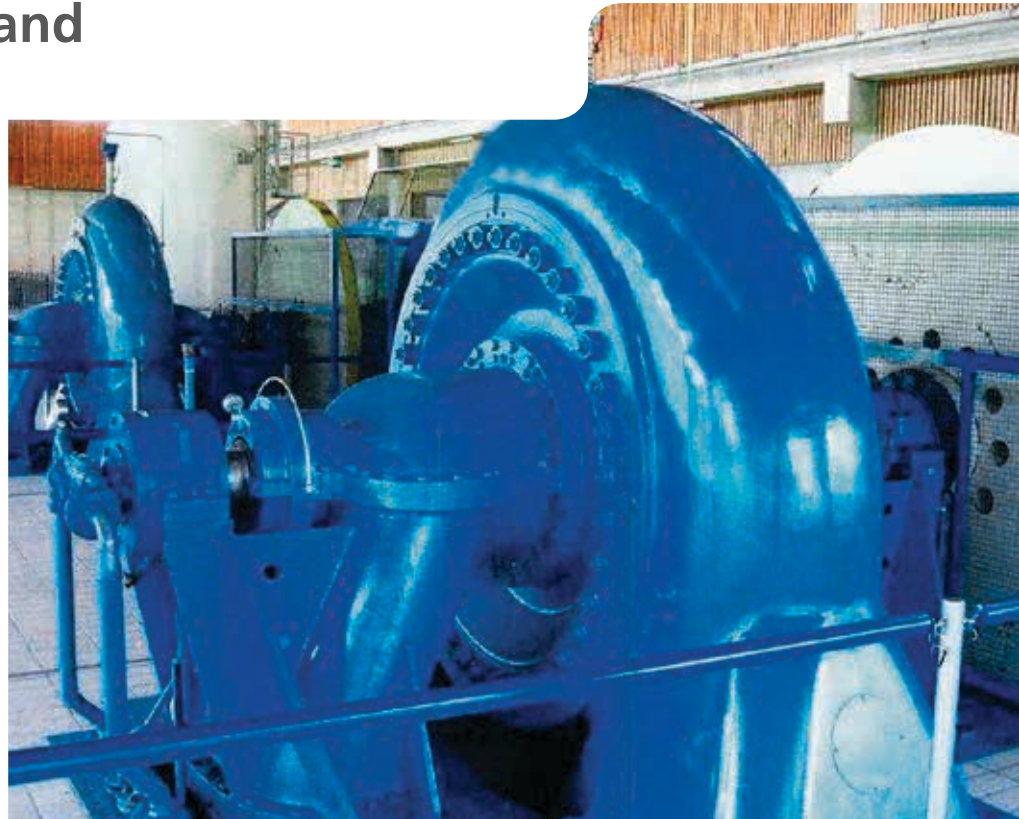


Special hydraulic system to match new level of demand



Drinking water supply

Water works and pumping stations are essential for securing the drinking water supply.

Reliable and efficient pump operation achieved

Due to decreasing demand, an existing drinking water pumping station was faced with the situation of having to supply smaller amounts of water in future. Its volute casing pump which was originally designed to handle large flow rates cannot be used to pump lower amounts of water as this would result in increased vibrations. The existing hydraulic system is not suitable for low-flow operation. Owing to the system conditions (NPSHavailable), matching the operating point to the current demand by reducing the impeller diameter would not provide a sufficient solution. As the pumps in KSB's current pump portfolio do not fit the existing pipe connections, simply buying a new pump is not an option.

Solution

KSB is designing and supplying an optimised high-efficiency hydraulic system (double-entry impeller and diffuser), individually tailored to the new requirements; it will be installed in the existing pump during pump repair work.

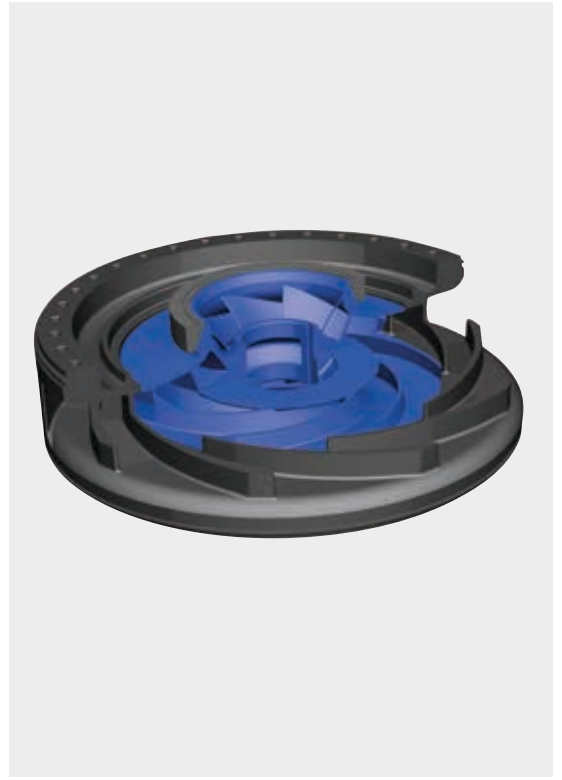
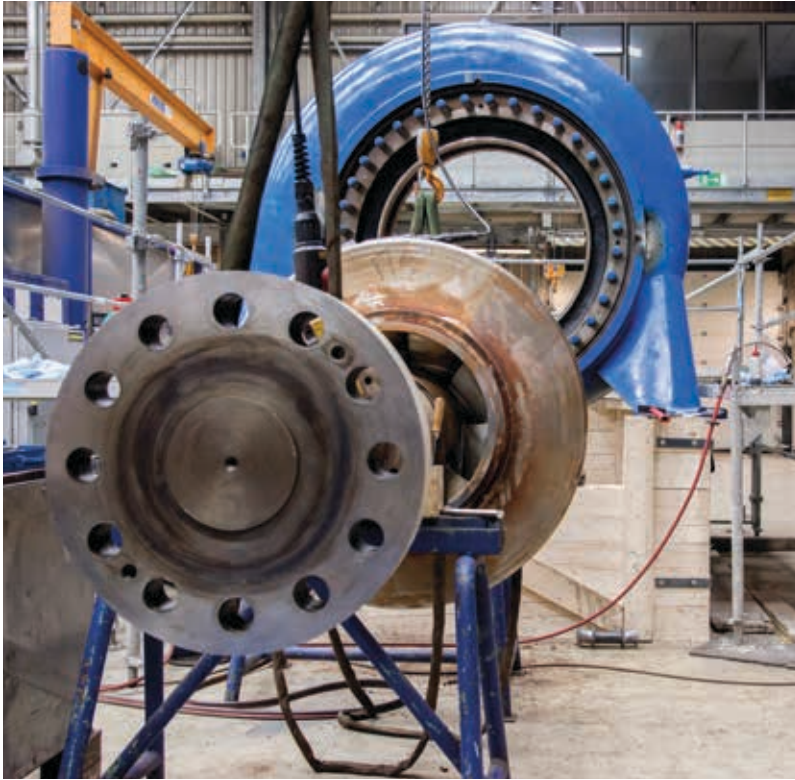
Result

As the hydraulic system has been optimised for use in low-flow conditions, KSB can ensure reliable and efficient pump operation.

Further achievements include improved pump efficiency and a lower NPSH of the pump (NPSH_{required}). Adjustments to the pump foundation or piping are also not required.

More information

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