture-laden reactivation air is exhausted outside. The reactivated desiccant rotor rotates passing back into the process section to provide continuous drying of the process air and the cycle continues.
- ▶ In many applications, the process air is cooled before entering the desiccant rotor to enable the system to produce dry air.
- ▶ The reactivation air stream may be heated by electricity, steam, hot water, or natural gas depending on the application and available utilities.

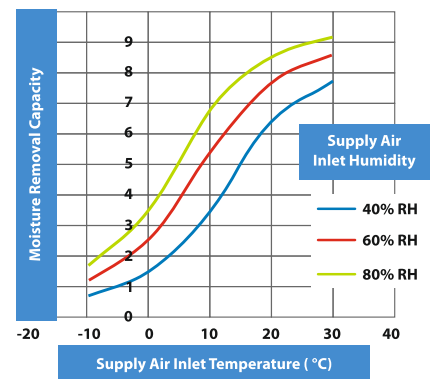


ROTOR TECHNOLOGY



FEATURES

- ▶ Available in size form 300 CMH to 3,000 CMH.
- ▶ Standard products include fully functional units with necessary safeties and electric relay based controls or optional PLC based Controller.
- ▶ Desiccant rotor technology removes water directly from the air.
- ▶ Designed for industrial process, including low Dew Point applications.
- ▶ Available with integrated pre and postcooling systems.
- ▶ Fast, simple access to all electrical and mechanical components through hinged doors or removable access panels.
- ▶ Desiccant cassette can be removed for cleaning, to extend rotor life and efficiency.
- ▶ Choice of Gas, Steam and Electric Reactivation.
- ▶ Standard features include easy access inlet filters, self-adjusting/tensioning rotor drive components and easy seal adjustment.
- ▶ Robust industrial duty structural frame and panel design.
- ▶ Highly compact design with lowest foot print area.
- ▶ Fully factory assembled, reduced installation time with on site and lesser costs.



PRODUCT DESCRIPTION

Dehumidifier unit complete with desiccant rotor section fitted with our rotor drive, regeneration module with electric heaters, G4 grade regeneration filter and reactivation fan and motor assembly. The desiccant wheel is constructed from a unique high temperature substrate media corrugated and impregnated with a non-migrating water selective low temperature regenerating desiccant which will have positive sealing between process and reactivation airstream to allow independent airflows.

- ▶ A completely independent unit.
- ▶ Option to start/stop remotely.
- ▶ Suitable for continuous operation.
- ▶ Independent blower and motor for each airflow.
- ▶ Volume control damper for both airflow (Process & Reactivation).
- ▶ Quick and Easy to Service.
- ▶ RS485 Connectivity.
- ▶ Sectors for process and reactivation airflow are insulated.
- ▶ Rotor is non-flammable.



TECHNICAL DATA - COMPACT DEHUMIDIFIER SERIES (RFD)

MODEL	Process air			Reactivation air			
	Air Flow (CMH)	ESP (PA)	Motor (H.P.)	Air Flow (CMH)	ESP (PA)	Motor (H.P.)	Heater K.W.)
RFD-30	300	200	0.25	100	150	0.25	7.5
RFD-60	600	200	0.5	200	150	0.5	7.5
RFD-100	1000	200	1.5	300	150	1	15
RFD-150	1500	250	1.5	500	200	1	18
RFD-200	2000	250	1.5	700	200	1	24
RFD-300	3000	250	2	1000	200	1.5	30
RFD-420	4200	250	3	1400	200	1.5	42



PLC or Relay based control choice



Highly efficient solid desiccant fluted wheel



G4 grade on both air streams side



Highly compact design & lowest foot print area



Reduced installation time on site and costs



Stainless steel sheet metal casing (optional)



REHOBOTH

Dehumidifiers

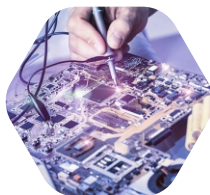


Some of the Industrial Applications



FOOD:

- Production & packing of Biscuit, Cookies, Chocolate
- Tea/herbs drying
- Cold Rooms
- Frozen food processing areas
- Loading docks
- Dried fruit/vegetables
- Seed drying & storage



ELECTRICALS & ELECTRONICS:

- HT Transformer and Capacitor manufacturing
- HV cable wrapping
- Clean spaces for Semiconductor manufacturing
- PCB assembly
- Lithium batteries



PHARMACEUTICALS:

- Soft gelatin capsule drying
- Manufacturing and packing areas of Effervescent
- Hygroscopic salts/powders
- Vitamins, Tablet coating



CORROSION PREVENTION :

- Storage of military equipments
- Leather, Precision components
- Power plant lay up
- Water and sewage treatment plants



PAPER & PRINTING:

- Libraries
- Archives Storage
- Paper pre-conditioning
- Gravure printing
- Currency printing
- Paper fibre molding



MOULD & FUNGUS PREVENTION:

- Schools
- Theatres
- Restaurants
- Hospitals
- Cargo protection
- Hotels



AUTOMOTIVE:

- Glass lamination
- Radial tyre creel room
- Engineering plastic components
- Engine test room



CONDENSATION PREVENTION:

- Injection and blow moulding
- Ice skating rinks
- Surface preparation & coating

and many more...

SOME OF OUR VALUED CLIENTS



REHOBOTH ENVIRO SYSTEMS PVT. LTD.

Plant : Plot No. 16,17 & 18 Chintupada, Palghar West, Maharashtra, India - 401404

MUMBAI:
+91 8286997301

DELHI:
+91 9811599922

CHENNAI:
+91 7904168588

BENGALURU:
+91 9880716097

KOLKATA:
+91 75969 20516

sales@rbdeh.com

cmnarang@gmail.com

www.rebothsystems.net



An ISO 9001:2015, 14001:2015, 45001:2018 Certified Company