

ZEVAC

ONYX OVERVIEW

Complete ONYX product line



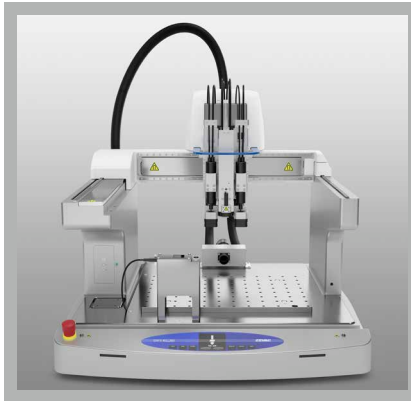


SSM4A & SSM9 – Selective soldering through hole technology

The SSM 9 soldering and desoldering machine provides reproducible results independent of the operator using programmable parameters.

SSM4A Manually adjustable parameters
SSM9 Programmable parameters

The preheater module PH4 can be used to preheat the printed circuit board. Heating performance of 3500W.



ONYX Milling – Precise removal of components

SMD parts with underfill are mechanically removed from the circuit board

- No thermal shocks (soldering for removal and removing residual solder are no longer necessary).
- Underfill and other casting compounds can be removed safely.
- A proper new base to place and solder in new parts results.
- ONYX software
- VISION system



ONYX 24 – Standard assemblies

High performance unit with unique operating features.

- Four motorized axes
- Powerful preheater 3500W
- 2000W top heater
- Force measurement
- Nitrogen connection standard
- ONYX software
- VISION system

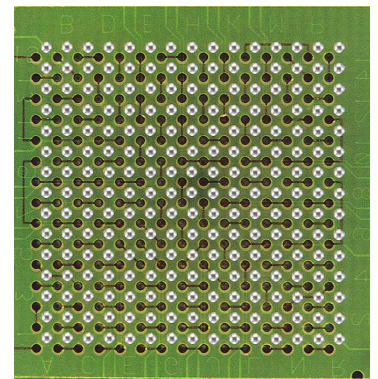
THREE-DIMENSIONAL VISION-SYSTEM

Every shift of the theta-, X- or/and Y-axis is visible clearly on the control image. An adjustable LED-light creates a bright illumination level.

FROM POSITIONING TO THE SOLDERING PROCESS EVERYTHING UNDER CONTROL

The component and the printed circuit board layout are projected in the same image plane, free from parallax errors using the VISION system and magnified to the monitor by the use of a camera.

E.g. BGA 225:



HOT GAS NOZZLES FOR STANDARD-AND SPECIAL COMPONENTS

A wide range of hot gas nozzles is available for selective soldering and de-soldering processes.

PROCESSABLE SMT PARTS

- 01005 / 008004
- μ BGA
- QFN
- Flip Chip
- μ LED
- CSP
- BGA / CCGA
- SMD's on flex circuit boards
- SMD-plug / -base
- Shields
- POP
- SMD's with underfill
- ...

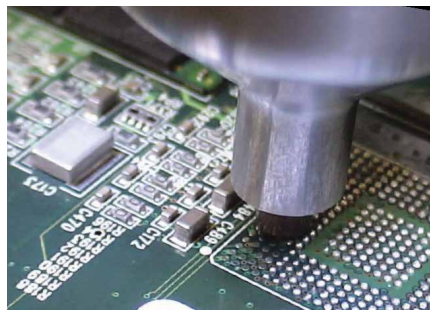
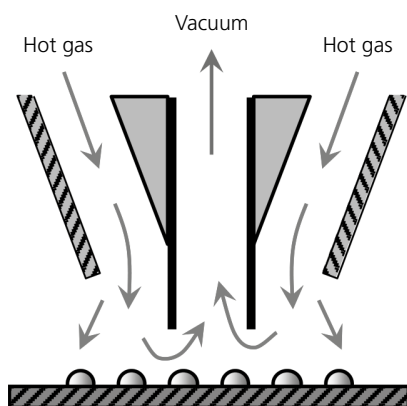




ONYX 25 – For large circuit boards

Using the proven ONYX soldering head and double preheaters (300 x 600mm) circuit boards up to 600mm x ∞ can be handled.

CONTACTLESS REMOVAL OF RESIDUAL SOLDER



ONYX 29 – Semi-automatic high-tech unit

Open construction and seven motorized axes assure high repeatability and quality. With the ONYX 29 all SMD rework applications can be processed safely and economically.

- MFOV Vision system
- Powerful preheater 6000W
- Force measurement
- X and Y linear motors
- Multi functional axes head e.g. for:
 - Heating
 - Dispensing
 - Fluxing
 - Placing
 - Pin print transfer
 - Re-balling

OPTIONS FOR ONYX 24/25/29

- Alternative preheaters
- Infrared temperature sensors
- Bridge tray (ONYX 29 only)
- Fluxer option
- Board cooling system
- Site solder removal system
- Dispenser (ONYX 29 only)
- Pyrometer
- Direct view camera system
- Component feeder
- Machine base



IC-900 – Fully automatic rework

Fully automatic high-tech unit with digital image processing system for highly precise assembly and soldering applications.

The integrated software enables automatic placement in the μm range. Laboratory applications, prototyping and rework of larger badges of production volumes.

One of the main application is the fully automated rework process of SMT components.

Desoldering, site solder removal positioning, placing and soldering is possible without any manual intervention of the operator.

OPTIONS FOR IC-900 HOT GAS

- Automatic tool changer
- Automatic hot gas nozzle changer
- Time / pressure dispenser
- Fluxer option
- Alternative preheaters
- Height sensor downwards
- Height sensor upwards
- Site solder removal system
- IR temperature sensor
- Machine base
- CAD data import

COMPANY HISTORY

ZEVAC has been founded 1978 and moved 1988 from Germany to Solothurn in Switzerland. Solothurn is famous for developing and manufacturing precision industrial products. In this environment ZEVAC could recruit a team of highly qualified personnel and source a group of reliable consultants and suppliers to meet the requirements of the ZEVAC superior quality standards. Ever since its founding, the dynamic team of ZEVAC has pioneered this young technology making ZEVAC a leading worldwide supplier providing selective soldering and de-soldering equipment, automation products and processes to the Electronics Industry in the field of micro placement, bonding and automation.

APPLICATION RANGE

The SSM and ONYX units with different levels of automation cover a wide range of applications. From the manually controllable soldering and soldering unit to the fully automatic multi function platform which processes challenging assembly and soldering tasks.

De-soldering, site clean solder removal, grinding, dispensing, soldering for rework of THT, SMT, semiconductor and every used part of circuit boards today.



VISION

Next to standard solutions ZEVAC is especially specialized to find always a solution for new applications regarding the reparation of printed circuit boards or substrates in the fields of removing, micro placement, connecting and automating. Customers and those intending to be are invited to challenge the ZEVAC capabilities by presenting their respective tasks for a professional evaluation. Precision, reliability and flexibility define our products and our intern operations.



ZEVAC

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