



**AIR CONTROL, INC.**  
*makes air clean*

## Microvoid CS-41 Chemical Process Station

Designed to operate in a cleanroom, the Microvoid Model CS-41 has an open upper architecture, allowing overhead cleanroom laminar flow air to 'wash' the interior of the station, creating an ultra-pure process environment. The CS-41 is also designed very carefully to ensure operator protection, passing the strictest ASHRAE 110 trace gas containment test.



**The Microvoid Model CS-41 Chemical Wet Process Station has been Air Control's "workhorse" model since 1970.**

## Specific features of the Microvoid Model CS-41:

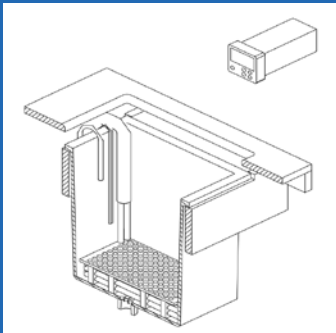
- A full unit-width leak containment tub/exhaust plenum, underneath the worksurface
- A wide array of chemical processing temperature controlled baths, rinse tanks, and process tooling (spinners, hot plate wells, heated ultrasonic cleaning tanks) available for 'flush/recessed' installation within the wet bench
- Lip exhaust around all bath or well perimeters for localized high velocity fume containment
- Complete PLC/HMI interface and control of all wet bench system parameters traditionally available in all Microvoid Wet Process Station models
- All safety systems and interlocks/inhibits, alarm hierarchies, and BMS communications capabilities available in all Microvoid Wet Process Stations
- Vented base cabinets underneath containment tub/plenum
- Chemical waste collection carboys in base cabinet in leak containment drawers or carts



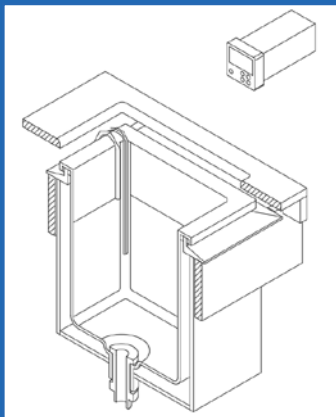
The Microvoid Model CS-41 allows for complete flexibility in terms of user process needs. Air Control's proprietary "floating infrastructure" feature facilitates easy lift-out of any recessed process bath or sub system, along with its under-worksurface support infrastructure. This simplifies replacement of baths and systems in the future without cutting and re-welding of station infrastructures. Additionally, all CS-41's are designed with accessible wiring chases, plumbing pass-throughs, extra electrical compartment space, PLC I/O upgrade availability, and physical space for future sub system controllers, generators, and monitors.



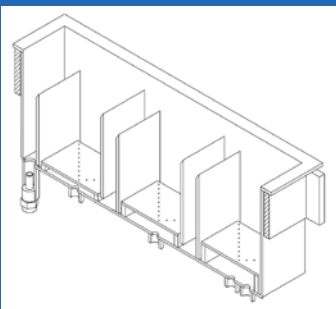
Many Optional Custom Tanks and Baths Available for Installation in the CS-41, including the Following:



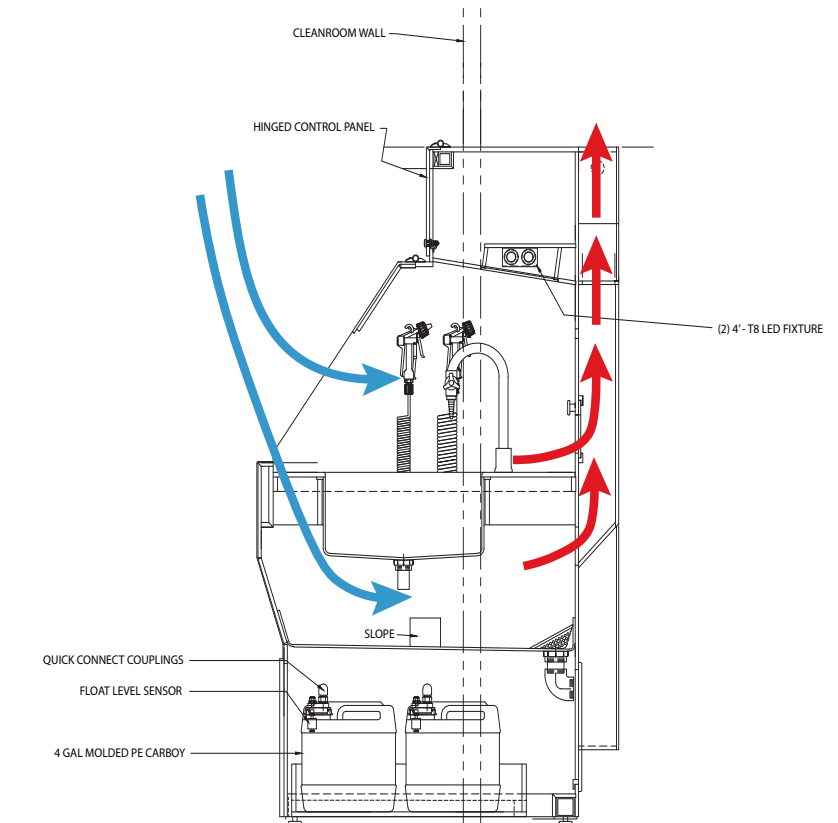
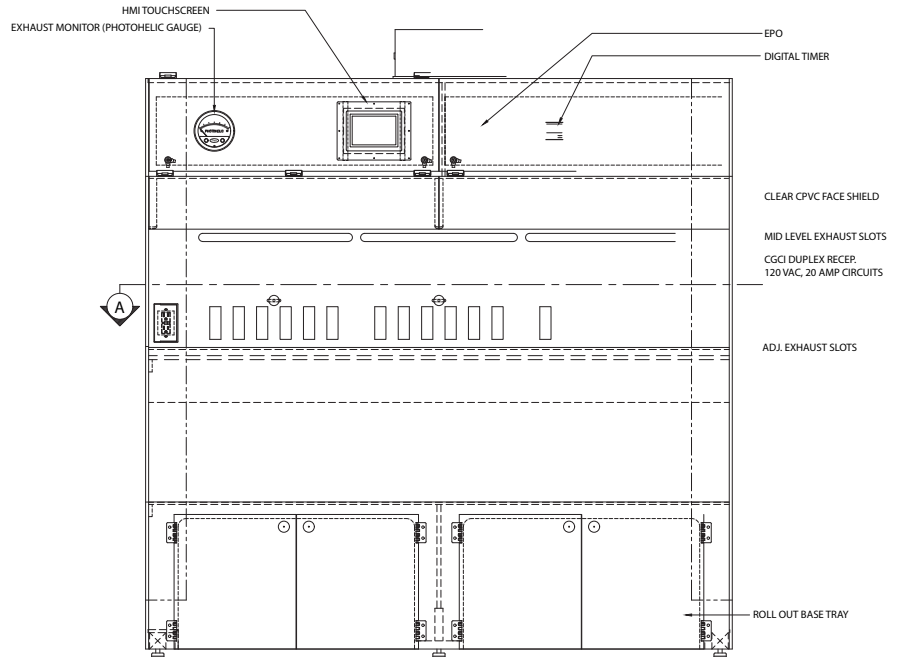
T-921 Etch Tank - High Temperature to 200 °C



T-926 Etch Tank - Heated Quartz Vessel



T-980 Cascade Rinse Tank



The Microvoid Model CS-41 is the safest Chemical Wet Process Station on the market. Each unit is customized to meet the user needs, but also the environmental, health and safety codes for any particular facility. Typical safety features available are:

#### GENERAL SAFETY PROVISIONS AVAILABLE:

- Vertical sliding sash stop override alarm (CS-41 may have hinged or vertical sliding eyeshield)
- Exhaust failure alarm and hood power interlock
- EPO manual reset
- Drains to waste carboys interlocked to carboy liquid level, leak detection, process chemical temperature below 60C, and incorrect connection status
- Hood power interlocked to leak detection in base cabinet with audible alarm
- Heated tanks interlocked to power for tank overtemp alarm, low fluid level, immersion heater purge loss
- Over current protection and grounding for solvent hoods
- Hot plate lip exhausted wells have thermocouple monitor interlocked to hot plate power should well reach an overtemp condition
- Central control system via touch screen PLC (HMI) - should any alarm condition occur, control system interlocked such that process hood operation interrupted until condition corrected
- Solvent hoods have purged electrical compartments. Purge loss interlocked to hood power
- Waste chemical carboys in solvent stations have intrinsically safe low voltage electrical liquid level connections
- FM-4910 compliance
- 3rd Party UL inspection and labeling of each unit
- 3rd Party ASHRAE 110 containment testing of each unit
- SECS/GEMS compatible
- SEMI S2 compliant
- Explosion Proof electricals for solvent stations if needed

