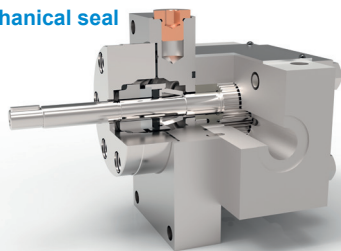


### Single mechanical seal



#### Technical Features

##### Housing:

Stainless steels, tantalum, titanium, Hastelloy®

##### Gears:

1.4112 (440B) but also all other processable ceramics and metals, e.g. 1.4571 (316Ti), Ferralium®, Ferro Titanite®, Hastelloy®, etc., optional: surface coating,

##### Friction Bearings:

Carbon, NiAg (nickel-silver), silicon carbide, zirconium oxide, tool steel, Al-bronze, optional: special materials, surface coating

##### Shaft Seals:

Single mechanical seal (ED),  
Single mechanical seal with buffer fluid (AD)  
Double mechanical seal with buffer fluid (DD),  
Magnetic coupling, stuffing box,

##### Heating System:

Steam, water, heat transfer oil, electrical

#### Operating Parameters

**Viscosity:** 0,5 to 10.000.000 mPas

**Temperature:** Up to 300 °C (580 °F),  
higher temperatures upon request

**Suction Pressure:** Vacuum to max. 15 bar (215 psig),  
magnetic drive to max. 25 bar (363 psig)

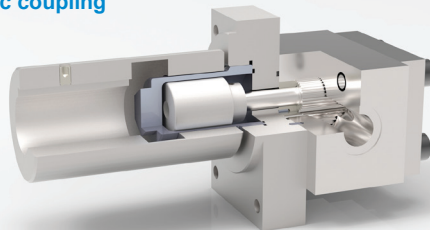
**Differential Pressure:** Up to 120 bar (1.740 psig)

*The values listed are maximum values and must not coincide under certain circumstances.*

#### Pump size

From 9/5,5 (0,2 cm³/rev) to 14/28 (2,95 cm³/rev)

### Magnetic coupling



#### Application Examples

##### Organic and Inorganic Chemicals:

Alcohols, additives, bases, esters, glycerine, resins, hardeners, isocyanates, monomers, oils, phenol, acids, biodiesel, hotmelt, glues, waxes, etc

##### Polymers:

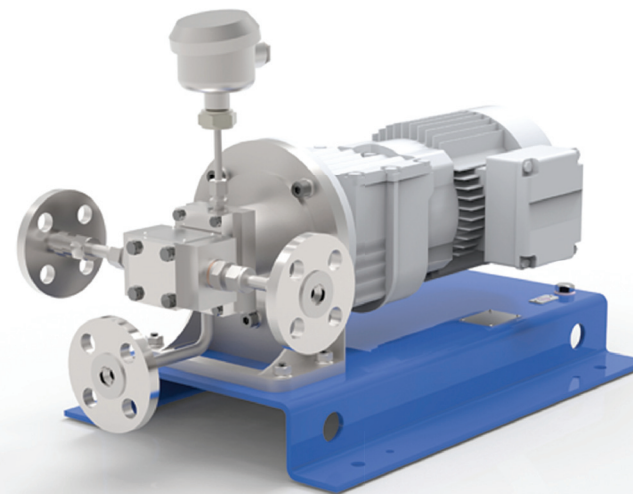
PET, PC, PA, PS, PMMA etc.

##### Foodstuffs:

Vegetable oils, butter, margarine, flavourings, chocolate, fudge, liquorice, chewing gum, vitamins, syrup, gelatine. etc.

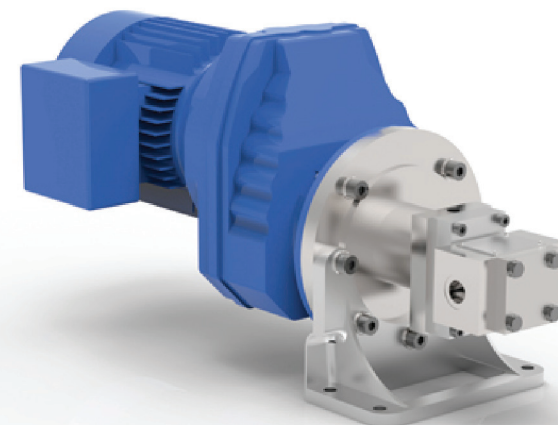
##### Pharmaceutical and Cosmetic Products:

Amino acids, lotions, shampoo, vitamins etc.



| Pumpsize  | Spec. displacement volume (cm³/rev) |
|-----------|-------------------------------------|
| 1 (9/5,5) | 0,20                                |
| 2 (9/9)   | 0,33                                |
| 3 (9/11)  | 0,40                                |
| 4 (9/14)  | 0,51                                |
| 5 (9/18)  | 0,66                                |
| 6 (14/7)  | 0,74                                |
| 7 (14/14) | 1,48                                |
| 8 (14/28) | 2,95                                |

Dependent on the fluid characteristics and operating conditions



# CHEM MINI

Gear pump for conveying and metering of fluids with low to medium viscosity.

The CHEM MINI gear pump is particularly suitable for precision metering tasks of low to medium viscosity media.

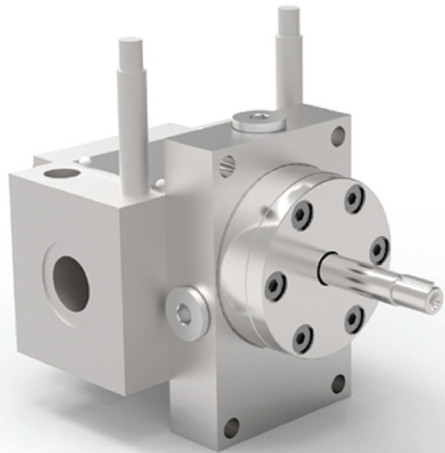
The application range goes from classic transfer and metering tasks in the chemical and pharmaceutical industries up to the conveyance of monomers, oligomers and prepolymers during the production of polymers.

Decades of experience in design and an optimum selection of materials, make this type of pump suitable for even the most demanding tasks and are outstanding in their reliability and metering precision in both vacuum and high pressure applications.

Typical areas of application for this type of pump are to be found in the chemical, cosmetic, food industry, and in the petrochemical.

The CHEM MINI takes fine metering tasks with high precision. Currently the smallest available pump has a specific volume of 0,2 cm<sup>3</sup>/rev. Smaller pumps are available upon request.

For this series are many different materials available for housing, gears and end plates.



# WITTE WORLDWIDE



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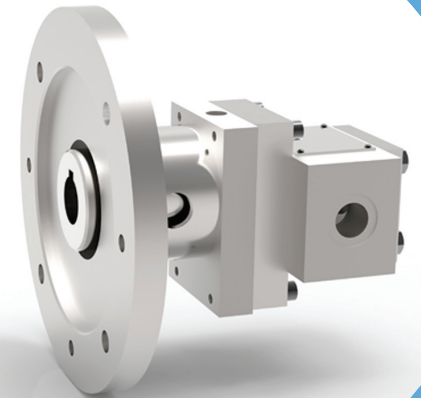
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05/2014 CHEM MINI ENG REV1.1

**WITTE**   
PUMPS & TECHNOLOGY

# CHEM MINI

Gear pump for the chemical industry  
for fine metering tasks



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