

## PRESS RELEASE

### Spraying of abrasive soldering paste

#### **eco-SPRAY provides new perspectives in the distribution of high viscous fluids**

ViscoTec has proven high expertise particularly in complex dosing environments. ViscoTec's brand preeflow shows the capability to operate reliable, extremely precise and repeatable for various applications in many industries. With the help of the precision volume dispenser "eco-SPRAY" preeflow explores new paths.

Soldering pastes are pasty mixtures of solder powder and flux agents, which enable an accurate soldering of metals and alloys by identifying the right mixing ratio. Hence soldering pastes pose the foundation for durable and bonded connections. Due to the high share of solids soldering pastes require a special material treatment and show high abrasiveness towards the dosing equipment. On the request of a well-known material supplier internal tests in the ViscoTec laboratory were performed. Micro-vaporization of solid containing soldering paste was the objective – with astonishing results:

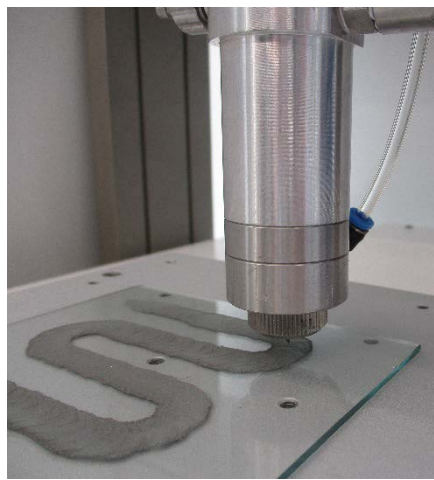
Adjusting the spraying factors – air pressure (in bar), distance needle to the substrate (in mm) and robot speed (in mm/s) – a sharp-edged distribution of the fluid will be achieved. Despite the high amount of solids in the paste the spraying pattern is defined by lowest overspray, a uniform coating and a round shape.

For this specific application 0.4 g soldering paste were atomized with a spraying width of 1.1 cm. Owing to the high share of solids the specific density is 3.0 g/cm<sup>3</sup> and the sprayed volume comes consequently to 0.13 ml. Even more impressive is the fact, that the mean deviation of the average shows an effect of 1.1%.

From a material supplier's perspective these results mean new opportunities for the application of soldering pastes. From a customer's perspective a more

## PRESS RELEASE

defined application with high efficiency will be realized. The consequence will be process stability and the saving of material consumption during the industrial production. The depicted comparison emphasizes the high potential which can be found in the spraying process.



*Soldering paste application manual vs. eco-SPRAY*

The test scenario demonstrates the ability to spray complex fluids and in spite of the materials abrasiveness no wear has been detected at critical dosing equipment. The nebulization of the soldering paste can be performed continuously or punctually. Due to the speed dependent dosing the volume is variably changeable during the whole process.

The internal ViscoTec know how enables the close coordination of all relevant spraying parameters according to customer requirements. As a result the industrial demands are met completely.

2.697 Characters including spaces. Reprinting free of charge. Copy requested.

## PRESS RELEASE

### Micro-Dosing in perfection!

preeflow<sup>®</sup> is a brand name powered by ViscoTec Pumpen- u. Dosiertechnik GmbH. ViscoTec primarily deals in systems required for conveying, dosing, applying, filling and emptying medium to high-viscosity fluids. The headquarter of the technological market leader is in Töging (upper Bavaria, near Munich). In addition, ViscoTec has subsidiaries in the USA, in China and in Singapore and employs about 120 people worldwide. preeflow<sup>®</sup> ensures precise, purely volumetric dosing of liquids in smallest quantities and was established in 2008. preeflow<sup>®</sup> products are appreciated worldwide, last but not least because of their unique quality – Made in Germany. An international distribution network offers professional services and support all around the preeflow<sup>®</sup> dosing systems. The various fields of application include, among others, automotive, electrical and electronics industry, medical technology, aerospace, renewable energies, electrical and hybrid technology and measurement and sensor technology. The complete preeflow<sup>®</sup> portfolio can be easily integrated due to standardized interfaces. Worldwide about 10,000 preeflow systems are working in semi- or fully-automated dosing applications - to the user's and customer's complete satisfaction.

### Press contact:

#### **Thomas Diringer, Manager Business Unit Components & Devices**

ViscoTec Pumpen- u. Dosiertechnik GmbH  
Amperstraße 13, D-84513 Töging a. Inn  
Phone +49 8631 9274-441  
E-Mail: [thomas.diringer@viscotec.de](mailto:thomas.diringer@viscotec.de) · [www.preeflow.com](http://www.preeflow.com)

#### **Elisabeth Lenz, Master of Business Management (CCI)**

ViscoTec Pumpen- u. Dosiertechnik GmbH  
Amperstraße 13, D-84513 Töging a. Inn  
Phone +49 8631 9274-447  
E-Mail: [elisabeth.lenz@viscotec.de](mailto:elisabeth.lenz@viscotec.de) · [www.viscotec.de](http://www.viscotec.de)