Hygienic, sterile, safe:
Our solutions for the beverage industry.
The right choice for sterile processes: pumps made by KSB.

For us, thinking ahead means thinking outside the box. This is the guiding principle behind our reliable, economic and environmentally-friendly solutions. Wherever our products are used, top priority is given to protecting people and the environment. This is especially important when it comes to Life Sciences applications such as life-sustaining and health care systems. Here, our hygienic product designs make a real difference.

In response to the requests of our customers, we have further expanded our product range for Life Sciences applications at KSB. Our established products for hygienic applications and support processes have won a reputation for high performance, and are now joined by a broad range of pumps for sterile processes.

The experience and expertise gained over more than 130 years as one of the world’s leading suppliers of pumps and valves is reflected in our new pump programme, and enables us to develop fluids and liquid foods transport solutions to meet precise requirements. KSB’s innovative solutions cater for both the beverages processing industry and sectors of the food processing industry.

As a system supplier we can draw on comprehensive know-how and offer economic all-in solutions from a single source. We are the ideal partner for everyone who values top quality, reliability and an outstanding price-performance ratio.
KSB’s product range: performance meets versatility.

In the beverage industry, our pumps for sterile processes have made a name for themselves based on outstanding performance in the most diverse of applications. From catering for individual customer requirements to equipping specialised applications (e.g. demineralised water), our wide-ranging product portfolio features a pump that is up to the task.

The reliability and optimum efficiencies of our products make a decisive contribution to future-proofing our customers’ systems. Based on our unique materials expertise we can offer high-quality investment cast or rolled steel pumps. Some more of the secrets behind our products’ success are worldwide, uniform KSB standards and our membership in the European Foundation for Quality Management (EFQM). This is how we ensure consistently high quality and continuous product development.

A global network of service centres is provided by our subsidiary KSB Service GmbH. The centres offer a complete range of services from new installations to tailored service solutions.

KSB’s products are found in the most diverse of applications, for example in the brewing process.
Pumps for sterile processes.

An eye for detail is essential when developing hygienic and sterile solutions. We aren't happy until our products perfectly match the customers’ requirements on safety and reliability; it’s an attitude that has helped us set the pace in our industry. KSB offers a total of five different pump series for sterile processes. Almost any transport duty can be performed with these safe and innovative solutions. The Vita range for hygienic applications extends the use by life of the final product, has almost no dead volume at all and allows optimised cleaning processes.
**Vitachrom**  Rolled steel centrifugal pump

**Description:** Maintenance-friendly annular casing pump, close-coupled with standardised motor, all wetted components made of stainless steel DIN 1.4404/1.4409 (AISI 316L/CF3M), active flushing of the mechanical seal. CIP/SIP-compatible. Certified by the TNO Nutrition and Food Research Institute to EHEDG standards for processing food products.

**Application:** Hygienic handling of fluids in the food and beverage industry as well as in the chemical industry.

**Technical data:**

- **DN:** 50–125
- **p [bar]:** 12 max.
- **Q [m³/h]:** 340 max.
- **T [°C]:** +140°*
- **H [m]:** 100 max.

These data refer to 50 Hz operation. Pump also available for 60 Hz. *Higher values on request.

**Vitacast/Vitacast E**  Investment cast centrifugal pump

**Description:** Maintenance-friendly volute casing pump with standardised motor, all wetted components made of DIN 1.4404/1.4409 (AISI 316L/CF3M) stainless steel. Designed with hardly any dead volume, open impeller, electropolished surface, excellent efficiency. Hygienic design for the highest requirements on cleanability (CIP/SIP-compatible), certified by the TNO Nutrition and Food Research Institute to EHEDG standards (Vitacast E). Also available with a trolley (accessory).

**Application:** Hygienic handling of fluids in the food, beverage and pharmaceutical industries as well as in the chemical industry.

**Technical data:**

- **DN:** 25–150
- **p [bar]:** 10*
- **Q [m³/h]:** 560 max.
- **T [°C]:** +140°*
- **H [m]:** 100 max.

These data refer to 50 Hz operation. Pump also available for 60 Hz. *Higher values on request.

**Vitaprime**  Self-priming centrifugal pump

**Description:** Maintenance-friendly, self-priming side channel pump in close-coupled design with standardised motor, all wetted components made of DIN 1.4404/1.4409 (AISI 316L/CF3M) stainless steel. Hygienic design for the highest requirements on cleanability (CIP/SIP-compatible). Also available with a trolley (accessory).

**Application:** Hygienic handling of fluids in the food, beverage and pharmaceutical industries.

**Technical data:**

- **DN:** 40–80
- **p [bar]:** 10
- **Q [m³/h]:** 55 max.
- **T [°C]:** +140°*
- **H [m]:** 45 max.

These data refer to 50 Hz operation. Pump also available for 60 Hz. *Higher values on request.
**Vitastage** Multistage centrifugal pump

**Description:**
Multistage centrifugal pump in close-coupled design for vertical or horizontal installation. All wetted components made of DIN 1.4401/1.4408 (AISI 316L/CF8M) stainless steel. Versatile, robust and especially energy-efficient.

**Application:**
Processes in the food and beverage industry with moderate hygienic requirements.

**Technical data:**
- Q [m³/h] 40 max.
- H [m] 150 max.
- p [bar] 16 max.
- T [°C] +140°

Data refers to 50 Hz operation. Pump also available for 60 Hz. *Higher values on request.

**Vitalobe** Rotary lobe pump

**Description:**
Maintenance-friendly rotary lobe pump with standardised motor, all wetted components made of DIN 1.4404/1.4409 (AISI 316L/CF3M) chrome nickel molybdenum steel. Designed with hardly any dead volume, with electropolished surface. CIP/SIP-compatible. Gentle handling of the fluid by rotary lobe design. Suitable for transporting highly viscous fluids. Also available with a trolley (accessory).

**Application:** Hygienic handling of fluids in the food, beverage and pharmaceutical industries as well as in the chemical industry.

**Technical data:**
- DN 25 – 200
- Q [m³/h] 300 max.
- p [bar] 30 max.
- H [m] 200 max.
- T [°C] -40 to +200

These data refer to 50 Hz operation. Pump also available for 60 Hz.
KSB’s products work reliably and economically to meet all of the demands of secondary processes. This makes them ideal for cleaning processes, such as sterilising water and disinfection. They are also highly suited to transporting cold or hot water.

**Movitec**  High-pressure in-line pump

**Description:**
Multistage, vertical, high-pressure centrifugal pump in ring-section design with suction and discharge nozzles of identical nominal diameters arranged opposite to each other (in-line design), close-coupled. ATEX-compliant version available.

**Application:**
In water treatment, fire-fighting and pressure booster systems, hot water and cooling water circulation, etc.

**Technical data:**

<table>
<thead>
<tr>
<th>DN</th>
<th>Q [m³/h]</th>
<th>H [m]</th>
<th>p [bar]</th>
<th>T [°C]</th>
</tr>
</thead>
<tbody>
<tr>
<td>32–100</td>
<td>102 max.</td>
<td>401 max.</td>
<td>40 max.</td>
<td>+140 max.</td>
</tr>
</tbody>
</table>

These data refer to 50 Hz operation. Pump also available for 60 Hz.

**Etachrom**  Rolled steel centrifugal pump

**Description:**
Horizontal annular casing pump, single-stage, ratings and main dimensions to EN 733, with replaceable casing wear rings. ATEX-compliant version available.

**Application:**
In water supply systems, also for handling cleaning agents as well as drinking and service water.

**Technical data:**

<table>
<thead>
<tr>
<th>DN</th>
<th>Q [m³/h]</th>
<th>H [m]</th>
<th>p [bar]</th>
<th>T [°C]</th>
</tr>
</thead>
<tbody>
<tr>
<td>25–80</td>
<td>260 max.</td>
<td>106 max.</td>
<td>12 max.</td>
<td>+110 max.</td>
</tr>
</tbody>
</table>

These data refer to 50 Hz operation. Pump also available for 60 Hz.
KWP  Centrifugal pump with channel impeller

Description:
Horizontal, radially split volute casing pump in back pull-out or close-coupled design, single-stage, single-entry, available with various impeller types: channel impeller, open multi-vane impeller and free-flow impeller. ATEX-compliant version available.

Application: Handling all types of slurries without stringy material and pulps up to 5% bone dry and a maximum density of 1.1 kg/dm³.

Technical data:
- DN: 40–800
- Q [m³/h]: 1300 max.
- H [m]: 100 max.
- p [bar]: 10 max.
- T [°C]: +280 max.
- n [rpm]: 2900 max.

These data refer to 50 Hz operation. Pump also available for 60 Hz.

UPA  Submersible borehole pump

Description:
Multistage centrifugal pump in ring-section design for vertical installation. Non-return valve integrated in the discharge nozzle.

Application:
Handling clean and slightly contaminated water in general water supply, pressure booster and emergency water supply systems, etc.

Technical data:
- DN: 100–250
- Q [m³/h]: 840 max.
- H [m]: 460 max.
- T [°C]: +50 max.

These data refer to 50 Hz operation. Pump also available for 60 Hz.
**Magnochem**  Seal-less volute casing pump

**Description:**
Horizontal, seal-less volute casing pump in back pull-out design, with magnetic drive, to ISO 2858 / EN 22 858 / ISO 5199, with radial impeller, single-stage, single-entry. ATEX-compliant version available.

**Application:**
Versatile pump with options for every application, for example a heatable version. Having only two static seals, the pump provides top safety. A heating facility integrated in the rotor space makes for high energy savings.

**Technical data:**
| DN (mm) | 25 – 250 |
| Q [m³/h] | 1250 max. |
| H [m] | 153 max. |
| p [bar] | 25 max. |
| T [°C] | +300 max. |

These data refer to 50 Hz operation. Pump also available for 60 Hz.

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**Microchem**  Centrifugal pump for minimal volume flows

**Description:**
System consisting of a variable-speed, single-stage centrifugal pump with directly flanged motor and integrated control unit.

**Application:**
Continuous volume flow control of aggressive organic and inorganic fluids. The pump is suitable for use in laboratories, pilot plants and in production, particularly in industrial process engineering, continuous processes, micro-process engineering, mini-plants, dosing, coating, spray-drying and injection applications.

**Technical data:**
| Q [ml/min] | 0 – 5000 |
| H [m] | 200 max. |
| p [bar] | 25 max. |
| T [°C] | -10 to +100 |
Pumps for support processes.

Our powerful product portfolio for support processes is well-established in the beverage industry thanks to perfectly matched solutions and continuous product development.

**Etanorm / Etabloc** Standardised pump

*Description:* Horizontal volute casing pump, single-stage (two-stage for pump size 125 and above), long-coupled back pull-out design, with replaceable shaft sleeves/shaft protecting sleeves and casing wear rings. ATEX-compliant version available.

*Application:* In bottle rinsing systems, spray irrigation, general irrigation, drainage, water supply systems, heating and air-conditioning systems, condensate transport, swimming pools, fire-fighting systems, handling hot water, cooling water, fire-fighting water, oil, brine, drinking water, brackish water, service water, etc.

**Technical data:**

<table>
<thead>
<tr>
<th></th>
<th>Etanorm</th>
<th>Etabloc</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN</td>
<td>32–300</td>
<td>25–150</td>
</tr>
<tr>
<td>Q [m³/h]</td>
<td>1900 max.</td>
<td>800 max.</td>
</tr>
<tr>
<td>H [m]</td>
<td>102 max.</td>
<td>102 max.</td>
</tr>
<tr>
<td>p [bar]</td>
<td>16 max.</td>
<td>16 max.</td>
</tr>
<tr>
<td>T [°C]</td>
<td>+140 max.</td>
<td>+110 max.</td>
</tr>
<tr>
<td>n [rpm]</td>
<td></td>
<td>4200 max.</td>
</tr>
</tbody>
</table>

These data refer to 50 Hz operation. Pump also available for 60 Hz.

**Etanorm SYT** Hot water/Thermal oil pump

*Description:* Horizontal, single-stage, long-coupled volute casing pump in back pull-out design, ratings and main dimensions to EN 733, with replaceable casing wear rings. ATEX-compliant version available.

*Application:* In heat transfer systems (DIN 4754, VDI 3033) or for hot water circulation (DIN 4752, TRD 108/110).

**Technical data:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>DN</td>
<td>32–105</td>
</tr>
<tr>
<td>Q [m³/h]</td>
<td>660 max.</td>
</tr>
<tr>
<td>H [m]</td>
<td>102 max.</td>
</tr>
<tr>
<td>p [bar]</td>
<td>16 max.</td>
</tr>
<tr>
<td>T [°C]</td>
<td>-30 to +350</td>
</tr>
</tbody>
</table>

These data refer to 50 Hz operation. Pump also available for 60 Hz.
**Sewatec**  Dry-installed volute casing pump

**Description:**
Horizontal or vertical volute casing pump in back pull-out or close-coupled design, with free-flow (F), single-vane (E) and multi-vane (K) impellers or diagonal single-vane impeller (D), discharge flange to DIN and ANSI standards. ATEX-compliant version available.

**Application:**
Handling untreated sewage and all types of waste water in waste water engineering and industry.

**Technical data:**

<table>
<thead>
<tr>
<th>DN</th>
<th>50 – 700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q [m³/h]</td>
<td>60 – 10000</td>
</tr>
<tr>
<td>H [m]</td>
<td>95 max.</td>
</tr>
<tr>
<td>p [bar]</td>
<td>10 max.</td>
</tr>
<tr>
<td>T [°C]</td>
<td>+70 max.</td>
</tr>
<tr>
<td>n [rpm]</td>
<td>2900 max.</td>
</tr>
</tbody>
</table>

These data refer to 50 Hz operation. Pump also available for 60 Hz.

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**Amarex KRT**  Submersible motor pump

**Description:**
Vertical single-stage submersible motor pump in close-coupled design, various impeller types, for wet or dry installation, stationary and transportable version. ATEX-compliant version available.

**Application:**
Handling all types of abrasive or aggressive waste water in water and waste water engineering as well as in the industry, especially untreated sewage containing long fibres and solid substances, fluids containing gas/air as well as raw, activated and digested sludge.

**Technical data:**

<table>
<thead>
<tr>
<th>DN</th>
<th>40 – 700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q [m³/h]</td>
<td>10800 max.</td>
</tr>
<tr>
<td>H [m]</td>
<td>100 max.</td>
</tr>
<tr>
<td>T [°C]</td>
<td>+60 max.</td>
</tr>
<tr>
<td>n [rpm]</td>
<td>2900 max.</td>
</tr>
</tbody>
</table>

These data refer to 50 Hz operation. Pump also available for 60 Hz.