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PCB PROCESSING EQUIPMENT

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 now fitted with an internally mounted thermal fuse which will blow if it is inadvertently turned on without any liquid in the tank. 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.

We also recommend that all tanks are used with a RCD power break device. All the PA series tanks are designed to be modular, the following being an ideal processing sequence:
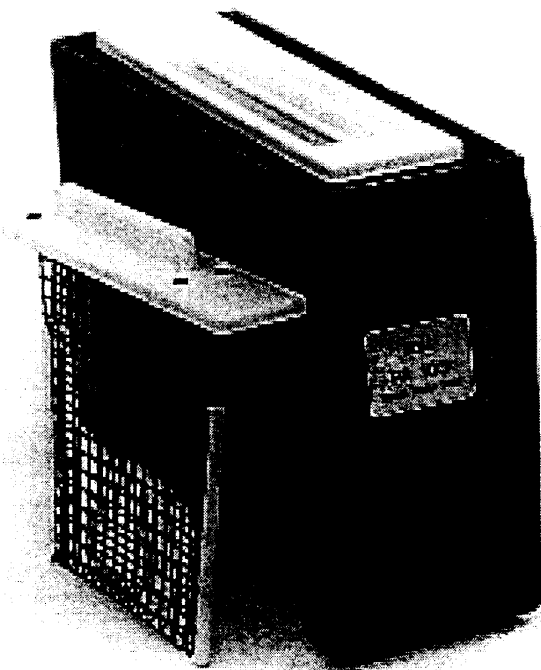
Develop	Spray Wash	Etch	Spray Wash	Resist Strip	Spray Wash	Immerse Tin

PA103 SPRAY WASH TANK

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.

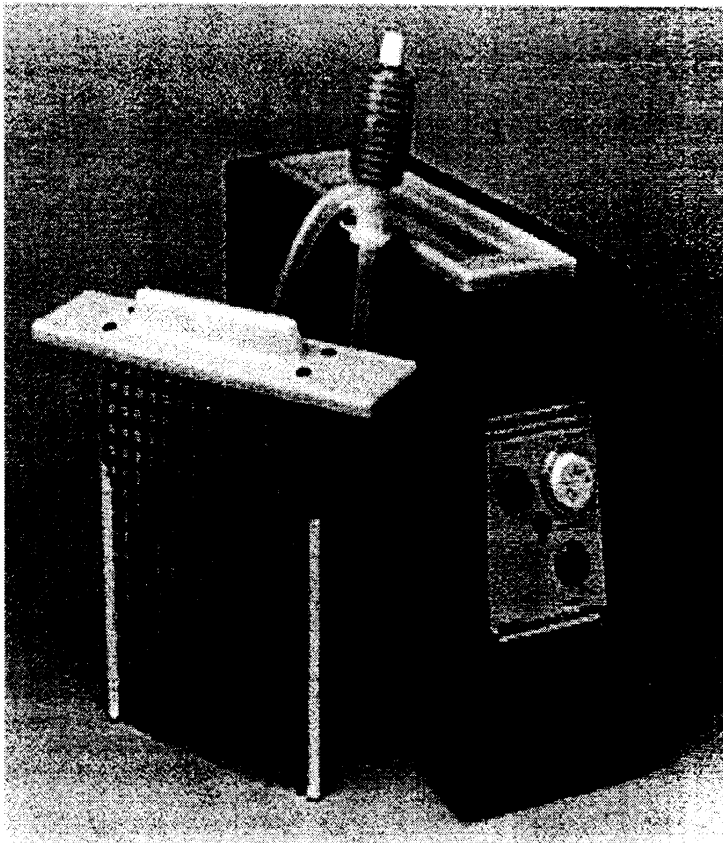| All the PA series tanks are designed to be modular, the following being an ideal processing sequence						
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PA107 UNIVERSAL TANK

PA107 UNIVERSAL TANK

Develop, Strip or Tin

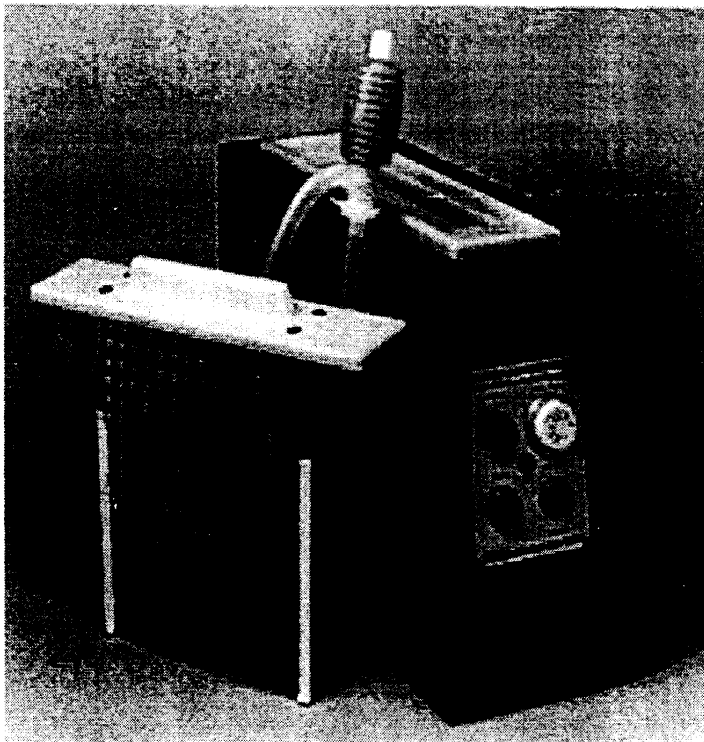Complete with thermostatically controlled heater to cover temperature range of 10 °C to 65°C. The tank can be thus selected for DEVELOP (25°C), RESIST STRIP (45°C) or IMMERSE TIN (21°C) . Neons indicate when the mains heater is operative. Supplied complete with a syphon, IEC socket and 2 metre mains cable with moulded 13amp plug.

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

PA104 BUBBLE ETCH TANK

PA104 BUBBLE ETCH TANK

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. Supplied 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.
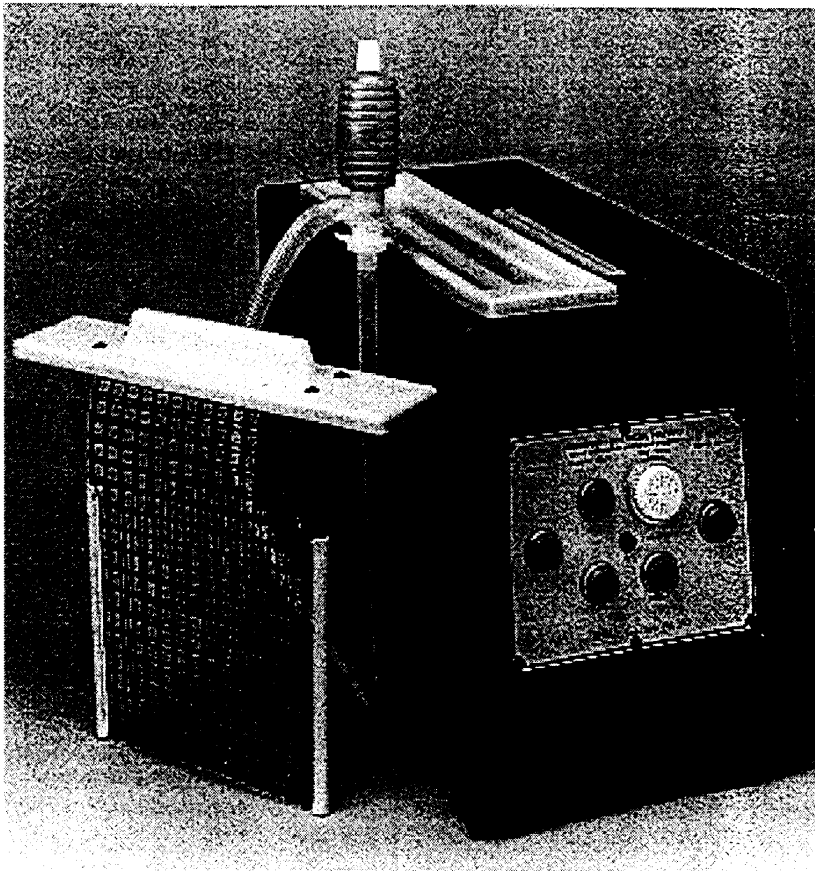
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PA210 TWO-TANK UNIT

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Etch & 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 IEC socket and supplied with a 2 metre mains cable with moulded 13 amp plug and syphon.
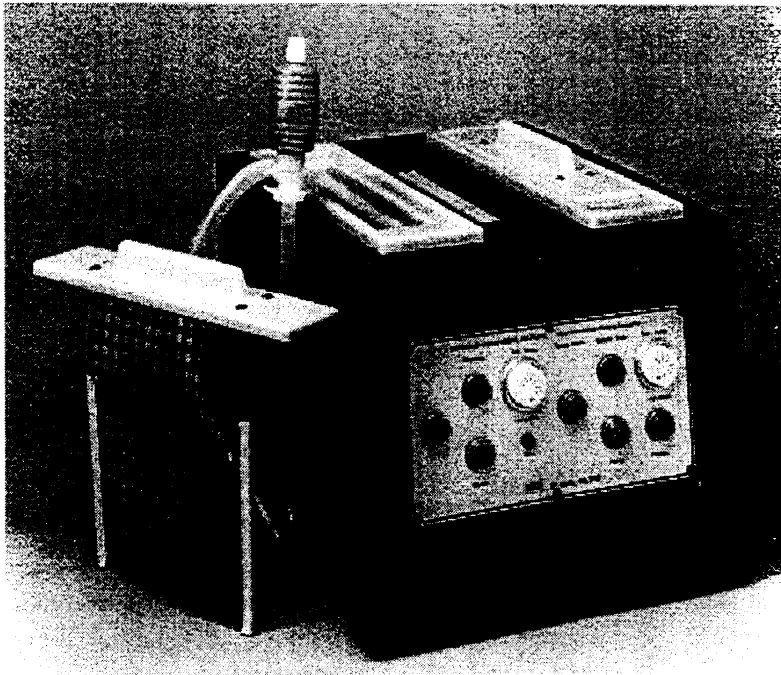
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PA310 TRI-TANK UNIT

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 eliminate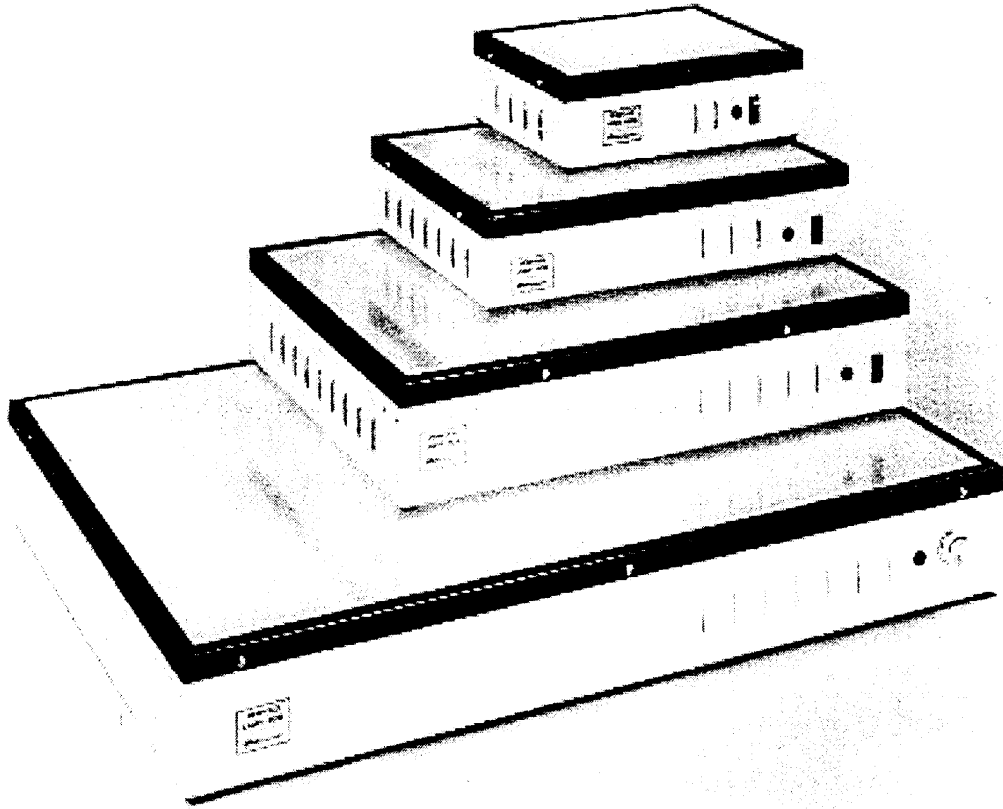s the normal untidiness associated producing PCBs to the solderable-etched stage. A RESIST STRIP / SPRAY WASH / IMMERSE TIN combination can be added to provide a full PCB processing run. Function tanks and splash proof controls are as standard, with all electrics brought together on the recessed front 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.P

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"LIGHT BOXES - LB410 / LB420

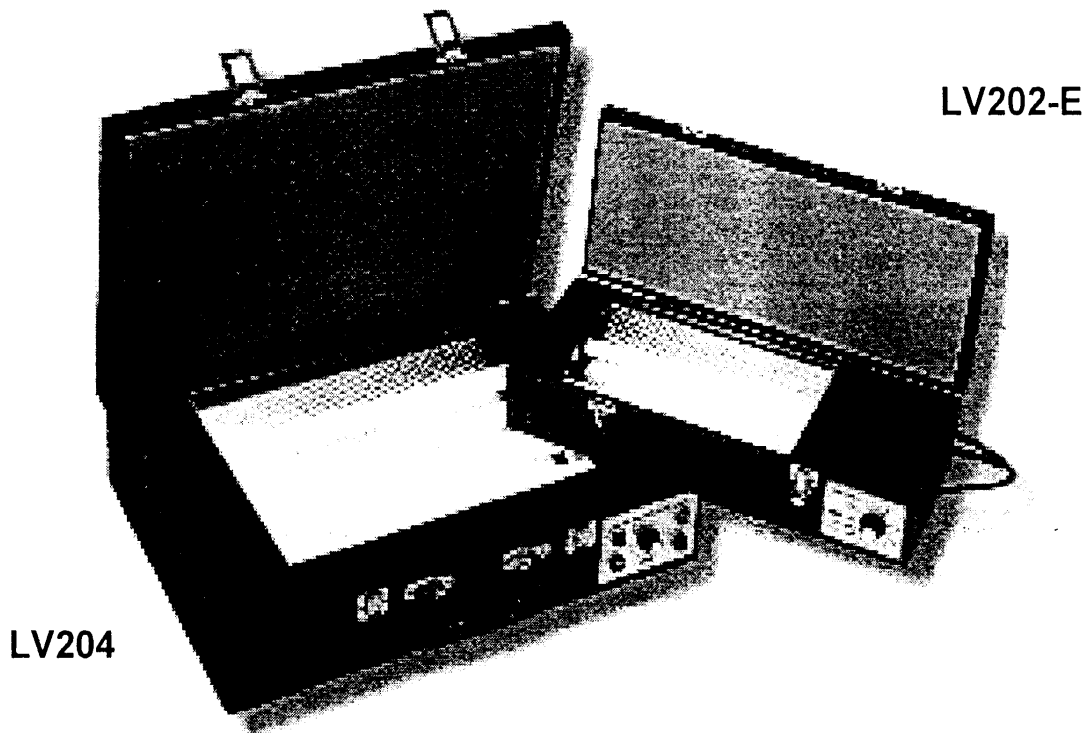## LB 410 PLAIN A3 & LB420 PLAIN A2 LIGHT BOXES

High quality light boxes - an invaluable aid to any artwork preparation.
Each case is constructed from 18 gauge steel featuring air vents in four sides and is completed using sheets of 050 opal perspex and glass which is secured by a black lid surround. This ensures both even temperature and illumination. The glass top means that a scalpel may be used to trim artworks directly on the illuminated surface.
 Five standard sizes from A4 to A0 are available. Colour corrected tubes are optionally available for the A3 to AO boxes. The cases are in a standard colour of white. A combined neon indicator ON /OFF switch is front mounted and all are supplied with fused IEC socket, 2 metres of mains lead and moulded 13 Amp plug.

Plain	DIN	Viewing Area	Glass	Perspex	Tubes	Weight
LB410	A3	304x454mm	3mm	3mm	2 x 15W x 18"	6.6 kgs
LB420	A2	425 x 604mm	3mm	3mm	2 x 20W x 24"	10.0 kgs

UV EXPOSURE UNITS LV202-E & LV204

LV202-E

LV204

Low Cost 'LV' UV Units

The steel cased LV models are the most cost effective UV units offered. The tubes are in the base which means the artwork has to be registered on the UV sensitive area and then placed face down onto the exposure area. Coloured black, each unit has a hinged lid containing a pressure pad which, when the lid is held closed by the two retaining clips, acts to force the artwork and sensitive material firmly together on the UV illuminated area. All controls are conveniently front mounted.

The **LV202-E** has a six minute mechanical timer which also acts as the mains switch. When the control knob is rotated to the required time the power is turned on and the exposure commences. The timer clicks off as soon as the exposure is completed.

The **LV204** controls consist of a mains ON/OFF switch and indicator, UV light start switch and amber indicator which goes off when the exposure is completed. The unit is fitted with an electronic timer which does not require re-setting for each exposure. Both UVs come complete with IEC socket and moulded 13 amp plug.

MODEL	Working Area	Timer	UV output	Dimensions	Weight
LV202-E	9 x 6.25" (229 x 159mm)	6 mins	2 x 8W	420 x 175 x 90mm	4.0 kgs
LV204	13 x 10.25" (330 x 260mm)	7.5 mins	4 x 15W	515 x 400 x 120mm	12.5 kgs