

## Avoid the **ERP Money Pit**

Four key functions of metals-specific software.

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oday, metals companies are facing a number of challenges from increasing raw materials pricing to mounting pressure from global competition. To address these cost issues, companies in this complex and competitive space are looking to adopt technology and best practices that will increase production while lowering operational costs.

To get their enterprises in order, producers and distributors often turn to traditional enterprise resource

planning solutions. While other companies use conventional ERP systems with various levels of success, metals companies often find after deployment that these systems lack the functionality that supports the unique needs of the metals industry. To remedy these shortcomings, companies usually do one of

two things: modify an off-the-shelf ERP solution or build their own. Ultimately, both options have their pitfalls, including overall inefficiency, heavy IT support, high labor outlay associated with system maintenance, and lack of visibility into business and production processes as well as associated costs.

Therefore, while many companies think they are investing in technology that provides visibility into processes, analyzes trends and reduces costs, they often are falling into an ERP money pit by selecting software that hinders their ability to react to changing business needs. With that as a backdrop, metals producers and distributors need to look for a vertical-market-specific ERP system that address the unique needs of their industry. Here are

the key functions to consider:

■ Material Variability—Unlike a traditional ERP solution, those specifically designed for the metals industry do not require users to define a part number for every single piece made. That would be nearly impossible, as all material takes on the chemical and physical properties of the heat or lot from which it is made.

Furthermore, a specialized system should allow for variance in the attributes required to identify materials.

For instance, the character-

istics of a coil include grade, gauge and width, whereas a tube includes OD, wall and length. ■ Inventory Tracking—

An ERP system designed specifically for metals should be able to trace everything back to the source of the original metal and record

its chemical composition,

as well as which products are still in inventory and which customers have already received the final product. Having the ability to track inventory by tags, heats, lots and multiple units of measure through the supply chain is an invaluable ability that will pinpoint any problem, as well as avoid the expense of a manual audit, or even a lawsuit.

■ Integrated Quality—Material must be tested at various stages throughout the production process. Therefore, correctly identifying quality control metrics and including certified test results are often required for process control and process improvement.

For example, every heat or lot of a given metallurgic grade is different, which means that quality tracking from heat to heat with full genealogy is a required function. Furthermore, ERP systems need to be able to translate data into a business solution, which is ultimately what saves both time and money.

■ **Process Variability**—Metal production happens in multiple ways, meaning the process

may be altered to produce a desired product based on the material that is applied. Alternate starting sizes can be used with additional operations, and certain properties can be adjusted by applying more process steps, such as heat treatment or annealing. In addition, material can be reapplied to other orders while the chain of property contribution is maintained to provide product quality cer-

Aptean, Atlanta, offers the Axis ERP system for metals producers, wire and cable manufacturers and metals service centers. For more information, visit www.aptean.com.

tification and conformance to all specifications.

While a best-in-class ERP system for the metals industry appears to be so unique that it stands on its own, the reality is that it also needs to integrate seamlessly with other enterprise and plant floor systems. This means that the system should be developed on top of

a scalable architecture that supports existing network and operating system environments.

Taking the above functions into consideration, metals companies can finally pull themselves out of the money pit by implementing a technology that provides true visibility into the various processes required by the business while analyzing trends and reducing costs.

