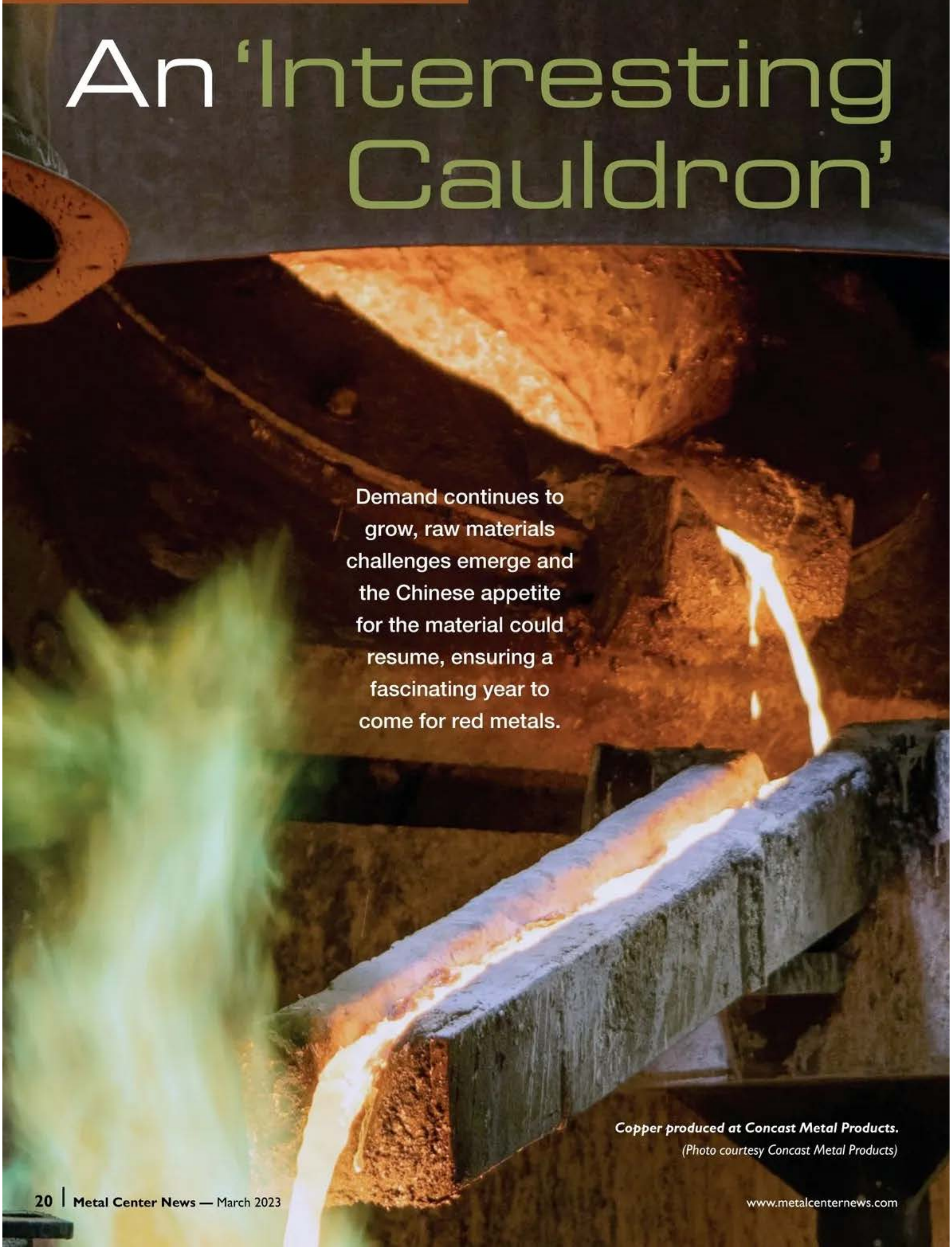
Red Metal Report

By **Dan Markham,** Editor-in-Chief

An 'Interesting Cauldron'

Demand continues to grow, raw materials challenges emerge and the Chinese appetite for the material could resume, ensuring a fascinating year to come for red metals.



Copper produced at Concast Metal Products.
(Photo courtesy Concast Metal Products)

For the members of the red metals supply chain, 2022 was a very good year. Few are seeing any reason to believe the new year will be much different.

Optimism abounds for producers and distributors about the demand picture for copper, brass and bronze products. But there are other issues surrounding the material that may pose challenges for the supply chain in 2023 and the years to come.

"2022 was good, and right now January is good, but we're seeing a little softening compared to last year," said Lance Shelton, vice president of Christy Metals, Northbrook, Ill., "But it's good; we're not complaining."

"We hope to continue to keep moving the way we have been," says Bob Farmer, co-president of Farmers Copper, Galveston, Texas.

Copper producers were even more enthusiastic. "It was a busy year, our best production year in many," says Amy Shaughnessy, vice president of sales and marketing for Revere Copper Products, Rome, N.Y. "It was a year where we produced as much as we've produced and more, and still could not capture customer demand."

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"2022 was a nice, good year for us," says Norman Lazarus, senior vice president of Aviva Metals, Houston. "It was solid all year."

Though there are some overall economic concerns as 2023 opens, the general feeling among executives is the market is poised for something similar, at least from most quarters.

"It's early days, but January picked up right where we left off last year," says Martin Little, executive vice president of sales and marketing for Concast Metal Products, Mars, Pa. "It's remaining very strong across the board – construction, vehicles, oil and gas, water handling, plumbing, aerospace."

"We finished the year strong and '23 has started off the same way. I hope to see a good year in '23," Lazarus says.

Bob Farmer likes the view, given the markets his company serves. "We have copper nickel for the defense industry, and that's going pretty well. We have a lot of copper plates and bars for the electrical industry, and that's going well. And we have rod for the oil and gas industry, and that's going pretty well.

"There may be a soft spot here or there, but it's holding up pretty well."

His brother, fellow Co-President Richard Farmer, says the now yearlong war in Ukraine is driving additional activity from the defense sector. "It seems like we're getting more involved. All of the shipyards are gearing up for a possible greater outlay."

Wieland President Greg Keown is a bit more reserved in his forecast, describing the underlying markets as a mixed bag. His company is seeing declining demand in the ordnance space and residential construction. Coinage and the automotive electronics markets are showing more positive signs, he says.

For Little, the only significant market Concast expects to decline this year is irrigation, given the heavy early rains in California where most of the company's product is going.

The chance for a downturn is largely downplayed by the copper supply chain executives.

"The looming recession is much hyped and talked about. We haven't seen it yet," says Little. "But sometimes when you talk about those things on a regular basis, you can talk yourselves into one."

Keown, on the other hand, is a little more worried about the possibility than some of his colleagues. "The biggest threat to the forecast is a combination of continued inflation followed by federal monetary policy tightening as well as geopolitical unrest and uncertainties."

Those latter elements are part of why Little describes 2023 as "an interesting cauldron. We have a potential recession blooming, tight copper supply and supply chain issues with China, and the East in general. There's a lot going on and how it all comes around and what transpires over the next few months is going to be interesting."

China, as always, remains the biggest wildcard. The Far East giant has had a rather uncharacteristically quiet few years, a byproduct of COVID shutdowns and changing priorities. But, many observers believe the Chinese industrial machine will rev up again in the second half, which will have an impact on supply and pricing.

Copper pricing softened throughout 2022 but entered the new year with a bit of stability. Observers think the price will strengthen this year, particularly if China resumes its historical patterns.

"The supply chain is a lot better than it was. I think it's highly probable it's going to get choppy going to the latter part of the year, purely based on the fact the Asian countries are going to get back in the market, particularly China," says Lazarus. "They're the biggest consumers of copper, and if they start sucking it out of the market, we'll see prices increase."

That's kind of what service center operators anticipate.

"Copper [pricing] was really up last spring. It dropped off and now it's pulled back up. We think it's going to stay fairly strong; there may be some dips if China is in the market or not. They drive things for everybody."

Lee Seeger, vice president of Seeger Metals and Plastics, Toledo, Ohio, agrees. "I think pricing is going to keep going up. That's just an educated guess based on what I've heard from people at the mills."

Looking long term, the outlook for copper is, in a word, spectacular. The push for electrification of so many products, most notably the next generation of automobiles, will drive demand growth for years if not decades to come.

"Whether you believe in EVs or you're an internal combustion guy, it's definitely coming," Shelton says of the explosion in electric vehicle production. "There's no stopping it."

According to the Copper Development Association, copper's role in the new wave of vehicles will dwarf its share in ICE vehicles. Traditional vehicles contained less than 50 pounds of copper. Hybrids took that number and pushed it to 85 pounds; it grew to 132 pounds with plug-in hybrid vehicles and will average about 183 pounds in a battery electric vehicle, which is the direction the market itself is going.

"Some of these programs we're seeing require an unbelievable amount of copper," says Shaughnessy. "And it's all still in its infancy."

A multicoil copper strip. *(Photo courtesy Wieland)*

'We're teetering on the edge on whether EVs are going to be a part of our everyday life and everybody is going to have one," says Little. "That will play a big part in the growth of our industry."

And it's not just the cars themselves. The expansion of the grid required to support the vehicles will be profound, driving more copper growth in the process.

Finally, it isn't just transportation where this is taking place. Electrification is everywhere, from the appliances in our homes to the devices in our hands. Virtually everything we touch is more connected than ever, all of which requires copper.

"With the government trying to electrify everything, there could be shortages. Not this year, but a few years down the road we could start having some problems, but I think the industry will work its way out of that," says Bob Farmer.

Of course, all of that drives a question: how well is the raw material base positioned to handle this demand explosion? That remains an open subject.

"There are shortages of copper and those shortages are going to get exponentially bigger going forward and that's going to create supply chain issues, I would imagine, especially in the specialty-type products," Lazarus says.

The U.S. red metal industry would love to grow the supply of home-grown raw materials, but that is easier said than done. Even if copper is added to the critical minerals list as industry leaders believe it belongs (See Sidebar), challenges remain. That became evident on the final day of January when the EPA rejected a proposal for the Pebble Mine in Western Alaska. Citing potential damage to salmon and other fish in the nearby waters, the EPA took the unusual step of killing the copper and gold project. The site is estimated to contain 57 billion pounds of copper.

The decision is further evidence of the difficulty of developing new sources of raw materials within the U.S.

Nonetheless, the domestic industry is ramping up production in other ways to meet increased demand. These developments are taking place at multiple places in the supply chain.

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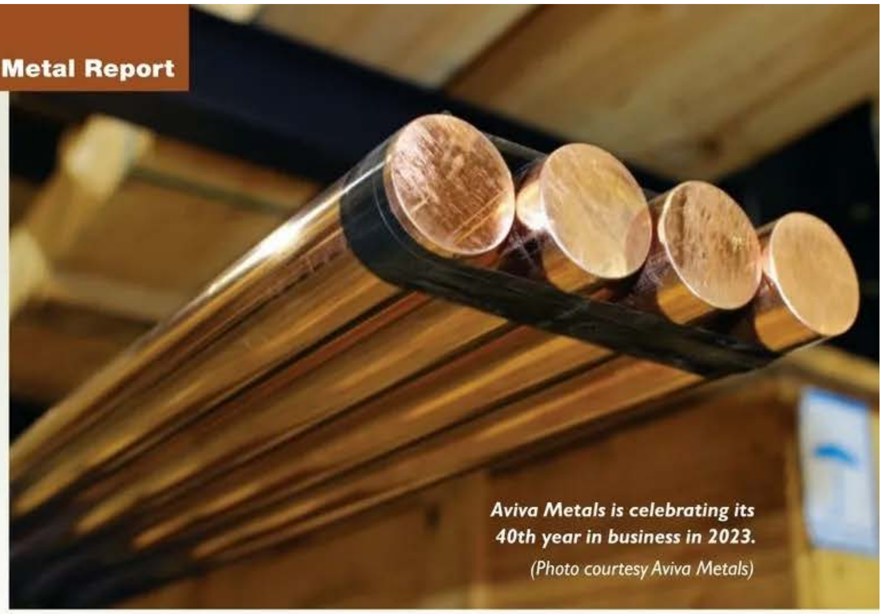
Wieland will commission its first greenfield recycling facility in Shelbyville, Ky., at the end of 2023. “This, along with many other sustainability initiatives, will drive Wieland to be a long-term sustainable supplier in the industry and the world,” Keown says.

Two other facilities are also in various stages of development to keep copper scrap in the U.S. In 2022, the Ames Copper Group opened a facility in Shelby, N.C., that will produce 50,000 tons annually of copper anodes. Additionally, Germany’s Aurubis will locate a multi-metal recycling plant and copper smelter in Augusta, Ga., with a planned opening by early next year.

At the next level, other copper producers are also upping production, none more aggressively than Revere. The centuries-old company is expanding production outside its



Aviva Metals is celebrating its 40th year in business in 2023.
(Photo courtesy Aviva Metals)

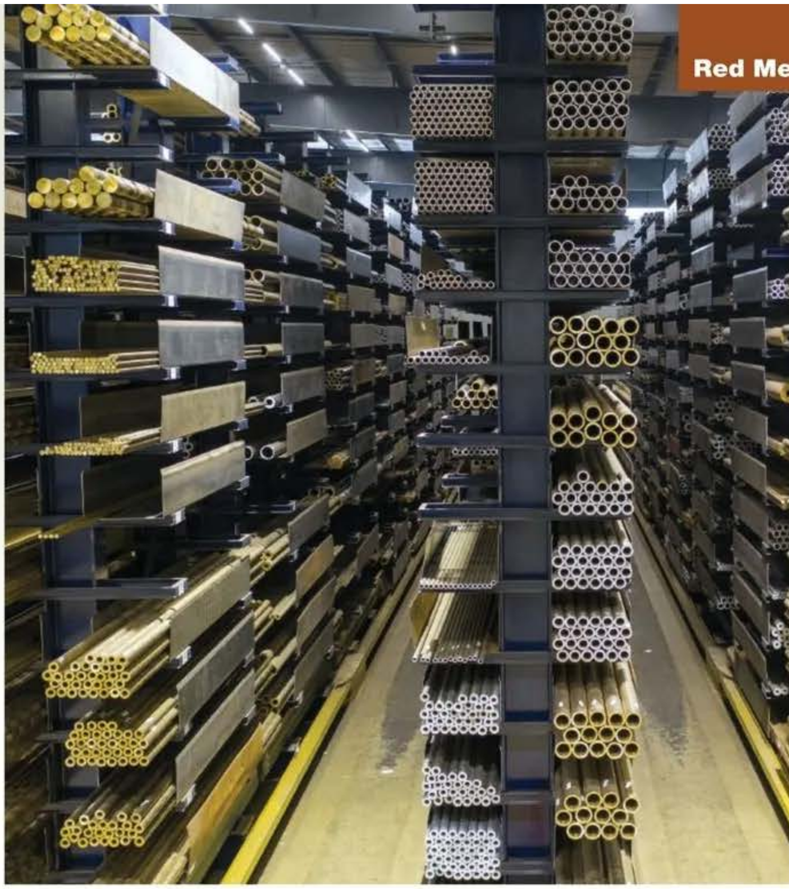
Upstate New York base for the first time in history. Revere is installing two new extrusion lines to make copper bus bar at a facility in Melvin, N.C. The facility was in a mixed stage of installation and development in January, with the expectation it would be ready to produce material for shipment by late winter.

"For us to announce we're expanding to a new location is beyond thrilling for us," says Shaughnessy.

Additionally, the company is upgrading a casting unit at its Revere plant, bringing in newer technology to enhance production. Ultimately, the two projects will add 50,000 million pounds of added capacity for Revere, though most of that growth will take place in subsequent years, as Revere will need to curb output this spring as it installs the new casters.

More immediately, Concast also expanded its production capabilities by bringing back online its ninth casting line. "It had been down for a while. We've got it back on track and that's going to help us tremendously this year and moving forward," Little says.

Though demand will undoubtedly grow in subsequent years, Revere is confident the raw material supply situation will not be an issue this year. "We're not seeing any sort of risk for supply for 2023," Shaughnessy says.



The supply chain seems to be in better balance compared with past years.
(Photo courtesy Concast Metal Products)

It isn't just new demand pushing the investments, but a recognition of the need for a healthy domestic production base throughout the red metals supply chain. The shortfalls and delays of the post-pandemic world have served as a crucial reminder of the importance of being able to access material closer to home. Cambridge-Lee Industries' Dave Goad hopes that isn't lost as the business environment changes.

"I believe the biggest threat to our business would be a failure to learn from the lessons of the past two years. A robust supply base with redundant capacities and a respect for each aspect of the supply chain – including ancillary processes or products – are what will enable all of us to keep our customers in product," says Goad, vice president of industrial metals and business development for the Reading, Pa.-based company.

Keown is optimistic the past few years will ultimately prove beneficial to domestic producers. "The pandemic changed the flow of materials throughout the world. That, coupled with challenges in domestic and international logistics, has resulted in many changes in the supply chain. Some of those changes will be temporary and others will be permanent. We believe, overall, the changes will be beneficial to North American manufacturing."

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In many ways, 2022 was a bit of a corrective year for the industry, getting away from the dramatic extremes of the recent past. That was certainly true of the supply situation, which has improved considerably.

"Lead times for many products have improved," says Dave Goad, vice president of industrial metals and business development at Cambridge-Lee Industries, Reading, Pa. "After two years of extraordinary demand across all products characterized by supply constraints and inflationary costs, buyers are a bit more deliberate in their purchases."

"It's been a struggle, but deliveries are coming in better for a lot of the pure copper materials," says Farmer, noting that some issues still exist with overseas mills on certain products.

"It's still a bit of a challenge, but it's better than it was," says Seeger. "We and others who do what we do could only buy a certain amount of pounds. Everybody had allotments. For the most part, that's gone now." ■