# **D Series** Compressed Air Dryers



## INSTALLATION & MAINTENANCE



Models: D-1 | D-2 | D-3 | D-4





## PREMIUM **OPTIONS**

# Standard Accessories Model: | D-1 | D-2 | D-3 |

Kit contains	Qty
PRESSURE GAUGES	2
STREET T	1
SAFETY VALVE ¼ @ 150 PSI	1
HEX NIPPLE 1/4"	1
BALL VALVE 1/4"	1



# Standard Accessories Model: | D-4 |

Kit contains	Qty
PRESSURE GAUGES	2
SAFETY VALVE 1/2 @ 150 PSI	1
HEX NIPPLE ½"	1
HEX NIPPLE 1/4"	1
T 1/2"	1
REDUCING BUSHING $\frac{1}{4}$ X $\frac{1}{2}$	1
BALL VALVE 1/4"	1





#### >> SAFETY

Do not remove, repair, or replace any item on the dryer while it is under pressure. Depressurize the dryer completely before starting installation and/or maintenance procedures. Serious personal or death may result if these safety rules are not followed. Do not remove cover and/or retaining clamp until ALL air pressure is removed.

#### >> INTRODUCTION

The purpose of installing a Super-Dry D Series dryer in a compressed air system is to remove the water vapours (humidity) which has been drawn into the system at the compressor intake. The dryer operates automatically. There is no moving parts and no external source of power is required. If an automatic drain is installed, a power source is required only to operate the valve.

The wet air enters the offset inlet, located at the lower part of the dryer, which makes the air spin in the lower portion of the dryer. Liquid water and solid particles are separated by gravity and centrifugal force and fall to the bottom of the vessel. A coalescer element, located at the bottom of the dryer, filters all oil, rust and others solid particles. The process

Clean dry air Outlet coalescer Rugged filter element aluminum casting Mounting brackets Felt pads and stainless Activated alumina steel grids (desiccant) filter bag Intake coalescer filter element Pressure gauge and safety valve Cooled Ball Valve compressed air intake Automatic Time Drain

Humidity and Temperature Indicator

air moves upward through a felt pad, and after through the desiccant bag which attracts and absorbs the moisture from the air before it flows through another series of felt pad and coalescer element.

#### >> INSTALLATION

The ability of a dryer to provide dry compressed air depends on the correct location of the unit. Inlet air temperature and pressure are the keys to selecting the proper location. We recommend to install SuperDry D Series dryers directly at the point of use. The dew point of the outlet air is directly related to the inlet air temperature. The lower the inlet temperature, the lower the dew point of the outlet air. Determine the lowest temperature where the compressed air is being used or where the lines are located. Do not exceed 100 °F inlet temperature. The ideal inlet air temperature should be 70 °F. An aftercooler, finned tubing or extended run of piping will usually be necessary to reduce the inlet air temperature to the dryer.



#### >> OPERATING THE DRYER

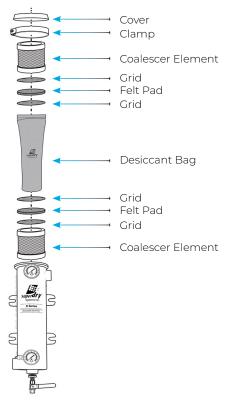
The simple design of the Super-Dry D Series dryer allows for easy operation. The dryer requires two procedures to ensure peak performance.

- Daily draining: The accumulated condensate at the bottom of the dryer should be drained as often as possible, or at least every 4 to 8 hours of operation. Depending on actual operating conditions, the dryer may required draining on a more frequent basis.
- **Refilling the dryer with desiccant:** During the Super-Dry drying process, the desiccant will slowly become saturated. When your moisture indicator indicates more than 80% relative humidity, or if the humidity condense downstream of the dryer, replace the cartridge. Cartridge replacing instructions are included with the Super-Dry Replacement Cartridges.

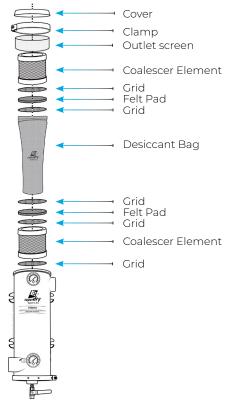
#### >> MAINTENANCE

- Completely depressurize the unit before servicing.
- Remove the cover clamp and cover.
- BRE Remove everything inside the dryer but keep the grids.
- Insert parts as shown on the diagram below.
- Install cover and clamp. Maximum install torque is 180 in-lbs (20.3Nm).

### Components: Model: | D-1 | D-2 |



### Components: Model: | D-3 | D-4 |





### **SUPER-DRY** SOLUTIONS INCLUDES:







**FSD Series** Water Separators





