Scanning Steel

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Bar codes offer the metals industry a method of computerized product tracking, from the mill to the job site.

or several years, the Metals Service Center Institute, the American Institute of Steel Construction and domestic structural steel producers have been working to create a standard business process for the metals industry that would provide for more cost effective, efficient and automated ways to ship and receive metals products. The vision of this process includes all the parties in the metals distribution chain: producers, such as steel mills; distributors, such as metals service centers; and customers, such as steel fabricators and erectors who put metals into their end products. This vision also provides for the computer-to-computer exchange of information about the metals products' shipment from producer, to distributor, to end customer. It also prescribes tagging the products using standard barcode technologies.

This effort has been confined to a limited number of participants in the structural steel shapes segment of the metals industry. Its culmination is a two-part standard. The first part of the standard delineates what information should be located on a barcode label. The human readable information on the label correlates to the ASTM A6 18.2 Shapes designation. The barcode format follows AIAG Standard B-10, Code 128. The second part of the standard calls for an electronic file to be

sent in advance of the material shipment, known as an Advance Shipment Notice (ASN).

These two standards recommend that each piece or individual bundle of structural steel be assigned a shipment identifier called the Supplier Shipment Reference Number (SSRN). This number is unique because it consists of the supplier's nine-character DUNS number in combination with a newly created "Supplier Item Number" that suppliers assigned to the item or bundle. The combination of these two numbers makes the SSRN absolutely unique. The SSRN can be thought of as a license plate for every bundle or piece of metal. This number will appear on a barcode label that is physically attached to the items being shipped from supplier to receiver. It will also appear on the electronic Advanced Shipment Notice file sent from the supplier to the receiver. Attached to the SSRN in the ASN file are descriptions of the supplier, the shipment, and the method of transportation used to ship the product from supplier to receiver. In this way, the receiving firm can create a more efficient and cost-effective receiving operation. The ASN file will indicate ahead of time what to expect when a shipment arrives, including supplier identifying information, receiver order information, shipment and transportation method information, and item information that describes exactly what has been shipped and should be received.

"This creates a powerful set of business opportunities for both suppliers and receivers of goods," said Mike Engestrom, technical marketing director for Nucor-Yamato Steel. "During the entire shipping and receiving process, all the companies involved can now be informed about the who, the what and the how of the shipment of every item. Receiving items becomes vastly more efficient because each item now has a bar-coded license plate that carries with it detailed information about when is being received, who sent it and how it is being sent. All of this information can be linked together inside company databases. The matching process used to accurately receive items is suddenly automated and informed."

The proposed standard bar code and ASN process has been developed and tested in the course of the last year to the satisfaction of the participating companies. These companies consisted of several shapes producers, metals services centers and fabricators.

It is now open for public commentary. Please visit www.aisc.org/barcode to view the standards and submit your comments.★

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