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Rolling on the river

John Correnti has put
Big River Steel on course



**CLOUD COMPUTING
FLOATS ALONG**

**A BIG LIFT FOR
HEAVY MACHINERY?**

**SHALE GAS
POWERS DEMAND**



PHOTO: Big River Steel LLC

Rollin' on the River

Never at a loss for outsized ideas, John Correnti is banking on a best-of-both-worlds 'flex' mill, more than four decades of mill-building experience and the length and logistical reach of the Mississippi River to transform 1,400 acres in Northeast Arkansas into steel's next big breakthrough.

It's not always easy lunching with a legend. Getting together once or twice a month at a local eatery is one thing. Dining on a steady diet of daily specials served with a side of greatness is an entirely different matter, one that leaves a trail of receipts and, almost by default, a deep and lasting impression.

"I ate lunch with the guy almost every day I was in town from 1991 to 1998, when he left," said John Correnti, chairman and chief executive officer of Big River Steel LLC, recalling a midday ritual played out in Charlotte, N.C., and its environs during the third decade of his four-decade-long steelmaking career. "When you eat lunch with somebody every day, a lot rubs off."

Correnti's lunch partner for all those years was his boss: Kenneth Iverson, then

chairman and chief executive officer of Nucor Corp. and the acknowledged godfather of the American mini-mill. And the Iverson Way has definitely rubbed off.

A civil engineer by training, a builder by nature and one of a select group of steel

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executives who grew up at the knee and under the mentorship of Iverson, Correnti began his steel career in 1969 at U.S. Steel Corp., where he served in construction management activities. Correnti joined

Nucor in 1980 as manager of construction, flourished in the entrepreneurial culture there and by the time he departed the pace-setting steelmaker in 1999 had earned the title of president and chief executive officer.

Since then, Correnti has held top positions at the former Birmingham Steel Corp., which he restructured and sold to Nucor in 2003; worked with Carl Icahn to revitalize metals recycler Philip Services Corp.; and in 2005 founded Severstal Columbus LLC, a 1.5-million-ton-per-year, state-of-the-art operation originally named SeverCorr LLC. Next came Steel Development Co. LLC (SDCO), a \$200-million, 300,000-ton-per-year rebar "micro-mill" envisioned as the first of a series of such operations built to serve niche markets within a 350-mile radius. Although SDCO



The governor, the mayor and the entrepreneur: No stranger to groundbreaking, John Correnti (fourth shovel from the left) was joined by state and local officials to mark the official launch of Big River Steel. Construction of the \$1.3 billion 'flex' mill is expected to take about 20 months.

broke ground on the project in late 2008, the global financial crisis intervened and the micro-mill was never built.

Six years later almost to the day, the first concrete was poured at a 1,400-acre site in northeast Arkansas in Correnti's latest venture: Big River Steel (BRS), a \$1.3-billion "flex" mill bred to produce 1.7 million tons annually of hot-rolled, cold-rolled, galvanized, and pickled and oiled coil for the automotive sector, substrate for pipe and tubers, and eventually grain- and non-grain-oriented electrical steels for the electrical energy market.

The going has not been easy. Plans to build the mill in Osceola, Ark., were announced in January 2013, drawing fire ever since from a high-profile competitor in the form of costly and time-consuming legal challenges to the mill's air permits. Correnti deflected a request to comment directly on the litigation. "You know what they say," he responded. "If they're shooting at you when you're flying over, there must be a reason."

An undaunted Correnti has every intention of shooting back. To that end, BRS is forging what promises to be a formidable weapon. "This mill is going to produce an integrated mill end product but it is going to be run on a mini-mill cost structure," he said. "At the end of the day, the way to be successful in the steel business comes down to two factors. Quality is a given; you have got to be there, and I don't care

if you're competing against integrated mills, other mini-mills or foreign steel. After quality, it's cost structure. And you've heard it a hundred times before: the electric furnace-based mini-mill holds a distinct advantage in terms of lower capital, energy and operating costs. And it's more environmentally friendly."

BRS is supplementing the advantages inherent in electric furnace steelmaking with

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some unique technological twists and unconventional (for a mini-mill) equipment additions of its own. At the top of the list is a Ruhrstahl-Heraeus (RH) degasser, a gateway to the more lucrative markets for advanced high-strength steels, high-grade American Petroleum Institute material and electrical steels. "I don't know of any other mini-mills in the U.S.—and I'm not sure even in the world—that have an RH degasser," Correnti said, acknowledging that many integrated steelmakers are equipped with an RH unit. BRS plans to run 125- to 185-ton heats through the degassing unit.

Other twists? "This mill is going to be

wider than any other mini-mill," Correnti said. "We are going to be able to go 76 inches wide, maybe even 78 inches. And it's got a heck of a coiler on it. We are going to be able to coil 1-inch-thick hot bands."

Add to that other quality-enhancing features ranging from higher temperature capability on the tunnel furnace between the caster and the hot mill to the incorporation of a long strip cooling section (65 meters vs. 40 meters) on the laminar cooling table to enhance cooling properties.

BRS has entered into a long-term power contract with Arkansas Power & Light Co., a unit of Entergy Corp. "We're locked in," Correnti said. "We certainly aren't going to be half the rate our other mini-mill competitors are, but we are not going to be higher. I can assure you that. I've done this for 40 years, and the top of the list as far as site selection was 'what's my power rate?' One of the reasons we are in Osceola is because Entergy did what they had to do to give us a competitive power rate."

Logistics also weighed heavily in choosing the location. "Osceola is on the 'Big Muddy,' the Mississippi River," Correnti said. "Probably about 80 percent of our scrap is going to come by barge. And it is going to come by barge from Chicago, Pittsburgh, Cincinnati, Omaha, you name it. There is plenty of shredded scrap in the South. Where there is a shortage is the *filet mignon* grades. It's great that Nucor is putting that big DRI (direct-reduced iron) plant in Louisiana. I hope they double, triple, quadruple the capacity."

Correnti estimated that scrap will account for anywhere between 60 and 100 percent of the mill's furnace charge. "It depends what we're making," he said.

Correnti is adamant, however, that BRS "will stick to our knitting. We will not be getting into the merchant DRI business. We are going to melt metallics and make finished steel," he said. "On the aft end, we are not going to get into the steel service center business. We are not going to compete with our customers. On the front end, we are not going to get into the scrap business or the iron ore business."

And in a page torn straight from the Iverson playbook on steel trade, Correnti paid homage to the legend. "You will not see Big River in Washington, D.C., I guarantee you that. Not while I am in charge of this place."

JO ISENBERG-O'LOUGHLIN