

PUMP & FILTRATION SYSTEMS >

CHEM-X™

High performance inox gear pump for highly demanding chemical applications



CHEM-X[™] pumps series is an innovative gear pump which improves efficiency and reliability in fluid transfer systems. Thanks to its optimized gear design, the new series aims to minimize pressure losses and maximize media flow. This pump is suitable for a wide range of industrial applications, including chemical, petrochemical oil & gas. The three-piece design facilitates maintenance and replacement of internal parts, such as gears and bearings. This model is available plain or heated, either electrically or with fluid. Thanks to MAAG's extensive range of components and materials it can be configured to meet the specific requirements of each customer.

Your benefits

- Wide range of viscosity, temperature and pressure
- High efficiencies due to optimized gear design
- Precise displacement volume
- High quality materials
- Corrosion-resistance
- Reliability and longevity
- Contribution to environmental sustainability through increased energy efficiency
- Easy replacement of internal parts

CHEM-X[™] 22-45 flow rate @ 0 bar ∆P



Application limits:	
Viscosity:	0.3 to 1,000,000 mPas
Temperature:	-30 to 320 °C
Suction pressu	re: Vacuum up to 65 bar
Discharge pres	sure: Vacuum up to 150 bar
Flow rate:	From 0.4 to 139 l/min
Technical specifications:	
Housing:	Stainless steelHastelloy
Gear shafts:	 Stainless steel Ferralium Hastelloy Ceramics Technopolymer (upon request) Titanium (upon request)
Bearing ¹⁾ :	 Synthetic carbon Stainless steel with carbon inserts Ceramic SSiC, ZrO₂ Tegodyn NiAg Hardened tool steel
Shaft seal:	 Single or double mechanical seal Single or double mechanical balanced seal Packing seal Sealing ring in a wide range of materials Sealing medium or heating medium connections available Magnetic coupling with single or double containment shell
Connections:	 SAE, CETOP, DIN and ANSI flanges
Heating:	 Electrical heating by cartridges on request Integrated channels for heating/cooling by steam or liquid

A range of typical pumping media

- Organic and inorganic chemicals
- Solvents
- Acids and alkalis
- Emulsions
- Sludges and condensates
- Additives
- Cellulose derivatives and pulps
- Cosmetic products
- Pharmaceutical products
- Food extracts and flavourings
- Gum base
- Vegetable/animal oils and fats
- Molten Sulfur

Accessories

- Stands, motor flanges and base plates
- Product flange connections
- Couplings
- Motors and gear reducers
- Frequency converters
- Shaft seal systems (with buffer tanks)

Certificates²⁾

- ATEX certificate
- 3.1 certificate
- German Air Quality certificate (TA-Luft)
- TR-CU (EAC) 010 012
- Performance test certificates

Options

- Bi-directional operation
- Special modifications for demanding applications
- Customizable
- ¹⁾ Other materials and designs available.
- ²⁾ Other certificates and conformities upon request.



