



SMART-SIZED HIGH SPEED DISPENSER

Versatile, Accurate, Artistic & Reliable

naturally adaptive.



spider.

SMART-SIZED HIGH SPEED DISPENSER

Introducing - The Spider - PCB design freedom. State-of-the-art technology, easily integrated in any line.



CELL SOLUTION

LINE SOLUTION

Integration in any line

dispense technology.

- Up to 2 valves simultaneously
- 5 different valves, large application range

productivity.

- Valve up to 780'000 - System Ø 280'000 dots/h
- Up to 2'000'000 dots/h line mode (Piezo Jet)

small footprint.

- Requires only 1 m² of production floor
- Machine fits through 90 cm wide door

mineral cast.

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

laser height mapping.

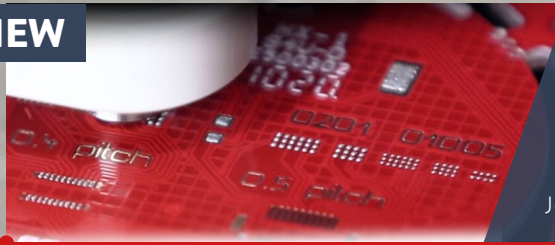
- Mapping of heights using laser technology
- Compensation of substrate warp / 3D contour

linear motors.

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

naturally adaptive.

NEW



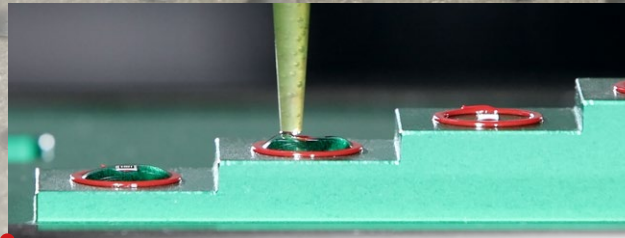
jet-on-the-fly

High-Speed Solder Paste Jetting at 280'000 dph system average, ~480'000 dph on BGA patterns. Customizable for special applications. Jet Dispensing in cavities and variable Z-level.

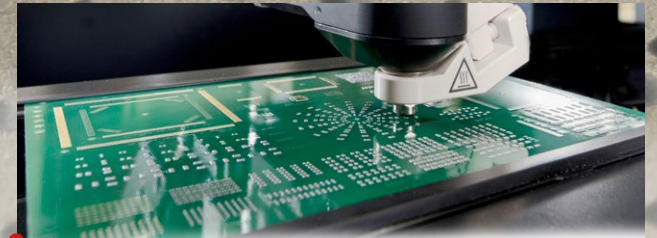
INTEGRATE INTO HIGH SPEED LINES AND HIGHLY COMPLEX DISPENSE APPLICATIONS



Versatile range of dispensing applications such as Solder Paste and SMT Glue, LED Encapsulation, Silver Epoxy, Dam and Fill, Underfill, Cavity Fill, 2,5D Dispensing via laser height mapping & more



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



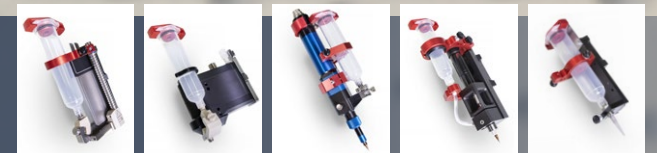
Two processes at the same time. Plug and Play for valve change. Piezo Jet Valve - super high speed for low viscosity. Shockwave Jet, Volume Displacement, Time/Pressure, and Archimedean Screw Valve.



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
- Process Control



- Needle and jet heating system
- Automatic syringe level detection
- Process control adjustment & stabilization

Integrated Inspection 2D SPI & AOI defect detection for dispensed material
Vacuum Cleaning Station, High Precision Scale, Clean Room, Heating/Vacuum Table
Full process control meeting automotive standards and more



naturally adaptive.

spider.



Inline with Fox Pick-and-Place

Process	Optimum jetting / dispensing speed (dots/h)	Shockwave Jet (Solder Paste): 780'000 BGA: 480'000 PCB Ø 280'000 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
	Dispensing mode	Dot, line, curve, interpolated 3D contour
Accuracy	Placement XY dots	40 µm (3σ)
	Positioning Z axis	20 µm (3σ)
PCB	PCB dimensions	50 x 50 mm up to 406 x 305 mm (2 x 2" up to 16 x 12")
Dimensions	Machine footprint	880 x 1090 mm (34.7 x 43")



**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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