

RELIABLE AND EFFICIENT WET TREATMENT SOLUTION



APPLICATIONS

Epitaxy
 APCVD
 LPCVD
 PECVD
 HDP-CVD
 Metal Etch
 Poly Etch

ADVANTAGES

Extensive process applications database for flexible configurations
 Low maintenance required
 Low resource consumption reduces cost of ownership
 Large worldwide installed base with over 4,000 installations
 Advanced safety features including full PLC control system
 High-efficiency, 2-stage water system for higher process tool uptime
 Advanced inlet designs for longer maintenance intervals
 110% secondary containment

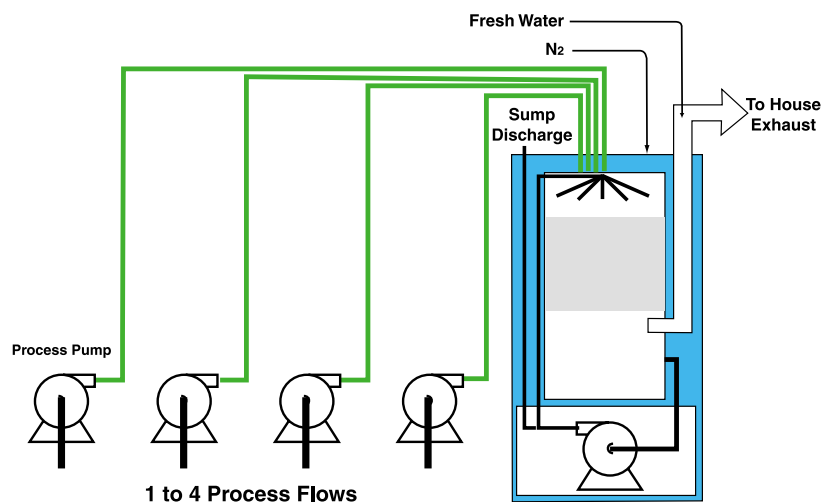
Reliable treatment systems are critical to the productivity of advanced process tools. A treatment solution must have high uptime and be flexible enough to handle changing process and environmental needs. The ATMI Vector[®] ULTRA series is uniquely suited to meet these challenges.

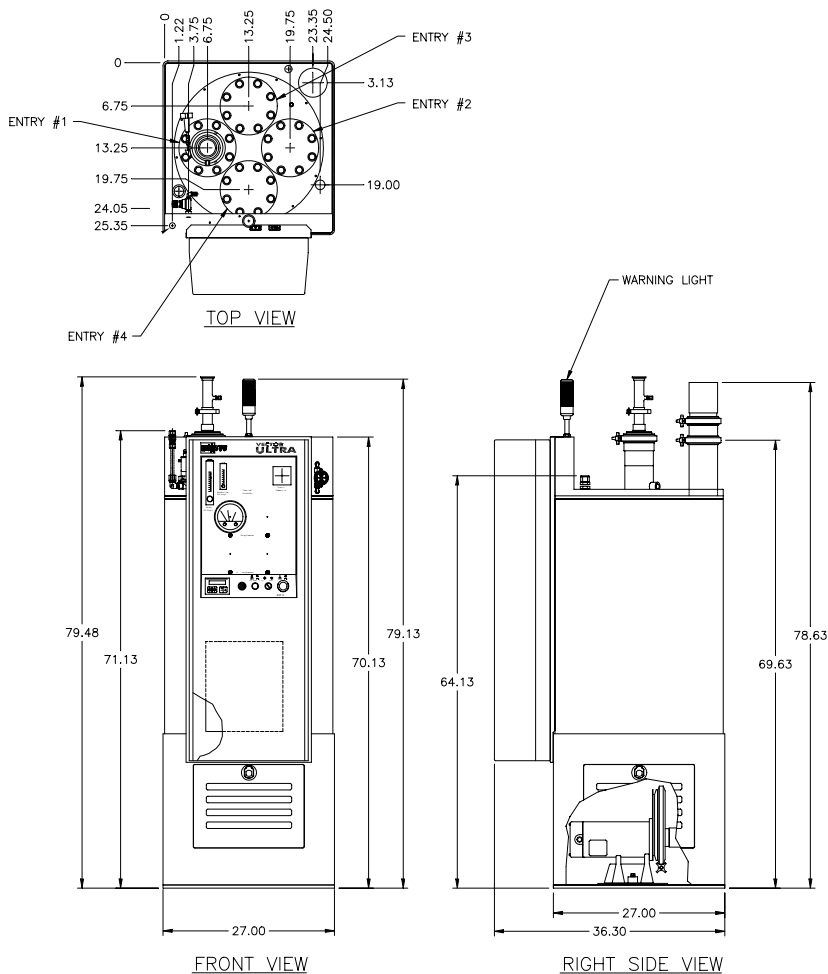
The Vector[®] ULTRA 3000 is a proven solution for a variety of processes including Etch, CVD, and Epi. An extensive database of applications and removal efficiencies is used to customize the best solution for a given process. Water-soluble effluent gases such as F₂, Cl₂, NH₃, SiF₄, HF and particulates can be removed with greater than 99% efficiency with the 2-stage water system. An optional chemical injection system can provide even greater efficiencies for some processes.

The primary stage uses a co-current, cylindrical packed-column design with high recirculating water flow while a counter-current second-stage provides further treatment of the effluent gases. This efficient design allows for water consumption as low as 0.5 gpm and contributes to its low cost of ownership. Multiple safety features include double containment, built-in redundancy, safety containment, and a PLC-based monitoring and control system.

The Vector[®] ULTRA 3000 can be configured to treat 1 to 4 effluent streams using a variety of advanced inlet designs. These inlets minimize clogging and reduce maintenance requirements. An extensive portfolio of options and field upgrades provide flexible solutions for different treatment demands.

The Vector[®] ULTRA 3000 has been used successfully by nearly every major semiconductor manufacturer and is supported by a worldwide network of ATMI service and support.





TOOL COMMUNICATION AND INTERLOCKS

Dry contacts (Standard)

OPTIONS AND ACCESSORIES

Safety containment cage

Chemical injection

Remote control

Communication cables

Extended warranty

Spare parts kit

RS-232

RS-485

Multiple inlet types

Electrical supply options:

200 VAC, 3 PH, 50/60 Hz

380 VAC, 3 PH, 50 Hz

460 VAC, 3 PH, 60 Hz

PERFORMANCE SPECIFICATIONS

Process Flow	1-4 inlets, Type 9 (std.)
Per Inlet- Typical	300 slm (10.6 scfm)
Per System- Max.(1)	2,265 slm (80 scfm)
Compressed Gas	
Nitrogen-per inlet (1)	14 slm (0.5 scfm)
Water Consumption	
Fresh Water(1)	0.5 to 4.0 gpm (1.9 to 15.2 slm)
Power Consumption	1100 watts
Reliability	
MTBF	> 8,000 hours
MTRR	< 2 hours

FACILITIES SPECIFICATIONS

Connections	
Process Inlet(s)	KF-40 or KF-50
Process Exhaust	-2.0 in w.c. (-4.9 mbar) 4" Diameter (102 mm)
Nitrogen	80 psig (5.5 bar) 1/4" compression fitting
Fresh Water	30 psi (2.1 bar) 1/2" compression fitting
Drain, Pressurized	5 gpm (19 slm) 3/4" NPT, PVC female
Electrical Supply	208/230 VAC, 50/60 Hz, 3-phase, 10 A
Overall Dimensions	79.5 H x 27 W x 36.3 D in (2,019 x 686 x 922 mm)
Clearance	
Front	36" (914 mm)
Right	24" (610 mm)
Left	12" (305 mm)
Weight	
Shipping, Dry	450 lbs (204 kg)
Operating	570 lbs (258 kg)

(1) Process dependent for application