



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 1'100'000 - System Ø 350'000 dots/h
- Up to 2'000'000 dots/h in line mode (Piezo Jet)

large dispense area.

- PCB size 560 x 610 mm, optional 1'800 x 610 mm
- Up to 80 mm programmable Z stroke (3.35")

mineral cast chassis.

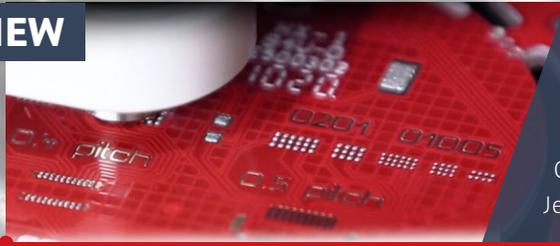
- No vibration, symmetrical mineral casting
- No warpage, no thermal drift

linear motors.

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

naturally adaptive.

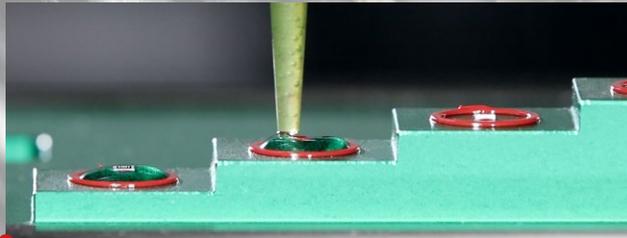
NEW



jet-on-the-fly

High-Speed Solder Paste Jetting at 350'000 dph system average, ~665'000 dph on BGA patterns. Customizable for special applications. Jet Dispensing in cavities and variable Z-level.

INTEGRATE INTO HIGH SPEED LINES AND HIGHLY COMPLEX DISPENSE APPLICATIONS



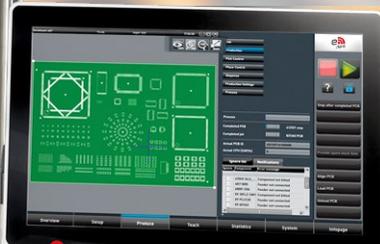
Versatile range of dispensing applications such as Solder Paste and SMT Glue, LED Encapsulation, Silver Epoxy, Dam and Fill, Underfill, Cavity Fill, 3D Dispensing via laser height mapping. Standard cleanroom according to ISO7 (class 10'000).



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. Shockwave Jet, Volume Displacement, Time/Pressure, and Archimedean Screw Valve.



eplace

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

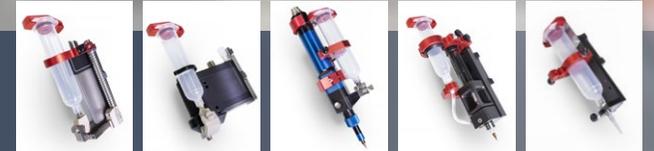
Valves & Pumps

Media Heating

Level Detection

Integrated Inspection 2D SPI & AOI 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	Optimum Jetting / dispensing speed (dots/h)	Shockwave Jet (Solder Paste): 1'100'000 BGA: 665'000 PCB Ø 350'000 Piezo Jet: 2'000'000 BGA Jet-on-the-Fly: 780'000 Stop & Jet: 177'000 Time/Pressure: 38'000 Archimedean Screw: 30'000 Volume: 26'000
	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.

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**Switzerland
Essemtec AG**

Mosenstrasse 20
CH-6287 Aesch/LU
Tel: +41 41 919 60 60
essemtec.info@nano-di.com

**Germany
Essemtec GmbH**

Taunusstrasse 21
DE-80807 Munich
Tel: +49 893 803 55 15
essemtec.info@nano-di.com

**France
Essemtec SAS**

50, Avenue d'Alsace
FR-68000 Colmar
Tel: +33 640 658 406
essemtec.info@nano-di.com

**America
Essemtec USA**

4 Suburban Park Drive
Billerica, MA 01821
Tel: +1 856 218 11 31
essemtec.sales-usa@nano-di.com

