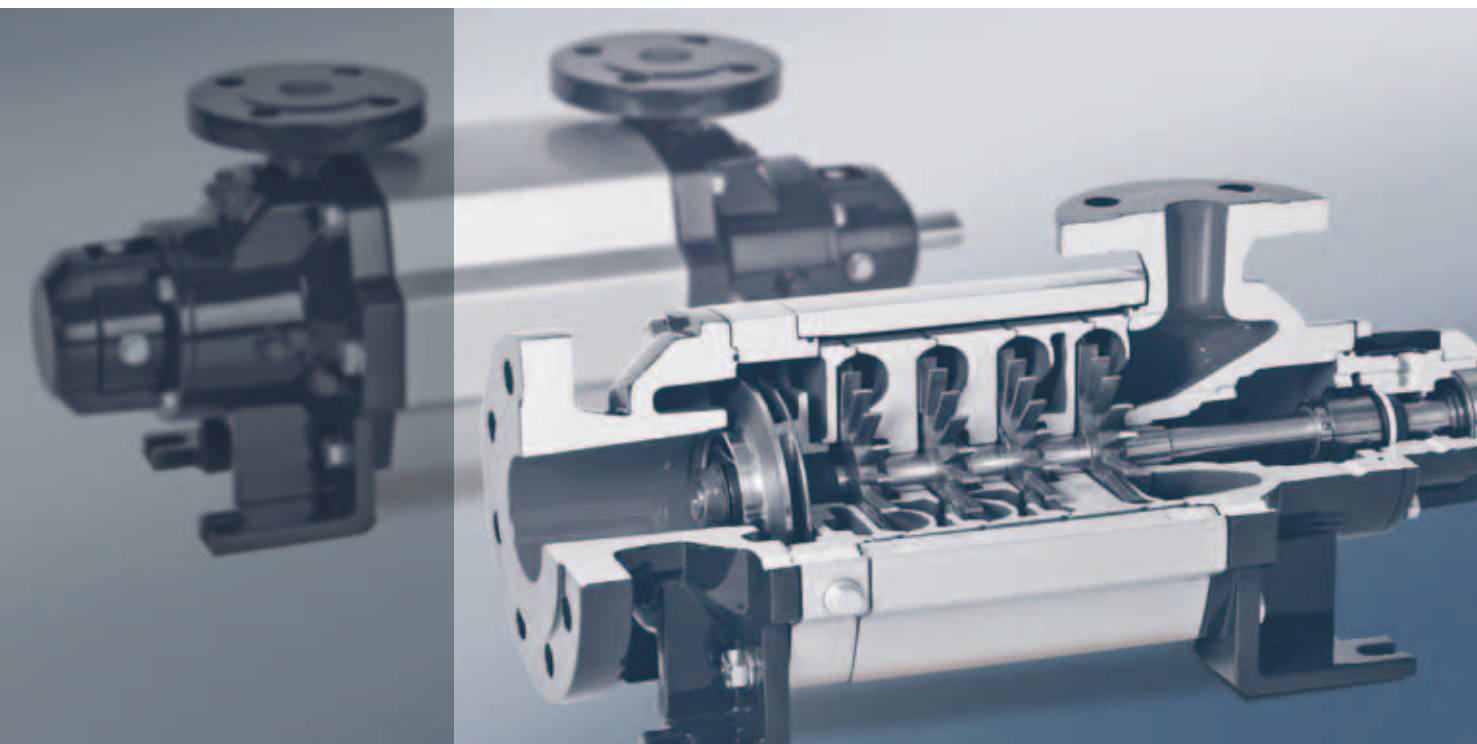


www.promhimtech.ru / zakaz@promhimtech.ru
8 800-250-01-54

Side channel pumps



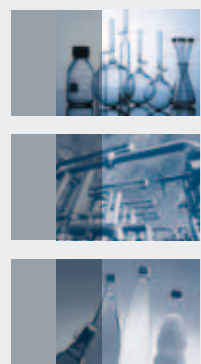
High head at low flow

The side channel principle was invented by engineers Siemen and Hinsch in 1920. SIHI has continued to develop and improve the design of its side channel pumps ever since.

This technology plays several important roles in process and operational safety, and is subject to ever increasing requirements on the part of customers. Such requirements present us with considerable challenges, particularly when it comes to incorporating new materials and technologies as part of the continuous further development of these products.

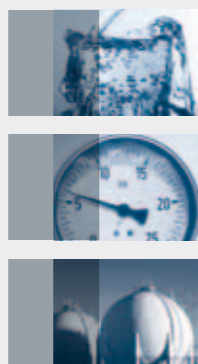
The experience and specific application knowledge of our engineers in terms of development, construction, production, application planning and sales are rooted in the fact that we have sold and maintained more than two million side channel pumps for a wide variety of applications over the past 90 years.

Our side channel pumps can handle high volumes of gas and are self-priming, guaranteeing a high level of process safety in the most varied of process-oriented cycles.



Industries/markets

Chemical
Pharmaceutical
Petrochemical
Foodstuff
LPG
Water supply
and many more



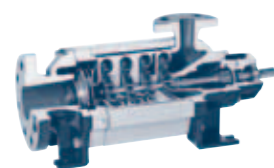
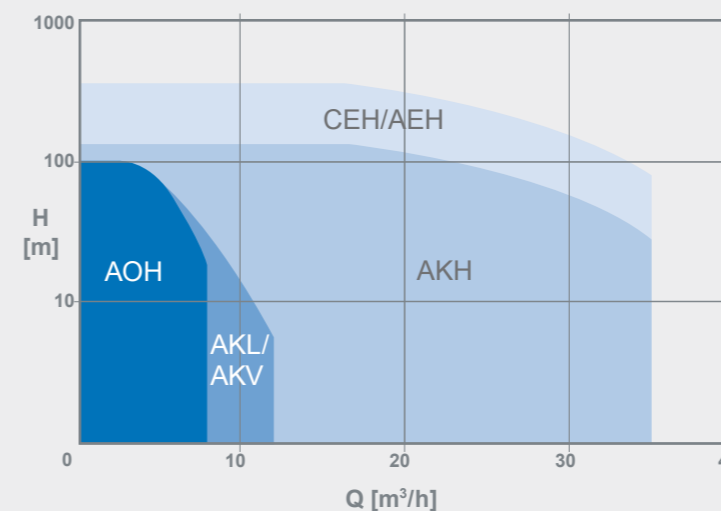
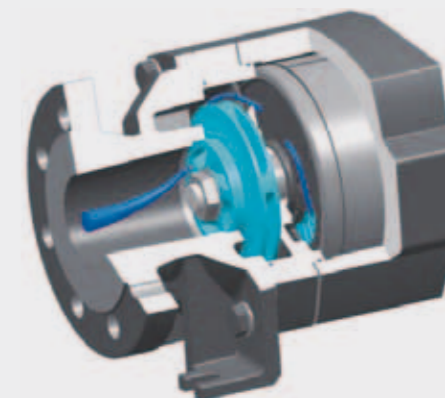
Applications

Filling
Emptying
Irrigation
Distillation
Product transfer
Fuel storage
Extraction
and many more

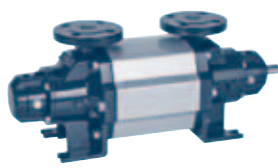
The side channel principle

A side channel pump is capable of evacuating a suction pipe and can prime the medium for suction independently. Depending on the integrated positive displacement unit, it is possible to handle gas contents of up to 50%.

The self-priming and gas-handling characteristics guarantee safe operation even in case of evaporation and therefore also a high degree of safety in industrial processes.



CEHX



AEHX



AKHX

Benefits

- + Self-priming
- + Handling of liquid-gas mixtures
- + Performance curve characteristics
- + Capacity up to 35 m³/h
- + Delivery head up to 354 m
- + Pumping of liquids under critical physical conditions
- + ATEX



CEH side channel combination pump up to 40 bar

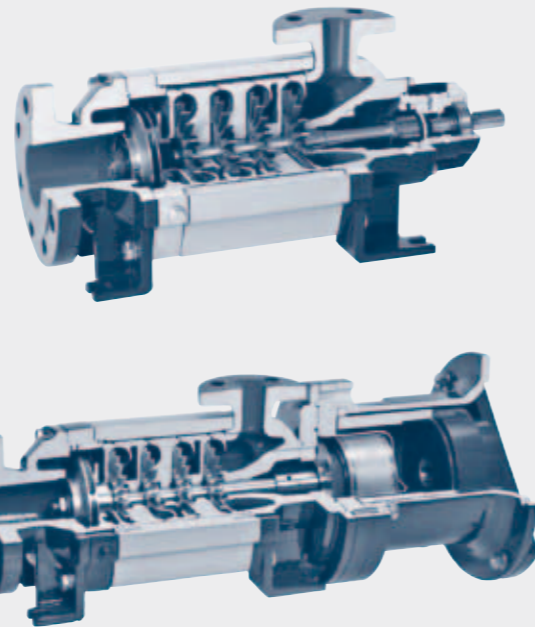
CEH

Pumps of the CEH series are self-priming, capable of handling gas together with the medium and operate with low noise levels.

These pumps are used if there is a need to handle liquids problem-free under unfavourable pumping conditions at suction side and also at positive suction heads lower than 0.5 m.

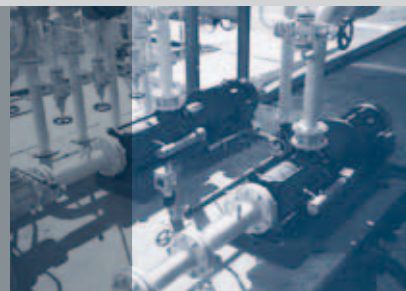
CEH pumps have an integrated retaining stage in the NPSH inducer stage, which ensures that the levels of operational fluid required for the pump to self-prime are maintained. Thanks to the very low NPSH value, the CEH is particularly suited to handling liquids under vapour pressure (e.g. condensate, refrigerant, boiler feed water, liquefied gas and especially liquid gas).

The range available enables an optimum rating to be obtained, ensuring the pump selected meets the required capacity and head.

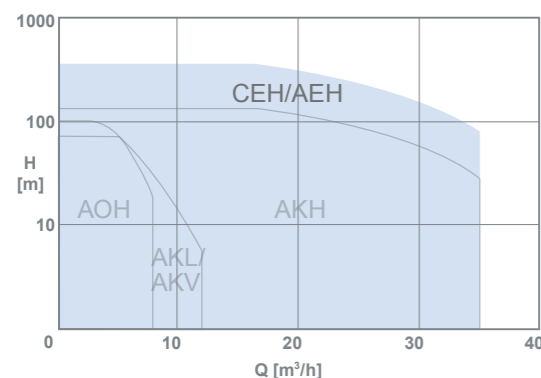


Applications

- + For handling acids and alkalis
- + For liquids near boiling point
 - Condensates
 - Distillates
 - Refrigerants
 - Liquid gases
 - Boiler feed water
- + For handling liquids under unfavourable suction conditions
 - Positive suction heads < 0.5 m



CEH pumps with magnetic coupling for evacuation of rail tankers.



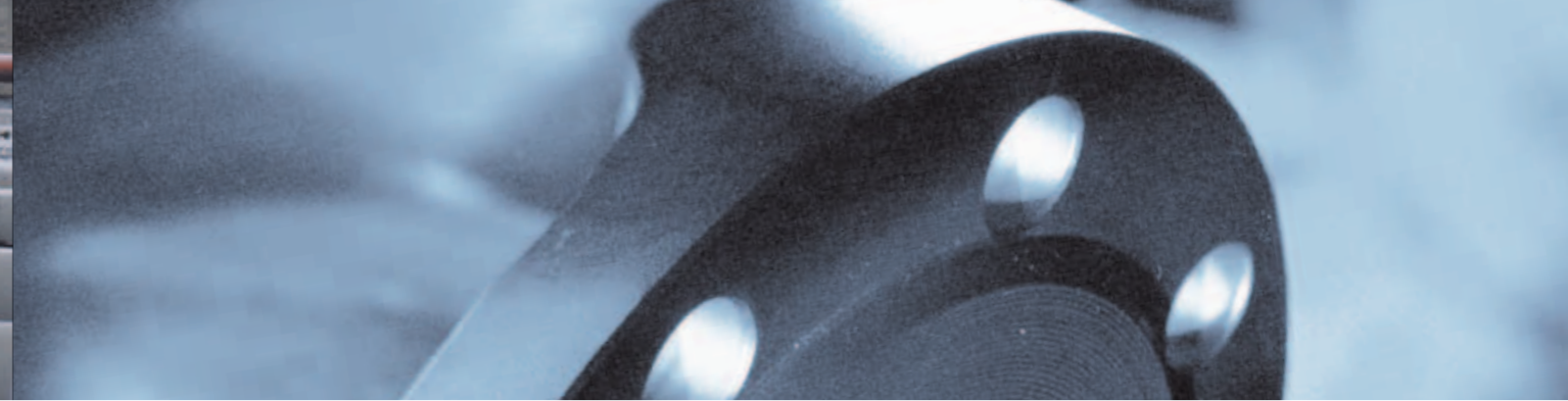
Performance data

Capacity: max. 35 m³/h
 Delivery head: max. 354 m
 Speed: max. 1,800 rpm
 Temperature: max. 180 °C
 Casing pressure: PN 40

Construction

Materials:
 Cast iron, ductile iron, stainless steel and special materials

Shaft sealing:
 Gland packing, mechanical sealing and magnetic coupling



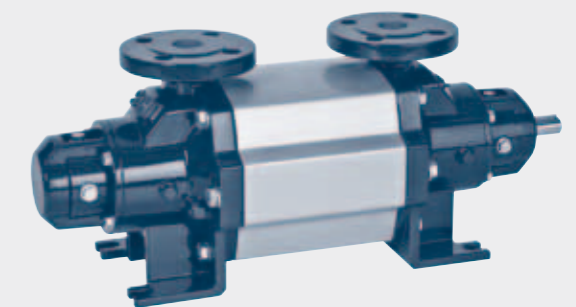
AEH side channel pumps up to 40 bar

AEH

Pumps of the AEH series are self-priming, capable of handling gas together with the medium and operate with low noise levels.

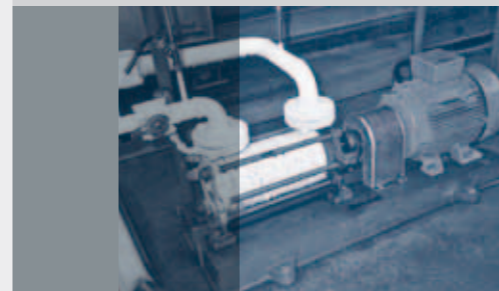
These pumps have been specifically designed for heavy-duty applications within all fields of industry where it is necessary to ensure problem-free pumping of pure, turbid or aggressive media.

The range available enables an optimum rating to be obtained, ensuring the pump selected meets the required capacity and head.

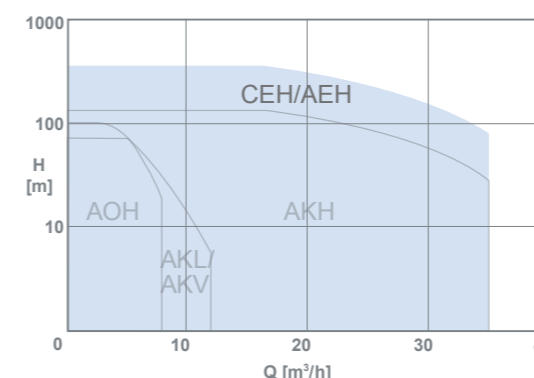


Applications

- + Chemical industry
- + Pharmaceutical industry
- + Petrochemical industry
- + Food and semi-luxuries industry
- + Plastic and rubber industry
- + Surface treatment and hardening



AEH pumps with mechanical seal for the transfer of carbon dioxide.



Performance data

Capacity: max. 35 m³/h
 Delivery head: max. 348 m
 Speed: max. 1,800 rpm
 Temperature: max. 180 °C
 Casing pressure: PN 40

Construction

Materials:
 Cast iron, ductile iron, stainless steel and special materials

Shaft sealing:
 Gland packing, mechanical sealing and magnetic coupling



AKH side channel pumps up to 16 bar

AKH

The SIHI side channel pumps of the AKH range are self-priming, capable of handling gas together with the medium and operate with low noise levels.

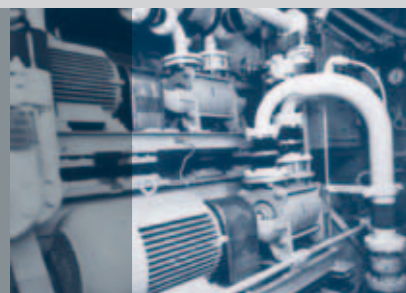
These pumps have been specifically designed for heavy-duty applications within all fields of industry where it is necessary to ensure problem-free pumping of pure, turbid or aggressive media.

The range available enables an optimum rating to be obtained, ensuring the pump selected meets the required capacity and head.

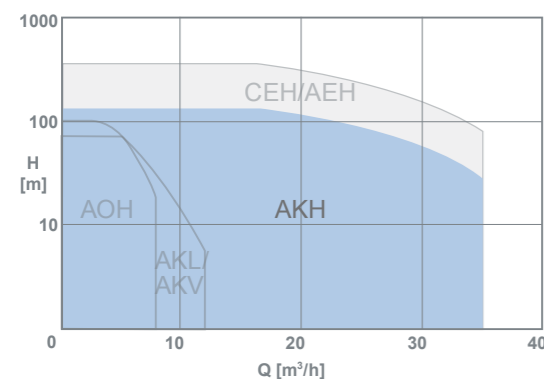


Applications

- + Chemical industry
- + Pharmaceutical industry
- + Petrochemical industry
- + Steel industry, mechanical engineering and vehicle construction
- + Food and semi-luxuries industry
- + Plastic and rubber industry
- + Electrical industry
- + Surface treatment and hardening
- + Shipbuilding industry



AKH pumps with mechanical seal for shipboard water distribution.



Performance data

Capacity: max. 35 m³/h
 Delivery head: max. 144 m
 Speed: max. 1,800 rpm
 Temperature: max. 120 °C
 Casing pressure: PN 16

Construction

Materials:
 Cast iron, bronze and stainless steel

Shaft sealing:
 Gland packing and mechanical sealing



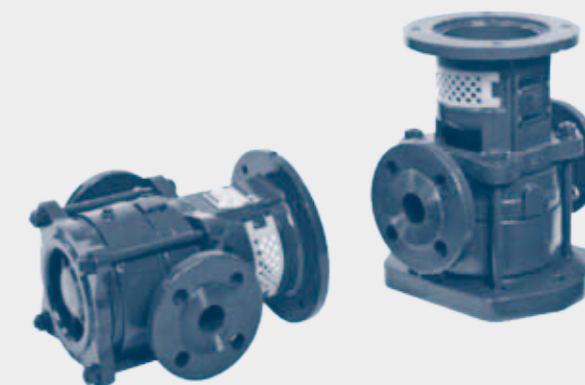
AKL/AKV side channel pumps up to 16 bar

AKL/AKV

The SIHI side channel pumps of the AKL/AKV range are self-priming, capable of handling gas together with the medium and operate with low noise levels.

These horizontal or vertical single-stage inline pumps are space-saving and easy-to-install units that are fitted with standard motors and mechanical seals.

The range available enables an optimum rating to be obtained, ensuring the pump selected meets the required capacity and head.

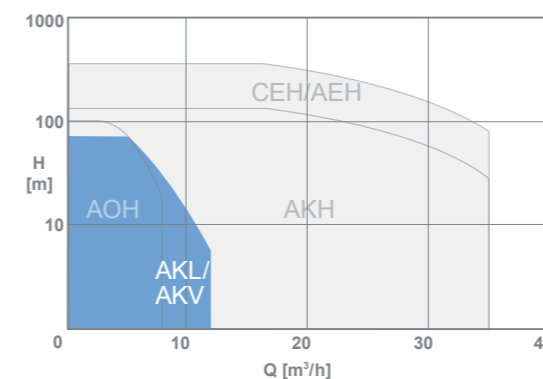


Applications

- + Chemical industry
- + Pharmaceutical industry
- + Petrochemical industry
- + Food and semi-luxuries industry
- + Plastic and rubber industry
- + Surface treatment and hardening
- + Air conditioning and refrigeration



AKV pumps with mechanical seal for pumping chemicals in tank farms.



Performance data

Capacity: max. 12 m³/h
 Delivery head: max. 70 m
 Speed: max. 3,000 rpm
 Temperature: max. 120 °C
 Casing pressure: PN 16

Construction

Materials:
 Ductile iron

Shaft sealing:
 Mechanical sealing



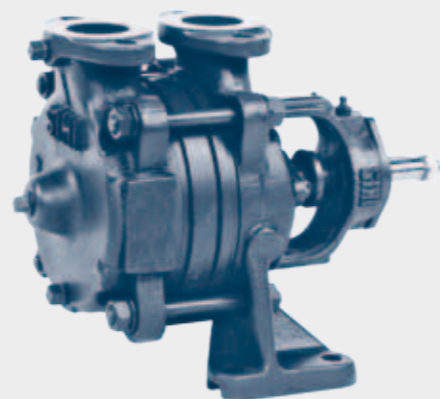
AOH side channel pumps up to 10 bar

AOH

The SIHI side channel pumps of the AOH range are self-priming, capable of handling gas together with the medium and operate with low noise levels.

These pumps have been specifically designed for use in all industrial fields where it is necessary to ensure problem-free pumping of pure, turbid or aggressive media.

The range available enables an optimum rating to be obtained, ensuring the pump selected meets the required capacity and head.

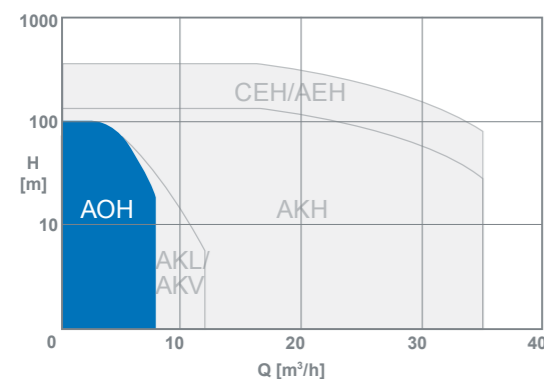


Applications

- + Waste-water disposal
- + Irrigation and drainage
- + Water circulation
- + Cooling water systems
- + Pressure boosting
- + Mixing and cleaning systems



AOH pumps for water distribution in domestic applications.



Performance data

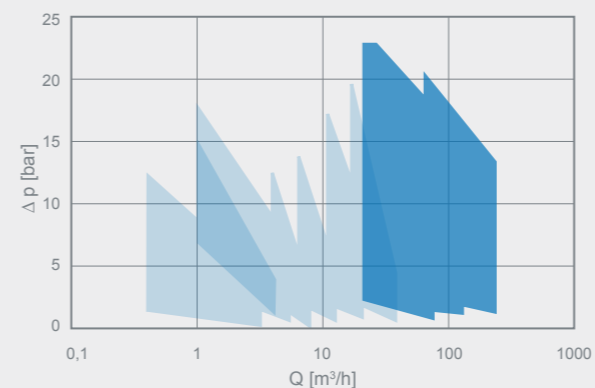
Capacity: max. 7.5 m³/h
 Delivery head: max. 98 m
 Speed: max. 1,800 rpm
 Temperature: max. 120 °C
 Casing pressure: PN 10

Construction

Materials:
Cast iron

Shaft sealing:
Gland packing

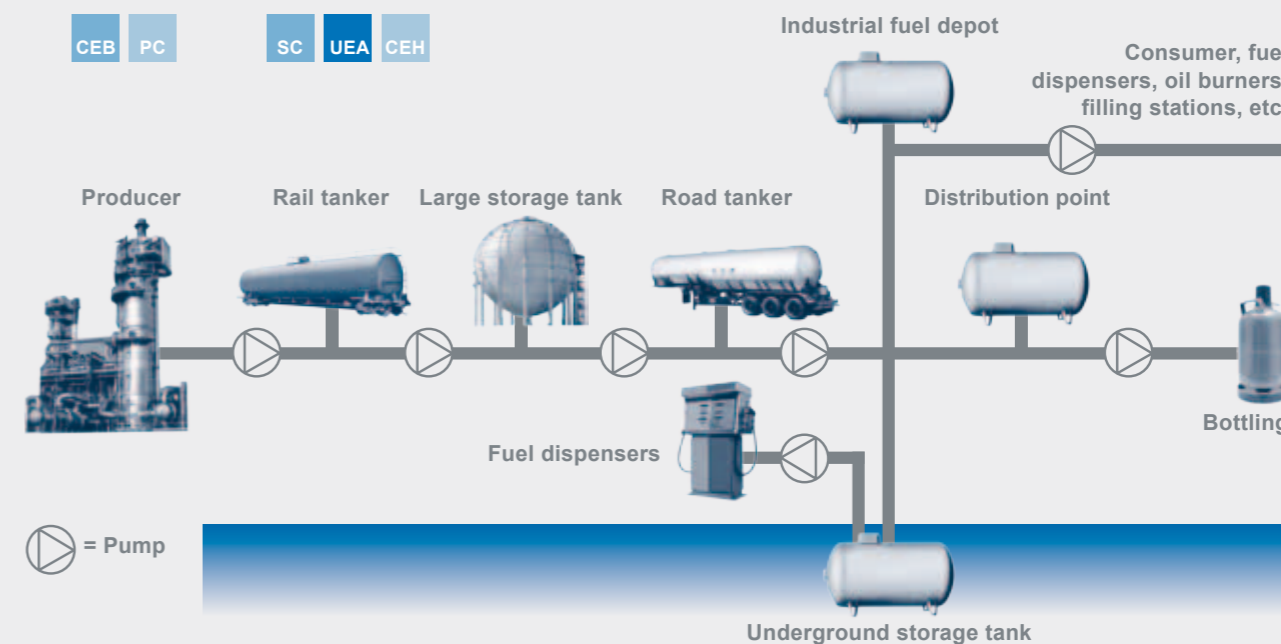
Side channel pumps for LPG



Top discharge: CEB, PC
 Bottom discharge: SC, UEA, CEH

During the various stages of distribution, pumps are required to transfer LPG in order to compensate for the pressure losses in the flow process.

Under normal atmospheric conditions, liquefied gases would be gaseous. Depending on the temperature at certain pressures, they can be liquefied.



⊕ = Pump



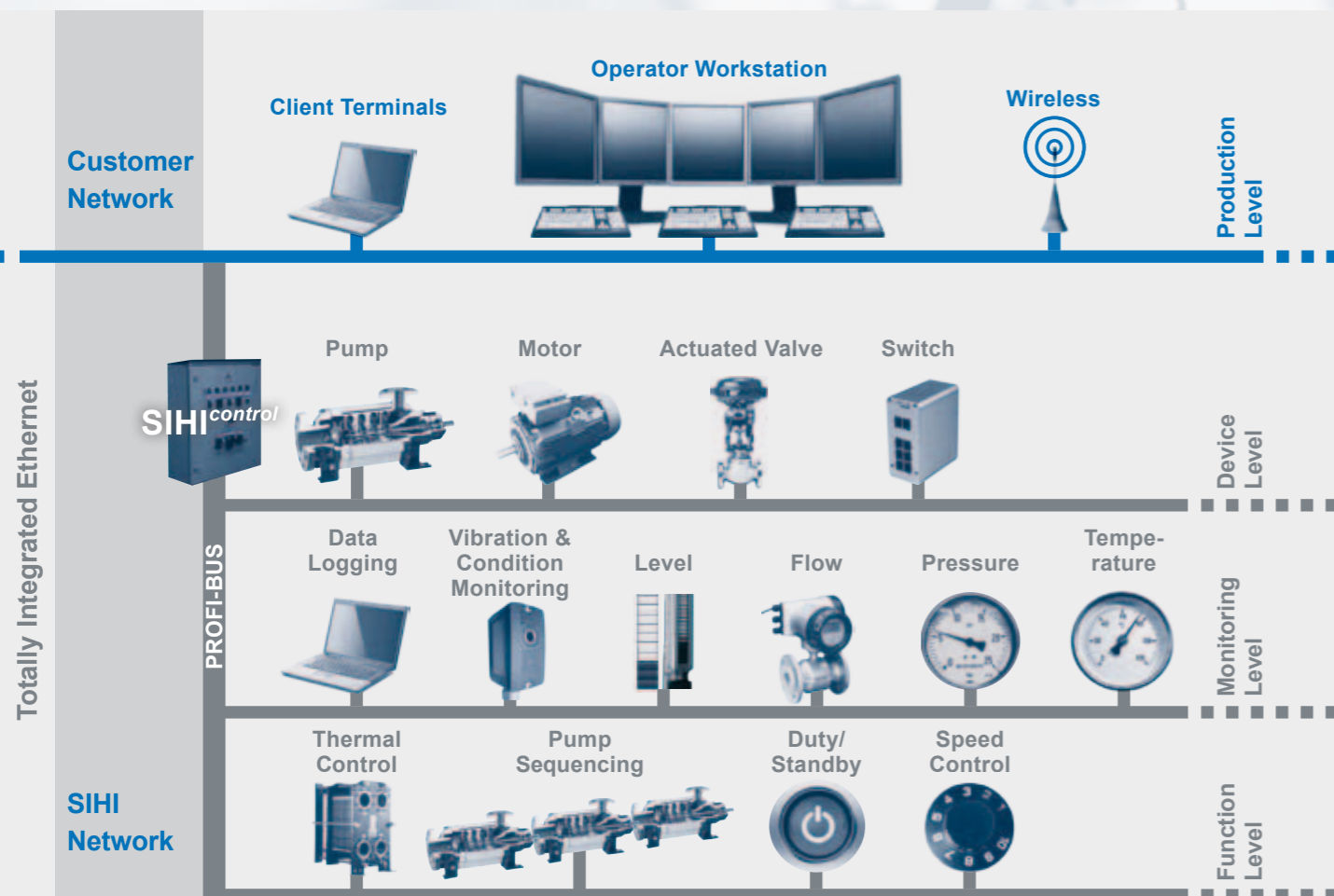
Side channel pumps

Vertical tank pumps



From concept to integration

Your process partner Committed to engineering excellence



Permitting our customers to save precious time and money, SIHI offers a complete digital control system. Employing the Process Field-Bus standard communication platform, PROFI-BUS, simple

operator connectivity is possible via a SIHI^{control}. Available with local panel and screen, the pumping system has pre-programmed logic control, monitoring, and data logging facilities.

Understanding the process

- + 100 years of experience
- + Staff trained to communicate at all levels
- + Deep application knowledge
- ... Solutions with minimal customer effort

Testing & documentation

- + Factory and Site Acceptance Tests
- + Certified documentation
- + Witnessed customised testing
- ... Reduced validation and commissioning costs

Optimum product range

- + Unique process can be treated with simplicity
- + Reduced cost of design, manufacture, and documentation
- + Predictable site testing and commissioning
- ... Customised solutions for standard capital costs

Quality assurance

- + Total Quality Management
- + ISO9000
- + Rigorous health and safety culture
- ... Long term security

Design

- + Advanced design tools
- + Highest level of machine efficiency
- + Long lasting reliability
- ... Reduced energy, maintenance, and environmental costs

Aftermarket – a local approach

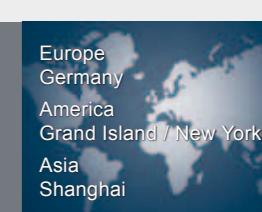
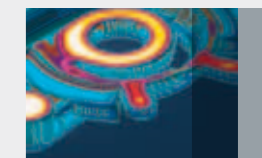
- + Dedication to process uptime
- + Locally positioned service & technical centres
- + Easy access to support, on a worldwide level
- ... Highest level of customer care

Manufacturing

- + Centre of excellence structure
- + High level of skill and competence
- + Ongoing people and process development
- ... Reduced integration costs

Competence Centre

- + Centralised design, purchasing, production, compliance, and local support
- + De-centralised (local) quotation and project management teams



Reduce Life Cycle Costs ...

- › Capital Cost
 - › Energy (Power)
 - › Installation & Alignment
 - › Maintenance & Operation
 - › Down time
 - › Environmental Cost
- ... with SIHI



SIHI^{detect} – Condition based monitoring

- Detect wear before damage occurs**
- + Cavitation and process turbulence
 - + Simple to connect
 - + LED display
 - + Available Ex
 - + All rotating machinery
 - + DCS integration and continual monitoring

Noise and Vibration analysis allows this compact device to diagnose the (often hidden) symptoms of longer term damage *even* before vibration occurs.

For further address details please visit:
www.sterlingSIHI.com

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Pumping Technology For A Better Future

