

OPTIMIZED Ordering

BY LUKE FAULKNER

We all know that steel makes construction projects run more smoothly for designers and builders. But the material ordering process can be cumbersome for fabricators and others in the steel supply chain. Luckily, there's an easy way to make that part of the project run more smoothly too.

TECHNOLOGY IMPACTS EVERYTHING. That much is clear.

From an industry standpoint, it's easy to point to areas that can be improved by a broader, smarter application of technology.

It's far more difficult to pinpoint the areas that are the *most* behind and stand to benefit the most from a little added technology. In that sense, e-commerce stands out as a painfully obvious part of the equation that can benefit from a technology boost.

Several years ago, AISC decided to undertake an effort to improve the efficiency of the structural steel procurement cycle via e-commerce. The effort was branded as steelXML (XML is short for eXtensible Markup Language, the language that supports communications between different purchasing and procurement systems). Initially, the idea sounded complicated but in reality, it was rather straightforward; data would need to move back and forth between systems that may not communicate easily, so the intent was to create a neutral platform that everyone could use to bridge that gap.

Waste Not

The case for steelXML is simple: As an industry, we waste thousands and thousands of man-hours by manually entering procurement data and combing through it for errors. We waste additional thousands of hours fixing and clarifying these errors, not to mention the uncounted opportunity costs of having employees do manual data entry on quotes as opposed to value-added activities. A more direct, digital platform would have the potential to save thousands of hours across the structural steel industry.

The steelXML development team identified ten critical transactions in the overall procurement process that have the most benefit and cover virtually every need:

- Availability inquiry
- Request for quotation
- Purchase order
- Order status
- Advance ship notice
- Material test report
- Invoice
- Payment
- Sustainability information
- Bill of lading

steelXML is neither software nor is it expensive. steelXML is an XML schema—simply put, a common way to organize (alphanumeric) data so that two different systems can communicate. (You can download this schema for free at www.aisc.org/steelxml.) The “cost” involved with steelXML is in deciding whether to implement it.

And there's a good chance you'll need to at some point—perhaps soon. E-commerce is tricky to disseminate, a lot like a fax machine; no one particularly *needs* it until they need it. That is to say, no one is at a distinct disadvantage until their competition decides to take advantage of it. Among the industry team tasked with developing the steelXML schema, there was a general consensus that the ability to use steelXML must be put in the hands of the purchasers (in this case, steel fabricators) as a starting point. On the software side, FabTrol, FabSuite, StruMIS and SteelProjects have all stepped in and offered to implement at least a portion of steelXML's capabilities into their respective software packages. Doing this was a major leap of faith on the part of software developers who were willing to assume that their customers were hungry for added efficiency. It's a critical first step in opening up the supply chain to steelXML and the efficiency it can bring.

Recognizing the Benefits

And now, a few years and several iterations of the schema later, we're finally seeing steelXML being deployed. Those that are using it are having success in eliminating excess man-hours that they've been pouring into procurement. For some, the potential alone was all it took to begin down the road to using steelXML. A prominent Midwestern AISC member fabricator recently offered this accolade: "Since using steelXML, we have seen a noticeable drop in shipment errors and have really been able to benefit from the quote turnaround time." And Will Stoner, director of marketing for AISC member service center Infra-Metals, noted, "We are seeing a tremendous interest and adoption rate of fabricators willing to use steelXML. They are really seeing the benefits and are more than willing to participate."

So how are companies doing this and what are they doing to get started? It's as simple as verifying that your material requirements planning (MRP) software supports steelXML. Most fabricators with commercial MRP software will find that their vendor has implemented at least *part* of steelXML. (If they haven't yet, you should ask them to.) The interface from program to program will vary slightly, but for the most part it will already be there for you to use.

From there, finding a willing supplier is the next step. While steelXML is straightforward, you should expect to do some testing between your MRP software and your steel supplier. Outreach at this point is critical. A steel supplier needs to see demonstrated customer demand in order to make steelXML a reality on their end. Without customer demand, suppliers are left with little reason to implement steelXML since, while the schema is free, there are still costs involved with implementing it (in terms of programming, implementation and learning curve).

No Going It Alone

E-commerce with one player, though, is not very useful. In order for our industry to reap the benefits of steelXML, it will need to be widely distributed and implemented on the supply side of the structural steel chain. This is both biggest challenge and biggest opportunity for any new significant process change. The industry can develop the schema and promote the benefits, but in the end market pressure will be what drives the successful implementation of steelXML.

Persistence is key. Suppliers are keenly aware of customer demand, and customers that are persistent about their wants and needs tend to be heard. AISC supplies form letters for those that are trying to convince their suppliers to take advantage of steelXML, but it's far more effective to reach out to your suppliers directly, in your own words, and ask them why they're not making your life easier and implementing it. There is too much potential for our industry not to adopt it. ■



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