micro dispensing in perfection!

2017

preeflow®

by ViscoTec

preeflow®
1K
dispensers

The brand with the systematic approach.
preeflow® – high-quality products ranging from control units to dispensers that live up to our vision ‘small, precise, economical’.

eco-PEN300
min. dosing quantity
0.001 ml
volume flow
0.12-1.48 ml/min
weight
approx. 380 g

eco-PEN450
min. dosing quantity
0.004 ml
volume flow
0.5-6.0 ml/min
weight
approx. 410 g

eco-PEN600
min. dosing quantity
0.015 ml
volume flow
1.4-16.0 ml/min
weight
approx. 750 g

eco-PEN700 3D
min. dosing quantity
0.060 ml
volume flow
5.30-60.0 ml/min
weight
approx. 750 g

preeflow®
2K
dispensers

eco-DUO600
min. dosing quantity
0.030 ml
volume flow
0.6-32.0 ml/min
weight
approx. 1,600 g

eco-DUO450
min. dosing quantity
0.010 ml
volume flow
0.2-12.0 ml/min
weight
approx. 1,100 g

eco-DUO330
min. dosing quantity
0.005 ml
volume flow
0.1-6.6 ml/min
weight
approx. 1,100 g

preeflow®
1K
controllers

EC200-B

process
safe

EC200-K

original
sizes

plug'n'dose

precise

Precision mechanics coupled with the latest digital control – a perfect combination.
Designed to optimize your 2K process.
preeflow® – micro dispensing in perfection!

preeflow® 2K controllers

EC200-DUO

volumetric

easy

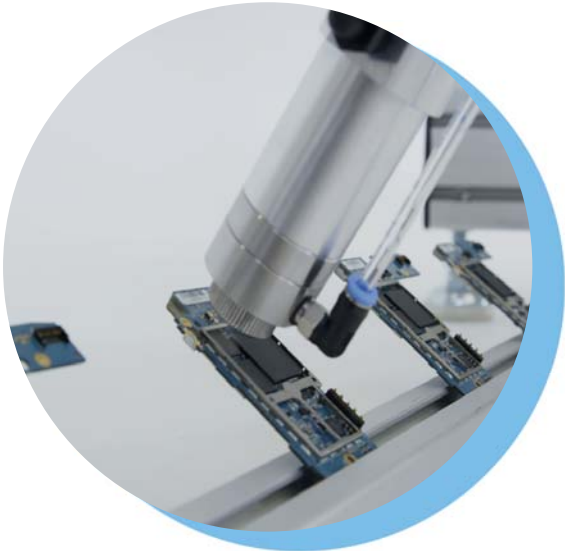
fast

plug'n'mix

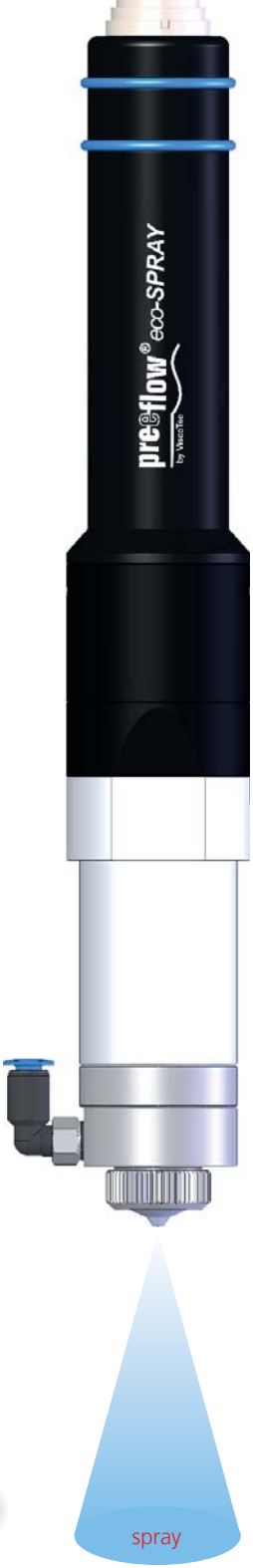
You can find more information about our 2K equipment and the other preeflow® products on our website: www.preeflow.com

preeflow®
spray
dispensers

The new precision volume dispenser eco-SPRAY made by ViscoTec offers a wide range of applications for low to high viscosity spray media. The preeflow® eco-SPRAY guarantees a volumetric spray application based on the endless piston principle. The base of this new microspraying technology is still our proven rotor/stator technology. Due to a defined rotary motion of the rotor the medium in the stator is volumetrically replaced and conveyance is created. Thus a determined amount of medium is process controlled and directed to the special low flow spray chamber.
The precise nebulization and spraying can take place continuously or punctually. The revolutionary combination of the endless piston principle and the low flow spraying chamber guarantees perfect spraying of low to high-viscosity fluids with high edge definition and lowest possible overspray.



eco-SPRAY
min. dosing quantity
50 µl
volume flow
0.5 to 6.0 ml/min
weight
approx. 640 g



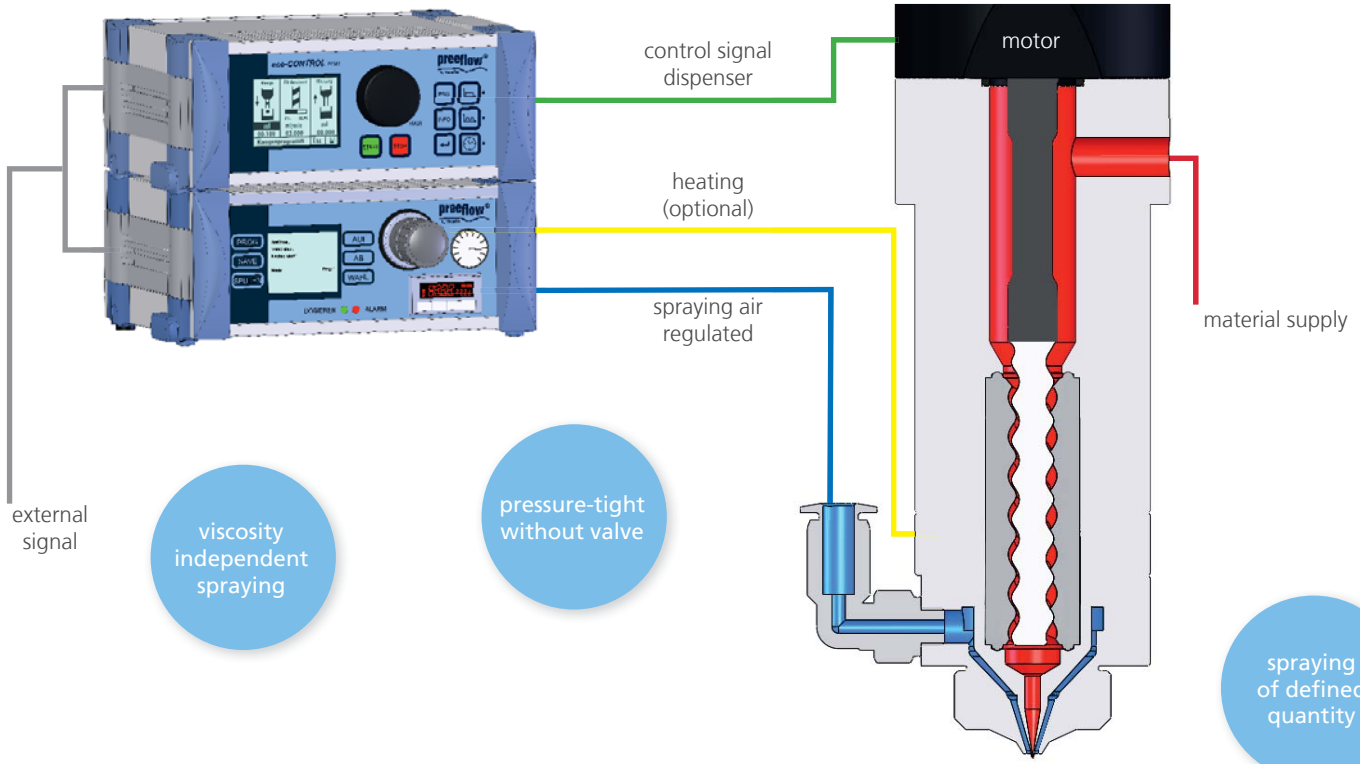
high edge definition/ no over spray

controllable round spray

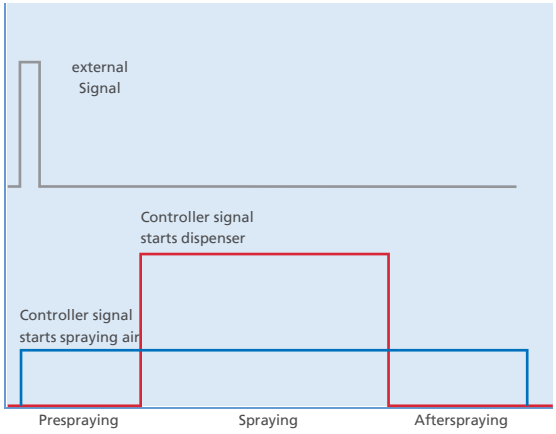
low to high viscosity spray

true volumetric spray

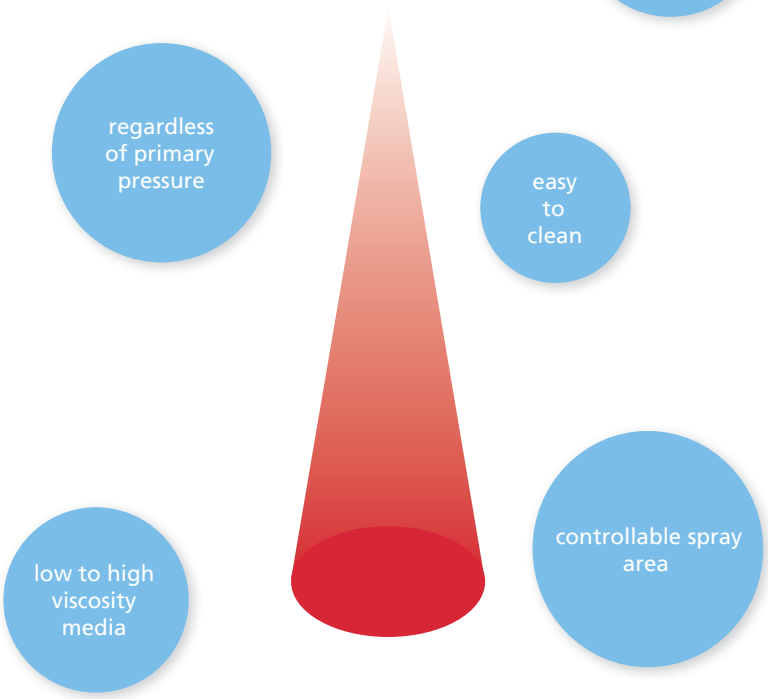
high precision spray



Switching example eco-SPRAY controller



Prespraying, spraying, afterspraying and pressure are customer specifically adjustable. Thereby individual spray contours are possible.



benefits and technology

The medium is unaltered by this process. And simply by switching to reverse-flow preeflow® ensures a clean and controlled stop of material or medium. No drips, no mess – always!

more than 20 years dispensing experience

very easy handling

100 % dosing technology

our vision - always a step ahead

QUALITY GERMANY MADE IN

we focus on your solution

world wide 24/7 support

Technology:

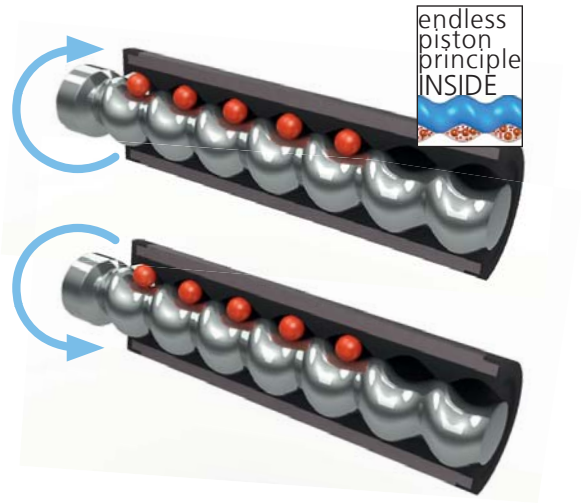
The dosing principle of preeflow® dispenser is based on progressive cavity pums.

This special dosing geometry allows an endless and pulsation free dosing flow. The possibility of reversing the dosing flow (suckback) will prevent from dripping and leads to a perfect control of media stringing or dripping.

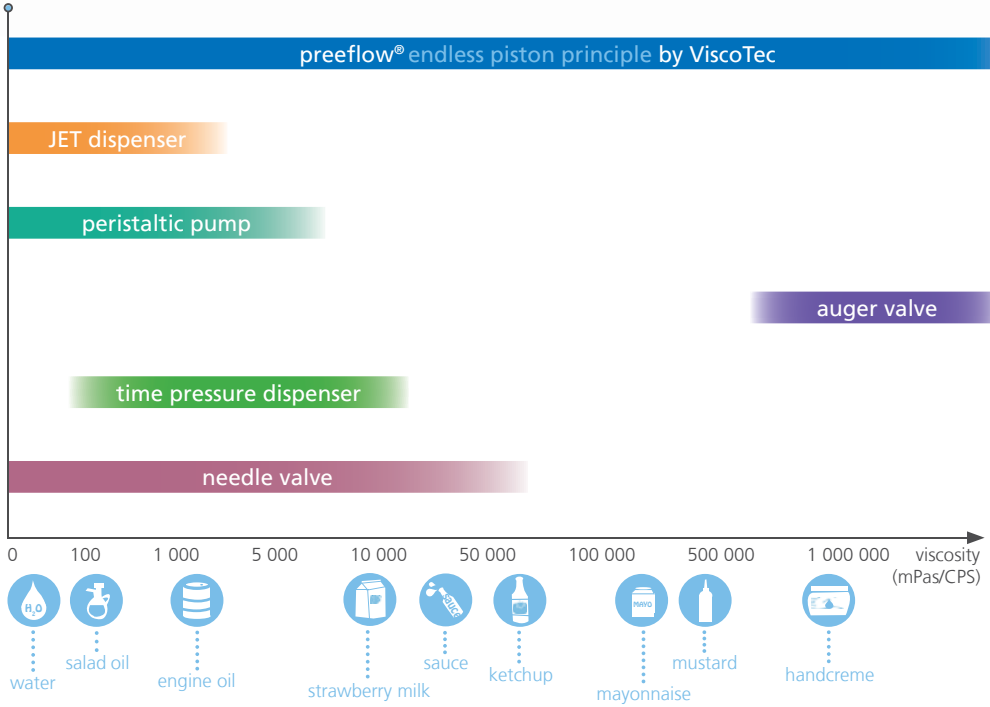
Especially sensitive fluids with high viscosity and fillers inside experience a gentle treatment due to the low shear stress and the low pressure.

Therefore, it is: many tasks – one principle!

preeflow®



Dosing technologies in use:



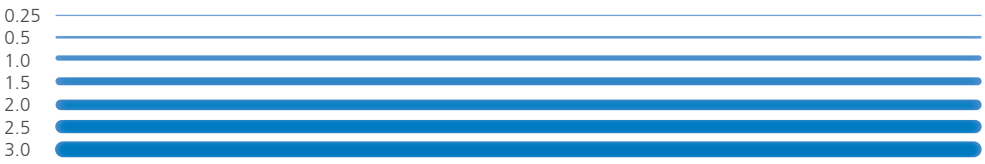
Dot size range:

v: ml (shot volume)
d: mm (diameter)

v: 0.0001	v: 0.0003	v: 0.0005	v: 0.001	v: 0.003	v: 0.005	v: 0.01	v: 0.03	v: 0.05	v: 0.07	v: 0.1
d: 0.73	d: 1.05	d: 1.24	d: 1.56	d: 2.25	d: 2.67	d: 3.37	d: 4.86	d: 5.78	d: 6.44	d: 7.26

Bead size range:

(mm)



applications in focus

preeflow® products offer the ideal properties to ensure that all relevant 1 & 2 component applications in several industries are perfectly dosed!

max. particle size 1 mm

endless piston principle inside

easy to integrate in machines

high repeatability more than 99 %

reversible material flow

Bonding

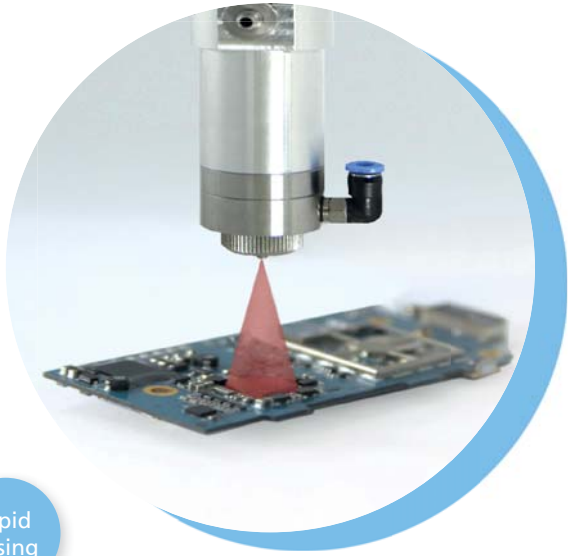
In the industrial world, the term of Bonding refers to join securely to something else, especially by means of an adhesive or chemical substance, heat or pressure. In our case, any combination of any type and roughness of materials could be joined together through the application of adhesives. The bonding therefore replaces more traditional technics such as riveting or welding.

Optical Bonding

Optical Bonding is a process in which a clear adhesive is applied between the layers of glass in a touch screen display. The main goal of this bonding process is to improve the performance of the display. This procedure eliminates the gap between the glass and the display. A great deal of importance is placed on dosing precision in the field of smartphone and tablet manufacturing in particular.

Conformal Coating

Conformal Coating is a protective coating which takes the form of a non-transparent or transparent varnish that is applied to all or parts of PCBs. The materials are usually high viscosity thermal or UV curing materials and are dosed onto the PCB using either a thin film or a thick film procedure.

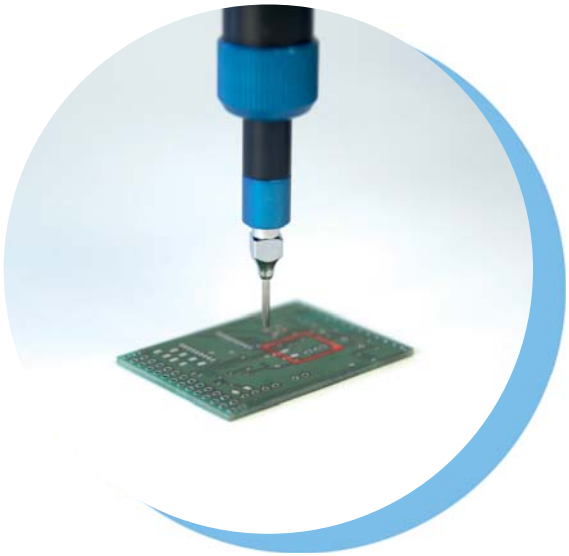


no stringing nor dripping

bead factor < 2 %

independent of pressure, temperature and time

rapid dosing



very wide viscosity range

liquids containing fillers

Dam & Fill

In Dam & Fill applications, the primary aim is to protect highly complex assemblies. Firstly, a high viscosity barrier, known as the "Dam", is applied to the surface to be sealed. Then the adjacent area is filled with a filler which provides protection and sealing effect.

pulsation free

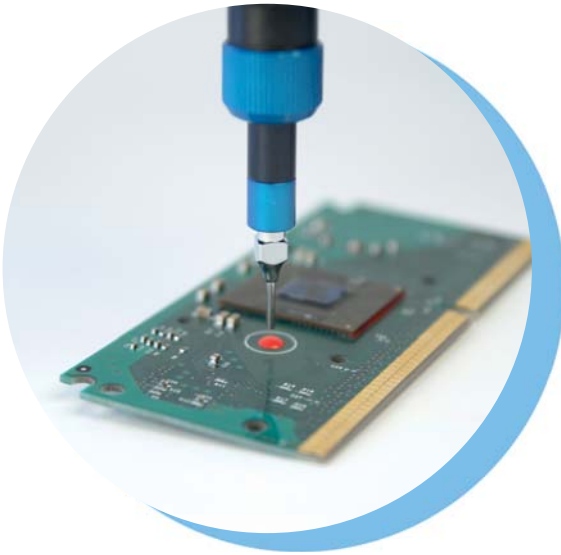
Glob Top

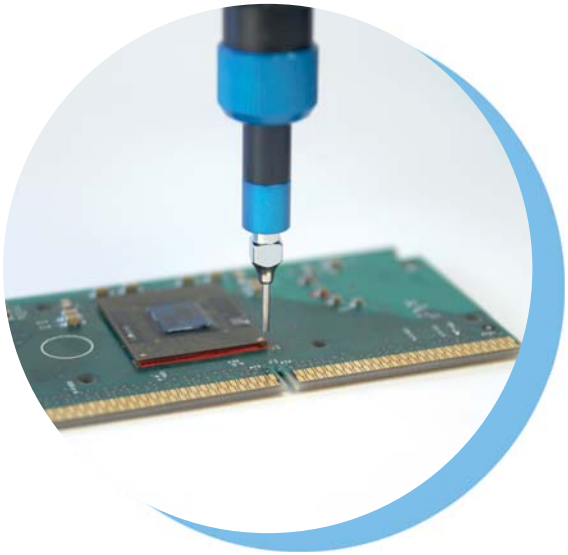
Glob Top potting is designed to protect sensitive components, usually semiconductor chips, from mechanical stress such as vibrations or fluctuations in temperature. External environmental factors too, like moisture or corrosion, are thus prevented from having an impact on the potted components. This effect is realised by applying a fluid resin matrix, mostly an epoxy resin adhesive, which is then cured.

gentle product handling

reproductible results

pure volumetric dosing





Underfill

Underfill applications usually are used with isotropic conductive adhesives. In this case, the isotropic conductive adhesive provides the electrical connection from the microchip to the substrate. As this adhesive is not applied over the entire surface, after the thermally or UV curing process, another filling of the hollow space is necessary, the so called "Underfill".

easy to clean

up to three shots per second

exact volume control

examples of materials

- 2K epoxy
- gasoline
- heat curing
- high fill fluids
- UV & light curing
- anaerobic
- flavours
- toluene
- sealing agents
- shear-sensitive adhesives
- 1K epoxy
- thermal conductive paste

short and easily accessible fluid path

self sealing displacement system

Micro Dispensing

Micro Dispensing refers to the dosing of fluid media in volume of just a few microlitres. Other fields of application are, for example, bead dosing, sealing, dot dosing, potting and 2 component applications. These applications in particular call for high levels of precision, repeatability and reliability.

low to high viscous liquids

pressure stable

Encapsulating

Encapsulating is the process of applying a fluid sealing compound to a small and defined area on a component or on a surface. The sealing compound protects the electrical component both in transports and from environmental influences such as vibration, shakes, humidity, dust and extreme temperature.
Other benefits include an improved electrical insulation, a higher safety against damage as well as a better chemical resistance.

dosing accuracy ± 1 %

solder paste
silver paste
industrial oils
silicones
MEK
isopropanol
paints & inks
cosmetics & medicines
biotechnical suspensions
acetone
epoxy resin
electrolytic solutions
alcohol
brazing paste
grease
primer
perfume
thermal grease
PU

and many more...

preeflow®
by ViscoTec

easy dosing technology

easy handling, easy dispensing

exact, precise dosing

effective dosing

economic, saves up to 30% of the medium

More information: www.preeflow.com

THE ORIGINAL!

Specialized dealer:

International
service & support center
please contact us
for further information!

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