


KSB Solutions


Chemical Industry

The Solvay Group, the global chemical company headquartered in Brussels, has a workforce of some 29,000 across the world. At their Bad Wimpfen facility, Solvay Fluor GmbH mainly produces organic and inorganic fluor-based products for use in the automotive industry and in air-conditioning, to name but a few.

Customer:

Solvay Fluor GmbH, Bad Wimpfen, Germany

Commissioned:

December 2010



Power input reduced by a quarter thanks to FluidFuture®

At its Bad Wimpfen plant, the company modernised the recooling plant for the systems used to produce hydrogen fluoride in 2009 and at the same time installed a new cooling tower.

During the planning phase, KSB's SES System Efficiency Service was used to identify potential power savings of the company's cooling water pumps. Analysing systems by means of SES is an important aspect of FluidFuture®, KSB's energy efficiency concept. The system consists of a data logger used to compare the pump's current load profile with the specifications. The potential energy savings this revealed were used to the full at Solvay Fluor GmbH. The deployment of carefully dimensioned, state-of-the-art pumps helped reduce the power requirement of this major consumer by approximately a quarter.



„With FluidFuture®, we saved 25% on energy – or 20,700 euros per year.“
Klaus-Dieter Schwab, Solvay Fluor GmbH, Bad Wimpfen



The measurements conducted by KSB Service GmbH showed that the tubular casing pumps installed in the cooling water circuit were considerably oversized for the actual load profile. Searching for energy-optimised replacements for the two old pumps, KSB's engineers compared several design variants of vertical volute casing pumps. They found that volute casing

pumps type GPV-W 150-400 would result in an optimum use of energy without requiring major reconstruction. This solution yielded savings to the tune of 20,700 euros per year. An added benefit is that the new pump sets produce much less noise and thus help reduce the sound and noise emissions of the plant as a whole.

Solvay Fluor GmbH – Scope of supply and project details

Operator:

Solvay Fluor GmbH

Scope of supply:

2x ETANORM GPV-W 150-400

System data:

Flow rate	Q = 310 – 390 m ³ /h
Head	H = 56.76 m
Working temperature	tA = 20 °C
Pump input power	P2 = 63 – 73 kW

If you require any further information, please do not hesitate to contact me:

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