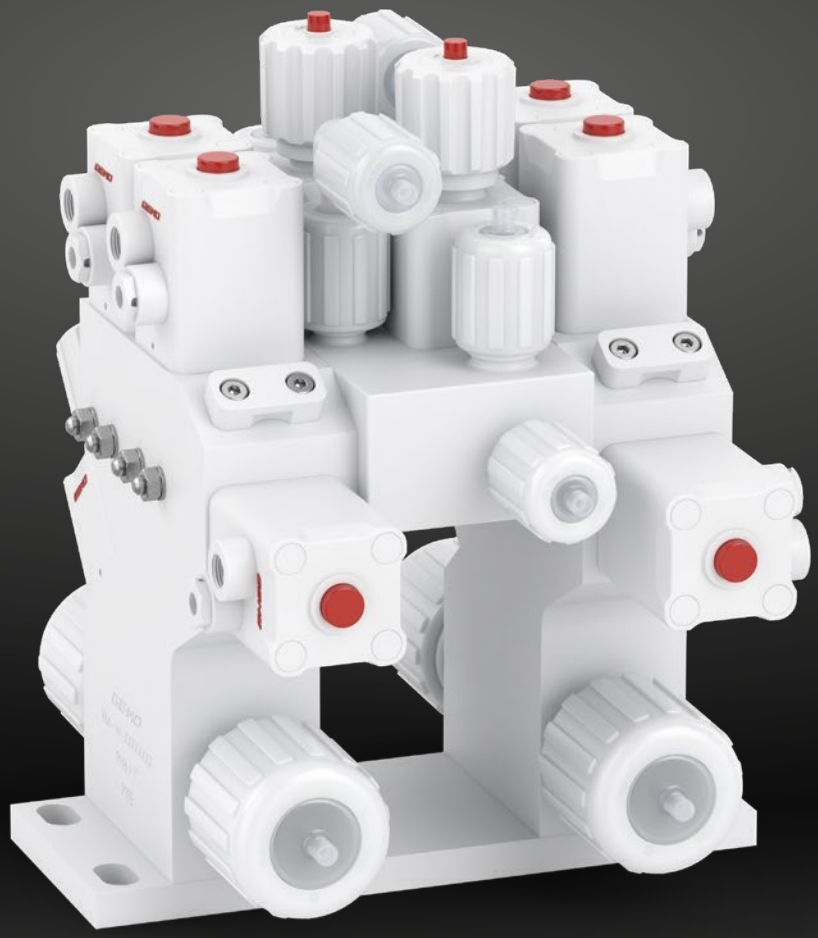


Plastic diaphragm globe valves GEMÜ C50/C51/C57 iComLine

Areas of application

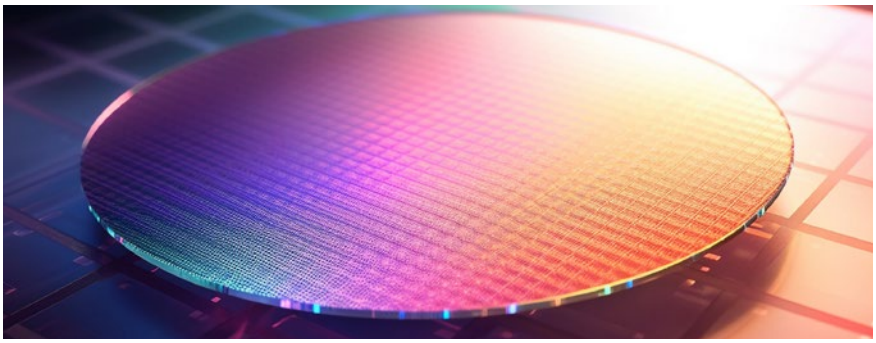
- Microelectronics and semiconductor industries
- Chemical processes
- Industrial water treatment
- Medical industry
- Power generation and environmental systems
- Pharmaceutical, biotechnology and cosmetics industries
- Foodstuffs and beverages

Features

- Low space requirement due to compact design
- Globe valve design with long service life
- Minimal contamination due to cleanroom manufacturing
- Minimal deadleg design
- Available with 2/2-way body and as a multi-port valve block system
- Design with PTFE-coated screws and compression springs, also possible as a high-temperature version

Major areas of application

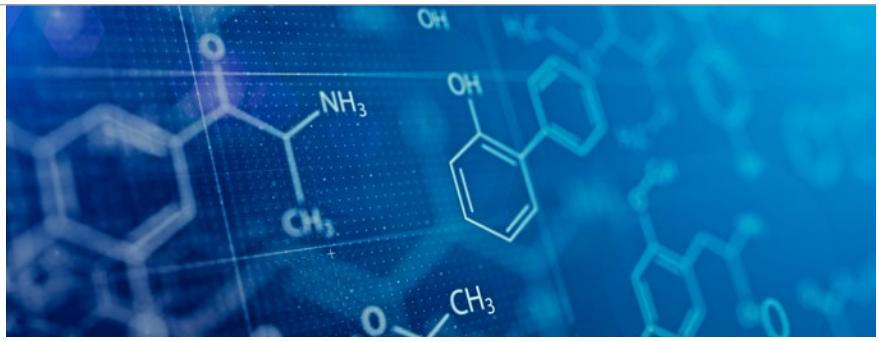
Semiconductor industry & microchip manufacture



Photovoltaic industry



Chemical industry



Renewable energies

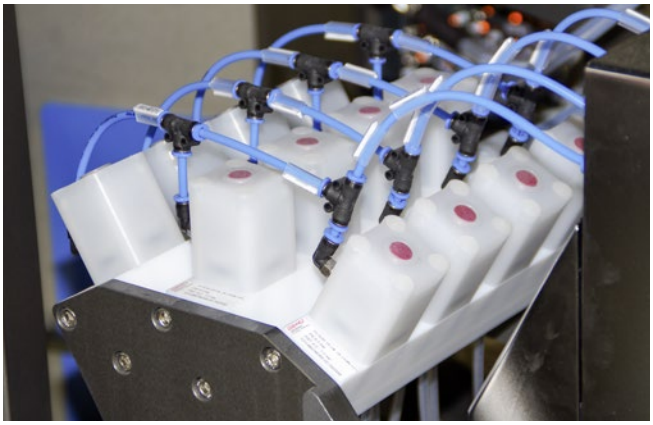


Flat panel & LED manufacture



2

Application examples



Chemical supply for ultra-pure areas of application

Used for
- Chemical supply systems for wet process applications
- Chemical supply systems for LED and microchip manufacture
- Chemical dosing/filling



Wet processes in microchip manufacture

Used for
- Wafer cleaning
- Etching/lithography in the manufacture of micro-electronic circuits
- Electroplating plants



Slurry systems in the microelectronics and semiconductor industries

Used for
- Sawing silicon wafers
- Mixed systems/recycling polishing agents
- Producing photovoltaic systems

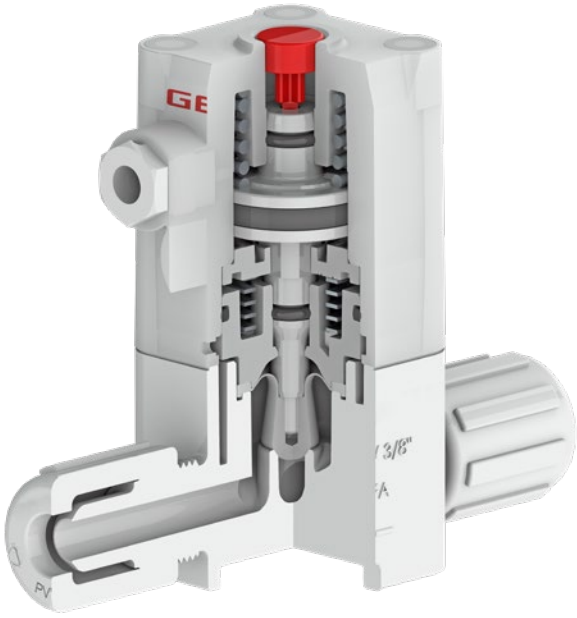


Energy storage/e-mobility/clean energy

Used for
- Electrolyte filling in battery production
- Supply/filling systems for dosing corrosive media
- Producing photovoltaic systems

3

Product highlights



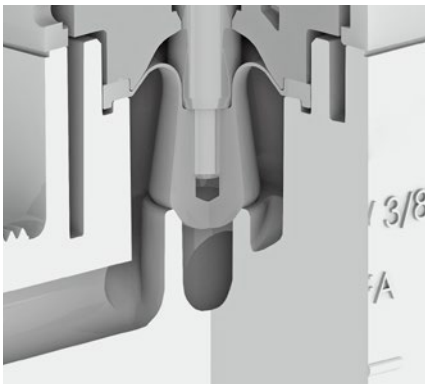
GEMÜ C50



GEMÜ C57

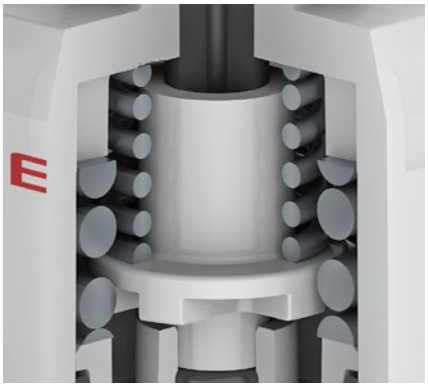
Globe valve design – compact design

- Globe valve design enables small footprint
- PTFE diaphragm (no other material/diaphragm backing)
- Long service life – expected maximum cycles: 5 million switching cycles
- Very suitable for control applications
- Very suitable for corrosive media
- Particularly suitable for use as dosing or filling valve
- Cost reduction possible due to intermediate seat sizes



Reliable leak-tightness due to pre-tension spring

- Innovative solution offers extended areas of use
- The pre-tensioned spring presses the diaphragm against the body, counteracting settling effects
- External leak tightness guaranteed, even with temperature fluctuations
- Long service life, even under extreme conditions of use



System solutions

Configuration examples



Customized multi-port valve block systems
- Compact design
- Flexible use
- Clear investment advantages due to reduced TOC (total cost of ownership)



Different valve body materials and connection options
- Depending on customer wishes/ specifications
- Depending on use of media/operating conditions
- Compact solution produced by machining a single block of material



Installation of electrical accessories
- Depending on customer request/ system solution
- Installation of electrical position indicators
- Adaptation of positioners and process controllers (also available with remote mounting)

System components



GEMÜ C38 SonicLine



GEMÜ C31 HydraLine



GEMÜ FlareStar



GEMÜ TubeStar

Integration of sensor system and subassemblies in multi-port valve blocks

- Pressure and temperature sensors
- Sensor system for determining the conductivity
- pH value measurement sensors
- Check valves



Multi-port valve block with integrated sensor unit and integrated temperature sensor

Overview of options

Actuator types and actuator sizes



Technical specifications

- Actuation types:
  Pneumatic, manual (handwheel),
  manual (hand lever, quarter turn)
- Nominal sizes*:
  ¼" to 1 ¼"
- Connection types
  Flare, Pillar®, Nexus Connect® and
  PrimeLock® connection
- Body materials*
  PTFE, PFA
- Media temperature*
  -5 to 200 °C
- Operating pressure
  0 to 6 bar

* depending on version and/or operating parameters

Body materials and connections



- Connection types: Flare, Pillar® and PrimeLock® connection, female thread, butt weld spigot
- Body materials: PTFE, PVDF, PP, PVC

Accessories



- Various electrical position indicators, positioners and process controllers can be fitted

Modular valve block solution

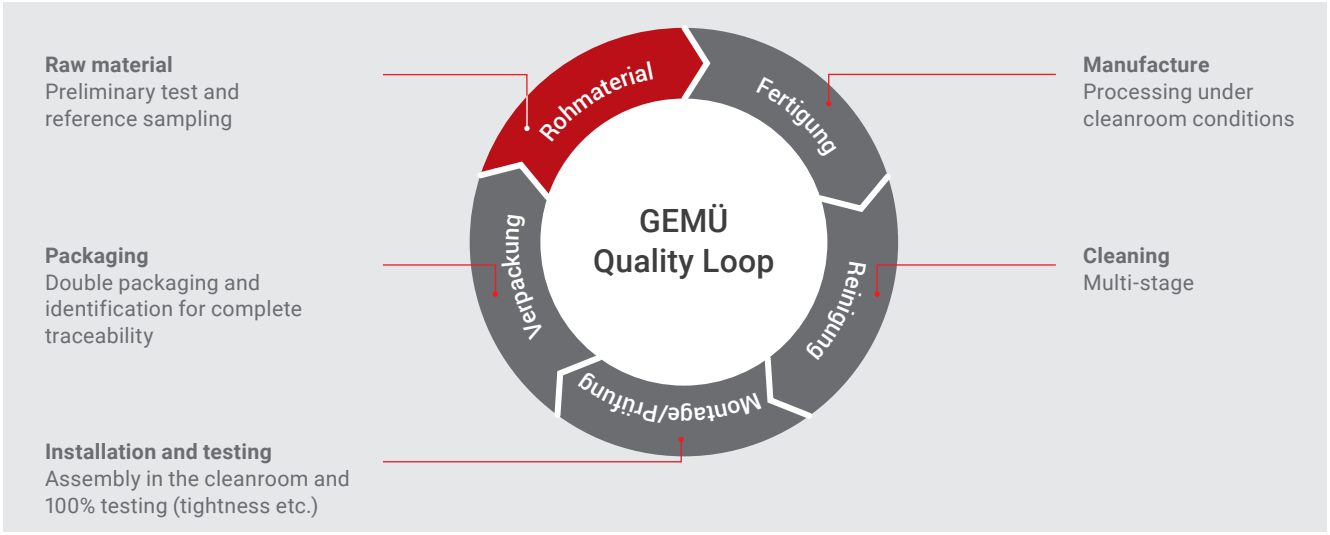
- Adapted special connections, retrofit
- Subdivided subassembly, filter housing attachment/ housing walls, sensor integration
- Modular system, flexible and extendable
- Cost optimization, same subassemblies



GEMÜ Quality Loop

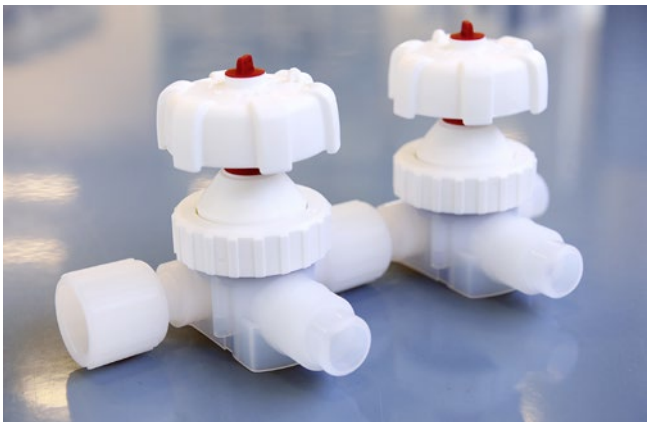
Purity, quality, safety.

To guarantee the highest purity, all high purity products are manufactured, cleaned, assembled and packed under cleanroom conditions. GEMÜ products are subject to continuous quality management. To this end, all processes are continuously monitored. The internal tests are also supplemented by testing at external testing institutes.



- Use of specified/controlled raw materials, continuous incoming inspection
- Reference sampling for traceability
- SPC – statistic process control
- Continuous further development for staff
- Voluntary supervision
- Customer audits
- Continuous improvement process
- Certified in accordance with ISO 9001:2015





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Subject to alteration · 06/2025 · 88481626