



# Products Process Optimization

**ZESTRON**  
*High Precision Cleaning*

# Bath Monitoring

For reliable and consistent cleaning results



Automatic monitoring system for precise real time concentration measurement for fresh and loaded cleaning baths



Automated concentration management system - real-time concentration measuring and automated dosage of cleaner concentrate and DI-water in a single module



Simple, easy to use method to evaluate concentration of pH-neutral and alkaline cleaning agents for fresh and loaded cleaning baths



A method to determine wash bath concentration as well as providing evidence of alkalinity of the cleaning agent

## Cleaning

## Rinsing

## Drying

## Analysis



Passive system for the partial recovery of the cleaning agent from exhaust vapor



Heavy metal adsorber for use with cleaning and rinsing baths

## Cleaning Agent Regeneration & Recovery

For a longer bath life and absorption of heavy metals from the cleaning bath



Indicates local distribution of carboxylic-based flux activators on PCBs



Indicates local distribution of resin-based residues on PCBs

## Surface Analytics

For reliable conformal coating and wire bonding processes

# Product Advantages

These products are developed for optimizing and securing your cleaning process, as well as for analyzing cleanliness reliability of the electronic assemblies.

## Bath Monitoring



### ZESTRON® EYE

- Precise and automatic real-time concentration measurement system for fresh and loaded cleaning baths
- Continuous data storage for traceability of the monitored process parameters
- Ability to integrate with the cleaning equipment PLC and automated dosing system



### ZESTRON® EYE CM

- Automated measurement and monitoring of the cleaner concentration and dosing of concentrate / DI-water
- Time and cost savings. No manual measurement or dosage by the operator required
- Can be easily integrated within the production lines and connected to new or existing cleaning processes independent of machine type and manufacturer



### ZESTRON® Bath Analyzer 10 & 20

- Test kit for an advanced and manual concentration measurement for fresh and loaded cleaning baths
- Applicable for pH-neutral and alkaline cleaning agents
- Portable for use throughout the production facility

## Cleaning Agent Regeneration & Recovery



### ZESTRON® Adsorber HM 1

- Heavy metal adsorber for cleaning and rinsing baths
- No recontamination of heavy metals (i. e. Cu, Pb, or Sn) on less precious metals or components



### ZESTRON® Demister

- Enables partial recovery of cleaning agent from exhaust vapor
- Passive system - no additional operating costs
- Saves overall operating costs

## Surface Analytics



### ZESTRON® Flux Test

- Indicates local distribution of carboxylic-based flux activators
- Quick and easy test method
- Onsite sampling inspection during production



### ZESTRON® Resin Test

- Identifies the local distribution of resin-based residues
- Quick and easy test method
- Onsite sampling inspection during production