BRAZIL’S PIG IRON STRUGGLES

Home to native forests bearing eucalyptus trees, a rich land with high-quality iron ore and in close proximity to US steel mills, North Brazil was a natural fit for merchant pig iron producers to establish a foothold and take advantage of US mills’ demand for the steelmaking raw material.

And they did just that, by the mid-1990s, merchant producers were popping up all over North Brazil, an area without a domestic steel market.

There were other markets the pig iron producers could target from North Brazil including the Far East and Europe, but the US – with freight to New Orleans as low as $15/mt on a two-week voyage – was always meant to be the primary destination for the material.

North Brazil is home to high-quality iron ore that allows the producers to supply low-phosphorus (less than 0.1%) pig iron that US mills require. Nearly every single US mill cannot utilize high-phosphorus pig iron.

This provides a distinct advantage to the North Brazilian producers over their neighbors to the south who mostly produce high-phosphorus material. The Southeast, however, has always had a domestic market to sell into – regional steel mills. This domestic market provided financial stability and leverage in negotiations with potential overseas buyers in Europe and Asia.

In the north, there was no such domestic market. The pig iron produced was strictly for export. With interest from the Far East at a bare minimum and no domestic outlets, the North Brazilian producers became dependent on the US.

Shipments of low-phosphorus pig iron to the US from Brazil grew from 1.63 million mt in 1996 to 2.94 million mt by 2000 and 3.38 million mt in 2001. In 2004 Brazil exported a record high of 4.68 million mt of pig iron to the US.

In 2005, the 4.39 million mt of Brazilian pig iron imported into the US, accounted for 75% of all US pig iron imports.

Shipments to the US from Brazil continued to slow as the US reduced
overall pig iron buys and began sourcing more material from Russia and Ukraine. In 2008 pig iron shipments from Brazil to the US totaled 3.61 million. That was when there were 16 pig iron companies operating in the North Brazilian pig iron strong hold of Carajas.

In 2009 shipments plummeted to 1.26 million mt. In 2012, Cargill, the world’s largest pig iron trader, announced it was exiting the business. Later that year, North Brazilian pig iron pioneer Cosipar, a major producer in the country, permanently closed after 26 years. The companies cited various reasons for their exits, but the overarching theme appeared to be a dim outlook for the future of pig iron trade.

In 2013 only five pig iron producers remained in Carajas – Sidepar in Pará, and Viena Siderúrgica, Queiroz Galvão, Gusa Nordeste and Margusa in Maranhão. That same year Brazilian pig iron exports to the US of 1.75 million mt accounted for only 43% of total US pig iron imports, with Russia not far behind (1.60 million mt).

With only five producers and operating rates falling to critical levels below 30% some months, including February 2014, the producers are fighting an uphill battle.

In September 2010, US-based steelmaker Nucor announced a $750 million 2.5 million mt/year direct reduced iron facility to be built in the US. The facility would take advantage of low-cost natural gas to produce DRI in the US for the first time. In a news release at the time of the announcement the company discussed the “value in use” comparison between DRI and pig iron.

A dramatic shift in purchases by Nucor – the largest buyer of North Brazilian pig iron – coupled with already crippled production levels, could have meant the nail in the coffin for the North Brazilians. But concerns in Brazil were somewhat allayed after the December 2013 startup of the facility because Nucor continued to book pig iron.

The remaining North Brazilian producers have bonded together via two consortiums, VPS and CPI. By operating together, the producers are able to fill Panamax vessels with about 70,000 mt of pig iron despite only operating at around 30% capacity. The consortiums allow the area producers to fill a cargo in a month, therefore not exposing an individual producer to extended time periods with potential price fluctuations.

A mid-2014 planned startup of a steel mill in North Brazil by Siderúrgica Latino Americana (Silta) could be a boost for the local pig iron market. The mill is part of the Ferroeste Group that produces merchant pig iron in the region at the rate of about 22,000 mt/month. That pig iron will now be taken out of the market and used for internal consumption and the mill could become a buyer of North Brazilian pig iron, giving the area producers local options – a benefit South Brazilian pig iron producers have always enjoyed.

For the surviving North Brazilian pig iron producers, the reduced output, the solidarity of the consortiums along with continued interest from Nucor and the startup of a local domestic mill, provide a new lifeline and improved outlook for a bustling industry once brimming with promise. ■