



## RELENTLESS ALL- TERRAIN DISPENSER

Precise, Fast, Adaptive & Versatile

naturally adaptive.





# tarantula.

## RELENTLESS ALL-TERRAIN DISPENSER

Introducing – The Tarantula – Multitasking expert. State-of-the-art technology with a wide range of applications.



### CELL SOLUTION

#### LINE SOLUTION

Integration in any line

#### dispense technology.

- Up to 3 valves simultaneously
- 5 different valves, large application range

#### process control.

- Monitoring sizes & weight of dispense dots
- Process control adjustment and dot stabilisation

#### productivity.

- Valve up to 720'000 - System Ø 180'000 dots/h
- Up to 2'000'000 dots/h in line mode

#### large dispense area.

- PCB size 560 x 610 mm, optional 1'800 x 610 mm
- Up to 80 mm programmable Z stroke (3.15")

#### mineral cast chassis.

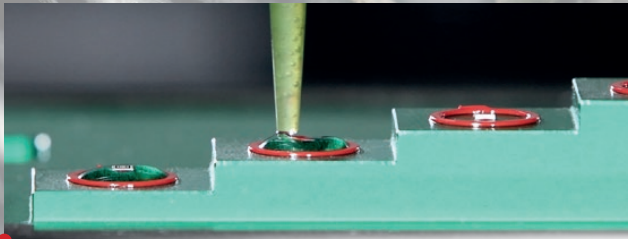
- No vibration, symmetrical mineral casting
- No warpage, no thermal drift

#### linear motors.

- Fast, reliable double drive linear motors
- No maintenance, longest lifetime

naturally adaptive.

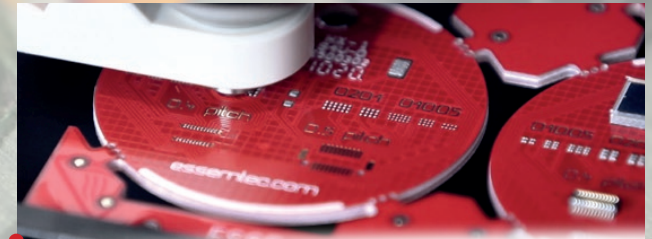
# INTEGRATE INTO HIGH SPEED LINES AND HIGHLY COMPLEX DISPENSE APPLICATIONS



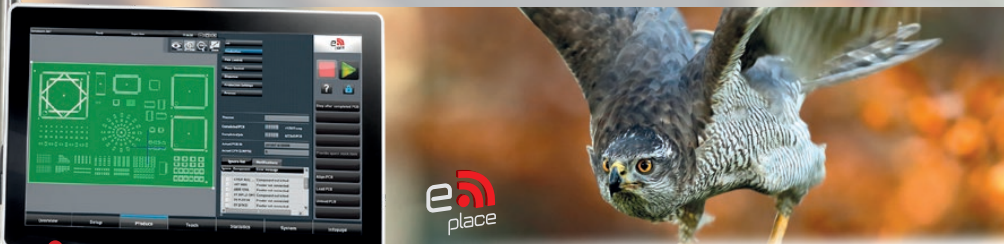
Versatile range of dispensing applications such as Solder Paste and SMT Glue, LED Encapsulation, Silver Epoxy, Dam and Fill, Underfill, Cavity Fill, 3D Dispensing via laser height mapping. Standard cleanroom according to ISO7 (class 10'000).



Full operator support - Automated error analysis & KPI. Training, support and troubleshooting via advanced remote access. Investment protection; all options and heads retrofittable. Modules are expandable in any direction.



Three processes at the same time. Plug and Play for valve change. Piezo Jet Valve - super high speed for low viscosity. Solder Jet Valve, Volume Displacement Valve, Time-Pressure Valve, Archimedeian Screw Valve.



**MULTITALENT SOFTWARE AT YOUR FINGERTIPS** State of the art, full graphics, 21.5" 16:9 touch screen, Windows - 64 bit, fingertip operation, real time visualization zoom at camera windows, all-in-one job planning, universal CAD conversion, setup optimization, easy definition of pattern and guided process support

## optional.

Valves & Pumps

Media Heating

Level Detection

Integrated Inspection 2D defect detection for dispensed material

Full process control meeting automotive standards and more, Adaptation & stabilisation, Integration & datatransfer of existing pick-and-place machines as Diplan, UniCam, Cogiscan etc., Vacuum Cleaning Station, High Precision Scale, Heating/Vacuum Tables



Needle and jet heating system

Automatic syringe level detection





naturally adaptive.



Inline with Puma Pick-and-Place

### tarantula.

Process	Max. dispensing speed (dots/h)	Piezo Jet: > 720'000 dots/h Solder Paste Jet: 720'000 dots/h	Time/Pressure: 28'000 dots/h Archimedean Screw: 24'000 dots/h
	Dispense mode	Dot, line, curve, interpolated 3D contour	
Accuracy	Placement XY dots	40 µm (3σ)	
	Positioning Z axis	20 µm (3σ)	
PCB	PCB dimensions	560 x 610 mm (22 x 24"), optional 1'800 x 610 mm (71 x 24")	
Dimensions	Machine footprint	1'557 x 1'357 mm (61 x 53")	

### OUR FOCUS - YOUR SOLUTION SMART SMT EQUIPMENT

Wildlife consistently shows us with breathtaking flexibility how nature can adapt itself to the many different demands of its environment; that is what inspires us! Essemtec AG is a company with its development and production site in Switzerland. The product portfolio comprises of production equipment for electronic assembly and more. Our high-tech solutions can be adjusted quickly and easily to meet wide ranging requirements; we are therefore able to respond to all manner of customer requests. That's why "naturally adaptive" is our motto across all ranges.

#### Disclaimer & Copyright:

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