

Lasting Values



## Blower Reactivated Air Dryers

### DB Series

- Extensive Mimic display with Electronic Controller.
- Energy saving purge economiser.
- Stainless Steel Filters Cartridges.
- Fabrication Code : IS 2825.
- Dewpoint better than  $-40^{\circ}\text{C}$ .

### Optional :

- Fabrication Code : ASME SEC VIII DIV I.
- Dewpoint based changeover.

## Principle of Operation

The Blower Heat Reactivated Dryer works on the principle of Thermal swing. The desiccant adsorbs moisture from the compressed air to deliver dry air. The desiccant bed saturates over a period of time. The saturated bed is regenerated by heating with hot air generated using a blower. Hence the dryer is called blower heat reactivated desiccant dryer. Since the temperature of the bed swings between the compressed air temperature and the regeneration temperature it is called Thermal swing type. The hot air from the blower passed through a heater. This makes the air very dry. The hot air then heats up the desiccant bed. When the bed is heated it gives up the moisture adsorbed and is ready for adsorption. The hot air carries this moisture to the atmosphere. After the regeneration, heated desiccant bed is cooled by the flow of air to suit the application conditions. Final cooling is achieved by a no loss compressed air cooling method, resulting in a no Dewpoint spike system. Trident dryer comes with a dewpoint based control system as a standard. The tower changeover takes place only when the bed is saturated, resulting in energy saving and extended life. The dryer with its control valves and controller manages the drying, regeneration and repressurisation of the desiccant columns automatically and thereby delivering continuous dry compressed air.

Blower Heat Reactivated Dryers are best suited for applications requiring large volume of compressed air at low dewpoint. For the above conditions the dryer works out very economical energy wise. Trident blower heat reactivated dryers are built from the start for customization. Since the air volume is large customisation delivers substantial energy savings.

### Salient Features :

- Low dewpoint • Low pressure drop • Low energy cost for given dew point • Compact • Ready to use • Reliable design and components • Available to various standards • Dew point based tower changeover controls • Low total cost of ownership • Extensive operation and maintenance manuals.

Contact us or visit our web site [www.tridentpneumatics.com](http://www.tridentpneumatics.com) for the design input details to enable us to give you a correct solution.

## DB Series Specifications

Model	Inlet Flow		End Connection	Power	
	cfm	cu.m/min		Heater KW	Blower KW
DB 500	500	14.16	2½" NB	12	2.5
DB 1000	1000	28.32	4" NB	23	4.0
DB 1500	1500	42.48	5" NB	35	5.5
DB 2000	2000	56.64	5" NB	45	7.5
DB 3000	3000	84.96	6" NB	68	5.5
DB 4000	4000	113.28	7" NB	90	5.5

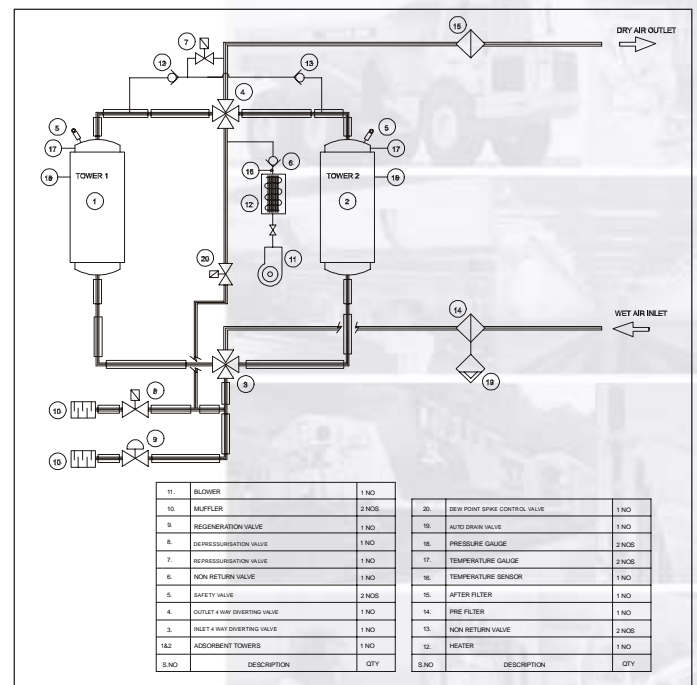
Designed for Air Inlet Pressure 7 Kg/cm<sup>2</sup>

Designed for Air Inlet temperature 38°C

Designed for Ambient temperature 35°C

Desiccant : Activated alumina with adsorption capacity 14%

### Blower Heat Reactivated Dryer



## Applications



Cement



Power



Fertilizer



Steel

### Our Other Range of Products

- Time based Auto Drain Valve • Level Sensing Auto Drain Valve
- Desiccant Dryer (Heatless) • Refrigeration type Dryer
- Micro Filter • Air / Water Cooled After Cooler • Air Receiver

### Trident Pneumatics Pvt Ltd

5/232, K.N.G. Pudur Road, Coimbatore - 641 108, India.  
Ph : +91-422-2400492 Fax : +91-422-2401376

### Trident Pneumatics Pvt Ltd

Shanghai, China.

### Trident Pneumatics Sdn Bhd

Selangor, Malaysia.

e-mail : [sales@tridentpneumatics.com](mailto:sales@tridentpneumatics.com) Website : [www.tridentpneumatics.com](http://www.tridentpneumatics.com)



Sales & Service Outlets

Ahmedabad  
98259 26342

Bangalore  
98450 93322

Chennai  
99949 78928

Delhi  
98113 10726

Hyderabad  
98854 45321

Kolkatta  
24071900

Mumbai  
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27471877