

VERMES Microdispensing and GENMA introduce solution for solder paste jet dispensing with outstanding small drop size

Holzkirchen / Stuttgart, Germany, September 08th, 2020, - The recent collaboration between VERMES Microdispensing - a leader in design and manufacture of innovative microdispensing systems and GENMA - a world-renown high-quality solder paste manufacturer, resulted in a new application for a fast and reliable process to apply smallest solder paste quantities in electronics manufacturing.

One of the main areas for solder paste dispensing is the mounting of electronic components in the PCB (Printed Circuit Board) assembly. Another major area is the use in module packaging. Both processes require the highest dispensing quality and steadiest process conditions.



VERMES Microdispensing System MDS 1560 and GENMA winDot solder paste

Many systems available on the market rely on old technologies that cannot meet today's market requirements for higher operating speed with smaller drop size. Contrarily, the VERMES Microdispensing systems are based on so called jetting valves with which the material can be applied contact free and with high speed and high precision.

“GENMA continuously searches for improvement and new technical solutions for our customers. In cooperation with VERMES Microdispensing we can now offer an outstanding solder paste solution, solving current technical challenges. GENMA's winDot solder paste can be consistently and safely applied in a dot size as small as 130µm in automated production processes,” states Stefan Komenda, CEO of GENMA Europe.

“The advantages of the VERMES Microdispensing System MDS 1560 that is based on our revolutionary actuator principle technology - DST (Dynamic Shockwave Technology) combined with GENMA winDot solder paste provide our customers with optimal solder paste dispensing results even at the smallest drop size,” adds Juergen Staedtler, CEO of VERMES Microdispensing.

The VERMES Microdispensing System MDS 1560 can easily be integrated into in numerous machine platforms, such as dispensing robots and screen printers.

High-end design and increased functionalities require electronics to get continuously smaller. The new VERMES MDS 1560 system with its optimized dispensing characteristics in combination with GENMA’s winDot solder paste allows jetting small dots in an absolutely reliable process at a high speed. Besides speed and dot size, reliability is specifically important. The new jetting process offers a solution that provides continuous top results. The valve can jet more than 1 million dots in a row without the necessity of operator attention.

In electronics manufacturing, the solution easily performs solder paste dispensing of smallest dot sizes and can increase the density on boards. The GENMA winDot solder paste can be jetted to pads for the smallest chip component currently in use, which is known as a 01005.

In prototyping and small-scale production the VERMES Microdispensing System MDS 1560 in combination with the GENMA winDot solder paste is much more productive than stencil printing.

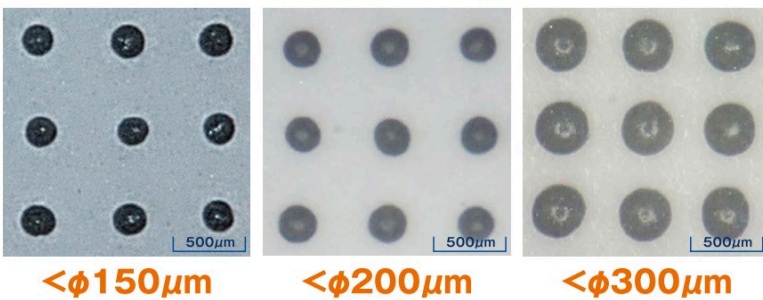
In mass production, the solution is an ideal addition to filling up solder depots or add additional depots.

Where it is not possible to print small solder paste depots, such as with flexible PCBs and 3D-MIDs (3-Dimensional Molded Interconnected Devices production), the system solution offers the fastest and most precise way of applying solder paste.

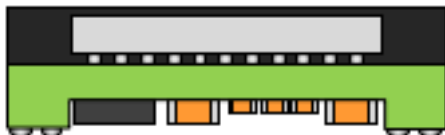
Without doubt, the jetting technology is sustainably faster than needle dispensing and pin transfer and delivers more precise results.



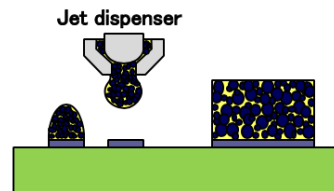
The higher accuracy considerably increases the production yield compared to the currently used solder paste application methods. A small dot size combined with highest reliability and high speed also provide great advantages to module packaging, such as PoP (Package on Package) modules, CSP (Chip Scale Packages) modules, 3D printed circuit boards, and for mounting RF Shields.



Different dot sizes dispensed with VERMES MDS 1560 Micro Dispensing System and GENMA winDot solder paste.



Small dot sizes of 200 µm can be used for module packaging



Jet dispensing of small pads in addition to screen printing

About GENMA

GENMA is one of the internationally leading producers of solder pastes and the global leader in solder wires. As a consumables specialist, GENMA supplies the electronics industry with solder paste, solder wire and bar solder from a single source. Our technical expertise, reliability, and flexibility in production and service make us a strong partner world-wide.

In 40 countries, GENMA is the synonym for quality and reliability. We develop soldering materials for tomorrow’s market requirements, always in close cooperation with our customers. As the leaders of this technology, we support our customers and partners comprehensively in all issues of soldering technology – and have been doing so for more than 60 years.

With its own flux, powder and solder paste production GENMA can easily adjust the solder paste to customer needs.

Several manufacturers are using the new jet dispensing solder paste in mass production. www.genma.eu

About VERMES Microdispensing

Headquartered in Germany, VERMES Microdispensing revolutionized microdispensing technology with the introduction of its contact free piezo-based MDS 3000 series in 2001. Today, the company is a world leader in the design and manufacture of innovative microdispensing concepts and systems for adhesives, silicones, greases, solvents and other fluids.

VERMES high precision MDS 3000 valves support modern manufacturing processes across the globe, e.g. for automotive, pharmacology, smart phones, TV sets, lamps, wafers, automated manufacture of LEDs, MEMS components, RFID tags, LC displays and many other electronic devices.

Our systems enable our customers to achieve contact free dispensing of highly viscous media droplets in the micro and nano-liter range at theoretical frequencies of more than 3000 Hz; a rate that is unique in our industry.

VERMES Microdispensing employees are dedicated to providing the best technologies and services to its customers around the world with the ultimate aim of contributing to increased throughput, improved quality and lower production costs. More information about VERMES Microdispensing can be found at www.vermes.com.

VERMES Microdispensing is a trademark of VERMES Microdispensing GmbH in Germany and other countries.

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