Fluid Systems

Systems Engineering

Our objective is to ensure maximum system availability for decades through proper system and application analysis, thereby selecting the correct pumps, the correct surge control systems, and the correct control equipment.

We function as a professional service provider, and offer turnkey water and waste water transfer schemes, including engineering services.

Our involvement from the initial feasibility study, through the design, planning and implementation stages has proved itself over many years, thereby guaranteeing professional management, design, order processing, installation, commissioning, training and maintenance services, ultimately making up the complete engineering solution.
One stop engineering

Planning and implementation of transfer systems for:

WATER SUPPLY
IRRIGATION AND DRAINAGE
WASTE WATER

The Benefits for you ..........

Your success –
Our know-how

Systems consist of both hydro-mechanical and electro automation elements. Our area of expertise lies in integrating the two; enhanced economic efficiency, operating reliability and availability.

One contact –
Streamlined Communication

All-in-one systems solutions from a single supplier – leaving you more time to concentrate on your goals

Added value through –
Integrated services

Whether construction of new or rehabilitation of existing systems is required, we are able to offer support in terms of operating or maintenance.

.......... with an integrated concept

As part of our responsibility as a provider of turnkey systems, we offer integrated services:

· Project Development
· Project Management for mechanical, electrical and automation systems and structural components
System Design, Engineering & Hydraulics

Pumping system design calculations and analysis to identify the most suitable and economic solution according to clients needs.

Our engineering team will prepare concept & preliminary drawings during engineering phase, as well as construction and manufacturing drawings during design & engineering phase.

Project Management

Our key personnel all have vast experience in their related fields and will assist you to effectively manage your projects from design through implementation and commissioning.

Experienced project managers coordinate the complete process, from blue-print through erection and start-up. Updated scheduling and reports will be provided during the life of the project.
Water Supply

• Water supply and pressure boosting

Pressure boosting systems ensure drinking and service water supply in both municipal buildings and industrial installations. In the form of fire fighting systems, they guarantee safety in homes and offices, hotels, hospitals and industrial sites.

Benefits for you:
• High availability on account of fully automatic operation.
• Reliable water supply due to consistent pressure, regardless of demand level.

• Clean-water pumping stations

...... are employed as intermediate pumping stations wherever fluid transfer by force of gravity is either impossible or uneconomical

The benefits for you:
• High operating reliability.
• Easy access for maintenance.
• Straight forward condition monitoring during operation.
Irrigation and drainage

• Low –lift pumping station

......transfer large quantities of water at low generated heads. They are employed for dewatering duties in flood control and for extracting water from still or flowing sources for irrigation purposes.
Our tubular casing pumps and submersible pumps in discharge tubes perform consistently well when employed in such systems.
Our innovative approach integrates both the hydro-mechanical part and the structural design.

The benefits for you:
Compact design.
Increased availability.
Reduced losses – increased efficiency.
Reduced investment and operating costs.

• High –lift pumping station

....transfer small, medium and large quantities of water at medium generated heads. Our innovative approach integrates both the demand variations and dependency on constant pressure as well as the hydro mechanical part and the structural design.

The benefits for you:
• Variable flow options according to demand.
• Increased efficiency.
• Innovative design, based on technical and economic viewpoints.
Waste Water

• Pumping installations / stations with wet-installed pumps

......with external control for installation in existing pump sumps.
Submersible motor pumps ensuring waste water and sewage transfer.

The benefits for you:
• Straightforward retrofitting of existing pump sumps.
• Short delivery and installation periods.
• Fully automatic operation – reduced monitoring effort.
• Minimal planning requirements due to modular design.
• A guide system allowing the lowering and removing of pumps from the sump, so maintenance can be performed in a clean environment.

• Pumping installations / stations with dry installed pumps

.... are employed as intermediate pumping stations wherever fluid transfer by force of gravity is either not possible or is uneconomical.

The benefits for you:
• High operating efficiency.
• Easy access for maintenance.
• Straightforward condition monitoring during operation
Rehabilitation

Modernisation of machines and equipment and upgrading of stations for automatic operation

Decades of experience in the rehabilitation of pumping stations include, amongst other things:

- Pumps
- Diesel generators
- System accessories
- Ventilation and air-conditioning system
- Telecommunications systems
- Low and high voltage systems for fully automatic operation

How do you modernise outdated pumping stations so that they meet today’s standards while they remain operational?

How do you optimise a network of pumping stations in terms of machines and equipment and full automation?

If you are asking yourself these questions, we are the people to talk to.
Electrical / Electronic & Automation Engineering
Design and Engineering of fully integrated systems, automation of existing systems during rehabilitation.

Through our network of Contractors or Partners, KSB is able to fully design and implement the necessary equipment to fully integrate the system into the required network.

This would include:
- Low & High Voltage Switchgear
- Monitoring Systems
- Systems for Control & Automation
- Telemetry Systems

KSB will help you - from detailed planning through to implementation
Caring for your liquid assets
– with an integrated concept
FLUID SYSTEMS DIVISION

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