MICROVOID® FH-25 Polypropylene or Stainless Steel Wet Process Hoods

Microvoid® Model FH-25 Wet Process Hoods are ideal for use in corrosive environments in the laboratory and production line. Corrosion resistant polypropylene or stainless steel construction makes the FH-25 well-suited for applications involving almost any environment including strong acids, bases and many solvents.

The FH-25 features front located valve and instrument panels for easy access and servicing. The vertical sliding sash offers full operator protection and continuous easy access to the hood interior, while reducing hood CFM requirements. A complete line of standard and custom process tanks and accessories can be installed to meet various process requirements.

Model FH-25 By-Pass Wet Process Hoods exhaust a near-constant volume of air regardless of the sash position; this is accomplished with bypass openings above and below the eyeshield.

Microvoid® Model FH-25 By-Pass Wet Process Hood Specifications:

- Polypropylene (PP) construction in 3/8 inch and 1/2 inch white stress-relieved material.
- Stainless steel (SS) units constructed in 304SS, with 316L work deck segments and tanks. All process tanks electro polished for mirror finish and improved corrosion resistance.
- 48”, 60”, 72”, 96”, or 120” inches wide, 35-3/8 inches deep, and 83 inches high over all (including a 6” high removable exhaust collar(s).
- Segmented work surface 27 inches deep and 36 inches above the floor with front located spill containment lip.
- Top located 8-inch diameter exhaust collar(s) with butterfly damper.
- Across-the-work surface exhaust with adjustable louvered shutters, and above-the-work surface exhaust with adjustable shutters.
- Top-located fluorescent lighting, with translucent polypropylene window in fume-tight sealed compartment.
- Vertically sliding, counterweighted for ease of operation, fully closing polycarbonate sash eyeshield, with sash mechanical stop at 18” opening with visual and audible alarm if over-ridden.
- Photohelic exhaust monitor with alarm, station power interlock, manual reset feature, and EPO emergency power off switch.
- Stainless steel solvent wet benches may be provided to meet Class I, Division 2 electrical requirements.
- Central hood systems touch screen controller provides centralized control of all hood systems and safety provisions.
- Modular design with segmented work surface (solid or perforated) and easily removable sinks, tanks, and wells (listed separately) with/without lip exhaust.
- Full length tub beneath work surface, bottom sloped toward 1-1/2 inch drain plumbed to rear and with exhaust ports connecting to exhaust system.
- Recessed, segmented sloping instrument panel below work surface level, removable for easy servicing.
- Totally enclosed leak-proof electrical compartment behind instrument panel with wiring case(s) to rear of unit.
- Base storage cabinet with leak-tight floor, hinged front access doors, and rear access panel.
- 1 inch levelers for easy installation.
- All electrical wiring to National Electrical Code. 115VAC 60Hz, single phase. Termination at rear of unit.
- All supply and drain plumbing of low corrosion PFA, PVDF, polypro, PVC, or stainless steel, according to customer process, chemical compatibilities and level of process purity required.
- Wet process hood height, eyeshield dimensions, and access opening height are chosen for comfortable standup operation with full eye protection by the taller 80% of all adult females and the shorter 50% of all adult males, according to anthropometric tables.
- Pressure drop across the fume hood exhaust system when operating at an average air velocity through the front access opening of 100 feet per minute is less than 0.25 inches of water.
- A variety of etch tanks, rinse tanks, and process tanks are available. Fire retardant polypro is available in several materials, including FM-4910 compliant selections.

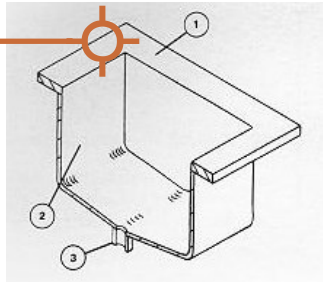
The Microvoid® FH-25 Wet Process Hood is custom crafted to your specifications, yet priced as a standard unit.

Air Control is prepared to work with your engineers to specify completely instrumented semi-automated systems, matched to their present process and adaptable to their future process. An investment in a Microvoid® is truly an investment in the future.

Below are just some of the options that can be incorporated into your Microvoid® FH-25 Wet Process Hood.

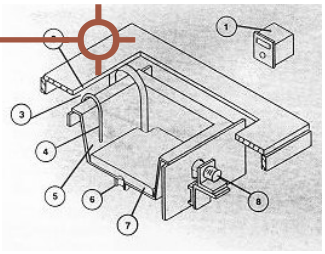
The FH-25 features a full-length tub beneath a work surface tailored to your process or a wide variety of sinks, tanks and wash systems.

Options and Accessories



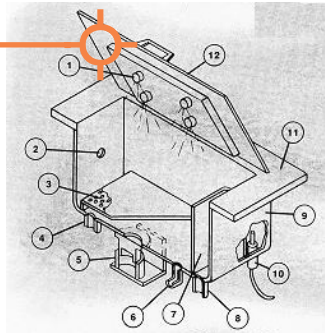
General Purpose Polypro Sink – T-995

1. Work surface segment 1/2” thick.
2. Fabricated from 1/4” white polypropylene. Formed tank bottom sloped to center drain, insures easy cleaning and complete drainage.
3. 1” drain.
4. Any size available.



Etch Tank–High Temperature to 200° C – T921

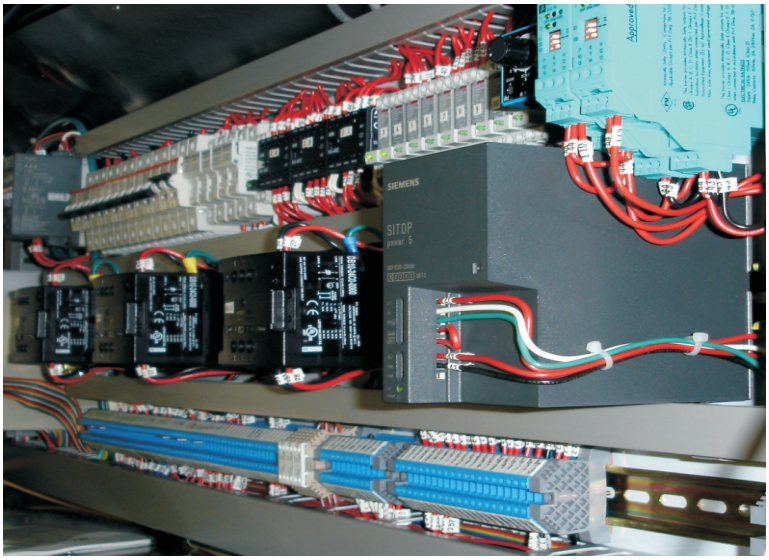
1. Digital readout temperature controller with proportional control, accuracy of ± 0.25% of span.
2. Cut out in work surface.
3. Lip exhaust
4. Teflon sleeved thermocouple.
5. Molded P.F.A. teflon tank.
5. Drain (optional).
6. Bottom located teflon encapsulated immersion heater.
7. Liquid level sensor and heater cut-off



Mult-Wash System with Transparent Lid – T985

1. Spray nozzels.
2. Low flow DI reclaim port.
3. Perforated stand-off shelf.
4. DI water inlet fast/slow flow.
5. Pneumatic quick dump valve.
6. Nitrogen inlet for agitation.
7. Overflow weir.
8. Tank drain.
9. Fabricated from 1/4” white polypropylene with formed tank bottom.
10. Resistivity probe (optional).
11. Work surface segment 1/2” thick.

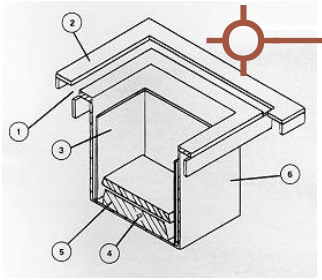
The FH-25 can be custom engineered to include a wide variety of sensors, computerized controls, and even robotics. All wiring and controls are easily accessible and properly marked.



- Non-metalic construction for trace metals analysis.
- Process baths.
- Sinks and rinse tanks.
- DI Loop systems.
- Glassware drying racks.
- Hot plates.
- DI, gas and electrical fixtures.
- Aspirators and drain carboys.
- Ionizers.
- CO2 Fire supression.
- Class 10 ULPA filters (Boron free).
- UL, CSA, CE, FM-4910, ASHRAE, and SEMI S2 compliant, as required.

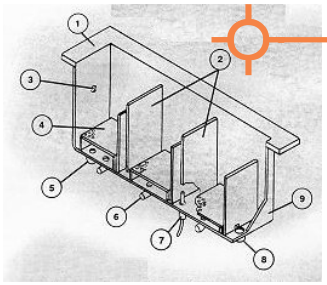
See www.AirControl-Inc.com for more options and accessories.

Options and Accessories continued



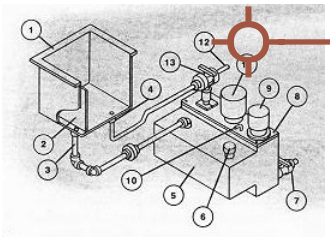
Hot Plate Well – T-950

1. Lip exhaust (optional).
2. Work surface segment 1/2” thick.
3. Replaceable radiant heat baffle.
4. Open bottom drain (tub units only).
5. Hot plate with remote controls.
6. Fabricated from 1/4” white flame retardant polypropylene.



Cascade Rinse Tank – T-980

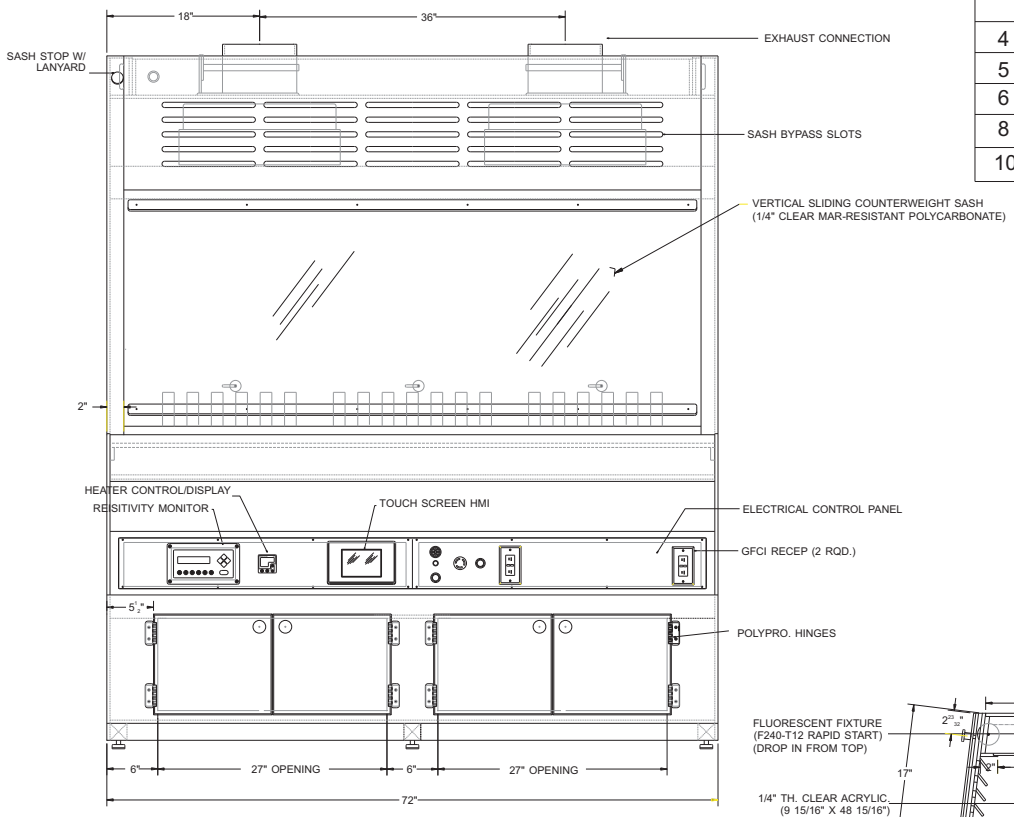
1. Work surface segment 1/2” thick.
2. Double weir configuration.
3. Low flow DI reclaim port (optional).
4. Perforated stand-off shelf.
5. DI water inlet fast/slow flow.
6. Nitrogen inlet for agitation typical (3) compartments.
7. Resistivity probe (optional).
8. Overflow drain.
9. Fabricated from 1/4” white polypropylene with formed tank bottom.



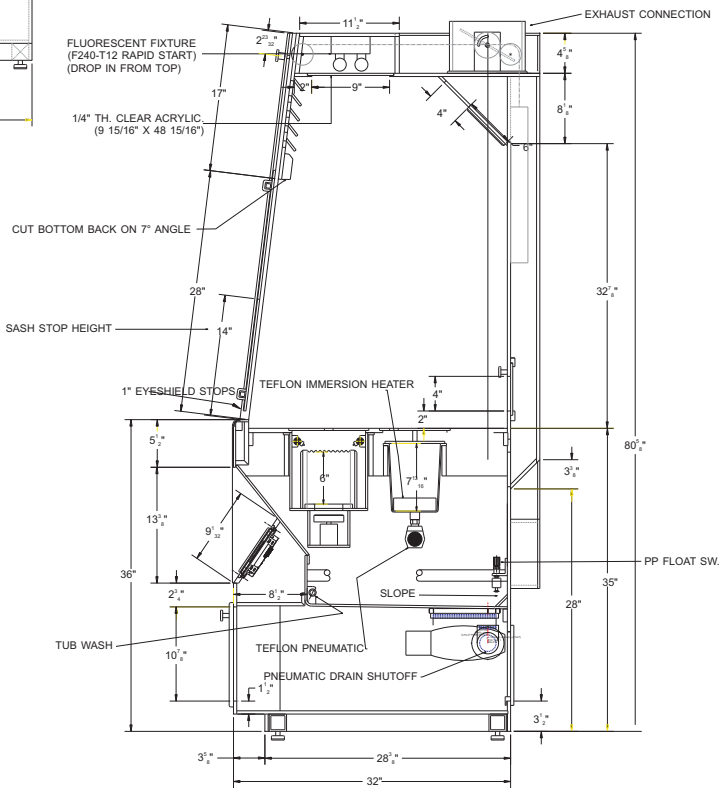
Acid Recirculating Filtration System – T-925

1. Process tank.
2. Overflow weir.
3. Tank drain.
4. Inlet.
5. Storage tank.
6. Fill cap.
7. Ball valve to drain storage tank.
8. Removable cover.
9. Pump.
10. Vent to exhaust system.
11. Filter housing.
12. Storage tank drain.
13. Three-way ball valve.

WIDTH	COLLAR SIZE	100 FPM	S.P. LOSS (WG)
4 FT.	(1) 8”	600 cfm	0.25”
5 FT.	(1) 8”	750 cfm	0.25”
6 FT.	(2) 8”	900 cfm	0.25
8 FT.	(2) 8”	1200 cfm	0.25”
10 FT.	(2) 8”	1500 cfm	0.25”



FRONT VIEW



SIDE VIEW

NOTES:

1. HOOD MATERIAL WHITE STRESS RELIEVED POLYPROPYLENE UNLESS OTHERWISE SPECIFIED.
2. ALL PROCESS TANKS WILL HAVE DRAIN VALVES THAT WILL INTERLOCK WITH THE ACID NEUTRALIZATION SYSTEMS HIGH LEVEL SENSOR.
3. THE INCOMING DI VALVES WILL CLOSE UPON HIGH LL IN QDR SUMP TO PREVENT OVERFLOW.

CONNECTION:

DI SUPPLY- 1/2" PFA FLARE (50 PSI)
DI RETURN- 1/4" PFA FLARE
CDA- 1/2" FNPT. (80 PSI MAX)
N2- 1/2" FNPT. (70 PSI MAX)
ACID DRAIN- 1 1/2" NPT, PVDF
EXHAUST- 12" ROUND PVC PIPE COLLAR (670 CFM @~1/4" S.P.) W/ SASH AT 14" HIGH OPENING
ELECTRICAL- TBD

AIR CONTROL, INC.
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