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ANNUAL SPOTLIGHT ISSUE

When It Comes To Imported Cast Iron, It's Buyer Beware

By Joe Christiansen, IGGC Inc.

A few months ago, President George Bush enacted sweeping tariffs and quotas on a number of imported steel products, sending ripples throughout the manufacturing and construction sectors. Domestic steel makers had sought the action as a means of battling subsidized imports that were being "dumped" in the U.S. at prices far below their cost.

Faced with many of the same challenges as the steel makers, the cast iron soil pipe industry has followed the tariff issue closely. Both industries provide important manufacturing jobs for U.S. workers. Both industries have an impact on construction. Both industries are being hurt by unfair trade practices.

In fact, in a 5-0 vote on April 8, the U.S. International Trade Commission ruled that there is a "reasonable indication" that nonmalleable cast iron fittings made in China are being sold at "less than fair value" in the United States. This finding is significant, particularly because as a new member of the World Trade Organization, China is now subject to the same anti-dumping rules as other member countries. The implication is clear. Without fair, rules-based trade, "free" trade cannot exist.

Unlike many of the old-line steel producers, domestic cast iron foundries have been investing in technology and automation. By plowing capital back into their processes and improving production techniques, today's foundries have become modern, efficient, low-cost producers.

In contrast, despite assertions to the contrary, many foreign foundries remain state-owned or enjoy huge government subsidies. They don't have to worry about the high cost of capital, making it difficult for private domestic foundries to compete. And depending on the country of origin, environmental and safety regulations can be lax, or in some cases, non-existent, along with the high costs associated with meeting those regulations. While American manufacturers can compete with anyone in the world on a level playing field, the unfair advantages enjoyed by subsidized foreign foundries, particularly Chinese foundries, cross the boundary of fairness.

There are larger issues at stake here as well. In many industries—steel, cast iron and textiles, to name a few—the United States is swiftly losing its domestic manufacturing capabilities. In fact, there are only three domestic cast iron soil pipe foundries left in the United States. Free trade purists say measures like the steel tariff drive up the cost of goods and hurt the economy. But there are broader economic and national security concerns to losing manufacturing jobs and having to rely on imported goods to sustain us. Maintaining a strong manufac-

turing sector will help to keep our economy and military strong. When this is understood, "Buy American" becomes more than just a slogan.

The cost of goods and materials is a legitimate concern when it comes to plumbing contractors—after all, who doesn't want to pay the lowest prices? Specifically, Chinese cast iron pipe and fittings are often available at a price that seems too good to pass up. Pipe is pipe, right? So why not buy the cheap stuff and save a few bucks?

If "Buy American" is not enough of an incentive, then perhaps issues like consistency of quality, reliability and availability are. Before you put your reputation on the line with imported cast iron, consider the following.

Manufacturing high quality cast iron is a difficult and demanding process. Cooling rates, wall thickness, alloy content and chemical composition all dramatically impact the strength, quality and integrity of the iron. In order to make uniform, high quality castings, Carbon Equivalent (CE), graphite and silicon must be controlled, and a constant, optimum pouring temperature maintained.

With domestic foundries, you can be sure of the quality. For example, Charlotte Pipe and Foundry, based in Charlotte, NC, monitors and controls the chemical properties and temperature of its iron on an hourly basis to be sure it meets stringent standards for quality. Charlotte also measures weight, thickness and laying length for dimensional accuracy to ensure that inside and outside diameters conform to all code specifications. Finally, water testing is done on every piece of cast iron pipe before it rolls off the line.

In addition, as a service to the engineering and contracting community, the Cast Iron Soil Pipe Institute (CISPI) inspectors perform quality control and conformance tests on inventories of all member U.S. foundries three times a year. These inspections help ensure that domestic pipe and fitting systems will perform as required by U.S. plumbing codes and product standards.

On the other hand, imports are sometimes marked with ASTM or CISPI standard numbers. But it is often unclear if the products have been manufactured to ASTM or CISPI standards. In addition, some imports carry the trademarks of long defunct or nonexistent domestic foundries—markings that have the capacity to mislead, because they imply that the material was made in the U.S. A few importers have even been caught copying trademarks of operating domestic foundries—

a blatant violation of trademark and unfair competition laws, including the Trademark Counterfeiting Act.

Because it's difficult to track the ownership of many foreign foundries, customers may not be able to ascertain for sure where the material was made or if it meets the quality requirements of the standards. Without reliable and accurate data concerning the raw materials and casting methods used to produce the material, those specifying the pipe and fittings are left to guess whether the products being used will perform as expected.

If you are concerned about the quality of the material you are buying, ask for the corresponding testing data that includes the date of manufacture and the maker's (not the importer's) name and address. Only then can you be sure of the chemical composition and quality. Some testing of imported material is done here in the United States. But, according to ASTM A888 (*Standard Specification for Hubless Cast Iron Soil Pipe and Fittings*), testing and inspection must be conducted before shipment. If not, there can be no way to address a quality issue after the fact, particularly since many imported materials lack the proper markings to allow a customer to identify who manufactured the products in the first place.

There is another factor to consider as well. A recent review of the OSHA Hazardous Communications-required Material Safety Data Sheets (MSDS) distributed by an importer of Chinese pipe products revealed the startling presence of asbestos fibers in the coating of imported pipe and fittings.

Engineers at AB&I Foundry in Oakland, CA, a domestic foundry that was testing Chinese imports, were shocked to see asbestos reported in the MSDS data and could not explain why it would be used in the production of cast iron DWV. Severe health problems and life threatening diseases have been linked to exposure to asbestos, and it is prohibited in almost all types of construction. A wholesaler or contractor that used pipe or fittings with asbestos coatings, wittingly or unwittingly, could face huge legal costs and financial penalties.

According to AB&I, the MSDS data published by this Southern California importer of cast iron DWV states that this asbestos is completely encapsulated by asphalt. "But what happens when the pipe is cut in the field using an abrasive saw?" asks AB&I's Kip Wixson. "Is the obvious dusting that occurs during cutting exposing plumbers and others to dangerous airborne asbestos?"

Few would want to expose themselves to the liability of dealing with hazardous material. "The courts are clogged with liability cases involving workers and others who were exposed to asbestos and got sick," says Wixson. It's not just manufacturing companies that are being sued. According to the March 2002 issue of *Fortune* magazine, boilermaker Babcock & Wilcox was merely a purchaser of asbestos products, but went bankrupt anyway due to asbestos litigation. *Fortune* reports that asbestos filings against some defendants have nearly tripled in the last three years. And if asbestos isn't enough, arsenic also has been detected in samples of imported cast iron soil pipe. And finally, a purchaser needs to be sure his suppliers check for radiation in the scrap they process, as there have been several instances where tainted materials have led to costly product recalls.

So you can see, producing high quality cast iron is no easy task. It's critical that you know the manufacturer of the materials you buy and that you can validate their claims concerning quality, reliability and compliance to manufacturing standards.

If you are considering buying imported cast iron, ask yourself a few tough questions first. Will your importer back the quality of your material? Will he stand behind you if a problem should occur? Are you willing to take that chance? Once harm to your reputation is done, earning back that trust can be a challenging prospect. **PM**

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