

2019 Chemical Industry Pump Purchases

The Chemical Industry's purchase of pumps, including parts and services, will exceed \$3.8 billion in 2019. The centrifugal pump purchases, specifically, will exceed \$2.8 billion⁽¹⁾. The pump market in the Chemical Industry can be segmented into four sectors: pumps for new Greenfield plants, new replacement pumps for existing plants, parts, and service.

By Robert McIlvaine, President & Founder, The McIlvaine Company

As the new Greenfield segment consists of less than 15% of the total market, most of the purchasing decisions come from existing pump owners. Furthermore, many existing plants have centralized their purchasing. This trend can be seen with companies such as the Badische Anilin und Soda Fabrik (BASF), who is specifying pumps for all plants from its headquarters in Ludwigshafen; the company has process management software and can track pump performance around the world. Consequently, many pump related decisions are made by a relatively small group of individuals who possess a great deal of analytical information.

Many of these highly informed individuals are looking to interact with supplier personnel, who can offer industry insights. In order to meet the demand of these influential individuals, suppliers need to develop direct sales programs that target specified needs. The ability to determine the annual purchases of thousands of pump customers, provides suppliers with the necessary information to create the foundation of a sales program.

Chemical Industry Pump Revenues - 2019

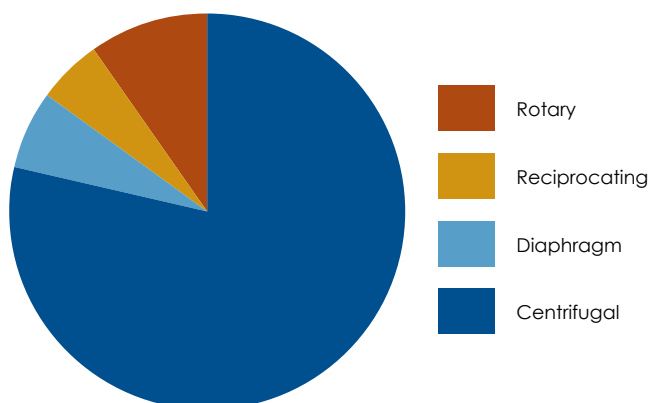


Figure 1: Graph representation of chemical industry pump revenues

Largest Pump Purchasers in the Chemical Industry - 2019

Company	Corporate Location	World Pump Purchases
Braskem	Brazil	
Sinopec	China	XX
Air Liquide	France	
BASF	Germany	XX
Linde	Germany	
Evonik	Germany	
Covestro	Germany	
Mitsubishi Chemical	Japan	X
Toray Industries	Japan	
LyondellBasell	Netherlands	X
AkzoNobel	Netherlands	
Yara	Norway	
SABIC	Saudi Arabia	X
LG Chem	South Korea	
Ineos	Switzerland	X
Formosa Plastics	Taiwan	X
Dow Chemical	U.S.	XX
ExxonMobil	U.S.	X
DuPont	U.S.	X
PPG Industries	U.S.	

All companies will spend more than \$35 million for pumps. Those with x will spend more than \$50 million and those with xx will spend more than \$100 million.

Table 1: Chemical companies' who spend more than \$35 million per year on pumps

Installed Chlorine Production Capacities (kt chlorine/yr)

Country	Company	Site	Total	Hg	D	M	Others
Austria	Donau Chemie	Brückl	74			74	
Belgium	NOVYN	Antwerp	460	110		350	
Belgium	NOVYN	Jemeppe	174			174	
Belgium	Vynova	Tessengerlo	475	205		270	

Table 2: Chlorine production capacities for various companies

Sales Program Foundation

More than \$500,000 per year is spent on pumps by roughly 10000 different chemical companies. At least 20 of those companies spend more than \$35 million per year.

The investment in pumps at each plant is a function of the chemicals produced. Data is available on the production of each chemical at each plant; it is also available for the type of production process used, as some chemicals, such as chlorine, have several different production processes.

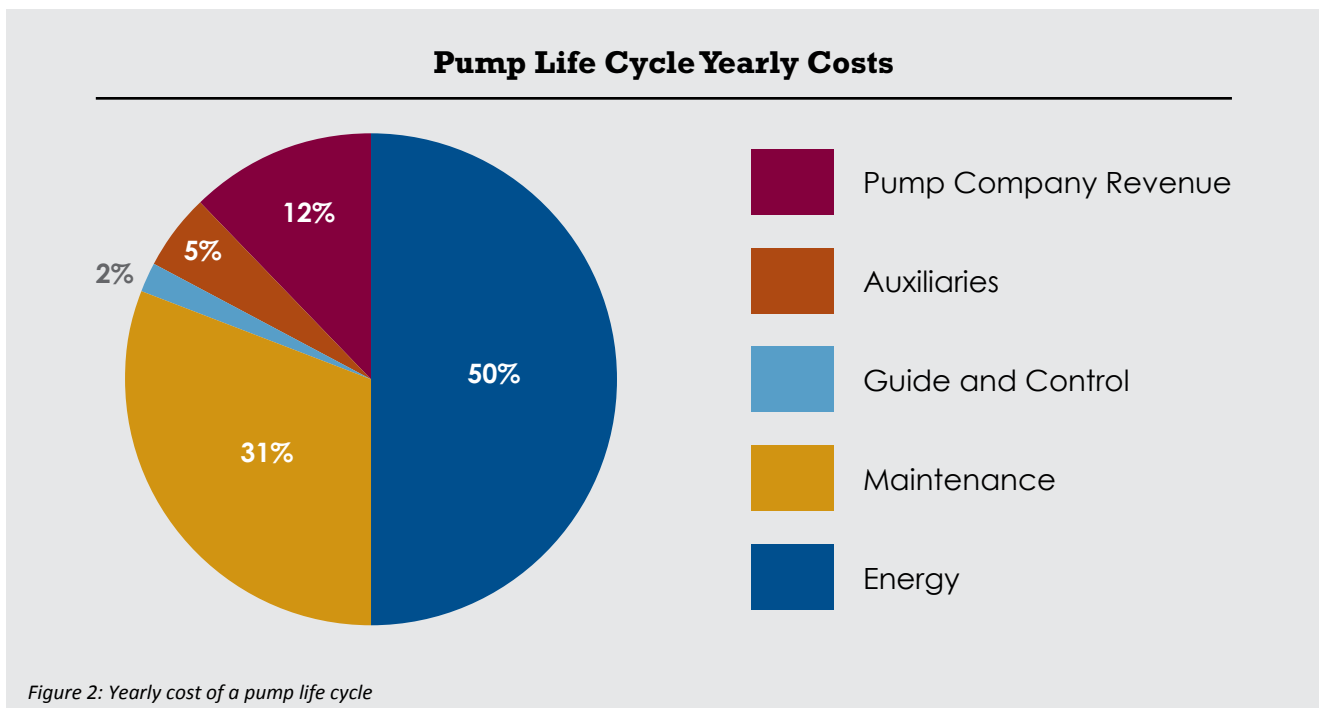
With the data presented in Table 2, a process pump investment can be determined. Which investment is most suitable to a costumers needs becomes more complex, however, when you consider companies, such as Wacker Chemie, who makes chlorine on site and then uses the chlorine multiple times in downstream processing. The continuous use of pumps increases the pump purchases accordingly.

The purchase of pumps for water intake, cooling, wastewater, chemical metering, and power plant ultrapure water can also be determined from available data. Thanks to the regulatory authorities, the size of any wastewater discharge is documented. This knowledge, coupled with the knowledge of the size of power generators, in industrial plants, is the basis for calculating the ultrapure water and cooling water pump purchases. This includes metering pumps as well as process pumps.

Revenue Analysis

By offering edge computer software, pump supplier revenue has the potential to increase.⁽²⁾ Revenue can also be expanded by offering 24/7 remote monitoring. Presently, pump suppliers capture just a small portion of the total market.

As detailed in Figure 2, 50% of the money that was spent





on pump energy could be reduced by using process management programs. Similarly, maintenance could be reduced with 24/7 remote monitoring.

Since the original pump price is only 12% of the total annual cost, it is important for pump suppliers to validate that what they offer has the lowest total cost of ownership.

The determination of the purchase opportunity for each major customer is the foundation of a sales program.

The Lowest Total Cost of Ownership Validation (LTCOV) is the vehicle to persuade these major customers as to where to spend their money.

References

(1) *Pumps: World Market* published by the McIlvaine Company

(2) *IIoT and Remote O&M* published by the McIlvaine Company



About the Author

Robert McIlvaine is the President and Founder of The McIlvaine Company, which publishes reports across worldwide pump and valve markets. He

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