



UNIQUE SOLUTION FOR ELECTRONIC PRODUCTION

Solder Paste Jetting, Glue Jetting & Pick and Place





archerfish.

UNIQUE SOLUTION FOR ELECTRONIC PRODUCTION

Solder Paste Jetting, Glue Jetting, Pick and Place & other process solutions combined on a single platform.

combined all-in-one.

- Placement, solder paste & other jet dispensing
- Up to 4 placement-axes and 3 dispense processes

process control.

- Monitoring sizes, volume & weight of jetted dots
- Process control adjustment and dot stabilisation

highest flexibility.

- Improve time to market/ NPI/ Immediate repair
- No waiting for stencil, process variation adaptation
- Jetting in cavities, Pin in paste jetting
- PCB design freedom - all programmable
- 2.5D placement and dispensing applications

software for all processes.

- Gerber file conversion and CAD data import
- One click production file generator
- Real time visualisation
- Connectivity SECS/GEM, iTac, OIC, Hermes

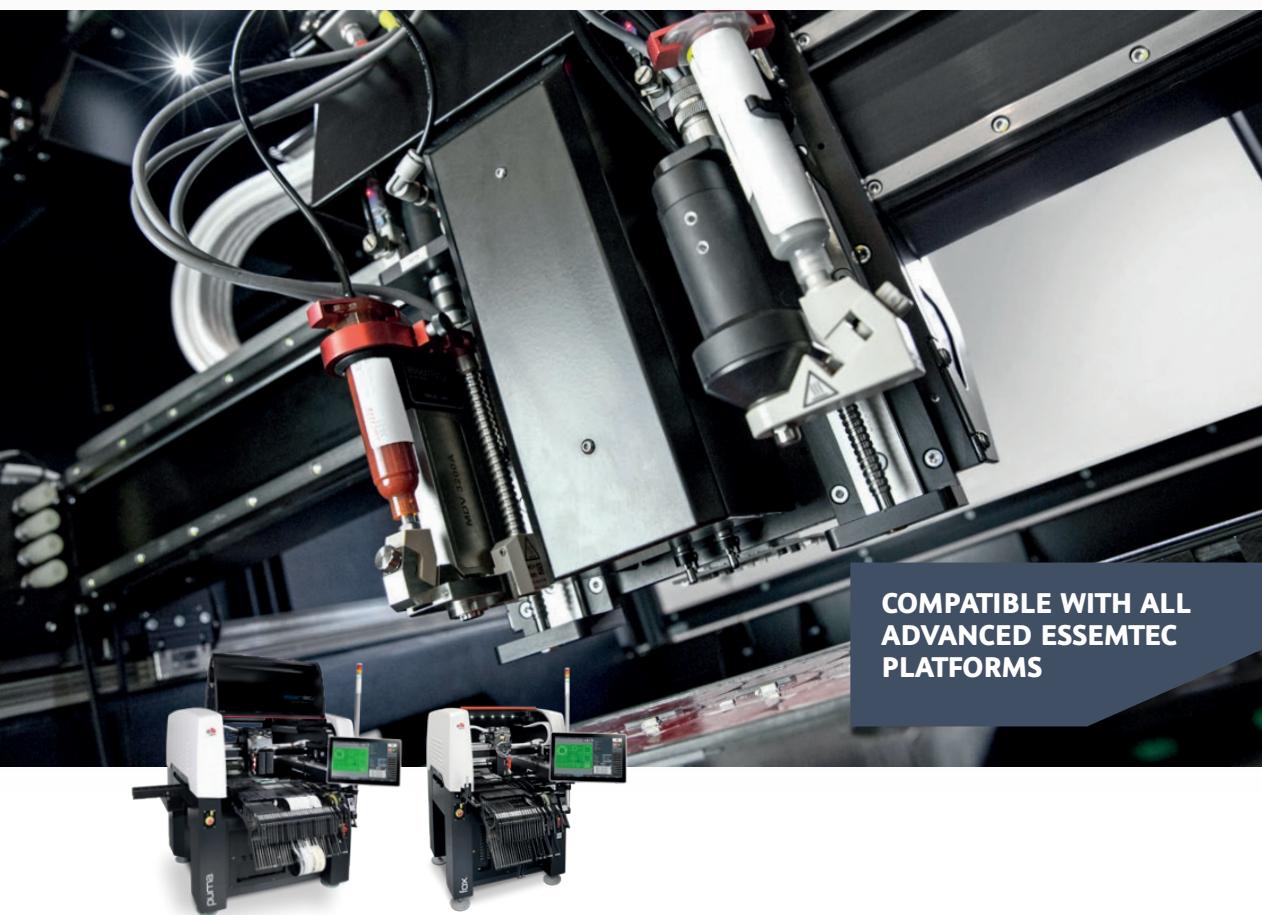


cost optimization.

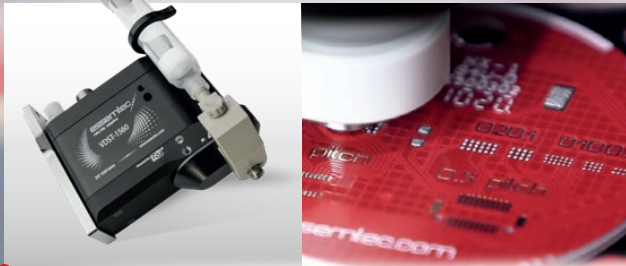
- One space saving platform for all processes
- Decrease of costs (no additional printer or stencils)
- Zero changeover time

**COMPATIBLE WITH ALL
ADVANCED ESSEMTEC
PLATFORMS**

naturally adaptive.



EXPANSION IN ANY DIRECTION. ADAPTIVE FROM PROTOTYPING TO HIGH SPEED PRODUCTION.



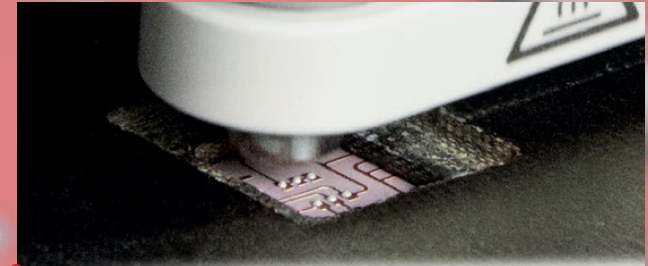
solder paste jetting

Dynamic Shockwave Technology. Adaptable for different jettable pastes (T4-7). Adaptable for special applications (nozzle, tappet, temperature etc.). Adaptable with needles for deep cavities. Super fast Plug n' Play change of fluidic and settings.



pick and place

The systems grow synchronously with the customer's requirements for performance and processes. Configurable heads with 1-4 placement-axes. Multi flexible feeder concept for up to 280 lanes. Largest component spectrum 008004 up to 80 x 80 mm.



other dispensing solutions

Wide range of dispensing applications such as SMT Glue, LED Encapsulation, Silver Epoxy, Dam and Fill, Underfill, Cavity Fill, 2.5D dispensing and more. Process parameters can be changed freely and optimized for any particular process.



Full process control & traceability meeting automotive standards, Adaptation & stabilisation, Integration & data transfer of existing pick&place machines as Diplan, UniCam, Cogiscan etc., Cleaning Station, High Precision Scale, Heat-/Vacuum Tables

Media Heating

Needle and jet heating system

Level Detection

Automatic syringe level detection

Integrated Inspection

2D defect detection for dispensing & pick and place

Increase Boardsize

Table extension to increase the processable board size



Glue Jet Valve



Solder Paste Jet Valve



Time Pressure Valve



Screw Valve



Volume Valve



All-In-One Jet Printer Glue Jetter Pick&Place

Vapor Phase

Inline Production

**FROM NPI TO MID RANGE,
UP TO INTEGRATION IN
HIGH SPEED LINES**

pick and place.

puma² (up to 2 valves)

puma⁴ (up to 1 valve)

fox² (up to 1 valve)

Optimum placement speed	11'200 cph (2-axes)	18'100 cph (4-axes)	12'000 cph (2-axes)
Feeder capacity 8 mm tape	260 (140 inline)	280 (160 inline)	180 (120 inline)
Component size range	008004 (imp.) up to 80 x 80 mm (Note specs for details)		
Placement accuracy (x, y)	Chip $\pm 40 \mu\text{m}$ (3 σ) / QFP $\pm 30 \mu\text{m}$ (3 σ)		
Max. PCB dimensions	560 x 610 / 1'800 x 610 mm	560 x 610 / 1'800 x 610 mm	406 x 305 mm
Machine footprint	1'557 x 1'357 mm (61 x 53")	1'557 x 1'357 mm (61 x 53")	880 x 1'090 mm (34.7 x 43")

solder paste jetting.

Viscosity range	< 2'000'000 mPa*s
Min. possible dot Ø / volume	>200 μm / > 2.5 nl
Optimum speed	Valve up to 720'000 dots/h
Useable solder pastes	Type 4-7 (jettable)
Valve heater	Included, max. 60°C
Useable cartridge sizes	5 ccm / 10 ccm / 30 ccm

dispensing.

Optimum speed (dots/h)	Glue Jet: > 720'000 Time-Pressure: 28'000 Volume: 24'000 Screw: 24'000
Dispense mode	Dot, line, curve, interpolated 2.5D contour
Placement XY dots	40 μm (3 σ)

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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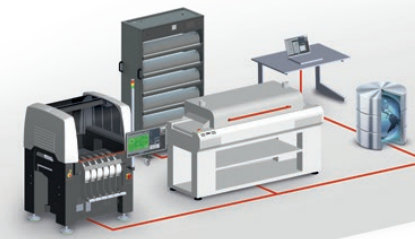
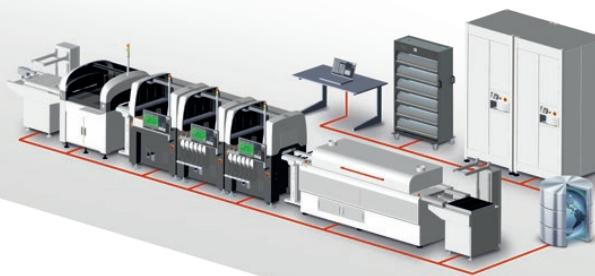
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