



Emptying, dosing, and filling systems  
for low to high viscosity fluids  
**Food & Cosmetics**



# The perfect solution for any application

Thanks to the modular design of our systems and various automation concepts, ViscoTec provides the ideal solution to your application: Different fluids and systems can be integrated into complex multirow filling production lines or into semiautomatic filling stations.

## Emptying Systems

- Volumetric pump based on the endless-piston-principle
- Hygienic Design (stainless steel 1.4404/1.4571 - AISI 316 L / 316 Ti)
- Barrel sizes from 10 to 1,500 l
- Emptying rates from 2.5 to 150 l/min
- Viscosities up to 7,000,000 cps
- Cylindrical, corrugated or slightly tapered barrels, plastic containers or barrels with inliner
- Pulsation free emptying/conveying
- Residues in the barrel < 1 %



## Dosing and Filling Systems

- Dosing units with specific filling nozzles depending on each individual application
- Dosing quantity starting at 0.3 ml
- Accuracy  $\pm 1 \%$
- Hygienic Design (stainless steel 1.4404/1.4571 - AISI 316 L/316 Ti)
- Dispensing within automated lines
- Low to high viscosity fluids which could contain abrasive, shear-sensitive particles or fillers
- Hot and cold filling process
- Perfect results at CIP/SIP (Cleaning/Sterilisation in Place) cleaning



## Control Units

- Easy integration into existing machines and lines
- Different operating modes: Quantity dosing, Start/Stop mode and dynamic dosing
- Volumetric dosing with adjustable flowrate
- Adjustable suck back function
- Control possible via BUS-Systems (e.g. PROFIBUS®)





Ideal for low to high viscosity products

### Independent of viscosity

Through versatile technology, high viscosity food and cosmetic fluids, e.g. suspensions, gels, pastes or pasty ointment can be dosed and filled properly. ViscoTec systems are also perfectly suitable for abrasive fluids like peeling pastes or marinades.

### Gentle product processing

Extremely gentle filling, emptying or dosing of fluids is achieved through the low-shear endless piston principle. Conveying or dosing of most sensitive food and cosmetic fluids, with e.g. fruit or vegetable particles – is therefore ensured.

### High precision

Highly repeatable dosing and filling processes with a deviation of only  $\pm 1\%$  are guaranteed by absolute linearity between the motor speed and the output quantity. An adjustable suck back offers a totally clean and hygienic process without dripping or tailing effect.

# Benefits



-20°C to + 120°C



CIP/SIP cleaning



adjustable suck back



±1 % deviation



pulsation free



pressure stable



gentle fluid processing



GMP compliant design



viscosities up to 7,000,000 cps



fast & easy disassembling



inhouse laboratory



valveless technology



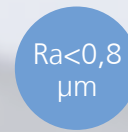
FDA compliant elastomers



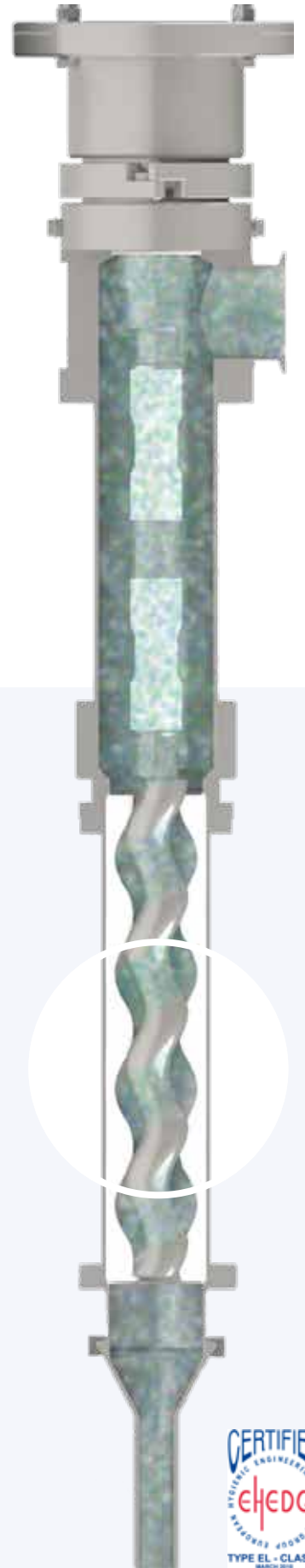
EHEDG certificate



wetted parts made of stainless steel



minimal surface roughness

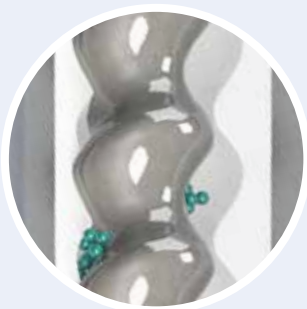
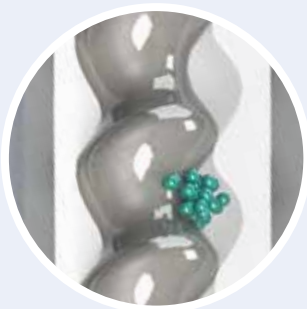
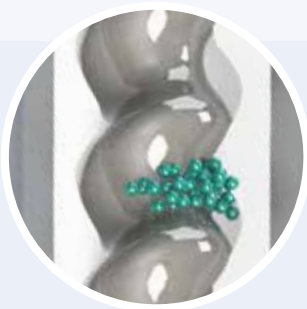
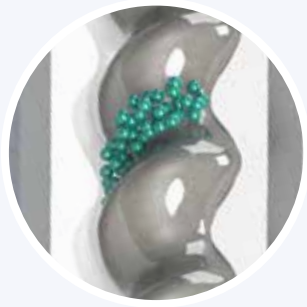
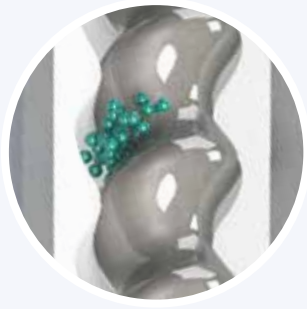


## Endless piston principle

Our technology belongs to the group of the rotary positive displacement pumps. The stainless steel rotor moves thereby eccentrically in the elastomer stator.

Chambers are formed through the interaction between rotor and stator. The size of the next opening chamber is the same as the previous one and remains constant during the rotation, so that there is no compression of the pumped product.

The endless piston geometry allows a precise, gentle and pulsation free product flow.



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## Applications

### Emptying

The ViscoMT range offers a great flexibility and always provides perfect emptying results. For example they are used for the emptying of tomato paste, mascara or Vaseline from 200 l drums. The remaining liquid in the barrel is always less than 1 %. A special designed wiping ring ensures a perfectly clean process (by wiping the liquid at the barrel edge).



### Dosing & Dispensing

Special and highly accurate dosing applications can be achieved with the help of ViscoTec dispensers. For example ViscoTec systems are used in the bakery and confectionary business for the decoration of cookies, cakes, etc. Typically, icing or fudges are dosed but also sweet filling like vanilla or chocolate pastes.



### Filling

The high dosing accuracy, the simple adjustability and the clean process (e.g. suck back function) are the main advantages of ViscoTec products in numerous filling applications. ViscoTec dispensing and filling units are used for standard stand-alone filling stations (e.g. simple manual honey filling) as well as for highly automated and synchronized bag forming, filling and sealing machines (e.g. marinades, sauces etc.).



# Specialist for high viscosity liquids

ViscoTec Pumpen- u. Dosiertechnik GmbH is a German company, located in Töging (east of Munich) which primarily deals with systems required for conveying, dosing, applying, filling and emptying low to high viscosity fluids.

## Comprehensive service and consulting

At ViscoTec we do not only offer reliable products, but offer also complete service & consulting packages: Individual concepts at the initial stage, specific tests in our laboratory, in-house setup of the systems as well as training sessions. In a common discussion, our experienced engineers will provide you with the best solution. After shipment and successful setup we will of course offer best after sales service and support – and that up to 24 hours on 7 days a week.

## Laboratory

We will analyse and test your fluids in our inhouse laboratory – based on these results we will recommend you the best suitable solution for your application.

## Spare parts

All common spare and wear parts for our products are permanently available in our spare parts stock, resulting in low maintenance durations and downtimes for you.



subsidiaries  
on 3 continents



own R&D and  
elastomer production



Made in Germany

35'

35,000 pumps  
installed worldwide

30

30 years' experience with  
the endless piston principle



Perfectly dosed!