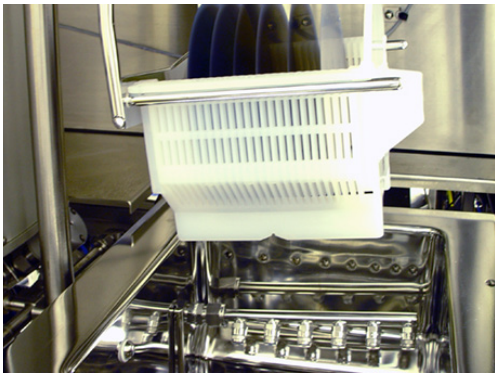
JST Manufacturing, INC.

HEATED DOWNFLOW BATH

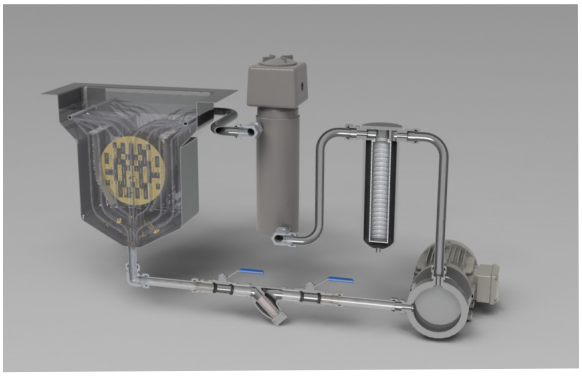


BASIC FEATURES

- Temp Range 40ºC- 120ºC +/- .5ºC Sidewall Heaters
- Thermocouple, Type J Teflon Coated Temperature Probe
- PLC Touch Screen Controller
- Liquid Level Detection Interlocked to Pump
- Dual diaphragm Pneumatic Pump.
- Air Operated Drain Valve
- Dispersion Cassette Platform.

OPTIONS

- Hinged or Auto Lid
- Dedicated Drain to Carboy
- Flow Sensor for control
- Electric Centrifugal Pump
- Auto Chemical fill
- Auto Chemical Blending
- Pump Stroke Monitoring
- Temperature Range 40ºC- 180ºC +/- 0.5ºC with Inline Heater
- Ultrasonics



JST's heated downflow baths are designed for metal lift off and removal of heavy particles that have a tendency to fall to the bottom of the tank. Filtered and heated solvent chemistry flows directly onto the submersed parts lifting the containminants and flowing them down the bottom of the tank and out the bath drain. This downflow action eliminates the possiblity of sheeting films redepositing back onto the product. In a typical overflow bath, chemistry is introduced into the tank via the bottom and flows over the product and out the top into the overflow weir leaving heavier films to circulate within the body of the bath. With the downflow design the particles are pulled out of the tank and captured in a filter trap.

An inline filter housing accepts a standard 10 inch dual o-ring filter cartridge allowing users to install the type of filter cartridge they need depending on chemistry PH and particle removal size required. For applications that require reclaim, a removeable filter trap is available.

The heating elements are bonded to the outer walls, insulated and contained with an outer shroud. The heating element in the double wall housing is N2 purge. Inline heaters are recommended for large, high temperature baths that require a fast heat up time or higher processing temperatures.

A PID controller using a Type J RTD temperature probe controls the bath temperature. The controller has a programmable temperature set point and process timer. An audio alarm sounds if the bath goes out of the specified operating temperature. In an over temperature condition the controller will turn off the heaters. A heating element snap switch protects in an over temperature condition in case the controller or probe fails. A liquid level detection monitors the chemistry level in the bath to keep a safe operating level.

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