



# Portable Regenerative Dryer

**Are you looking for clean, dry, high quality spray air?  
Does your drying system need to be portable?**

If so, then the Portable Regenerative Dryer Demo Unit is the answer.

We provide you with up to 20 minutes of clean, dry air per cycle at a fraction of the cost of a full blown regenerative dryer with less maintenance than other point-of-use desiccant drying systems. Not to mention this drying system is portable for use in mobile applications and great to use in demonstrations

**Note: Maximum outlet pressure 60 psi.**



**Portable Regenerative Dryer  
P/N 21999-0788**

All you have to do is connect the Tsunami Portable Regenerative Dryer to a compressed air source for clean, dry air. When you have finished spraying, simply plug the mobile unit into a 110v electrical outlet and the dryer automatically regenerates the tower so you have clean, dry air the next time you need it.

Simply allow the mobile dryer to cycle 3 to 4 times to dry out the regenerative tower and the only other requirement to maintain the highest quality air for your application is to replace an oil coalescing pre-filter element every six months. It's just that easy!

- Low Relative Humidity
- Easy Maintenance—replace a coalescing filter element every six months
- Dryer housing manufactured from solid aluminum billet
- Tower housing has a single piston spool
- Cartridge style regeneration orifices
- **Waterborne ready!**
- Low cost to maintain - under \$100/yr avg.
- Stronger construction; eliminates casting porosity
- Less parts, more reliable, and easy to service
- Provides the ability to customize the performance of your dryer

## Benefits

- **3-year warranty**
- Economical solution for high quality dry air in a portable drying unit
- Tsunami oil coalescing filter to pre-treat the incoming air
- Outlet regulator allows for better pressure control and conserves air
- Easy to use



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## Product Description

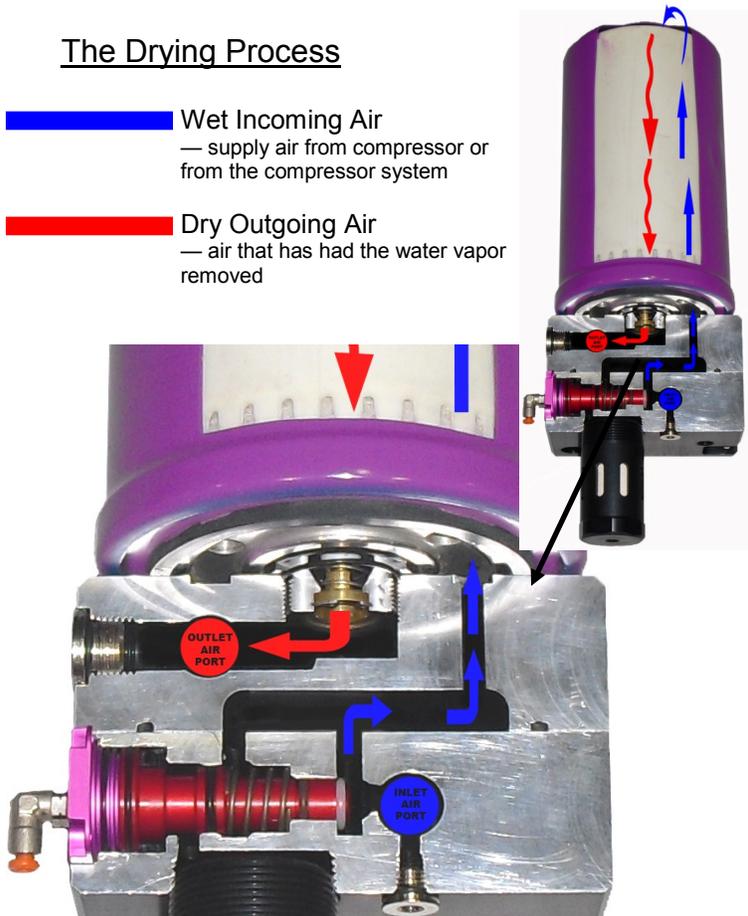
The Portable Regenerative Dryer uses the latest technology to provide your booth with the cleanest, driest compressed air available. Our system, unlike some of our competitors, are complete systems. This includes the Tsunami oil coalescing filter. Pre-filter comes standard with manual drain.

We configured our portable system to provide very low dew points with low relative humidity (down to .01%) all while keeping a low sweep rate. Flow rate and sweep rate determine the quality of your compressed air.

- This technology functions by passing wet, dirty compressed air through the Tsunami water separator which removes bulk water and oil down to 10 microns, then the air passes through the Tsunami oil coalescing filter which further removes oil and particulates down to .01 micron.
- This pretreated air enters the dryer and passes through our desiccant canister.
- Our canister is filled with a molecular sieve bed which is under tight compression, so there is virtually no movement or banging together of the beads to cause material break down. Our desiccant media is also encapsulated in a 10 micron filter bag which eliminates the possibility of desiccant carryover downstream.
- When the portable dryer is disconnected from an electrical source, wet air passes through the tower and the molecular sieve draws the water vapor to it while under pressure. After spraying, simply connect the dryer to an electrical outlet and we depressurize the tower. We then flow 3 gallons of dry air from the storage tank to sweep away the humidity. The sweep air removes the water vapor from the tower and discharges it through the muffler below.
- The timed control valve sends out a pilot signal to an internal spool causing it to shift, which switches the flow of air through the tower.
- This switching of tower operation now allows wet, incoming air to flow through the dried tower. We then fill the three gallon storage tank with dry air in order to allow it to be used for another regeneration cycle. (This is referred to as sweep air or the regeneration process). This dry flow of air through the wet beads will dry them out so they are ready for a new cycle. It's like changing your desiccant every time you spray. Our system assures a continuous flow of clean, dry compressed air for your needs.

### 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

