

# Automatic Cleaning Machine

## Hydro-clean LDS

### Linear Direct Spray



### Cleaning Application

- Removing all kinds of solder residues
  - Cleaning of micromechanical components
  - Removing contamination from handling and board manufacturing, FOD
  - Cleaning highly populated electronic assemblies with low standoff such as BGA, FC, CSP, BTC, QFN, MELF
  - Cleaning of power electronics
  - Cleaning sensitive electronic devices
  - One side misprints on complex assemblies
- Cleaning before conformal coating and wire bonding

### Unique Advantage

- Fully automatic spray-in-air closed loop zero drain system
- Triple capacity configuration
- Linear direct spray for equal washing of entire surface
- 100% filtration of entire DI water
- Optional triple rinse
- Hot air knife direct dry technology
- Illuminated glass door chamber for visual process control
- All process steps with up to 5 substeps
- for highest flexibility
- Wide range of standard and customized PCBA fixtures
- Clamping for all types of stencils
- Up to 3 fully separated liquid loops
- Low consumption of chemicals and water
- Proportional level sensors in all processes
- Outstanding options of water utilization

## Versions by Application

Wash + Rinse I + Rinse II + Drying PCBA after soldering, PCBA before coating , power electronics, micromechanics

## Filtration Options

Zero drain concept-close loop or open loop can be set by software

Special filtration strategy for the highest flow

First rinse filtration fully separated from second rinse filtration

## Technical Parameter

Machine dimension (L × W × H)	1 900 x 1 700 x 1930 mm
Weight (without liquid)	1000kg
Machine noisiness	LAeq <70 dB
Power supply voltage	3x 400/230 V, 50Hz
Power input	24,7 kVA
Volume of tank	70L
Working range	3-800x800mm
Washing - pressure on the nozzles max/min	2.5-3bar
Washing – max. flow	200L/min
Rinsing - pressure on the nozzles max/min	1.5-2bar
Rinsing - max. flow	180L/min

## Adjustable Parameter

Steel mesh washing time	0-99 min.
PCBA+Misprints washing time	0-99min.
Washing medium temperature	Room temp. - 60 °C
Rinsing temperature	Room temp. - 60 °C
Drying temperature	Room temp. - 110 °C
Drying time	0-99min
Specific conductance	0-99 μS/cm (2 <sup>nd</sup> rinse)