

# MODEL 38 INDUSTRIAL MIST PRECIPITATOR



Under normal mechanical and thermal stresses, petroleum based and synthetic oils in the lubricating systems break down into fine mist and smoke particles. These particles, under pressure, escape through bearing seals to breather vents where they are exhausted. These airborne oil mists can create health and fire hazards, violate EPA/OSHA regulations, and contribute to the fouling of relays and other electronic components. Direct venting to the atmosphere is costly and may violate EPA/OSHA regulations.

A practical and economical method to eliminate these oil mists is to apply Trion's Model 38 to lube oil vents. Trion's Model 38 is ideal for collecting fumes and oil mists from these applications:

- Gas Turbines
- Diesel Engines
- Vacuum Pumps
- Compressors
- Auxiliary Engines
- Storage Tanks

Because of the predominance of submicron size particles, generally, oil mists cannot be effectively controlled by ordinary straining type filters or centrifugal collectors. High efficiency mist eliminators create excessive back pressure. Trion's Model 38 is up to 99% efficient, nonselective in the size of particles collected, contains no moving parts, and in most applications, is virtually self-cleaning.

## FEATURES/BENEFITS

- Removes Fumes and Oil Mist from Discharged Air - helps maintain a cleaner work environment and reduces costly maintenance cleanup of oily accumulations
- Spiked Ionizers - no ionizing wires to replace, which reduces maintenance replacement cost
- Low and Constant Static Pressure - insures machinery performance is keep constant without excessive static pressure buildup, common in media filters
- Easily Installed and Maintained - installs within 30 min.-1 hour!

**SHOCK** Designed to meet the requirements of MIL-MIL-S-901 Grade A, Class 1, High Impact Shock

**VIBRATION** Designed to meet the requirements of MIL-STD-167 Environmental Vibration

**EMI** Designed to meet the requirements of MIL-STD-461 Electromagnetic Interference

# TRION®

**CABINET:** Constructed of heavy gauge steel with welded seams. Units are furnished with corrosion resistant machine tool green powder coated finish. All internal construction materials are compatible with petroleum based or synthetic lubricants. Predrilled mounting bars permanently attached to the back of the unit to simplify field installation.

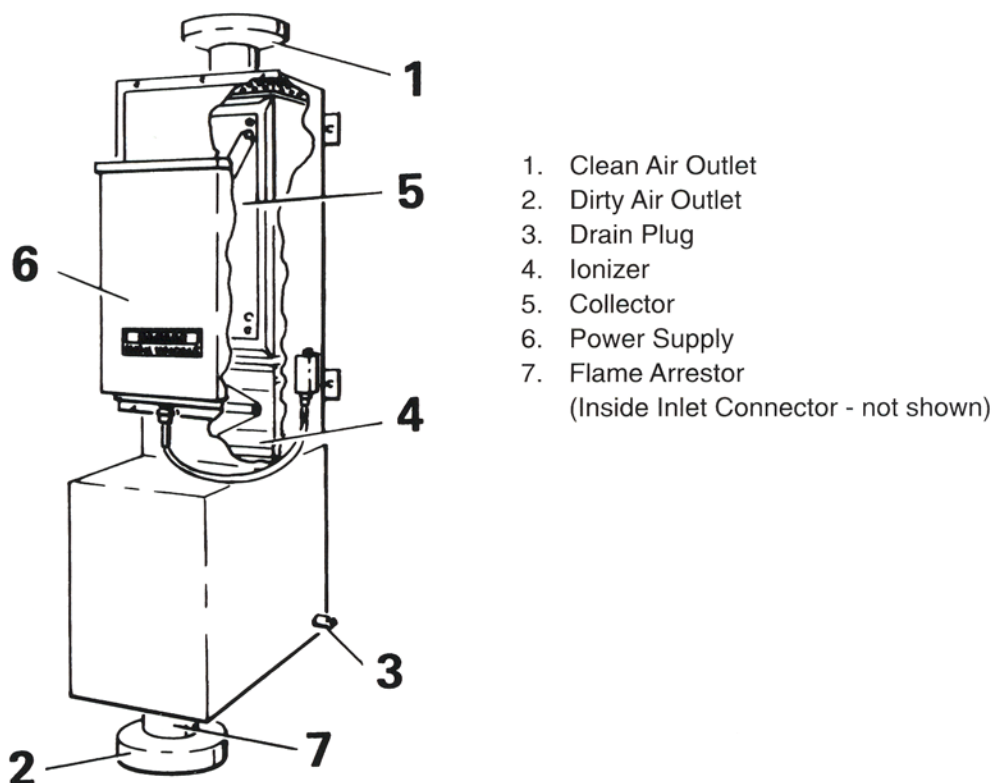
**INTERNAL COMPONENTS:** Ionizing-collecting cells are constructed of heavy gauge aluminum and have Trion's exclusive Spiked Ionizer. The stainless steel Spiked Ionizer eliminates wire breakage and replacement. They are rugged, light weight and slide into the cabinet on rails like drawers. A removable perforated steel baffle is located on the discharge side of the collector section and provides operator protection from high voltage components. All internal components are easily accessible through a single, front mounted access panel.

**POWER SUPPLY:** A modular power supply is contained on the unit access panel in a weatherproof enclosure. It converts either 120V, 60HZ, 1 PHASE or 240V, 50HZ, 1 PHASE input power to the high voltage direct current necessary to energize the ionizing-collecting sections, 12/6 KVDC. Input line power is connected to the unit in a weatherproof junction box and delivered to the power supply primary through an oil proof cable with quick connect fittings. For reliability, the power supply is of 100% solid state construction and is operated at a higher frequency (30 KHZ) with switching mode. The cell protection is built in to provide greater dependability. When output is arcing or shorted the built in patented circuitry will activate within nano seconds. An electrical interlock arrangement prevents access to high voltage components without first interrupting the primary power supply. Power consumption is 50 watts.

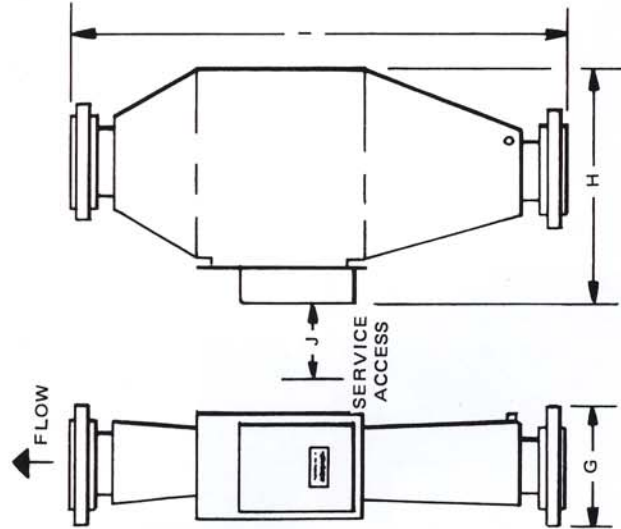
**INLET AND OUTLET CONNECTIONS:** Vertical mount airflow Model 38's are provided with inlet air connection of ASTMA 181, ASAB 16.5, 150 PSI weld neck flanges or with threaded pipe of 2", 3", 4", or 6" IPS. The outlet may be open for free air discharge or piped externally, the same as the inlet.

**OPERATING TEMPERATURE:** Maximum operating temperature . . . 160°F or below the vaporization point of the lubricant being collected. Minimum temperature . . . 20°F or above the point that the lubricant being collected ceases to be free flowing.

This specification is subject to revision. Consult the factory for operating temperatures exceeding this range.

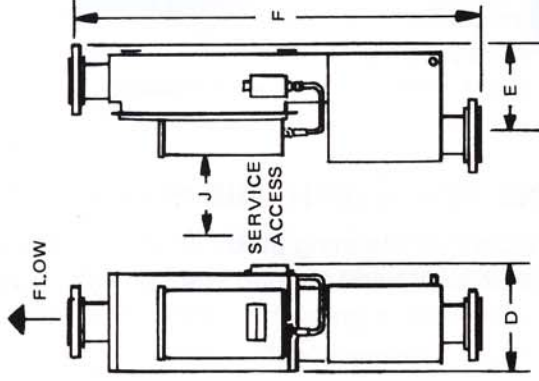


.....CAPACITY/DIMENSIONAL DATA TYPE IMP MODEL 38 VERTICAL AIR FLOW



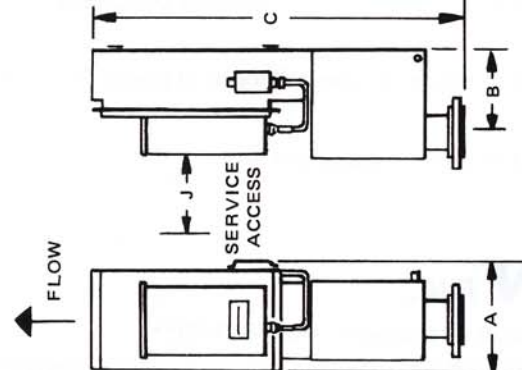
600 CFM UNIT

— Flanged discharge and inlet only



150 & 300 CFM UNIT

— Flange or threaded pipe discharge  
— Flange or threaded pipe inlet



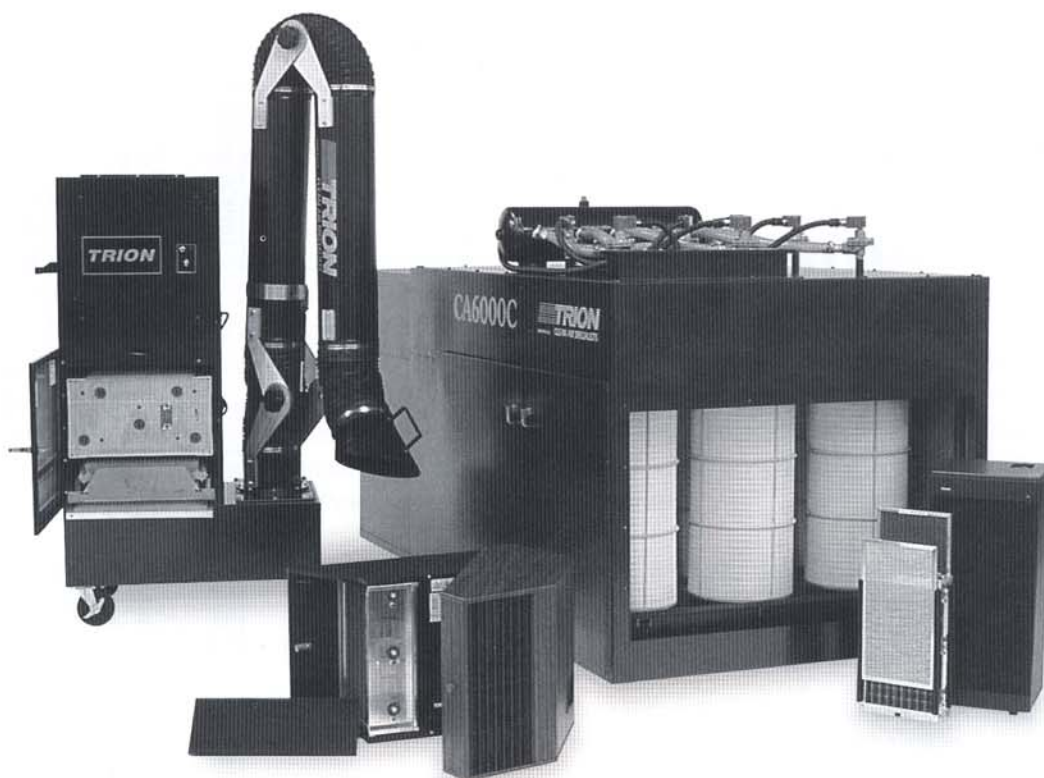
150 & 300 CFM UNIT

— Free Air Discharge  
— Flange or threaded pipe inlet

Unit Size CFM	Connection Variations		DIMENSIONS (INCHES)												Unit Weights (Lbs.)											
	Inlet and/or Outlet	Outlet	Overall length in direction of flow are same for units equipped with flanges or threaded pipe connections. 12" minimum clearance required in front of power pack for component removal.												Total unit weight equals base unit plus type of inlet and outlet connections.											
	ASTMA 181, ASAB 16.5 150PSI	Open for Free Air Discharge	2"	3"	4"	6"	8"	A	B	C	D	E	F	G	H	I	J	Base Unit	Adder for Each Flange			Adder for Each Pipe				
150	Yes	Yes	Yes	No	No	No	13 3/4	10 1/4	45 1/2	13 3/4	10 1/4	50 1/4	50 1/4	—	—	—	12	135	2"	3"	4"	6"	2"	3"	4"	6"
300	Yes	Yes	Yes	Yes	No	No	13 3/4	15 25/32	45 1/2	13 3/4	15 25/32	50 1/4	50 1/4	—	—	—	12	150	6	10	15	24	3	6	8	14
600	—	—	—	—	Yes	Yes	—	—	—	—	—	—	—	12 1/4	28 1/8	68	12	300	—	—	—	24	—	—	—	14

When ordering, specify air flow capacity, input voltage and type of inlet and outlet connections.





## ENGINEERED SOLUTIONS FOR CLEAN AIR

Trion manufactures a complete line of innovative indoor air cleaning products to clean the air in industrial plants, commercial buildings and offices, to provide a clean, safe environment.

**TRION** *INC.*

Call us today for the name of your local distributor! 1-800-227-3917

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TRION Inc., having a policy of continuous product improvement, reserves the right to make changes in design and specification without notice.

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