## ZENITH DESICCANT AIR DRYERS

- LOW PRESSURE DROP
- NO PRESSURE SPIKES
- ENERGY MANAGEMENT CONTROLLER TO MINIMIZE **PURGE LOSS**
- LARGE DESICCANT BEDS FOR CONSISTENT DEW POINT



## INTRODUCTION

The ZENITH has been providing solutions to compressed air problems for more than 20 years.

The desiccant type adsorption dryers are electronically controlled with automatic purge adjustment to varying flow rates, pressures and temperatures.

Our desiceant dryer brings many benefits to the compressed and air user. These include no waste of valuable compressed air for regeneration which operates in accordance with the actual conditions on site.

These benefits mean more reliable compressed air system, an extremely energy efficient as well as achieving substantial Operational cost savings over conventional drying systems.

## **OPERATION**

Wet compressed air enters the drying tower from pre & oil removing filters, at the bottom and is directed by a non-lubricated switching value. The wet air encounters dry desiccant and moisture is transferred from the air to the desiccant. The direction of the air flow during drying is upflow; design of the towers prevents fluidization of the desiccant. At the top of the dryer, the dry processed air is directed to the after filter of the dryer through check valves.

Approximately ten percent of the dry air is directed into the regenerating tower where it is depressurized to atmospheric pressure and is used to regenerate the desiccant. After removing the moisture from the desiccant, the purge air exits the dryer through a muffler and is blown out to atmosphere. After a present time based on energy management controller, the dryer shifts towers. At tower shift, the regenerating tower is gradually repressurized, the switching valve sequentially shift and offstream tower is depressurized. The switching and exhaust valves are controlled by solenoid valves.

## TECHNICAL SPECIFICATIONS

- Activated Carbon
- Alluminia ball
- Moisture separator
- Free Filter





