




**Manual Desiccant Dryer  
Model AD3500**

**SPECIFICATIONS**

Maximum Pressure	150 PSIG
Maximum Temperature	125°F
Maximum Continuous Airflow*	10 SCFM
Atmospheric Dewpoint*	-45°F
Total Airflow*	4400 SCF
System Size	One AD3500 is required for each 275 gallon system
Weight with Desiccant	6.8 lbs.
Weight Desiccant Element(Alone)	1.8 lbs.
Pipe Connections	½” NPT

\*With Dry Desiccant at 100 PSIG (7 bar) and 70°F.

**Description**

 Manual Dryers are used to remove water vapor from the compressed air system. Atmospheric dew points as low as -100°F are achievable when operated within rated unit specifications.

**General Safety Information**

- Relieve all air pressure from airline before installation
- Install unit in airline.
- Always make sure bowl, bowl guard and clamp ring are in place and the clamp ring is securely locked before installation
- DO NOT exceed the pressure and temperature ratings as shown on the specifications.
- Follow all local, state and federal EPA, OSHA and similar codes.

## **Installation**

- 1) Install as close as possible to the point where the air is being used.
- 2) Install unit with the airflow going in the direction of the arrow.
- 3) Replace bowl, bowl guard and clamp onto the unit. Be sure clamp ring is securely locked in place before pressurizing unit.

Most manual dryer users will achieve optimal results when installing the dryer alone, as close to the equipment or process being protected as possible in the compressed air system. Some users, especially those with highly contaminated systems, or critical air requirements, may wish to further protect their system and/or manual dryer, or extend the life with the following filter:

**Part No. F3500, coalescing filter** should be installed prior to the manual desiccant dryer in any lubricated compressor system, which does not use a system coalescing filter. The coalescing filter removes oil from the compressed air, which prevents oil from coating the silica gel and destroying its ability to dry the air. Oil contaminated desiccant must be replaced and disposed of properly, as it cannot be regenerated.

## **Operation**

- 1) The activated alumina desiccant, visible through the clear polycarbonate plastic bowl, contains color indicating silica gel beads. The silica gel beads change from dark blue (meaning dry) to pink (meaning wet) to indicate the need to replace the desiccant cartridge.
- 2) By installing two or more units in parallel, higher dry airflows can be achieved.

## **Maintenance**

- 1) The only service required for manual dryers is when the desiccant color moisture indicator has changed from dark blue (meaning dry) to pink (meaning wet). Should this color change occur:
  - a. Turn off and depressurize the line containing the dryer unit
  - b. Loosen the clamp ring and remove the bowl from the top housing.
  - c. Unscrew and remove desiccant element from the dryer head attached to piping.
    - a. Remove protective seal from top of new desiccant element.
    - b. Screw the new desiccant cartridge into the dryer head attached to piping..
    - c. Use Part No. AD3500-ELM when ordering replacement desiccant
  - a. Dispose of desiccant according to local codes
- 4) Replace bowl, bowl guard and clamp onto unit. Be sure clamp ring is securely locked in place before repressurizing the unit.