

# PCB PROCESSING TANKS

Mega is the leading manufacturer of small PCB processing tanks which are used with great success in both Industry and Education. The successful proven design features self contained units each of which are free standing and will accept boards up to 320 x 260mm (12.6" x 10.23"). Each unit is formed in two parts, the high density polypropylene inside tank being injection moulded as a single piece. This method of construction has proved to be far more efficient than the old method of welding together several vacuum formed parts which by design gives inherent danger of leaks from joins. This one piece design is an important safety feature which should be considered when choosing PCB tanks.

This inside tank has an integral top surround, which secures over the second of the two parts, a rigid rotationally moulded polyethylene outer case. A splash proof lid with full length board holder mesh covers a working area of 5 litre capacity. The board holders feature yellow side clips which can be secured to close the sides of the mesh when very small boards are being processed. For added safety the inside tank is bolted to the outer case at the bottom of the unit. This must be removed before access to electrical components. Where applicable, the specially developed 500 watt heater with protective silica sheath is externally mounted in the tank, as is the thermostat sensor.

The heater is fitted with an internal re-settable safety device to protect the tank if it is inadvertently turned on without any liquid in. All splash proof electrical controls including a variable thermostat setting are located in a recessed panel on the case front, which prevents liquid getting in contact with the electrics. For ultimate convenience of use we recommend all our PA processing tanks are used in conjunction with the Process Tank Workstation Tray featured on page 18. We also recommend that all tanks are used with a RCD power break device such as the unit featured on page 55. All the PA series tanks are designed to be modular, the following being an ideal processing sequence:

Develop - Spray Wash - Etch - Spray Wash - Resist Strip - Spray Wash - Immerse Tin

## PA103 Spray Wash

This tank contains two spray wash bars at the top, driven from a single mains water inlet, between which the developed, etched stripped or tinned board can be suspended to be rinsed. A bottom tube permits used water to be run off to waste. Width 180mm, Depth 525mm, Height 380mm.

Order CodeDescription500-002PA103 Spray wash tank



### PA104 Bubble Etch



This, the most popular of single tanks, includes the heater and thermostat sensor as described above and has a pump fitted which forces air through two bubble bars to provide efficient and even etching. Illuminated switches control mains power and the pump whilst a neon indicates heater operation. The switches and neon have splash proof covers. The temperature is set by adjusting the variable thermostat control knob. (Optimum temperature for Ferric Chloride 40 - 45 °C). The tank is supplied with a syphon, IEC socket and 2 metres mains lead with moulded 13amp plug. Width 180mm, Depth 525mm, Height 380mm.

Order Code Description 500-003 PA104 Bubble etch tank

### PA107 Universal Develop, Strip or Tin

Complete with thermostatically controlled heater to cover PCB chemical temperature range of 10°C to 55°C. The tank can be thus selected for DEVELOP (25°C), RESIST STRIP (45°C) or IMMERSE TIN (21°C). Neons indicate when the mains heater is operative. Supplied complete with a syphon, IEC socket and 2 metre mains cable with moulded 13amp plug. Width 180mm, Depth 525mm, Height 380mm.

Order Code Description 500-004 PA107 Universal tank



### PA207 Two-Tank Unit Develop, Strip or Tin and Wash



A cost effective improvement over the standard PA107 Universal Tank. This unit includes a process tank as above plus an integral spray wash tank. The spray wash tank is solenoid operated with all electrical controls located on the front panel. Connections are provided at the rear for drain and cold water requirements. The integral spray wash tank offers safer, cleaner and more efficient processing of boards than the standard Universal Tank and being wider also gives greater stability. Complete with an IEC socket and supplied with 2 metres mains cable with moulded 13amp plug and a syphon. Width 275mm, Depth 525mm, Height 380mm.

Order Code Description 500-036 PA207 Two-Tank Uuniversal

### PA210 Two-Tank Unit Etch and Wash

An improvement over a standard Bubble Etch Tank. This unit is the same as the PA104 Bubble Etch Tank with the addition of an integral spray wash tank. The spray wash is solenoid operated and all electrical controls are on the front panel. Connections are provided at the rear for drain and cold water requirements. The integral spray wash tank offers safer and more efficient etching of boards than a standard bubble etch tank and being wider also gives greater stability. Complete with an IEC socket and supplied with 2 metres mains cable with moulded 13amp plug and a syphon. Width 275mm, Depth 525mm, Height 380mm.



Order Code Description 500-005 PA210 Etch wash tank

### PA310 Tri-Tank Unit Develop, Wash and Etch

Our best selling and most popular PCB processing unit. A self-contained triple process unit with built-in DEVELOP / SPRAY WASH / BUBBLE ETCH functions providing a convenient bench standing system. The PA310 eliminates the normal untidiness associated with producing PCBs

to the solderable-etched stage. A RESIST STRIP / SPRAY WASH / IMMERSE TIN combination can be added to provide a full PCB processing run. Function tanks and splash proof controls are as standard, with all electrics brought together on the recessed front panel. The connections are provided at the rear for drain and cold water requirements. Complete with IEC socket, 2 metre mains cable with moulded 13amp plug and two syphons. Width 400mm, Depth 525mm, Height 380mm.



Order Code Description 500-006 PA310 Tri-tank

### PA318 Tri-Tank 12" x 20"

Develop, Wash and Etch



For those requiring a larger three tank unit the PA318 is available. Featuring a larger fabricated outer and larger inner tanks, panels to 12" x 20" can be processed. The same processing sequence as the PA310 is offered, namely develop/wash/etch. Width 400mm, Depth 525mm, Height 600mm.

Order Code Description 500-081 PA318 Tri-Tank Dev/Etch/Wash

# Process Tank Workstation Tray, Splash Back and Base Unit

New products which provide a clean, safe and efficient platform to use Mega's PCB Processing Tanks.



### **Process Tank Workstation Tray**

This can be used on any bench top or in combination with a base unit. It will accommodate a combination of units including 4 single tanks. All normal splashes and drips associated with PCB manufacturing are caught in the tray which has a capacity of 6 litres. The tray is manufactured from smooth, easily wiped clean ABS. It is designed so any electrical supply to the tanks is kept away from any liquid.

#### Splash Back

This provides protection to surrounding walls. Supplied complete with fixings to enable it to be secured to the tray.

### Base Unit

Manufactured from a steel, painted frame with poly-propylene cladding and black 6mm PVC doors. The design of the Base unit allows the Process Tank Workstation Tray to fit directly onto

it. Two lockable doors provide a storage area for chemicals. When used in conjunction with a Process Tank Workstation Tray this Base Unit provides tanks with an "ideal" working height of 850mm.

### **Stability Bars**

These provide additional anchoring for single tanks being used on a bench top or on the Process Tank Workstation Tray. The front rubber feet of the tanks are removable to enable the stability bar to be fitted. A large bar will fit into a Process Tank Workstation Tray whereas the small bar is for single, stand alone bench top tanks.

Order Code	Description
500-060	Process Tank Workstaion Tray
500-061	Workstation Tray Splashback & 2 Blocks
500-064	Base Unit for 500-060 Tray (ORDER TRAY SEPARATELY)
500-062	Lge Stability bar (for up to 4 single tanks)

