Splash/Splash Center

Etching machine

Introduction

The Splash is a laboratory spray etching machine with integrated rinse. The machine is suitable for single and double-sided copper-clad base material. This equipment is designed with a special focus on ergonomic, clean and low carryover etching and rinsing.

Areas of application:

- acid or aqueous-alkaline etching of circuit boards.
- Developing of positive or negative-working photoresists or laminates (aqueous-alkaline processable - add anti foam if necessary).
- Alkaline resist stripping.

In the Splash Center all wet process steps of photo positive pcb production can be processed in a single machine, without having to carry the dripping board to the next machine. In the spray chamber the pcb is etched, tank 1 and 2 include a cascade rinsing, tank 3 is used for alkaline developing and in tank 4 the etched circuit board can be tinned.

Features:

- maintenance-free spray etching system with special jet nozzles
- Etch rate of approximately 70 s in 35 micron Cu in fresh, warm FeCL3
- large window to the etching chamber made of transparent PVC
- maximum board size 210 x 300 mm (Splash XL 300 x 400mm)
- Resolution down to 0.1 mm
- suitable for all common acid etchants
- Opening door for etching zone with safety switch
- removable, etching shadow free titanium plate holders, can be locked in drip off position
- easy access to the interior, no tools needed, therefore easy to clean
- heated by quartz heater 1000 W
- thermostatically controlled etchant temperature
- Etching time is set by digital timer 1 s - 99 min., with count-down, end alarm and auto-reset function
- Overtemperature protection, response temperature 72 ° C
- Stand alone unit with integrated static rinse and drip off frame
- Splash Center with static rinse and a combined static and spray rinse activated by foot switch
- All tanks can be easily emptied by ball valves

Splash Center:

- A spray etching or spray developing chamber and 4 more treatment tanks
- Cascade rinsing with a static and a combined static / spray rinse; foot switch activated
- Tank 4 with magnetic coupled pump for revolving e.g. stripper
- integrated squeeze-off-dryer
- Collecting tray included in delivery

Technical Data

Splash			**Splash Center**	
LxWxH	60x66x120cm XL: 80x77x120cm		**LxWxH**	100x67x121 cm XL: 116x77x120 cm
Weight	35 kg / XL: 40kg		**Weight**	46 kg / XL: 56 kg
Tank capacity	25 l / XL: 40l		**Tank capacity**	25 l / XL: 40l
Power Supply	230V 50 Hz 1500W		**Power Supply**	230V 50 Hz 1500W
Materials	PVC, Titan, PP, Viton		**Materials**	PVC, Titan, PP, Viton
Maxi. Board size	210 x 300 mm / XL: 300 x 400 mm		**Maxi. Board size**	210 x 300 mm / XL: 300 x 400 mm
Heater	1000W Quarz heater		**Heater**	1000W Quarz heater

Tanks

			Splash Center		**Splash Center XL**
Nr.	**Name**	**Cont.**	**Mixture**	**Cont.**	**Mixture**
1	Spray Chamber	24l	13,5 kg FE3; 17 l water (or if used for developing: 24 l water and 240 g neg. developer)	36l	20,5 kg FE3; 25,5 l water (or if used for developing: 35 l water and 350 g neg. developer)
2	Static Rinse	8 l	water (possible 250g RX3)	16 l	water (possible 250g RX3)
3	Combined static/spray rinse	12 l	water	24 l	water
4	Strip tank	8 l	8 l water and 400 g NaOH	16 l	15,5 l water and 750 g NaOH
5	Reserve tank	8 l	e.g. f. chem. tinning	16 l	e.g. f. chem. tinning

Made In Germany