

# Valve market strategies in the post digital era

The valve market on each continent can be viewed from the perspective of the sales or supply strategy. In the Americas and EMEA purchase decision expenditures will exceed the consumption expenditures. The U.S is holding its own against China as a purchasing decisions center although China is gaining ground.

By

## Meet the columnist



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The Americas will spend \$18 billion on valves to be used in the area in 2019.<sup>(1)</sup> It will make purchasing decisions for valves valued at \$21 billion. In APAC (Asia-Pacific region) many of the valve decisions will be made by large corporations with headquarters and decision making authority in EMEA (Europe, Middle East, Africa) and the Americas (Canada, USA). Increasingly, decision making is being centralized. Sales strategies need to take this into account. A significant part of the valve volume will be taken in by high performance valves, defined as those valves which are not purchased mainly on price and delivery. They include severe service and critical service applications. They also include any offering which persuades the customer to make the purchase for reasons other than price. We are entering the post-digital world where the Industrial Internet of Wisdom empowers IIoT

(Industrial Internet of Things). Decisions that would otherwise be made on price and delivery, are made based on the addition of software packages or even operations and maintenance support. What would have been an on-off manual valve would now be automated and monitored.

## Local decision making

The percentage of high performance valves purchase decisions made in the Americas and EMEA will exceed those for general performance. The opposite is true in APAC. The reason being that large international corporations based in the Americas and EMEA will be making high performance valve decisions for their plants around the world. They will, however, let the local plants make general performance valve purchasing decisions. More than 20 corporations spend more than \$300 million/yr on valves. Many Chinese companies are in

| Category            | Valve Purchases - \$ millions - 2019 |      |      |
|---------------------|--------------------------------------|------|------|
|                     | Americas                             | APAC | EMEA |
| Valve Consumption   | 18                                   | 30   | 16   |
| High Performance    | 7.5                                  | 12   | 7    |
| General Performance | 10.5                                 | 28   | 9    |
| Purchase Decisions  | 21                                   | 24   | 19   |
| High Performance    | 11                                   | 11   | 10   |
| General Performance | 10                                   | 13   | 9    |

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| Company                                                     | Type     | Corporate Location | Industry  |
|-------------------------------------------------------------|----------|--------------------|-----------|
| Guodian/Shenhua                                             | Operator | China              | Power     |
| Huaneng                                                     | Operator | China              | Power     |
| Sinopec                                                     | Operator | China              | Oil & Gas |
| Saudi Aramco                                                | Operator | Saudi Arabia       | Oil & Gas |
| Companies above spend more than \$700 million/yr for valves |          |                    |           |
| China Nat. Petr.                                            | Operator | China              | Oil & Gas |
| Datang                                                      | Operator | China              | Power     |
| NTPC                                                        | Operator | India              | Power     |
| PetroChina                                                  | Operator | China              | Oil & Gas |
| EDF                                                         | Operator | France             | Power     |
| Huadian                                                     | Operator | China              | Power     |
| Eskom                                                       | Operator | South Africa       | Power     |
| Companies above spend more than \$500 million/yr for valves |          |                    |           |
| ExxonMobil Refineries                                       | Operator | U.S.               | Refinery  |
| ExxonMobil                                                  | Operator | U.S.               | Oil & Gas |
| Royal Dutch Shell                                           | Operator | Netherlands        | Oil & Gas |
| Bechtel                                                     | EPC      | U.S.               | Power     |
| Shell Refineries                                            | Operator | Netherlands        | Refinery  |
| Kuwait Petroleum                                            | Operator | Kuwait             | Oil & Gas |
| Companies above spend more than \$400 million/yr for valves |          |                    |           |
| BP                                                          | Operator | UK                 | Oil & Gas |
| Total SA                                                    | Operator | France             | Oil & Gas |
| Sinopec Refineries                                          | Operator | China              | Refinery  |
| BASF                                                        | Operator | Germany            | Chemical  |
| Companies above spend more than \$300 million/yr for valves |          |                    |           |

this group. However, they are mostly purchasing for Chinese operations. Guodian/Shenhua, for example, operates more coal fired power plants than exist in Europe or the U.S.

### Centralized purchasing

Most of the hundreds of large purchasers home based in Europe and the U.S. are moving more toward centralization of valve decisions based on remote monitoring and data analytics of valve operations. Direct sales programs can be conducted for each of these customers. In fact, since they will be armed with large amounts of valve knowledge based on their software systems, they will want to talk to the most knowledgeable individuals at the valve companies. The focus will be on total cost of ownership. Valve companies will need to step up and provide lowest Total Cost of Ownership Validation (LTCOV) for each valve product in each process operated by the customer.

### Bows versus drones

This requires the application of IloW by the valve companies to understand enough about the industries and processes and their competitors to validate a claim of LTCO. This post-digital era will be a battleground as different from the past as drones have been to bows and arrows. In the bow and arrow era you could respond to a sales lead, demonstrate that you have successful installations in the industry and assert that you have the lowest TCO, but not be able to validate the claim. This approach is not going to win many battles against 'drone competition' in the IloW era.

### New developments

The supplier needs to not only have access to all the relevant industry and process information, but he must organize this in a way that a sequence of decisive classifications can be accurately prepared. In fact, all decisions are a sequential classification

process. His 'drone fleet' has to be guided by people in multiple divisions within the corporation. This includes division by function, for example, engineering, sales and by geography.

The McIlvaine Company analyzes all combust, flow, and treat processes. It has separate services on scrubbers, filters, cross flow membrane systems, pumps, compressors, fans, heat exchangers, separators, furnaces, and other processes. Some new developments such as catalytic hot gas filters will change valve selection in power, refining, waste to energy and certain other industries.<sup>(2)</sup> This knowledge is being used to assist valve clients adjust to the post digital era.

- (1) *Industrial Valves: World Markets* published by the McIlvaine Company
- (2) *Fabric Filter Knowledge Network* published by the McIlvaine Company since 1976