



State of the Pump Industry 2006

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Critical Issues in the Global Pump Industry

Certainly the cost and availability of certain raw materials and energy has been an issue during the past year, and with continued strong demand in China, this may continued to be a concern in the future.

Looking to the longer term, improving the energy efficiency of pumps and pumping systems is critical, as is greater emphasis on understanding and more effectively controlling life cycle costs.

The high demand for raw materials has pushed costs up and impacted pricing. But perhaps more critical are the extended delivery times, especially for engineered product manufactured in North America.

The reduction in foundry capacity in North America over the past two decades limits our options to obtain quick turnaround on castings for engineered products. While technology has greatly enhanced the design and tooling process, it is likely that the turnaround time for castings on engineered product will continue to be a concern.

While the long-term outlook for energy costs may be more favorable, short-term costs are projected to remain high.

According to statistics published by the Hydraulic Institute and others, pumps and pumping systems consume an astonishing 20 percent of the world's energy! There is a great opportunity for the pump industry to become a leader in energy conservation efforts and the Hydraulic Institute is to be applauded for its initiatives in promoting energy awareness and energy savings to the pump industry, and to pump users as a whole.

Strong Industry Sectors



The oil, gas and refining market is an excellent opportunity for growth.

Higher oiler prices are encouraging the North American market to increase refining capacity. This will likely involve not only capital expansion projects for new refining capacity, but also the refurbishment of refiners that had not been cost effective to operate in recent years.

The municipal market is also an area for continued stable growth.

Industrial countries will continue to invest in environmental-related programs while demand for basic services should continue to expand in the emerging countries.

Weak Industry Sectors

According to a recent Europump/Hydraulic Institute market analysis, the chemical industry in industrial countries will continue to restructure, with an industry investment shifting to emerging countries in Asia and other areas.

Technologies Offering the Most Impact

There is a growing interest in the use of non-metallic materials in pump-wear components, which can extend pump life and also contribute to significant energy savings.

Based on the initial analysis of a number of projects during the past year, we are very excited about the cost savings opportunities that we can offer our customers using this technology.

Though perhaps not (strictly speaking) a technology the development of partnerships with pump suppliers and users is a concept that can yield significant cost savings, particularly when such a partnership is structured not on first-cost savings, but on programs which emphasize life cycle cost reductions – improved equipment reliability and efficiency.

Additional Insights

Regarding life cycle cost analysis, the pump industry is a complex industry offering great varieties of pumps, meaning often there is more than one solution for a particular application.

The tendency in the industry itself, and among those making the pump selections for users, is to focus on first cost – that is, to opt for the low cost offering, even though over time this solution may cost a great more in both on-going maintenance and energy costs.

As an industry we have not done a good job in assisting users in making the best decision for the long-term.

Life cycle cost analysis must play a greater role in user purchasing decisions, whether for new



equipment or equipment refurbishment and upgrades. This requires methods for more effectively presenting and analyzing total cost versus first cost plus a change in buying philosophy on the part of the user.

However, in our experience, companies that are willing to invest time to better understand their total cost of ownership are successful in reducing those costs.

Regarding human resources, with the consolidation that has occurred in the pump industry there has been a significant loss of skilled and experienced people and not enough young people interested in entering our industry.

The pump industry offers a varied and challenging opportunity to young people with an interest in technical issues. Certainly it is hard to compete with the glamour of the high-tech industries, but we do need to attract more talented and creative people to our industry, both in engineering and in the skilled crafts and trades.

Link:

<http://www.hydroinc.com/sites/default/files/P-S-Jan06.pdf>