

## OVERVIEW ONYX / SSM

Complete product line of the ZEVAC machines





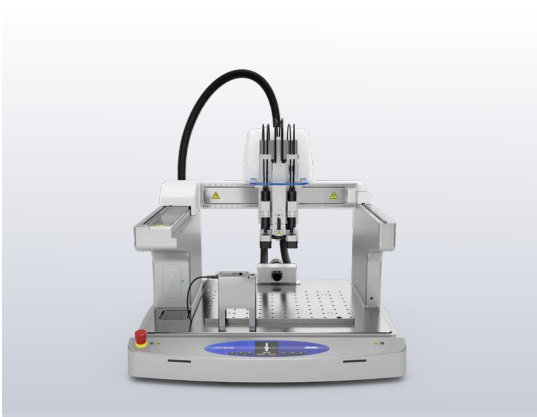
## SSM 4A & SSM 9 – Repair of through hole parts

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

**SSM 4A** Manually adjustable parameters

**SSM 9** Programmable parameters

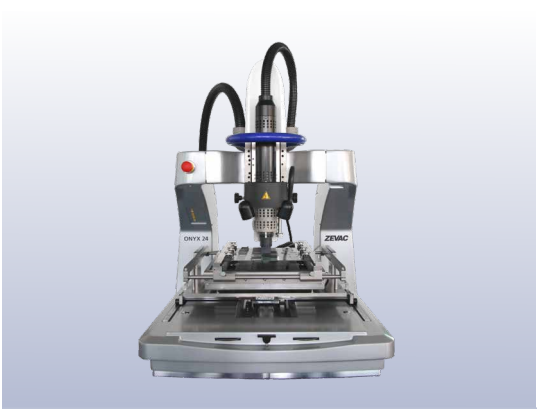
The optional preheater module PH 4 can be used to preheat the printed circuit board. Heating performance of 3500 watt



## ONYX Milling – Precise removal of components

SMD parts with underfill are mechanically removed from the circuit board

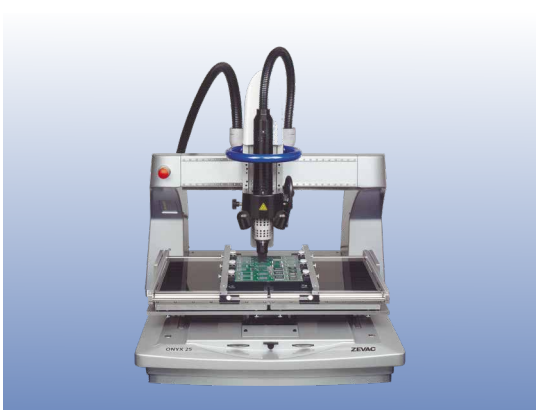
- High frequency spindle 80'000 min<sup>-1</sup>
- Entire process without any tool change
- Automatic tool calibration
- Precision in µm
- No heat impact
- Underfill is removed precisely
- A clean surface results, perfect for the placement and soldering of new components



## ONYX 24 – Repair of circuit boards

High performance unit with unique operating features

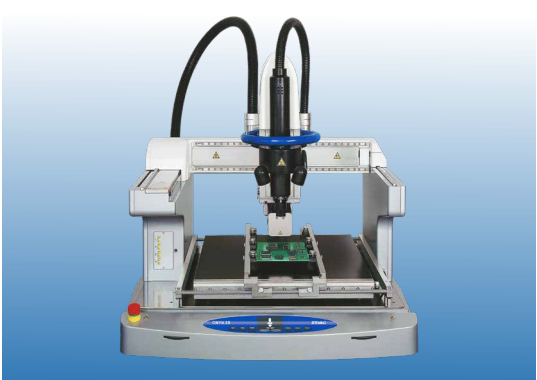
- Four motorized axes
- Powerful preheater 3500 watt
- 2000 watt top heater
- Integrated force measurement
- Compact design for standard assemblies up to 300 x 400 mm
- Vision-System



## ONYX 25 – Repair of large circuit boards

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

- Four motorized axes
- Up to two preheater modules 300 x 300 mm, 3500 watt
- 2000 watt top heater
- Integrated force measurement
- Large board handling for boards up to 560 mm width, no limitation for length



## ONYX 29 – Automated repair of circuit boards

Open construction and seven motorized axes assure high repeatability and quality

- Seven motorized axes
- Powerful preheater (6000 watt)
- Integrated force measurement
- Multifunctional heater head: Soldering, removing of residual solder and optional dispenser for dispensing applications
- Placement accuracy of 10 µm



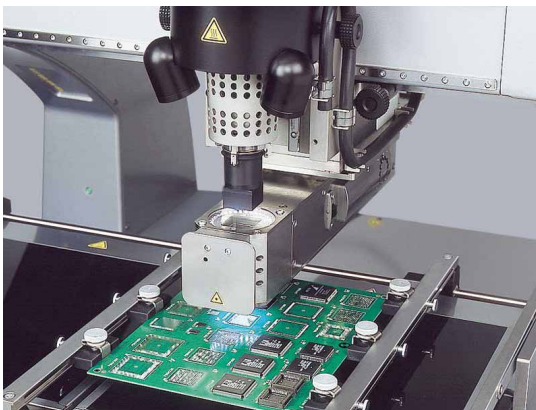
## IC-900 – Fully automatic repair of circuit boards

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  $\mu\text{m}$  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.

### MAIN FEATURES ONYX

- Dreidimensionales Visionsystem**  
 Jede Verschiebung in der Theta-, X- oder/ und Y-Achse wird durch das Kontrollbild deutlich sichtbar. Eine regelbare LED-Beleuchtung sorgt für helle, vom Umgebungslicht geschützte Ausleuchtung.
- Vom Positionieren bis zum Lötprozess alles unter Kontrolle**  
 Bauelement und Print-Layout werden mit Hilfe des integrierten Vision-Systems parallaxfrei übereinander projiziert und auf dem Monitor wiedergegeben. Somit ist ein Positionieren des Bauteiles über dem Layout problemlos möglich.
- Berührungsloses Restlotabsaugen**  
 Speziell beim Ersetzen von BGA's ist die vollautomatische und berührungslose Restlotentfernungs-Option ein wichtiges Leistungsmerkmal.
- Heissgasdüsen für Standard- und Spezialbauelemente**  
 Ein breites Sortiment an Heissgasdüsen steht für das selektive Ein- und Auslöten zur Verfügung.

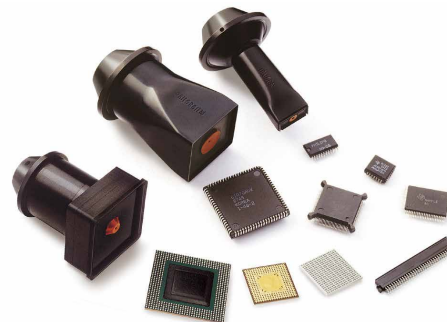


### OPTIONS ONYX 24, 25 AND 29

- 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

### OPTIONS IC-900

- 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 AG is a swiss company based in Solothurn. Since the repositioning in Solothurn 1988, Zevac AG grew continuously to an international acting company.

The success story of Zevac AG started in 1978 in Germany when the company realized its first products with the development and production of selective soldering machines for the electronics industry.

More than 40 years of experience in reparation and selective soldering of electronic printed circuit boards, with highly motivated and experienced employees, enables Zevac AG to set new milestones every year.

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## 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 multifunction 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.

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## VISION

The requirements of all participants, in particular of our customers, define our actions: We are curious, open to new ideas and solutions and to strive to exceed all expectations.

Next to standard solutions Zevac develops and produces machines for the component placement and the component interconnection technology including soldering processes, focusing on printed circuit board repair systems within the manufacturing process of the electronics industry.

Precision, reliability and flexibility build the focus of our products and internal processes.

**We make your products work!**