

**Well pump measurement** – first step  
towards improved economic efficiency

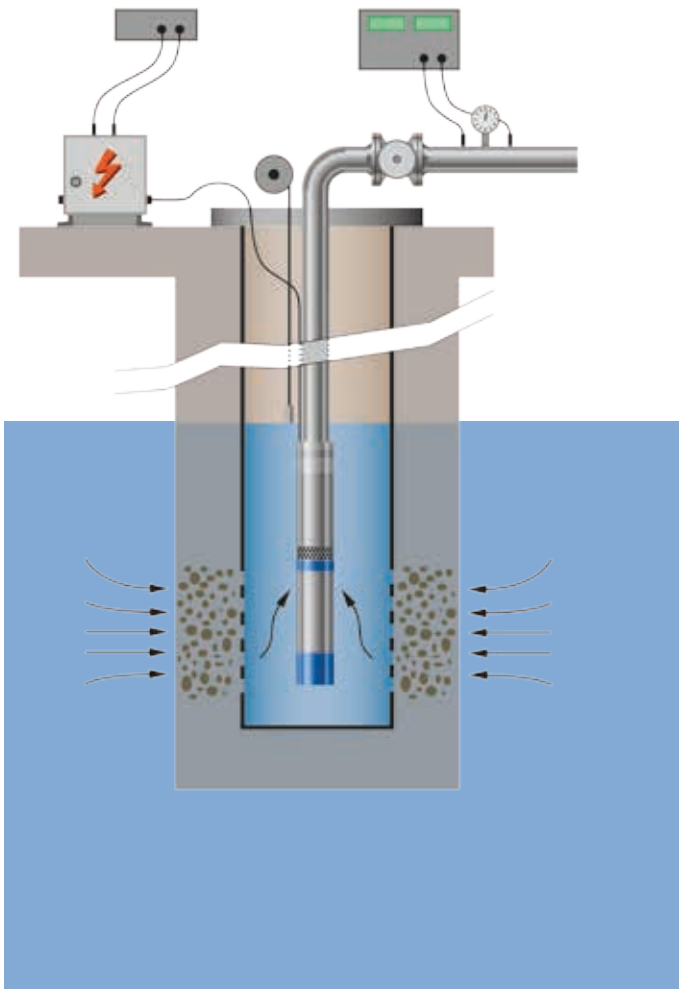
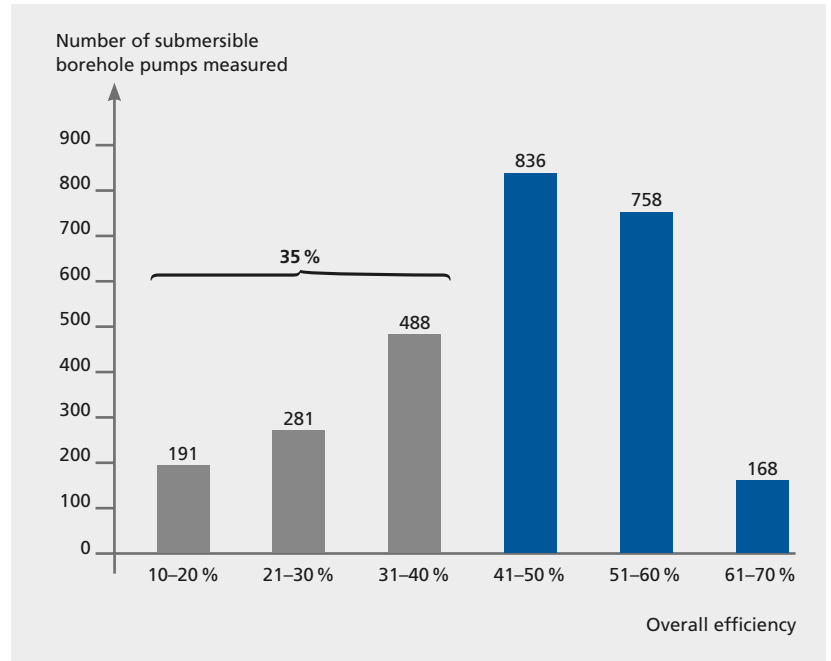


# Well pump measurement saves hard cash

## Check the economic efficiency of your groundwater extraction system

By performing measurements on well pumps, our specialists have ascertained that one third of all well pumps operate at an overall efficiency of less than 40 percent – this results in excessively high operating costs as much more energy is consumed than necessary. Well pump measurement indicates just how efficiently and economically a system is functioning and reveals potential savings in energy costs.

Effective groundwater extraction with KSB – just ask us!



## Factors which have a negative influence on the overall efficiency of groundwater extraction

- Altered operating conditions (e.g. water supply mains expansion due to the connection of a new housing estate)
- Changes in the groundwater level
- Iron clogging in the system
- Wear inside the pump
- Changes to the pipeline or downstream water treatment systems
- Changes to the well inflow zone with time (gravel screens/filters etc.)



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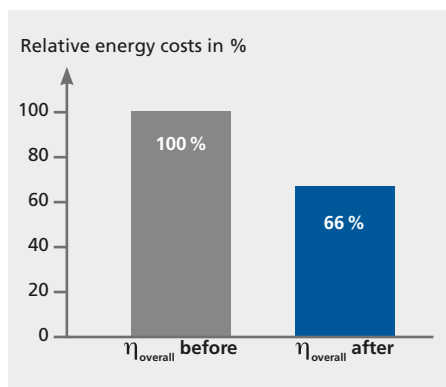


## Energy-optimised pump selection lowers your operating costs

### More efficiency and reliability of operation

Your well's economic efficiency depends on the efficiency of your submersible borehole pump. KSB excels in selecting pumps that provide energy-efficient operation.

The investment in a new submersible borehole pump with increased efficiency is only 2–3 % of the energy costs to be paid for over 10 years.



		Example 1: Flow rate = 100 m <sup>3</sup> /h Head = 45 m	Example 2: Flow rate = 30 m <sup>3</sup> /h Head = 70 m
Energy costs*	$\eta_{\text{overall}}$ before = 40 %	181.200 €	85.700 €
	$\eta_{\text{overall}}$ after = 61 %	120.600 €	56.300 €
Savings in	10 years	60.600 €	29.400 €
	1 year	6.060 €	2.940 €
Payback period when investing in one pump		< 1 year	< 1 year

\*Energy costs for a submersible borehole pump with different efficiency levels:  
Service life: 5000 hours/per annum over 10 years  
Energy price: 0.12 / kWh

# Comprehensive services from KSB – a clear view that brings real benefits

## Our services at a glance

- We identify the operating condition of the submersible borehole pumps you run, irrespective of the pump brand.
- We only use calibrated measuring instruments.
- We give you a detailed analysis including measurement report.
- We discuss the results with you personally.
- We send you a quotation free of charge complete with payback analysis for operating cost reduction if required.

## Expert consulting takes top priority at KSB.

### You will receive

- A detailed overview of the economic efficiency of groundwater extraction from your well
- A payback analysis providing the facts for sound economical decisions
- A detailed and reliable statement showing where you can save on operating and energy costs





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