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Argus White Paper:

US HRC: Midwest pricing a legacy of the past?

Most published US hot-rolled coil assessments continue to reflect prices of the past, when the Midwest was the predominant steelmaking region. What happens when this changes?

The US Midwest — the topic of endless discussion. What states or areas comprise the Midwest? Would Pittsburgh be considered a Midwest city? It can be argued that the people there have Midwest attitudes but geographically they are not in the Midwest.

When it comes to the steel market, the Midwest — regardless of its specific boundaries — has always been the pricing home of the most widely produced finished steel product — hot-rolled coil (HRC).

But the legacy approach has failed to keep up with the ongoing shifts in the location of US production.

Argus, like other price-reporting agencies (PRAs), does assess US HRC on an ex-works Midwest (covering Illinois, Indiana, Michigan, Ohio, Iowa, Minnesota, Nebraska and Pennsylvania) basis.

But *Argus* was the first PRA to recognise the need for two separate assessments amid the growing importance of the southern market, as well as its noticeably different market dynamics. The assessment, with nearly two years of price history, reflects pricing in Alabama, Arkansas, Mississippi and South Carolina.

The US has continued to shift its production to electric-arc furnaces (EAFs) with any intent of ever investing in a new blast furnace in the US long gone. As the type of sheet production has shifted in the past 45 years, so have the locations where it is produced.

Blast furnace-based steelmakers have shrunk through consolidation over the past 25 years, while their production footprints have also eroded.

US Steel shuttered its blast furnaces outside of Detroit at its Great Lakes Works in 2020. A portion of its Gary, Indiana, facility is also being repurposed to focus on metallics for its EAF mini-mills. In Illinois, the steelmaker is exploring options to sell its Granite City blast furnaces to focus on producing granulated pig iron. Meanwhile, Cleveland-Cliffs reduced its active blast furnaces outside of Chicago at its Indiana Harbor facility in 2019 and 2022.

It would be difficult to argue that steel produced in Detroit, Gary, just outside of St Louis – or, particularly, Chicago – would not classify as being Midwest in origin. Suggesting otherwise would be as difficult as making the case that an Italian beef sandwich and an Old Style lager, two Chicago culinary staples, were not Midwestern.

US sheet capacity expansions, 2016-25

Company	Location	Capacity *mn st/yr*	Date
Big River Steel	Oscela, Arkansas	1.65	2016
Big River Steel	Oscela, Arkansas	1.65	2020
Steel Dynamics	Sinton, Texas	3.00	2021
Nucor	Ghent, Kentucky	1.4.0	2022
Nucor	Mason County, West Virginia	3.00	est 2025
North Star Bluescope	Delta, Ohio	0.94	2022
US Steel	Oscela, Arkansas	3.00	2024

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South of the Mason-Dixon line, the US has seen 14.6mn short tons (st) of new flat-steel production announced or started production since 2016. By the end of 2024, the US mecca for HRC will be Arkansas – not its traditional Midwest locale.

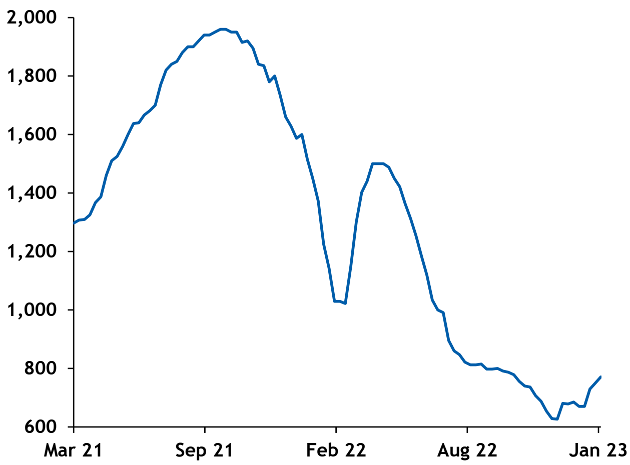
By then, the northeast corner of Arkansas will be home to about 9mn t of annual flat-rolled steel capacity, split between Nucor and US Steel's Big River mills. In 2019, US mills shipped about 57mn t of sheet products, according to data from the American Iron and Steel Institute. Once US Steel begins production at its self-described 'mega mill' sometime in 2024, the sliver of northeast Arkansas will have total production capacity of about 16pc of 2019 total mill shipments.

While there is coil capacity being added in the Midwest with the expansion of North Star BlueScope in Delta, Ohio, it remains limited compared with growth in the south.

With production headed south, what does this mean for the Midwest pricing reference? Pricing benchmarks are notoriously sticky, but as the south grows in influence, there will be a limit to how long the market will accept pricing driven by what steel prices are doing in the Midwest.

Argus launched its southern US HRC assessment in March 2021, right around the time traditional market dynamics went out the window. In 2021, regional differences were not relevant, with steel prices at all-time highs flirting with $2,000/st. At the time, it did not matter how large your chequebook was, you were unable to buy your way out of the supply crunch. Things did not calm down much in 2022 either, with the Ukraine crisis having sparked panic over raw material prices.

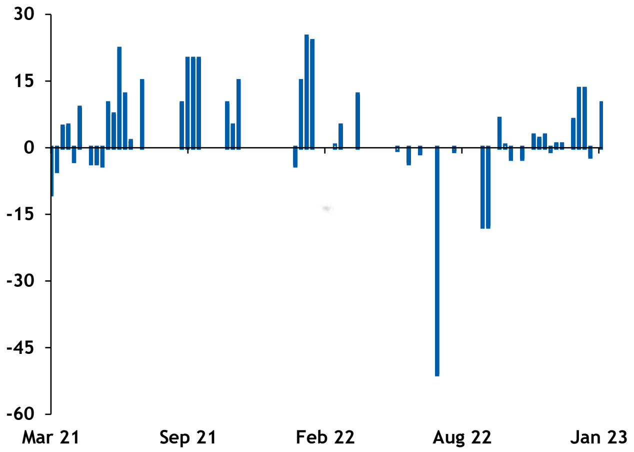
Argus US southern HRC assessment $/st



It appears as though steel prices may be poised for a "normal" market in 2023, with prices returning to more comprehensible levels. Still, there will be increased competition by mills as newly added capacity in Texas, Kentucky and Ohio eventually transitions from the ramp-up phases of 2022 to full production.

With this, we will probably see the return of differentiated prices between the Midwest and southern markets. Participants should look to limit their basis risk of buying or selling off of an assessment that is not reflective of their local geography and transaction prices. Despite 2021 seeing the tightest supply in the US steel market since 2004, there were still differences regionally in pricing.

Argus US Midwest diff to southern HRC $/st



Still, with domestic prices shy of $800/st and unlikely to eclipse the $1,000/st market again amid more capacity and competition, $10-$20/st differences in indices used for buying and selling thousands or even millions of tons could have noticeable effects on a company's bottom line.

Want to know more? Please reach out directly to Michael Fitzgerald at michael.fitzgerald@argusmedia.com or Rye Druzin at rye.druzin@argusmedia.com if you would like to learn more about any of the topics in this white paper.

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