Suburban MANUFACTURING, INC.

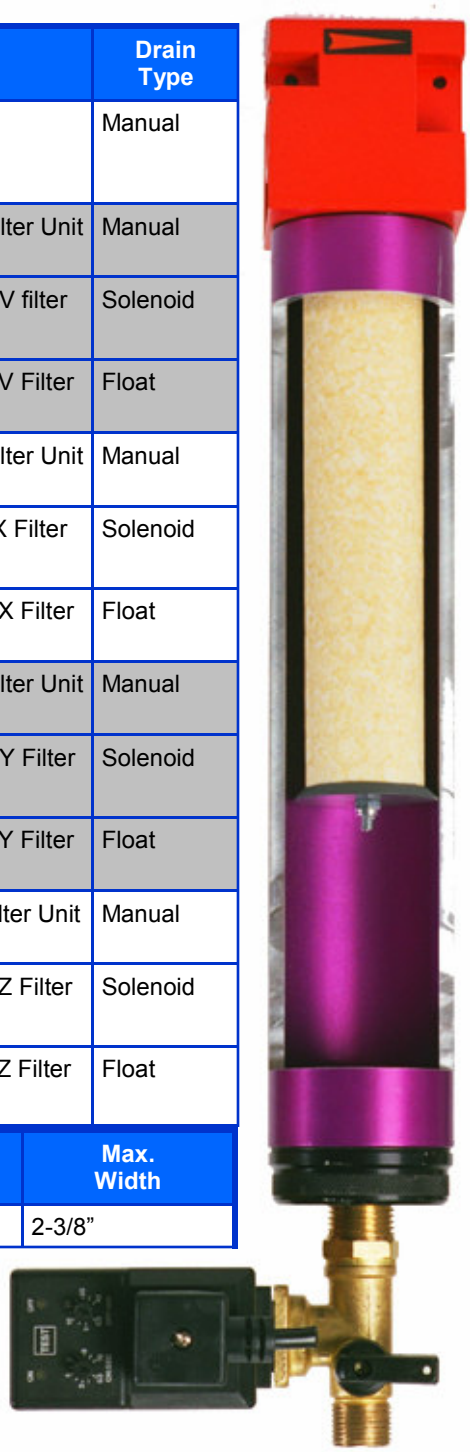
Tsunami™ Oil Coalescer & Activated Carbon Filters

Excellent protection of critical equipment from oil, oil mist, vapor and particulate down to .001 PPM (.01 micron). Tsunami™ elements utilize a multi-stage filtration effect. These elements are much larger than standard elements, offering the largest surface area and lowest pressure drop. Available with manual, solenoid or piston drain options and a large sump. Tsunami™ coalescers are rated for heavy wet flows. Tsunami™ activated carbon filters used with Tsunami™ oil coalescers deliver the highest instrument grade compressed air.

- Duty rated wet flows 50 SCFM and 120 SCFM
- 3 drain options
- 5 Element Options
- Less than 1 PSID

Part #	Drain Type
21999-0131-AC Tsunami Activated Carbon Filter Cartridge	Manual
21999-0131-V Tsunami Grade V Filter Unit (no drain included)	Manual
21999-0131-V-ED Tsunami Grade V filter Unit W/Timed Drain ☻	Solenoid
21999-0131-V-FD Tsunami Grade V Filter Unit W/Float Drain	Float
21999-0131-X Tsunami Grade X Filter Unit (no drain included)	Manual
21999-0131X-ED Tsunami Grade X Filter Unit W/Timed Drain ☻	Solenoid
21999-0131-X-FD Tsunami Grade X Filter Unit W/Float Drain	Float
21999-0131-Y Tsunami Grade Y Filter Unit (no drain included)	Manual
21999-0131-Y-ED Tsunami Grade Y Filter Unit W/Timed Drain ☻	Solenoid
21999-0131-Y-FD Tsunami Grade Y Filter Unit W/Float Drain	Float
21999-0131-Z Tsunami Grade Z Filter Unit (no drain selected)	Manual
21999-0131-Z-ED Tsunami Grade Z Filter Unit W/Timed Drain ☻	Solenoid
21999-0131-Z-FD Tsunami Grade Z Filter Unit W/Float Drain	Float

Weight	Max. Length	Max. Width
3 Lbs.	14-1/4”	2-3/8”



Shown with optional Solenoid Drain

Part #	Drain Type
21999-0082-AC Tsunami Activated Carbon Filter Cartridge	Manual
21999-0082-V Tsunami Grade V Filter Unit (no drain included)	Manual
21999-0082-V-ED Tsunami Grade V filter Unit W/Timed Drain ☻	Solenoid
21999-0082-V-FD Tsunami Grade V Filter Unit W/Float Drain	Float
21999-0082-X Tsunami Grade X Filter Unit (no drain included)	Manual
21999-0082-X-ED Tsunami Grade X Filter Unit W/Timed Drain ☻	Solenoid
21999-0082-X-FD Tsunami Grade X Filter Unit W/Float Drain	Float
21999-0082-Y Tsunami Grade Y Filter Unit (no drain included)	Manual
21999-0082-Y-ED Tsunami Grade Y Filter Unit W/Timed Drain ☻	Solenoid
21999-0082-Y-FD Tsunami Grade Y Filter Unit W/Float Drain	Float
21999-0082-Z Tsunami Grade Z Filter Unit (no drain selected)	Manual
21999-0082-Z-ED Tsunami Grade Z Filter Unit W/Timed Drain ☻	Solenoid
21999-0082-Z-FD Tsunami Grade Z Filter Unit W/Float Drain	Float

Weight	Max. Length	Max. Width
4.5 Lbs.	15-7/8”	3-1/8”

Products shown with this ☻ are recommended for air systems with rust and oil

Tsunami™ Oil Coalescer & Activated Carbon Replacement Elements

Tsunami™ replacement filter elements are designed to provide quick and painless change-outs in a matter of minutes. Just unscrew the bottom cap, remove one nut and remove/ replace the element.

Part #	Description	Micron Rating	Oil Carry Over PPM	ISO Class
21999-0197	Grade V replacement filter element (95% efficiency)	1.0 Micron	.8	<3
21999-0198	Grade X replacement filter element (99.97% efficiency)	.03 Micron	.01	1
21999-0199	Grade Y replacement filter element (99.999% efficiency)	.02 Micron	.003	<1
21999-0200	Activated Carbon replacement filter element	N/A	.003	<1
21999-0202	Grade Z replacement filter element (99.9999% efficiency)	.01 Micron	.001	<1

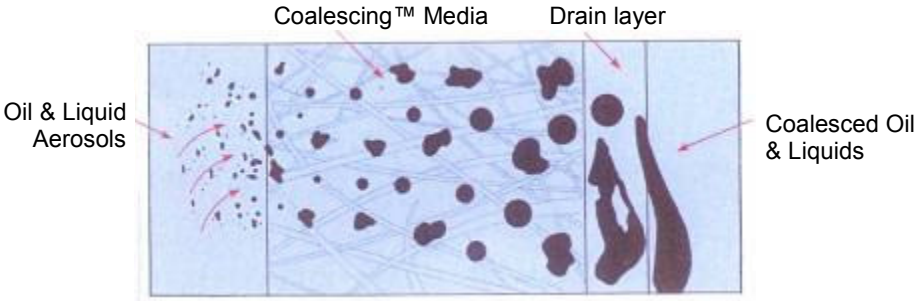
How It Works

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.

Scanning Electron Micrograph of Coalescing Media @ 500X magnification

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.



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