

The Tsunami Water Separator

Product Description and Parts Breakdown

The Tsunami Water Separator is a high quality filtration product which can be used to remove liquids and dirt particulates from compressed air systems with a capacity of up to 240 SCFM (Standard Cubic Feet per Minute).

This technology accomplishes its goal by taking the inlet air through the inner tube and reverses direction when it hits the baffle plate (refer to cutaway below for more details). When this happens, the air velocity is slowed in the larger area of the outer tube which allows gravity to remove the bulk liquids. The air then travels upwards through the stainless steel mesh where the remaining water molecules are coalesced into larger droplets of liquid which then drop to the bottom and are removed through the float drain.

The water separator consists of a unit head, outer tube, inner tube, baffle plate, coalescing stainless steel mesh and a bottom cap with float drain.

Head:

- The head is machined from 6061 aircraft aluminum and is anodized for corrosion resistance. In addition, the head is powder coated for **maximum corrosion protection**.
- Head Dimensions and port sizes
 - 20 Series has a 2" square head with ¼" NPT inlet and outlet ports
 - 50 Series has a 2¾" square head with ½" NPT inlet and outlet ports
 - 120 Series has a 3⅞" square head with 1" NPT inlet and outlet ports

Stainless Steel Mesh:

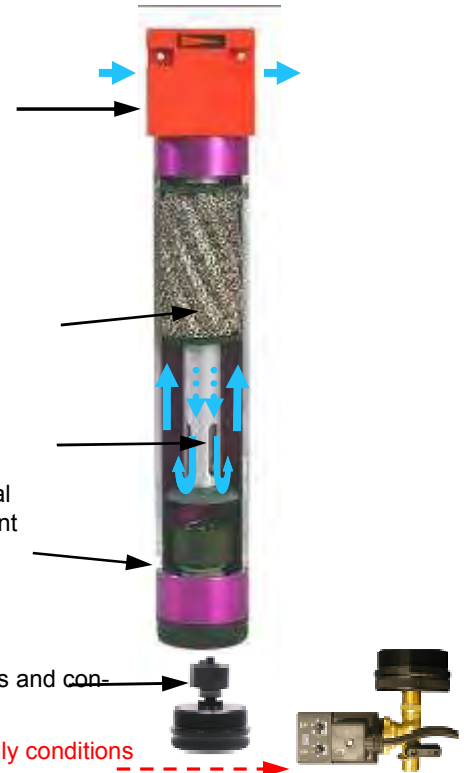
- The stainless steel mesh is a non-corroding material that retards rusting and breakdown of the weave.

Outer Tube and Inner Tube:

- The inner and outer tubes are machined from 6061 aircraft aluminum which provides exceptional durability for the most rugged applications. The tubes are anodized both inside and out to prevent corrosion from air system contaminants.

Float Drain:

- The float drain is a critical component to this unit as its sole responsibility is to remove the liquids and contaminants.
- **Electronic Solenoid Drain Valve (optional) - Recommended for air systems with dirty, rusty, or oily conditions**



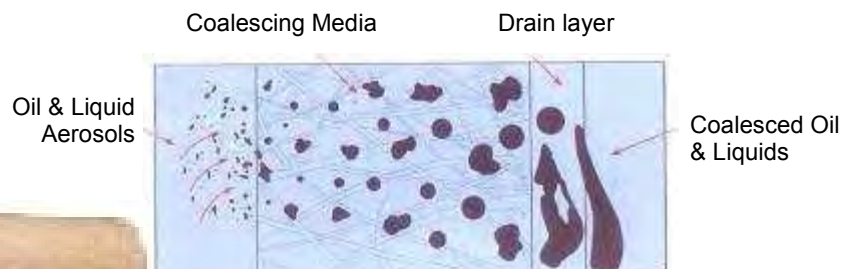
The Tsunami Oil Coalescing Filter

How It Works

Once the aerosol is captured by a fiber, it coalesces with other captured aerosols to form a bulk liquid which is forced by the air flow to the outer surface of the filter media. A non-wicking drain layer attached to the outer surface of the filter media separates the oil and water liquid from the air flow and drains the liquid via gravity to the sump of the filter housing preventing entrainment.

Construction

Tsunami coalescing media is made of 100% borosilicate glass micro fibers bonded together with a resin binder. In the standard configuration, chemical-resistant polypropylene cores and layers intimately support the coalescing media. A non-wicking drain layer is in intimate contact with the outside of the outer support core.



Scanning Electron Micrograph of Coalescing Media @ 500X magnification

By utilizing direct interception, diffusion and impaction, liquid aerosols are coalesced and removed from compressed air.



Air Tool Protection / Individual Filters / Lift and Rack Utility Station

The Tsunami Water Separator removes water, up to 1 quart per minute, and filters particulate down to 10 micron

P/N: 21999-0390
20 SCFM Water Separator

P/N: 21999-0131
50 SCFM Water Separator

P/N: 21999-0082
120 SCFM Water Separator



The Tsunami Oil Coalescing Filter removes oil aerosols down to .001 ppm and traps particulates down to .01 micron

P/N: 21999-0390-Z-FD
20 SCFM Oil Coalescing Filter

P/N: 21999-0131-Z-FD
50 SCFM Oil Coalescing Filter

P/N: 21999-0082-Z-FD
120 SCFM Oil Coalescing Filter



The Tsunami Activated Carbon Filter removes oil aerosols down to .003 ppm and absorbs oil vapors which removes odor and taste from the air.

P/N: 21999-0390-AC
20 SCFM Activated Carbon Filter

P/N: 21999-0131-AC
50 SCFM Activated Carbon Filter

P/N: 21999-0082-AC
120 SCFM Activated Carbon Filter



20CFM Air Tool Filtration Packages

The Tsunami 20 Series Filtration Packages are the perfect solution for protecting your air tools from water and dirt in any air system.



P/N: 21999-0414

Package # 8 - 20 SCFM

- Standard water separator with regulator

1/4" NPT inlet and outlet

Height - 11" Width - 4"
Depth - 3 1/2"



P/N: 21999-0416

Package # 1 - 20 SCFM

- Standard water separator with lubricator

1/4" NPT inlet and outlet

Height - 11" Width - 5"
Depth - 2 1/2"



The best FRL for use with air tools

P/N: 21999-0415

Package # 2 - 20 SCFM

- Standard water separator, regulator, and lubricator

1/4" NPT inlet and outlet

Height - 11" Width - 6"
Depth - 3 1/2"

P/N: 21999-0081



Industrial grade Utility Station is designed to eliminate the problems found in commercial grade boxes

- Easy to install
- Adapts to any lift or body shop work area
- Electrical outlets equipped with 20 amp industrial GFI protection
- Air service through 2 outlets: one non-lubricated for blow off or tire inflation; one lubricated for pneumatic tools
- Electrical outlets located above the air service to prevent moisture damage and tangling
- Air service filter element and lubricator filler port are easily accessible
- Powder coated finish for durability and long life