



Engineering services:





Tailor-made repairs and modifications

Process changes, new legal requirements, design improvements and material developments present you with opportunities to enhance the profitability and reliability of your system during your pumps' service life. Drawing on over 140 years' experience as a pump manufacturer KSB engineering services use the latest design and optimisation tools to provide a comprehensive range of solutions which respond to such changed requirements. These services are not limited to a particular brand.

After extensive recording and assessment of your requirements we thoroughly analyse the current conditions.

Aspects such as technical feasibility, integrating existing components or selecting an optimum time frame for retrofitting are considered alongside the payback period. Modifying the hydraulic system, making mechanical improvements, upgrading material or any combination thereof – our service experts tailor their solutions to each and every case, which may be as varied as the requirements on a pump system are. The resulting changes, e.g. to pressure-retaining components or to the rotor dynamics, are verified for compliance with the applicable engineering standards. This will provide continued safety and reliability of your system without any restrictions.

Naturally the changes will be documented in order to enable after-sales service (e.g. supply of spare parts).



Our solutions







Material upgrades

Often the availability of pumps is strongly limited by erosion, corrosion or cavitation damage. Our materials laboratory provides the expertise required for retrofitting corrosion-resistant materials, wear-resistant coatings and non-metallic materials. Such upgrades will extend the service life of equipment where standard materials were chosen due to cost reasons.

Hydraulic modifications

After verifying the design data against the actual and the planned operating data of a pump, we offer you modifications tailored precisely to your requirements. We draw on the latest selection software as well as on our hydraulic engineers' decades of experience. This results in the pump being more efficient, more reliable and perfectly matched to its particular application.

Mechanical optimisation

Our specialists use the latest 3D design systems to analyse the as-is condition of your pump and suggest constructive solutions to overcome seal leakages, improve the rotor dynamics or solve problems with noise or vibrations. Our experts can also advise you on integrating state-of-the-art shaft seals (e.g. a double mechanical seal) in older pumps which were previously fitted with a single seal or gland packing.

Your benefits at a glance:

- Reducing energy and maintenance costs
- Extending the service life
- Increasing the availability
- Adjusting to changes in system conditions (e.g. increasing the output)
- Complying with legal requirements (e.g. Guidelines for the control of process emissions)
- Preventing high investment costs of new installations by using existing interfaces (e.g. piping, base frame)

High-pressure boiler feed pumps in ring-section design



Further options:

- Retrofitting a variable speed drive
- Automatic monitoring (leakage of mechanical seal, bearing vibration, bearing temperature)

High-pressure boiler feed pumps in barrel casing design



Boiler recirculation pumps with integrated wet winding motor



Centrifugal pumps for solids-laden fluids



Further option:

Retrofitting a variable speed drive

Pumps in back pull-out design (ISO 13709/API 610)



Further option:

RPC Retrofit Kit for OH2 pumps

Axially split volute casing pumps



Further options:

- Retrofitting a variable speed drive
- Automatic monitoring (leakage of mechanical seal, bearing vibration, bearing temperature)

Tubular casing pumps



Submersible borehole pumps





Technology that makes its mark

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