Written by Trygve Dahl, Ph.D., P.E., VP Technology, Intelliquip, LLC
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It takes more than jumping on the Information Superhighway's entrance ramp to realize the maximum potential of the most significant invention since the printing press. While the uses of the Internet are virtually limitless, many process and manufacturing companies remain stuck in first gear.

They often confine their information technology to internal business ventures that improve productivity—*ventures such as computer-aided design, advanced manufacturing-systems software, shop-floor process monitoring and remote-control technology.*

Few of these companies have made real progress in sharing technical data with key partners through external business processes. Accordingly, there is a growing emphasis toward interfacing these external business processes that have not yet been fully realized.

Technical information about mechanical equipment and process systems must be shared throughout the supply chain—*thus linking purchasers, suppliers, engineering contractors and procurement, operations and maintenance staff* . This information fuels collaboration among organizations wired into a complex maze of work processes that often are captured in "electronic paper" documents such as PDFs, neutral CAD files or spreadsheets.

Ironically, the fuel itself is vulnerable: All of this data must usually be re-entered manually, multiple times, into different software systems, driving up costs, absorbing more time and increasing the chance of errors or omissions.

The Hydraulic Institute (HI) (www.Pumps.org), the North American association of pump manufacturers and related equipment suppliers who develop industrystandards and provide forums for the exchange of industry information, recognized the need to improve this process. HI published a new standard in late 2010, HI 50.7, Electronic Data Exchange (EDE) for Pumping Equipment, to define the process and protocols of sending and receiving technical and commercial information using digital file-transfer methodologies.

EDE aims to make the exchange of technical data, like that found in a pump datasheet, as easy as sending an email. Software applications can use the data to initiate a piping system analysis, create a pump RFQ, select and quote a pump, summarize a bid-tab or update an as-built database of pump equipment in a process plant—*without having to manually re-enter the data into separate applications.*

The Hydraulic Institute has developed this stand-ard in collaboration with the AEX (Automating Equipment Information Exchange) project sponsored by the FIATECH Consortium (www.fiatech.org/aex). While HI has taken a leadership role in the pump industry, FIATECH promotes data interoperability more broadly within capital facilities industries, considering dozens of different types of mechanical equipment for the many types of systems included in industrial facilities and buildings. Further, EPRI, the Electric Power Research Institute (www.epri.com), is working with FIATECH, NIST (www.nist.gov), HI and industry suppliers and vendors to pilot and test the AEX XML that create tools for priority equipment such as pumps, control valves, motor-operated valves, electric motors, centrifugal compressors and centrifugal fans. The API 610, 11th ed./ISO 13709 2nd edition standard and Practices, published by Process Industry Practices (PIP), have also collaborated in support of the HI 50.7 standard.

Now that the Information Superhighway has opened a fast lane for EDE, the traffic flow is shifting in the direction of adapting commercial and proprietary software applications to conform to the HI-EDE standard. As the smart-phone industry has so clearly demonstrated, “apps” are key to securing end-user adoption and maximizing industry benefits. **MT**

In addition to his work with Intelliquip (www.intelliquip.com), a company focused on the development of Web-based selection, configuration and quote-management solutions for the engineered-equipment industry, Tryg Dahl serves as Chairman of the Hydraulic Institute’s Electronic Data Exchange Committee. To learn more or to get started with EDE for pump equipment, visit: www.Pumps.org/EDE or email: tdahl@intelliquip.com
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