

▲ The Watson-Marlow SPS peristaltic pump has the capacity to cope with a wide range of complex and demanding tasks in often harsh environments

adage that 'You only get what you pay for' could not be truer," commented Peter Staddon, managing director at The Pump Company. "Incorrect advice at the time of pump selection, or price, can lead to on-going problems for many years." He makes the point that many purchasing decisions are taken without any thought for on-going maintenance costs. Two separate departments often hold capital costs and maintenance costs.

#### The information gap

The Pump Company uses the case of a food manufacturer in Lincolnshire, which was having problems pumping hot water from a pump after the cooking process water was dumped. The temperature of the water was around 96 to 98° C and the pump was approximately 2m deep. For years the manufacturer had used submersible pumps and every six to eight weeks the pumps would fail and were sent to either have the mechanical

▲ Seepex pump fitted with Smart Conveying Technology

seals replaced, the motor rewound or the bearings replaced.

The costs ran from £600 -£1000 each time. Regrettably the client did not fully appreciate that the maximum operating temperature of the submersible pump was 60° C and due to the water vapour pressure of 98°C it was impossible to use a self-priming pump. The Pump Company's solution was to install a Salvatore Robuschi - Vertical Cantilever pump. The pump had no submerged bearings as the main shaft bearings were above the base, no mechanical seal as the pump casing was submerged and no problem with overheating motors. In fact the pump was impervious to temperature. The payback on the pump was six months and two years later it has required no maintenance and runs daily.

The information gap between the initial application discussions and the end-user is an area that needs to be addressed because of misguided preconceptions of what is required, poor communication and a lack of understanding. Concerns, often only discussed on the shop floor, are rarely passed on to the supplier and sometimes not

## cover feature | life-cycle costs

fully appreciated by finance departments. Similarly, systems designers, contractors and pump suppliers need to have comprehensive knowledge of the products that they are recommending.

This situation is not just confined to selecting pumps. Tim Guest, director of marketing and sales at valve and actuator supplier, Zoedale, reports that his company is frequently requested to quote for a valve or valve and actuator combination without knowing the full specification. "We don't like to just say no and decline to quote; we have to remember that the person requesting the quotation does not necessarily have an understanding of the process for which the equipment is required, nor why the information we request is important.

"So communication and the need for information is critical. Keeping the technical language as basic as possible is sometimes the way forward," said Guest. "If at the end of the day only very basic information is available then sometimes it is appropriate to give a variety of solutions or make assumptions to create the quotation. However, it is critical to ensure the end user is given information on why the assumptions are made so that they can make their own informed choice, or come back with more information enabling a re-quote to match the actual need."

But there is no lack of commitment from pumps and valves manufacturers in helping

« There is something fundamentally wrong about decisions being made by those in industry with no real practical grasp of how basic or downright arduous a job could be for a pump

end-users to obtain the best possible solution. Seepex says that they would always promote their expertise in the application and specification of the correct pump. "End users want quality pumps, claims Lesley Eaton, Seepex business development manager. "With progressive cavity pumps the wear rate, and therefore spares use, is increased in a pump that runs quickly as there is more contact between rotor and stator...By running slower there is less wear and therefore lower cost to the end user. However, sometimes we find that a smaller pump with a lower purchase price is ordered that will, in the long run, cost the end user more in terms of spares and maintenance expenses."

SPP's recognition of the increasing emphasis on whole life costs when evaluating modern day pumping schemes has led to the development of its 'Lowest Life-Cycle Cost Series' of pumping solutions. The concept behind this series is quite simple - to provide customers around the globe with solutions that offer them the lowest possible total cost of ownership.

But what does this mean for the industry? "We focus on developing our expertise by understanding the industry challenges facing end-users and developing appropriate technology that supports them where it really matters," said Martin Bagg. "The LLC range of pumps is a prime example of this commitment. They offer high

#### « Pump Company's Salvatore Robuschi - Vertical Cantilever pump

efficiency and reduced downtime, thereby significantly reducing cost of ownership."

When it comes down to the lowest total cost of ownership in a range of industry applications, there can be very little argument against peristaltic pumps. Compared with other positive displacement pumps, peristaltic pumps (with only one wearing part - the hose) are very inexpensive. Even the hose is built to last, consisting of a thick, reinforced wall to cushion abrasive or sharp materials which enable the pumps to cope with high viscosities. What's more, pumps can run dry indefinitely, are self-priming, are reversible and have 100% volumetric efficiency.

From an LLC point of view, the key advantages of the inherently straightforward and flexible nature of peristaltic technology are its outstandingly high reliability, low maintenance requirement and its capacity to cope with a wide range of complex and demanding tasks in often harsh environments.

According to Watson-Marlow Pumps Group, purchasing decisions based on

LCC significantly impact on overall costs, profits and losses - making sure that such decisions are based on the most

accurate and comprehensive information available is essential for water and sewerage companies' short, medium and long-term planning activities.

#### The long-term view

Opting for the cheapest initial pump purchase is no longer the route favoured by decision-makers in more informed companies. No company can afford to get locked into unsatisfactory and costly pumping systems, which can have a serious adverse impact on its long-term strategic plans.

The last words on this subject go to Borger's managing director David Brown. "The work carried out by reputable pump manufacturers to achieve best practice should be matched by those responsible for making the final purchasing decisions. In any walk of life, you get what you pay for," said Brown. "But there is something fundamentally wrong about decisions being made by those in industry with no real practical grasp of how basic or downright arduous a job could be for a pump.

The Victorians who created the sewers that we're still using today clearly built things to last and didn't buy cheap, so you think some of today's procurement personnel would have learned that lesson by now."

Brown said that whilst it can be disheartening to miss out when the tendency with some is always to buy whatever is the cheapest, he reports encouraging signs that an increasing number of companies are finally taking the long-term view by purchasing pumps that will stand the test of time. ■

