



## Tsunami Ultra Drying Systems

15Hp to 30Hp compressor solutions

The Ultra Systems uses the latest Tsunami technology to provide your application with the cleanest, driest compressed air available. Our systems are complete packages and include Tsunami water separators, oil coalescing filters and Moisture Minder® automatic drains to assure proper draining of water and oils. The fully assembled solution comes complete with an outlet regulator all mounted on an 80 gallon storage tank for storing ultra dry air.

Includes:

- **3-year warranty**
- Built-in bypass circuit
- 80 Gallon storage tank for the ultra dry air
- Moisture Minder automatic piston drains for pre-filters
- Outlet regulator allows for air conservation
- Pre-assembled for easy installation
- Global units sent outside North America have special power adaptors
- Large Tsunami Water Separator and Oil Coalescing Filter to pre-filter the incoming air



Height - 71" Width - 51" Depth - 27.5"

Inlet - 1" NPT Outlet - 1" NPT

Part Number	Description
P/N 21999-0810	10 Hp Tsunami Ultra Drying System
P/N 21999-0815	15 Hp Tsunami Ultra Drying System
P/N 21999-0820	20 Hp Tsunami Ultra Drying System
P/N 21999-0830	30 Hp Tsunami Ultra Drying System



## REGENERATIVE DRYERS - HOW THEY WORK

- 1 The technology functions by passing contaminated compressed air through the Tsunami water separator where bulk water and oil is removed down to 10 micron. The air then passes through the oil coalescing filter which further removes oil and particulates down to .01 micron.
- 2 The pretreated air enters the dryer and passes through the desiccant canister(s). Molecular sieve desiccant forms a bed encapsulated within a 10 micron filter bag. The molecular sieve bed is spring loaded, under tight compression, virtually eliminating bead movement which causes breakdown of the media.
- 3 As the wet air passes through the tower(s), the molecular sieve draws the water vapor in while under pressure. At the same time, one or more tower(s) become depressurized. With the use of sweep air, the towers discharge water vapor through the mufflers located below the dryer manifolds.
- 4 The PLC sends out a pilot signal shifting an internal spool. When the spool shifts, air is redirected from the saturated tower(s) to the dried tower(s).
- 5 A small amount of air from the dry outlet flow is then directed backward through the wet towers via a small orifice in the regeneration valve. (This is referred to as “sweep air” or the “regeneration process”) The desiccant is dried as the sweep air passes back through the canister(s). The tower is now ready to be cycled again. It's like changing your desiccant every few minutes.

### THE DRYING PROCESS

- Wet Incoming Air - supply air from compressor or from the compressor system
- Dry Outgoing Air - air that has had the water vapor removed

### THE REGENERATION PROCESS

- Dry Outgoing Air - small amount of dry air used to “sweep” or regenerate the towers
- Wet Discharge Air - water vapor which was removed during the drying cycle

