


micro
dispensing
in perfection!



$1 \mu\text{l} \pm 1\%$

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



original
sizes

preeflow[®] 1K controllers

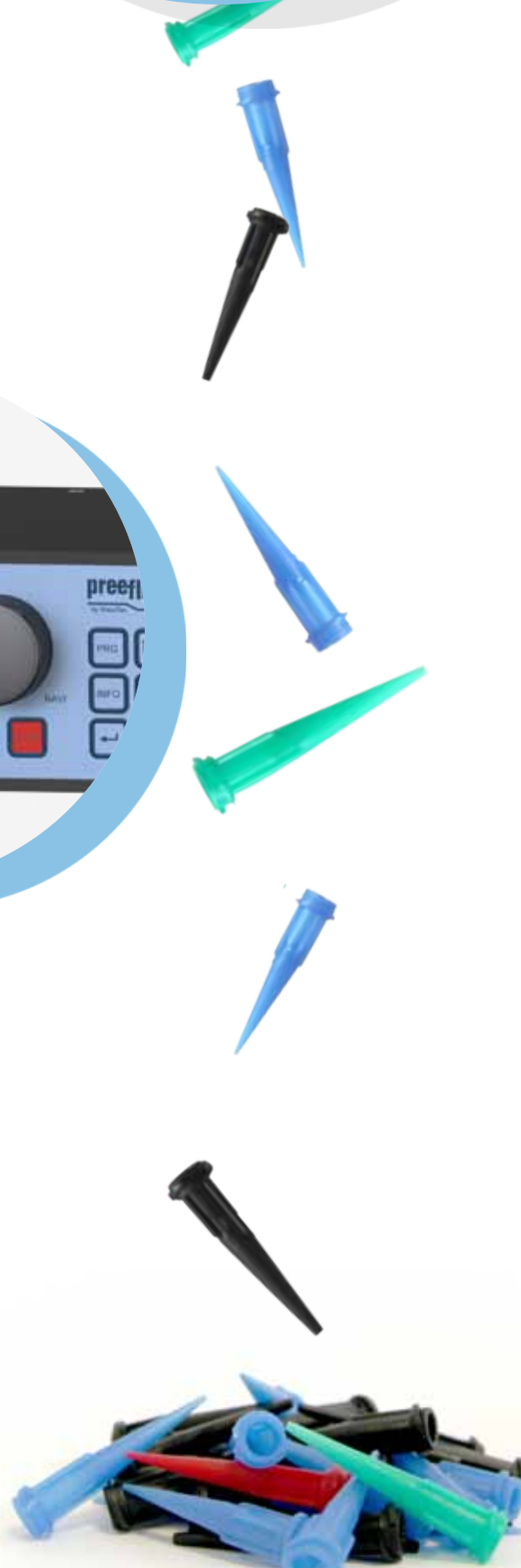
EC200-K



EC200-B



plug'n'dose



pre@flow[®] 2K dispensers

original
sizes



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

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

new!

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

preeflow® 2K controllers

EC200-DUO



new!

plug'n'mix



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



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!

preeflow[®]
by ViscoTec

more than
20 years
dispensing
experience

our vision -
always a step
ahead

100 %
dosing
technology

we focus
on your
solution

very easy
handling

world wide
24/7
support



Technology:

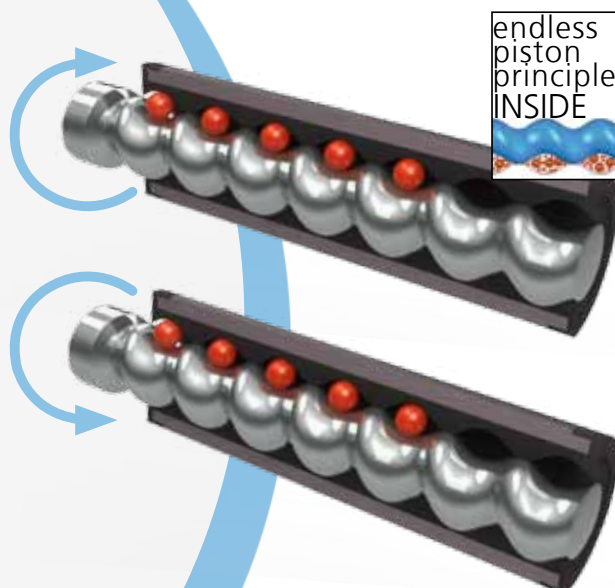
The dosing principle of **preeflow**[®] dispenser is an endless piston dispenser.

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.

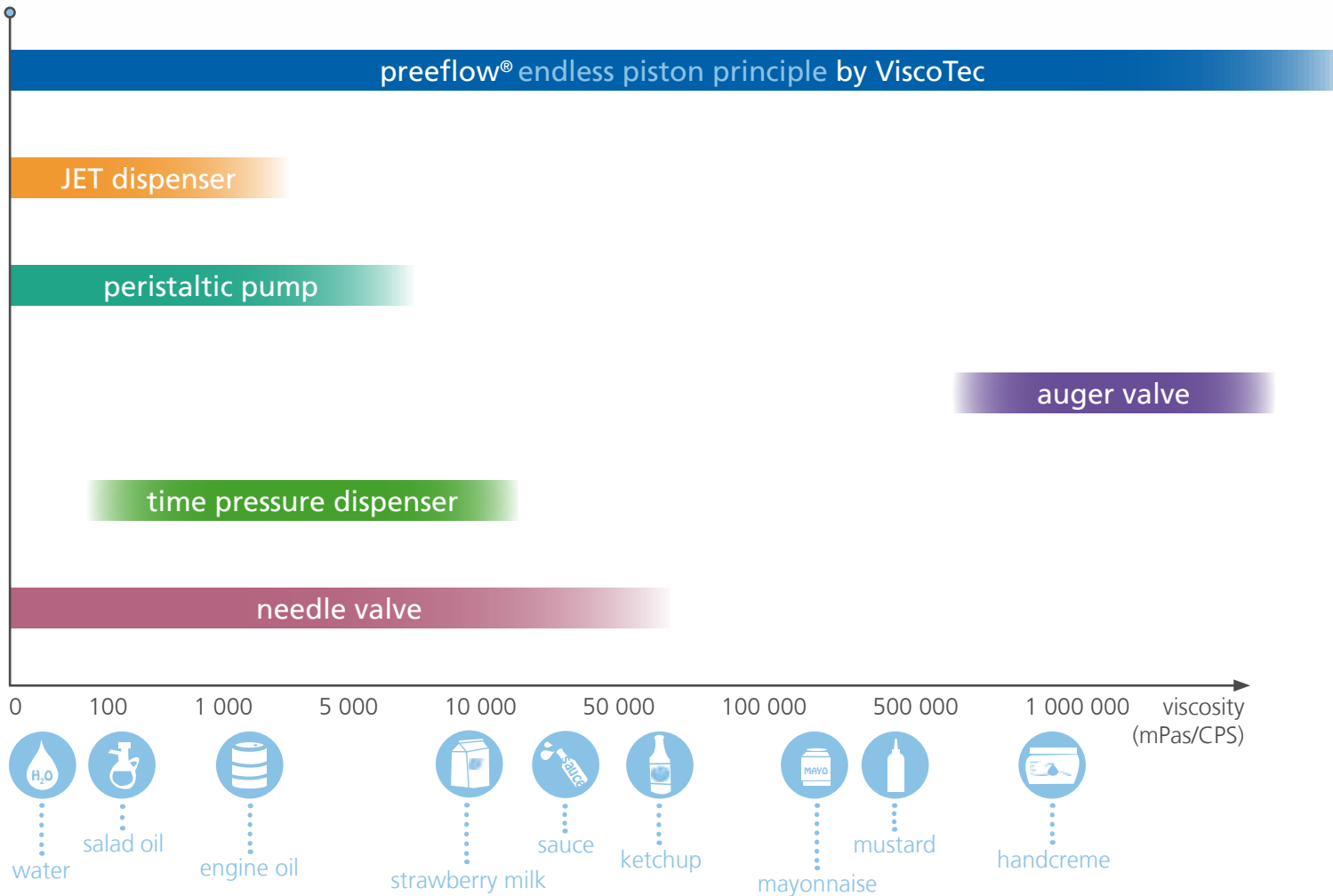
Therefore, it is: many tasks - one principle!

preeflow[®] one for all - conformal coating, sealing, bonding, micro dot, dam & fill, underfill, glob top.

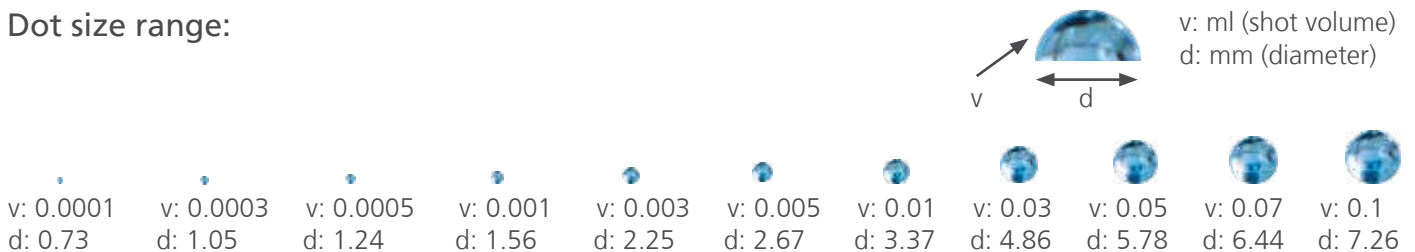




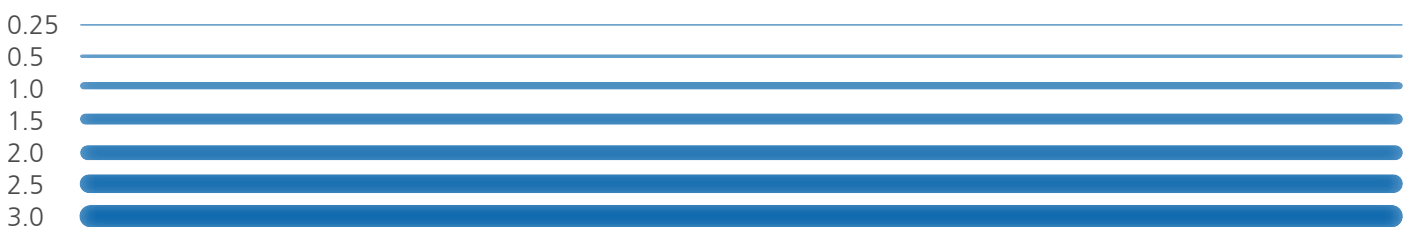
Dosing technologies in use:



Dot size range:



Bead size range:



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

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.

easy to
integrate
in machines

high
repeatability
more than
99 %



reversible
material
flow



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 when outdoors. 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

A 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.

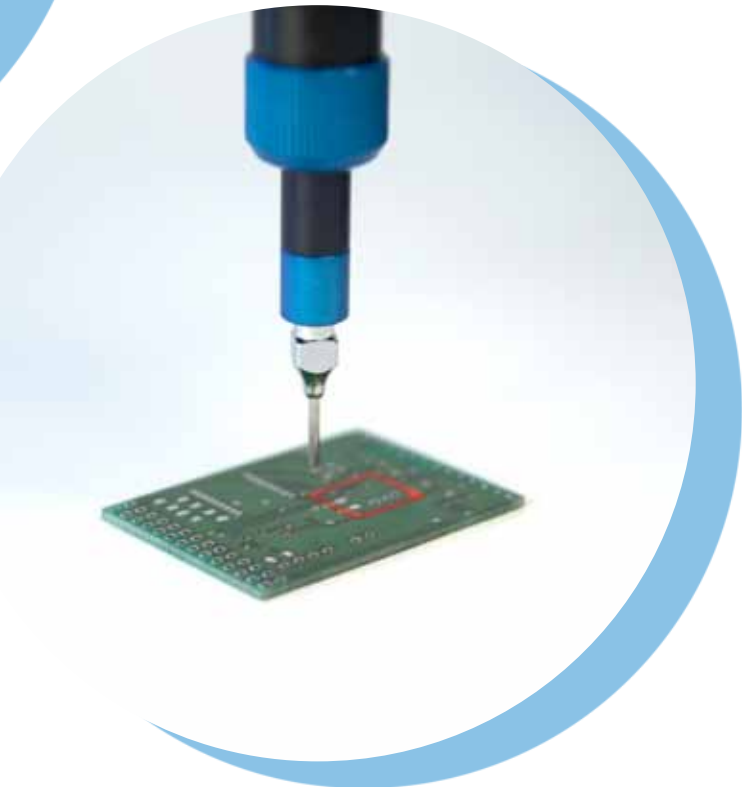


bead
factor
< 2 %

no stringing
nor dripping

independent
of pressure,
temperature
and time

very wide
viscosity
range



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.

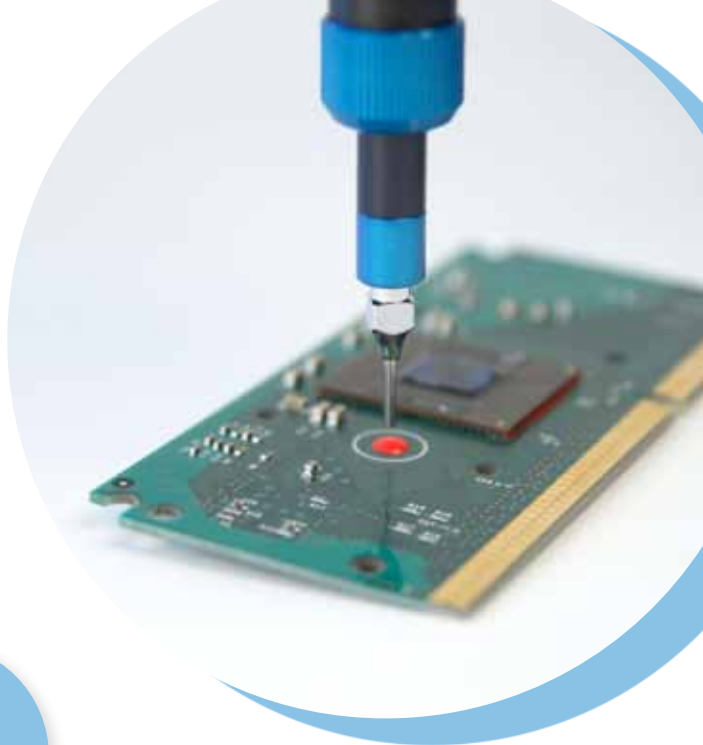
rapid
dosing

pulsation
free

liquids
containing
fillers

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.

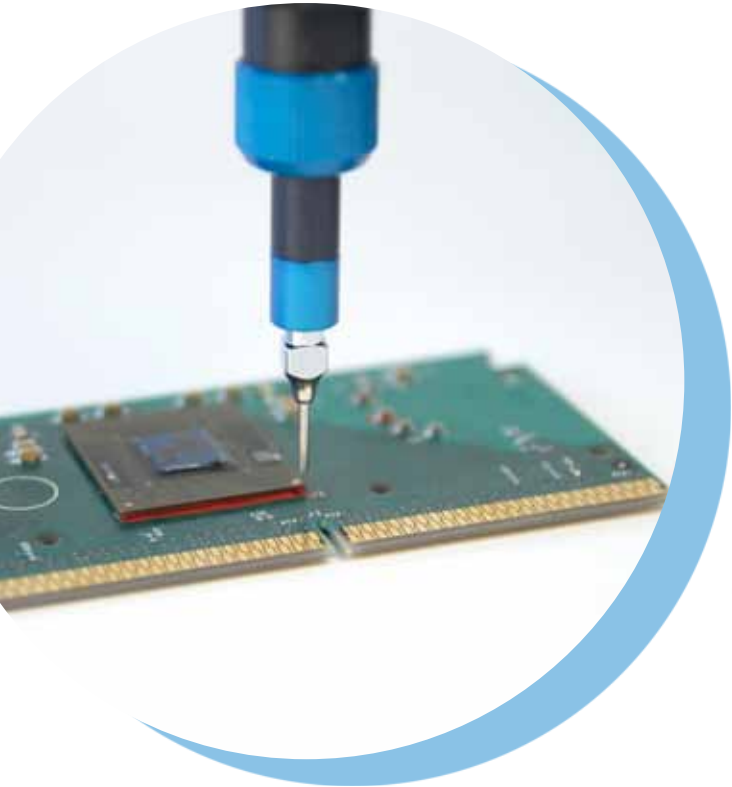


gentle product handling

reproducible results

pure volumetric dosing

easy to clean



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".

up to three shots per second

exact volume control

examples of materials

UV & light curing

anaerobic

toluene

sealing agents

2K epoxy

heat curing

shear-sensitive adhesives

1K epoxy

flavours

gasoline

high fill fluids

LED resins

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, repeat accuracy and reliability.



watery to high viscous liquids

pressure stable

dosing accuracy $\pm 1\%$

Encapsulating

Encapsulating is the process of applying a fluid sealing compound to a small and define 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.

solder paste

RTV rubbers

silver paste

flux

industrial oils

perfume

silicones

cosmetics & medicines

biotechnical suspensions

isopropanol

alcohol

MEK

grease

thermal grease

paints & inks

acetone

electrolytic solutions

brazing paste

primer

epoxy resin

PU

and many more...



preeflow®

by ViscoTec

- e**asy dosing technology
- e**asy handling, easy dispensing
- e**xact, precise dosing
- e**ffective dosing
- e**conomic, saves up to 30% of the medium

More information: www.preeflow.com

THE ORIGINAL!

ViscoTec Pumpen- u. Dosiertechnik GmbH
Amperstr. 13 | 84513 Töging a. Inn | Germany

E-Mail: mail@viscotec.de
Internet: www.viscotec.de

Telefon: +49(0)8631/9274-0
Fax: +49(0)8631/9274-300

Specialized dealer:

ViscoTec