Desiccant rotors units

Integrable into an air treatment system

High performance desiccant rotor

Fixed or variable speed drive

Two configurations : 180/180° et 270/90°

Available in painted or stainless steel version

Description

The desiccant wheels are intended for produce dry air and be integrated into air handling units.
The operating point of the wheels is specifically calculated for each application.

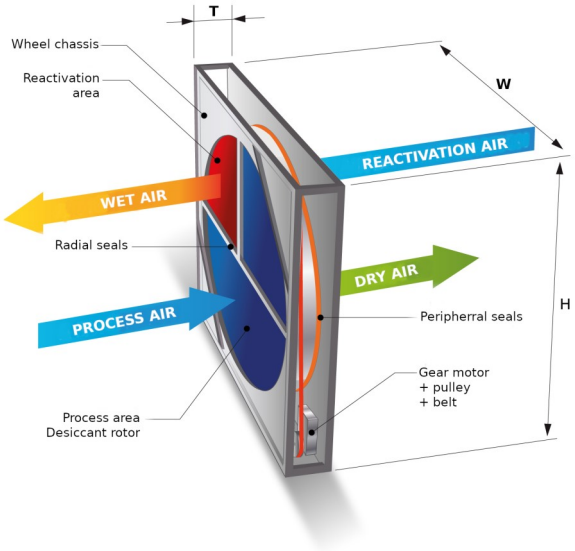
The desiccant wheels on frame (RC) consist of :
• a PPS or PPX (silica gel) impeller mounted on a painted steel or stainless steel metal frame
• a drive system ensuring the rotation of the wheel (belt, gearmotor, pulley) fixed or variable
• peripheral and radial seals.

Applications

The dry air process is used in many industries such as food, electronics, energy, pharmaceuticals, for drying or air conditioning applications ...

Operating principle

The process air contain humidity, pass through the process sector (blue) and comes out dry. At the same time, reactivation air heated from 100 to 165°C passes through the reactivation sector (red) and evapored moisture trapped in the rotor. With the wheel rotation, the production of dry air is continuous.



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Technical specifications and dimensions of desiccant rotor

GENERAL CHARACTERISTICS ON DESICCANT ROTOR						
Rotor diameter	Width (W) in mm	Height (H) in mm	Thickness (T) in mm (200mm rotor)	Thickness (T) in mm (400mm rotor)	Weight in kg (200mm rotor)	Weight in kg (400mm rotor)
450	600	600	311	511	60	70
550	700	700	311	511	70	90
630	780	780	311	511	80	110
700	850	850	311	511	90	130
770	920	920	311	511	100	150
870	1020	1020	311	511	120	160
965	1115	1115	311	511	130	180
1050	1200	1200	311	511	150	220
1220	1370	1370	311	511	180	270
1370	1520	1520	311	511	210	320
1525	1675	1675	311	511	250	380
1730	1920	1920	355	555	300	460
1940	2130	2130	355	555	350	560
2190	2380	2380	355	555	530	800
2450	2640	2640	355	555	620	960
2700	2890	2890	355	555	720	1220
2900	3090	3090	355	555	800	2270

Dimensions of standards design, possibility to get a tailor-made rotor
For large diameters, the rotor is delivered in sectors, the frame in 2 parts and the whole is assembled on site.

Installations

The frame rotor is intended for installation in air handling system. The installation guidelines are the follows :

• The rotor is crossed by filtered air (minimum G4).

• The seal around the frame and between the two air flows must be ensured. It is necessary to respect a maximum pressure differential between the two air flows in order to maintain a tightness (consult us).

• To ensure annual maintenance, access must be provided in order to inspect the peripheral and radial seals, the gear motor, the bearings and the rotor axle.

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