

## ONYX OPTIONS

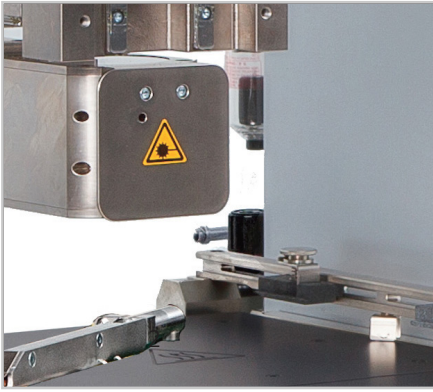
Expansions for ZEVAC`s ONYX machines



# OVERVIEW

<b>Options for profile and temperature control</b>	IR Sensor	Page 3
	Board Cooling	Page 3
	Pyrometer	Page 3
	Thermocouple Module	Page 3
	Preheater	Page 3-4
<b>Options for component / PCB handling</b>	Bridge Tray	Page 4
	Adaptors and Accessories	Page 4
	Component Reject Bin	Page 4
	Insertion Tool	Page 4
	Nozzle Changer	Page 5
	Pickup Shuttle and Tool	Page 5
	Board Holder	Page 5
	Board Holder Extension	Page 5
Board Holder Clamp, Finger and Board End Stop	Page 6	
<b>Options to apply / remove media</b>	Site Cleaning System	Page 6
	Dip Fluxer	Page 6
	Time / Pressure Dispenser	Page 6
	Paste on Device QFN	Page 6
	Reballing Tool	Page 7
	Fume Extraction	Page 7
<b>Options for machine / software</b>	Direct View Camera	Page 7
	Machine Bench ESD	Page 7
	Advanced Software Access	Page 7
	Traceability License	Page 7
<b>Accessoires</b>	Overview Order No. Accessoires	Page 8

# OPTIONS FOR PROFILE AND TEMPERATURE CONTROL



**IR SENSOR 90° (1)**

This IR temperature measuring Sensor remotely monitors board temperature and provides process control during desoldering or soldering a component.

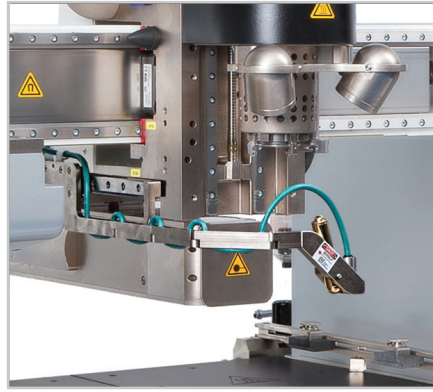
**IR SENSOR FIXED (2)**

Non-contact temperature measurement built into the vision system that can be positioned by moving the axis.

**Order no. 1:**

50.21.004 50.24.612 50.25.102 50.29.102

**Order no. 2:**

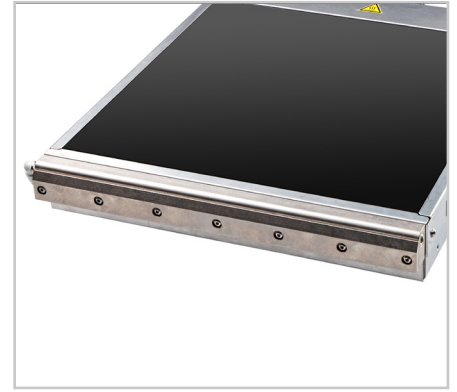


**IR SENSOR PIVOTING**

A manual positioned non-contact IR Sensor that monitors the PCB top side temperature.

**Order no. at Vision:**

50.21.037 50.24.664 50.25.160 50.29.185



**BOARD COOLING**

Provides specific cooling of the PCB to reduce the cycle time. Different models are available for different size preheaters.

**Order no. 315mm 1st unit:**

50.21.003 50.24.631 50.25.131 50.29.131

**Order no. 315mm 2nd unit:**

50.25.132

**Order no. 490 mm:**

50.25.171 50.29.132



**PYROMETER**

Uses non-contact, thermal radiation to monitor the temperature during the soldering process using a detection diameter of 1.8 mm at a range of 200 mm, allowing controlled, reproducible results.

**Order no.:**

50.21.007 50.24.626 50.25.126 50.29.126

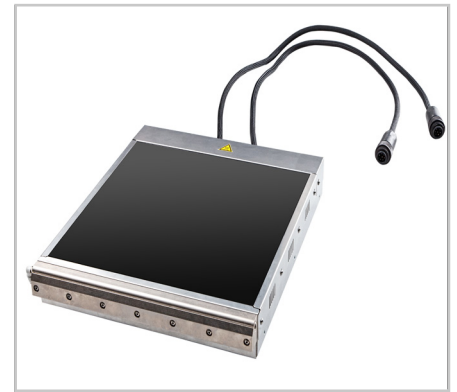


**THERMOCOUPLE MODULE**

All ONYX machines are equipped with four inputs for K type thermocouples. The ONYX 29 can be equipped with an additional module providing a total of 8 inputs.

**Order no.:**

50.29.101



**PREHEATER 300 X 300 MM**

3500 W Preheater with a size of 300 x 300 mm is used as standard on the ONYX 21, 24 & 25.

**Order no. 1st unit:**

50.21.019 50.24.629 50.25.129 50.29.129

**Order no. 2nd unit:**

50.25.130

## OPTIONS FOR PROFILE AND TEMPERATURE CONTROL OPTIONS FOR COMPONENT / PCB HANDLING



**TWO-ZONES PREHEATER 245 x 490 MM**

3000 W (2 x 1500 W) Preheater with a size of 245 x 490mm.

**Order no.:**  
50.25.163 50.29.156



**FOUR-ZONE PREHEATER 490 x 490 MM**

Standard equipment on the ONYX 29.  
6000 W (4 x 1500 W) Preheater with a size of 490 x 490 mm.

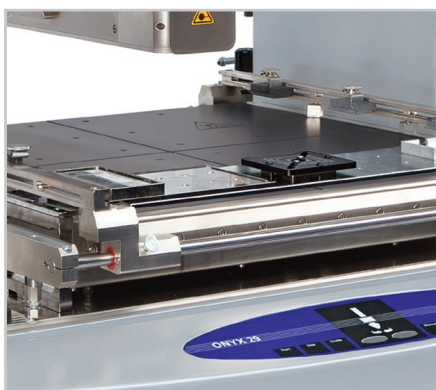
**Order no.:**  
50.29.141



**PREHEATER 310 x 350 MM**

3260 W Preheater with a size of 310 x 350 mm.  
Supplied as an alternative to the standard preheater on the ONYX 21, 24, 25.  
Recommended for use multi-layer circuit boards.

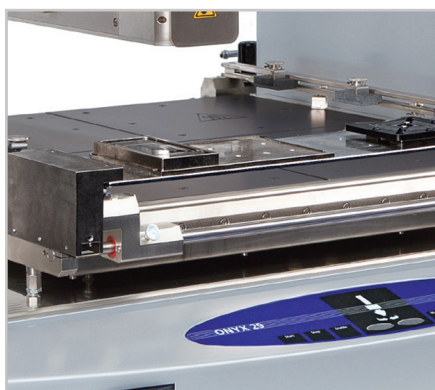
**Order no. 1st unit:**  
50.21.041 50.24.657 50.25.152 50.29.190  
**Order no. 2nd unit:**  
50.25.153



**BRIDGE TRAY**

The Bridge Tray is used to mount Insertion Tool and Reject Bin, Fluxing accessories and other ancillary equipment.

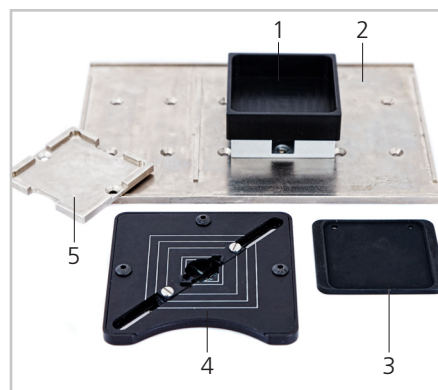
**Order no.:**  
50.29.124



**ELEVATED BRIDGE TRAY**

Provides increased above board clearance allowing use of the full area of the preheater.

**Order no.:**  
50.29.186



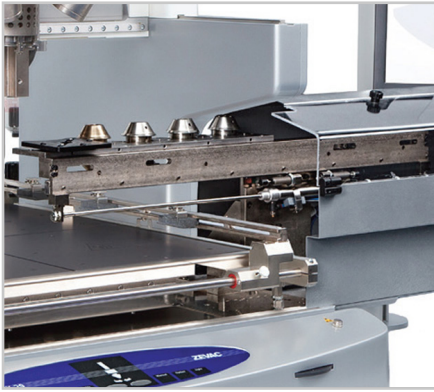
**ADAPTORS AND ACCESSORIES**

For use with the Bridge Tray, Shuttle or with Nozzle Changer. Various accessories are available.  
1 = Component Reject Bin (l)  
2 = Tray Plate for Bridge Tray (k)  
3 = Adaptor Plate for Nozzle Changer (i)  
4 = Insertion Tool (a-f)  
5 = Adaptor Plate for Bridge Tray (j)

**Order no.:**  
see on rear side



## OPTIONS FOR COMPONENT / PCB HANDLING



### NOZZLE CHANGER

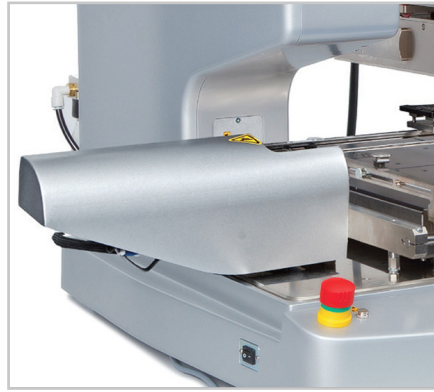
A Nozzle Changer can be provided to accommodate different tools or nozzles as part of the automated process cycle.

**Order no. 1 unit (for 5 nozzles):**

50.29.176

**Order no. 2 units (for 10 nozzles):**

50.29.177



### PICKUP SHUTTLE AUTOMATIC / MANUAL ONYX 29

Fully automated loading, fluxing or unloading of components. Preparation is completed manually outside of the heated working area.

An adjustable Insertion Tool is available in different sizes.

**Automated:**

No. incl. insertion tool 4 - 45 mm: 50.29.172

No. incl. insertion tool 6 - 47 mm: 50.29.192

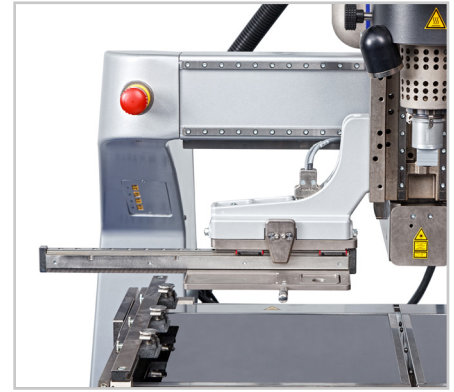
No. incl. insertion tool 9 - 56 mm: 50.29.173

**Manual:**

No. incl. insertion tool 4 - 45 mm: 50.29.170

No. incl. insertion tool 6 - 47 mm: 50.29.191

No. incl. insertion tool 9 - 56 mm: 50.29.171

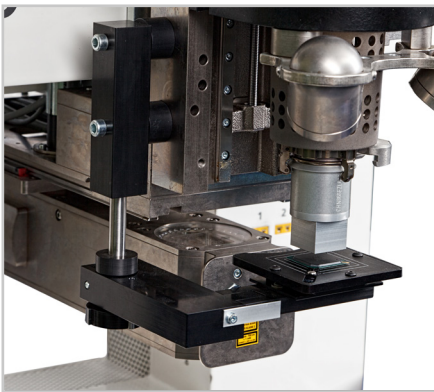


### PICKUP SHUTTLE MANUAL ONYX 21, 24, 25

The Pickup Shuttle Manual with an integrated Force Sensor can be used for semi-automated pickup, dipping or placement of components.

**Order no.:**

50.21.006 50.24.646 50.25.105

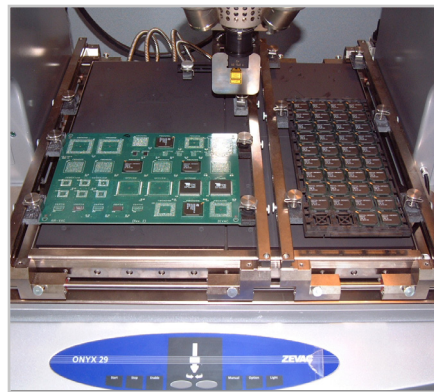


### PICKUP TOOL SWIVELLING

Manually positioned under the nozzle, this provides semi-automated pickup of components.

**Order no.:**

50.21.025 50.24.658 50.25.154



### SECOND BOARD HOLDER

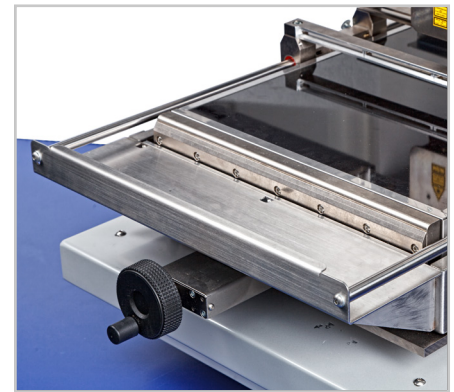
Provides an additional working area. This option is available with standard height or additional above board clearance of 20mm.

**Order no. version same level:**

50.29.103

**Order no. version elevated level:**

50.29.163



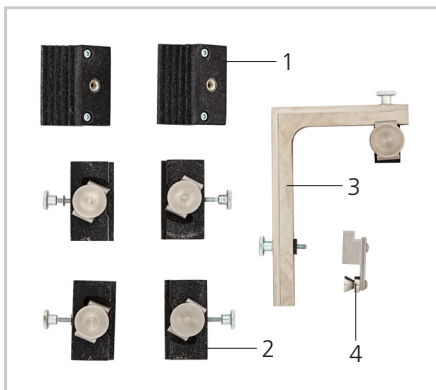
### BOARD HOLDER EXTENSION

Extends the ONYX 21 Board Holder capacity in the Y axis by 100mm.

**Order no.:**

50.21.024

## OPTIONS FOR COMPONENT / PCB HANDLING OPTIONS TO APPLY / REMOVE MEDIA



### BOARD HOLDER CLAMPS / FINGERS

PCB Holder Clamps, Fingers and End Stop can be used to firmly and accurately locate the PCB in the Board Holder.

- 1 = Board Holder Clamp -10mm (2 pcs.) (n)
- 2 = Board Holder Clamp ONYX 21 (set of 4 pcs.) (o)
- 3 = Board End Stop (1 pce.) (p)
- 4 = Board Holder Finger (1 pce.) (m)

**Order no.:**  
See on rear side



### SITE CLEANING SYSTEM

This non-contact Site Cleaning System is used to remove solder and flux residues before placing a new component.

This option tracks the board surface using non-contact vacuum control for adjusting the Z height except when installed on the ONYX 21 where the Z height is constant. Various suction tip forms are available on request.

**Order no.:**  
50.21.022 50.24.620 50.25.120 50.29.120

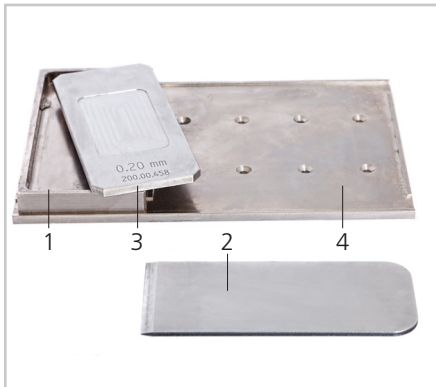


### DIP FLUXER KIT FASET1

Fluxer Kit with a range of fluxer plates for various fluxing applications.

See separate data sheet.

**Order no.:**  
50.21.045 50.24.671 50.25.167 50.29.195



### DIP FLUXER KIT

Fluxer Kit with Fluxer Plate Holder and Squeegee.

Fluxer Plates with different depths are available on request.

#### Kit contents:

- 1 = Fluxer Plate Holder
- 2 = Squeegee

#### Other accessories:

- 3 = Fluxer Plate (specify depth)
- 4 = Tray Plate for Bridge Tray (k)

**Order no.:**  
50.21.036 50.24.663 50.25.159 50.29.183



### TIME / PRESSURE DISPENSER

To dispense solder paste, flux, adhesive epoxy, underfill or other fluids.

**Order no.:**  
50.29.104



### PASTE ON DEVICE QFN

Used to screen solder paste onto the underside of a component.

**Order no.:**  
50.21.029 50.24.660 50.25.156 50.29.181

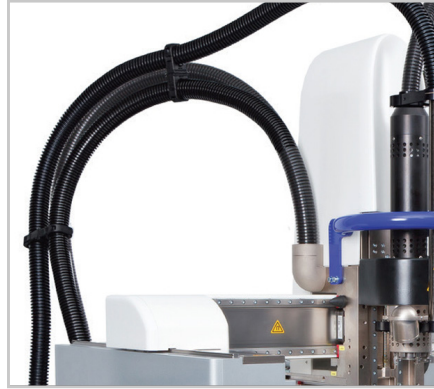
## OPTIONS TO APPLY / REMOVE MEDIA OPTIONS FOR MACHINE / SOFTWARE



### REBALLING TOOL

For reballing components. With the precision and high level of automation with the ONYX 29 BGA components can be fitted again with solder balls.

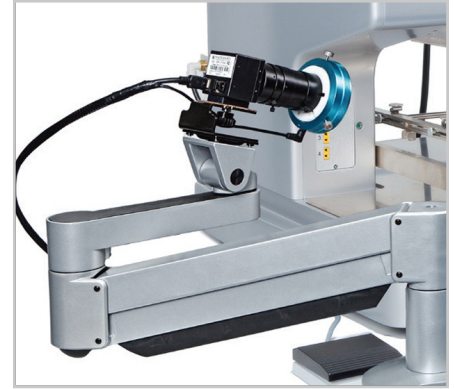
Order no.:  
50.29.188



### FUME EXTRACTION

The Fume Extraction System is mounted to the machine head to collect the fumes emitted during machine processes for extraction by an external filtering system (not included).

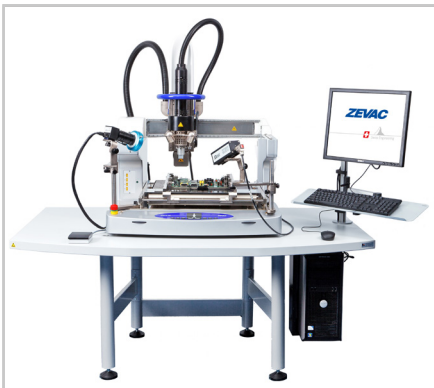
Order no.:  
50.21.005 50.24.617 50.25.117 50.29.117



### DIRECT VIEW CAMERA

Enables real time monitoring of the machine process. The Camera is either on an articulated arm that is table mounted or on a machine mounted holder. An LED light is available.

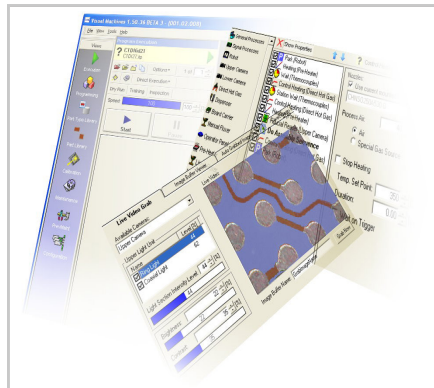
Order no. with machine holder:  
50.24.651 50.25.141 50.29.161  
Order no. with folding arm:  
50.21.038 50.24.665 50.25.161 50.29.187  
Order no. illumination:  
50.21.009 50.24.644 50.25.144 50.29.144



### MACHINE BENCH ESD

Machine Benche with ESD surfaces and monitor stands are available for all ONYX models to provide a rigid and stable platform for the machine.

Order no. machine bech:  
50.21.031 50.24.618 50.25.118 50.29.174  
Order no. support bench:  
50.21.032 50.24.639 50.25.139 50.29.139



### ADVANCED SOFTWARE ACCESS

Providing extended Software Access including explanation and training with practical examples of:

- configuration and calibration of peripherals
- creation and editing process lists
- multiple image / assembly programming

Order no.:  
50.21.047 50.24.635 50.25.124 50.29.107



### TRACEABILITY LICENSE

A Traceability License can be provided for management report documentation and quality control.

Order no.:  
50.32.190

## ACCESSORIES

Accessories	Legend	ONYX 21 Order no.	ONYX 24 Order no.	ONYX 25 Order no.	ONYX 29 Order no.
Insertion Tool rectangular for Components 6 - 47 mm	a)	AU6LGA47R			
Insertion Tool rectangular 6 - 47 mm, incl. Adaptor Plate for Tray Bridge	b)	-	-	-	50.29.194
Universal Pickup Frame, for Components up to 60mm	-	50.21.050	50.24.675	50.25.172	50.29.198
Adaptor Plate 45 ° for Insertion Tool	c)	50.21.046	50.24.672	50.25.168	50.29.196
Adaptor Plate 50 x 100mm to 41 x 41 mm	d)	50.21.048	50.24.673	50.25.169	-
Adaptor Plate for Nozzle Changer	e)	-	-	-	50.29.193
Adaptor Plate for Bridge Tray	f)	-	-	-	50.29.122
Tray Plate for Bridge Tray	g)	-	-	-	50.29.119
Component Reject Bin	h)	-	-	-	50.29.136
Board Holder Finger	i)	50.21.026	50.24.659	50.25.155	50.29.180
Board Holder Clamp -10 mm	j)	50.21.034	50.24.662	50.25.158	50.29.165
Board Holder Clamp	k)	50.21.015	-	-	-
Board End Stop	l)	50.21.035	50.24.653	50.25.142	50.29.164
Board Support Extension	m)	50.21.039	50.24.666	50.25.162	50.29.189
Warm-up Nozzle standard	n)	22.15.214			
Warm-up Nozzle for Nozzle Changer	o)	-	-	-	22.15.215
Additional Network Card	p)	17.00.138			

### contact us

info@zevac.ch



Vogelherdstrasse 4  
4500 Solothurn  
Switzerland

Tel. +41 32 626 20 80  
Fax +41 32 626 20 90

