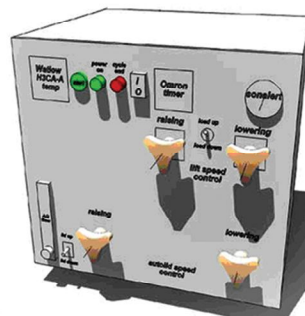


SEMI-AUTO TANK FRONT VIEW

## XE-LAB

HIGH TEMPERATURE ETCH SYSTEM

### CONTROLLER



The Accubath XE-LAB is a two module system that allows for chemical processes up to 300°C and was designed for wet etching patterned sapphire substrates (PSS). The tank module includes an automated lid and end effector for loading and unloading. The control module includes all the basic controls and safety systems for operating the process tank. When used within a properly exhausted work area, the XE-LAB allows for safe high temp acid processing without the cost and space needed for an automated wet station.

### Facilities Requirements

Tank Electrical .....	200-240VAC Single phase, 20A, 3 wire
Control Module Electrical .....	120VAC single phase, 2A, Grounded plug
N2 or CDA .....	60PSI, 0.2SCFM, 1/4" tube connection
Aquaseal DI Water .....	25PSI, 2LPM, 1/4" tube connection
Autolid DI Water .....	25PSI, 0.1LPM, 1/4" tube connection
DI Water Drain .....	1/4" tube connection, 0.1LPM max.
Aquaseal Drain .....	3/8" tube connection, 2LPM
Tank Drain .....	Aspirator wand or suction pump, acid resistant

### Tank Module Features

- All wetted quartz construction
- Special "high flow" Aquaseal to maintain housing integrity
- (2) quartz sheathed RTD temperature probes (PT100 type)
- 2400/3200 watt heaters for fast heatup
- Quartz level sense line for low level
- Pneumatic Cylinder with quartz end effector, carrier, and 2"/4" boat
- Hydraulically actuated quartz lid

### Control Module Features

- Temperature Controller with Auto tune PID
- Separate heater and tank Overtemperature controllers
- Low Liquid Monitor
- Redundant mechanical relay cuts off power in alarm conditions
- Process Timer with end of cycle alarm
- Auto lid speed controls and actuation
- Elevator speed controls and actuation
- Rear panel power disconnect and circuit protection