Expected rise in copper imports won’t last: US mill

NEW YORK – Lengthening lead times at U.S. copper and brass product mills are encouraging more buyers to consider imports, but at least one major domestic mill source said he’s optimistic the trend will be short-lived.

The recent extension of lead times for copper and brass products—out to as far as 18 weeks for some products—had led service centers to speculate that original equipment manufacturers (OEMs) may turn to imports to meet their customers’ demands, which could take business away from domestic mills (amm.com, March 26).

Imports of copper sheet and strip may hit U.S. shores for a few months, although one domestic mill source said it will be short-lived. “There might be a short-term trend,” he told AMM. “We don’t want that to happen. Of course we don’t want to see business go somewhere else. But we understand how it can happen in the short term.”

Lead times for medium-gauge copper products are anywhere from eight to 14 weeks, out from four to six weeks previously, while lead times for light-gauge material are as long as 18 weeks vs. 12 weeks previously. Similarly, brass product lead times have stretched to 16 to 17 weeks from eight weeks, market participants told AMM in late March.

Service centers attribute drawn-out copper strip lead times to strong automotive demand and a recovering housing sector, while the brass is being consumed largely by ammunition makers as consumers continue to stock up on bullets fearing stricter gun laws on the horizon.

A service center source confirmed that mills are talking about imports and how they will impact their business. “They’re talking to us about almost every product,” he said, noting that imports of a variety of copper and brass products, including copper rod, See EXPECTED, page 8.

Construction data up but steel sales mixed

NEW YORK – Key construction industry metrics, including spending, have shown marked improvement in recent months, but whether the steel long products sector has seen the benefit in its order books is another question.

Most sources supplying the sector said business was improving and order books appeared stronger month on month, but many said dramatic changes have yet to arrive, even as spring activity starts to set in.

“We’ve seen an uptick, but not (as much as we hope) we will,” said an Illinois-based rebar distributor who supplies contractors. States that begin public construction projects in mid-April are getting ready for more activity, but business might remain subdued until then, he said. “I think about a week before (out) April 15 opening, we’ll see projects getting off the ground,” he said.

See CONSTRUCTION, page 9

Other top stories

Success of W. Coast steel tubing price increases still up in the air

West Coast structural steel tubing producers are standing by recently announced hikes, but most buyers believe it’s still too early to judge their success. West Coast tubing producers began raising prices by $30 per ton effective with new orders placed March 11, the first increase since last year. See 2.

Alfiniti targets HVAC, automotive marts with new extrusion presses

Alfiniti Inc. plans to add two new aluminum extrusion presses to its Alfiniti Precision Tube subsidiary in Winston, N.C., over the next five years as it looks to continue to expand into the automotive sector as well as the heating, ventilation and air conditioning (HVAC) markets, an executive said.

East Coast ferrous scrap export prices flat; West Coast tags drop

U.S. ferrous scrap bulk export prices trended in different directions this past week as prices for West Coast sales dropped, while East Coast prices held unchanged. East Coast export prices to Turkey have been flat for more than two weeks as mill buyers have shown no interest in U.S. cargoes.

Quote of the day

“Sure, you can find cheap pieces of junk equipment (in China), but you can also find some things that are truly world-class. What that does is it lets us bring manufacturing back to America.” Alfiniti Precision Tube president Richard “Steve” James says buying machinery in China helped the company meet its expansion budget, page 5
Republic plans third-quarter start-up of Lorain melt shop

CHICAGO — Republic Steel expects to start a new melt shop in Lorain, Ohio, during the third quarter, allowing the company to adequately supply its special bar quality (SBQ) mills and run them more efficiently.

Republic has faced an internal shortage of raw materials for its Lorain and Lackawanna, N.Y., bar mills since its blast furnace was idled in 2008 (amm.com, Dec. 3, 2008). That has led to staggered, temporary work force reductions in Lorain, particularly in recent months, when bar demand pulled back.

“We are in the process of installing a new electric furnace in Lorain,” Republic executive vice president Ted Thielens told AMM April 1. “We completed the foundation and concrete work and equipment is starting to arrive for installation.” However, until the melt shop is running, Republic remains in a “steel-short situation, dependent on the melt shop in Canton,” he said. “We are not able to operate all three bar mills on a continuous basis, so at Lorain we run the bar mills two to three weeks per month.”

Lorain has one mill that produces coils of up to 1-inch diameter hot-rolled bar, and a second that makes 3- to 6.5-inch diameter hot-rolled bar. The Lackawanna mill produces up to 3-inch diameter bar, shipped primarily to automotive customers.

“That has been busier than the two mills in Lorain, and we run that mill heavier,” Thielens said. “This year, we’re running each of the Lorain mills two weeks a month. ... We will be on that schedule until the melt shop starts up, and then we’ll be able to increase production on the bar mills.”

As the bar mills are typically on two weeks and off two weeks, this has meant temporary layoffs during the off weeks. Up to 200 production workers are affected each month, Thielens said, but noted that other departments—such as billet inspection and conditioning—continue operating.

“We certainly look forward to the additional capacity coming online with the new melt shop,” said Thielens.

—Ted Thielens, Republic Steel

West Coast tubing hike still up in air

LOS ANGELES — West Coast structural steel tubing producers are standing by a recently announced price hike, but most buyers believe it’s still too early to judge its success.

West Coast tubing producers began raising prices by $30 per ton ($1.50 per hundredweight) effective with new orders placed March 11, the first increase since last year (amm.com, March 14). But both buyer and mill sources continue to debate just how much resistance the announced increase is meeting.

On paper, the hike would nominally raise day-to-day purchase prices of core sizes of A500 Grade B hollow structural sections (HSS) in the Los Angeles market to $990 to $1,010 per ton ($49.50 to $50.50 per cwt), depending on the size of the order. But larger service centers with bigger orders to place would in many cases pay about $20 per ton ($1 per cwt) less, with multiple truckload orders reported at $30 to $40 per ton below the nominal price.

One distributor said his company initially paid part of the hike but is now trying to decide whether it needs to continue paying more.

“We paid half of it, but nothing’s changed that shows prices are on their way up. ... We just don’t know if there are enough orders at the mills to make it work. It still looks like a buyer’s market,” the distributor said.

“If we’re buying material today for a bundle or two or to fill a hold in our inventory, we’ll pay it,” another service center buyer said of the hike. “But if I (were) making a big order, I wouldn’t necessarily expect to pay.”

As with many other downstream steel products, most HSS market sources agree that the hike’s success or failure could hinge on two factors: the ultimate outcome of recent hikes on hot- and cold-rolled coil by local mills, which remains undetermined; and the volume of tubing demand, which by some measures still hasn’t shown a significant improvement.

“They’re buying,” one mill source said of current demand from distributors and fabricators. “They’re just not buying that much.”

Imports also continue to be quoted at a discount, with the latest quotes on South Korean tubing at $820 to $830 per ton ($41 to $41.50 per cwt). Prices as low as $770 per ton ($38.50 per cwt) for some Korean material for July arrivals have also been reported.

Frank Haflisch fhaflisch@amm.com

Japanese steelmakers less pessimistic

TOKYO — Japan’s steelmakers have a less pessimistic business outlook for the second quarter than at the start of the year, according to a Bank of Japan survey.

Japan’s business sentiment index came in at negative 13 for the second quarter compared with negative 30 at the start of the first quarter.

“There are still worries,” an executive at one steelmaker said. “We are concerned about too much steel capacity in Asia and a lot of domestic demand is being moved overseas by manufacturers such as automakers. Also, some sectors, especially the shipbuilding industry, face very poor business conditions.”

First-quarter business conditions were worse than the survey had predicted, with the actual reading coming in at negative 38, well below the forecast of negative 30.

“The improvement in demand has taken longer than we had expected,” one industry executive said. Nevertheless, demand from many sectors now appears to be picking up, he added. But the fact that the reading among steelmakers remains firmly in negative territory shows that demand, while picking up, continues to remain sluggish.

US drilling up as Canada sinks

NEW YORK — The number of drill rigs running in the United States increased by two last week, led by Oklahoma (up nine), while Canadian drilling activity plunged by 91 compared with the previous week.

<table>
<thead>
<tr>
<th>Country</th>
<th>Last week</th>
<th>Previous week</th>
<th>Percent change</th>
<th>Last year</th>
<th>Percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>1,748</td>
<td>1,746</td>
<td>+0.1</td>
<td>1,979</td>
<td>–11.7</td>
</tr>
<tr>
<td>Canada</td>
<td>246</td>
<td>337</td>
<td>–27.0</td>
<td>256</td>
<td>–3.0</td>
</tr>
</tbody>
</table>

Source: Baker-Hughes Inc.

Frank Haflisch fhaflisch@amm.com

‘We certainly look forward to the additional capacity coming online with the new melt shop.’

—Ted Thielens, Republic Steel

Japanese steelmakers less pessimistic

TOKYO — Japan’s steelmakers have a less pessimistic business outlook for the second quarter than at the start of the year, according to a Bank of Japan survey.

Japan’s business sentiment index came in at negative 13 for the second quarter compared with negative 30 at the start of the first quarter.

“There are still worries,” an executive at one steelmaker said. “We are concerned about too much steel capacity in Asia and a lot of domestic demand is being moved overseas by manufacturers such as automakers. Also, some sectors, especially the shipbuilding industry, face very poor business conditions.”

First-quarter business conditions were worse than the survey had predicted, with the actual reading coming in at negative 38, well below the forecast of negative 30.

“The improvement in demand has taken longer than we had expected,” one industry executive said. Nevertheless, demand from many sectors now appears to be picking up, he added. But the fact that the reading among steelmakers remains firmly in negative territory shows that demand, while picking up, continues to remain sluggish.

US drilling up as Canada sinks

NEW YORK — The number of drill rigs running in the United States increased by two last week, led by Oklahoma (up nine), while Canadian drilling activity plunged by 91 compared with the previous week.

<table>
<thead>
<tr>
<th>Country</th>
<th>Last week</th>
<th>Previous week</th>
<th>Percent change</th>
<th>Last year</th>
<th>Percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>1,748</td>
<td>1,746</td>
<td>+0.1</td>
<td>1,979</td>
<td>–11.7</td>
</tr>
<tr>
<td>Canada</td>
<td>246</td>
<td>337</td>
<td>–27.0</td>
<td>256</td>
<td>–3.0</td>
</tr>
</tbody>
</table>

Source: Baker-Hughes Inc.

Frank Haflisch fhaflisch@amm.com

‘We certainly look forward to the additional capacity coming online with the new melt shop.’

—Ted Thielens, Republic Steel

Japanese steelmakers less pessimistic

TOKYO — Japan’s steelmakers have a less pessimistic business outlook for the second quarter than at the start of the year, according to a Bank of Japan survey.

Japan’s business sentiment index came in at negative 13 for the second quarter compared with negative 30 at the start of the first quarter.

“There are still worries,” an executive at one steelmaker said. “We are concerned about too much steel capacity in Asia and a lot of domestic demand is being moved overseas by manufacturers such as automakers. Also, some sectors, especially the shipbuilding industry, face very poor business conditions.”

First-quarter business conditions were worse than the survey had predicted, with the actual reading coming in at negative 38, well below the forecast of negative 30.

“The improvement in demand has taken longer than we had expected,” one industry executive said. Nevertheless, demand from many sectors now appears to be picking up, he added. But the fact that the reading among steelmakers remains firmly in negative territory shows that demand, while picking up, continues to remain sluggish.

US drilling up as Canada sinks

NEW YORK — The number of drill rigs running in the United States increased by two last week, led by Oklahoma (up nine), while Canadian drilling activity plunged by 91 compared with the previous week.

<table>
<thead>
<tr>
<th>Country</th>
<th>Last week</th>
<th>Previous week</th>
<th>Percent change</th>
<th>Last year</th>
<th>Percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>1,748</td>
<td>1,746</td>
<td>+0.1</td>
<td>1,979</td>
<td>–11.7</td>
</tr>
<tr>
<td>Canada</td>
<td>246</td>
<td>337</td>
<td>–27.0</td>
<td>256</td>
<td>–3.0</td>
</tr>
</tbody>
</table>

Source: Baker-Hughes Inc.

Frank Haflisch fhaflisch@amm.com
We sell service.

www.metalsusa.com
Defective Bay Bridge steel fasteners traced to Dyson

NEW YORK — The California Department of Transportation (Caltrans) is investigating the cause of damage to 32 steel rods on the San Francisco-Oakland Bay Bridge that had been supplied by Painesville, Ohio-based Dyson Corp.

Construction workers tensioning 96 steel rods for bridge contractors American Bridge Co., Corapolis, Pa., and Fluor Corp., Irving, Texas, in early March found evidence of fracturing on about one-third of the rods.

Dyson was contracted for 288 threaded steel rods ranging in length from 9 to 17 feet for the bridge, a spokesman for San Francisco’s Metropolitan Transportation Commission (MTC) told AMM. Ninety-six rods were manufactured and installed in 2008, of which 32 showed evidence of fracturing. The remaining 192 rods were installed in 2010, he said.

“It has not yet been determined whether the presence of excess hydrogen (that may have caused the damage) is due to something in the manufacturing process or something in the galvanizing process,” the spokesman told AMM.

Caltrans is investigating Dyson’s possible culpability, and the MTC spokesman said authorities don’t know yet if the company had made the product from start to finish.

“It hasn’t been determined whether galvanizing was done by Dyson itself or a subcontractor,” he said. Dyson Corp. and Caltrans didn’t return calls for comment.

The fasteners were supplied for the bridge’s $6.4-billion reconstruction project on its eastern span, which started in 2002, according to the bridge’s website.

Samuel Frizell
samuel.frizell@amm.com

Bar processor installs new lathe, handling equipment

CHICAGO — Steel Supply Co. has completed installing two major pieces of equipment designed to improve quality, production and customer service, vice president and general manager David Sheer told AMM.

The Rolling Meadows, Ill.-based distributor has installed a Haas-ST40L CNC lathe that includes live tooling capable of producing hydraulic piston rods, fan and blower shafts, and general machine tools.

The products made on the new line will include solid and hollow steel shafts used for hydraulic cylinders, as well as steel for use in shafts in blowers such as water chillers and furnaces.

“The live tooling allows for cross holes and key slots to be machined on the lathe rather than transferring the work to a separate milling machine,” Sheer said.

The service center also has installed a Hubtex sideloader that retrieves raw bar and tubing from storage racks and loads and unloads the material on production lines. It can handle 6,000-pound bundles and can reach racks 25 feet high, Sheer said.

The equipment installation comes at a time of stable demand, Sheer told AMM. “Business overall is steady but not as strong as first-quarter 2012,” he said. “We anticipate a steady year but perhaps 4 to 7 percent down from 2012 volume.”

Sheer said mill lead times are “much improved from last year, back to the normal eight to 12 weeks,” which is important because the company has to build in processing time when quoting customer deliveries.

Steel distributors’ prices still at standstill

PALM DESERT, Calif. — Steel distributors continue to see stagnant pricing despite mills’ persistent attempts to raise prices, although some key areas—such as automotive—are showing signs of strength.

“There’s just not a lot of upside (pricing) potential in the market,” Jim Barnett, president and chief executive officer of Grand Steel Products Inc., Wixom, Mich., said on the sidelines of the Association of Steel Distributors’ 2013 annual convention in Palm Desert.

Nearly $200 in flat-rolled hikes have been announced over the past five months, Barnett noted. But while prices might rise briefly following an announcement, the market eventually “seeks its own level,” making any improvement temporary, he said. “I don’t think the actual amount of the transaction price has increased more than $40 per ton (over this period).”

An unusually large amount of business seems to be between distributors, suggesting a reluctance to commit beyond the spot market, other sources said.

“It’s really an indecisive marketplace,” Gregg Gross, president of Northshore Metals Inc., Deerfield, Ill., said, noting that the steel market’s “hesitation factor” is in line with most Americans’ cautious economic attitudes.

With memories of the recession still fresh, Voss Industries, a Taylor, Mich.-based flat-rolled processor that does 80 percent of its business in automotive-related work, continued to sit on some capital spending projects.

“All of us learned from 2008 and 2009,” president Paul Michael Voss said, noting that his company is debt free. “We’re taking it day by day and running our place as efficiently and effectively as we can. We’re not going to pull the trigger on (projects) that take on debt.”

Still, distributors aren’t willing to relinquish their roles.

“I don’t mind a slightly larger inventory,” Brian D. Robbins, chief executive officer of Midwest Materials Inc., Perry, Ohio, said.

Robbins’ company stocks about three months of materials vs. a service center industry average that he pegs at two to two-and-a-half months.

“At the end of the day, we’re a distributor of steel goods, and we want to have the goods to distribute,” he said.

Tim Berna, president of Toledo, Ohio-based flat-rolled distributor Heidtman Steel Products Inc., has a “very optimistic” outlook, noting that auto output is expected to grow through the year, partly due to consumers’ needs to replace aging vehicles and demand for fuel efficiency.

Rail cars are another source of healthy demand, distributor, mill and securities analyst sources said.

Capital equipment is currently stronger than consumer goods, James P. Bouchard, chairman and chief executive officer of Sewickley, Pa.-based Esmark Inc., said.

Plate fabrication, in particular, is up, with Dallas-based Trinity Industries Inc. and other rail car manufacturers “doing great,” he said.

Frank Hofflich
fhofflich@amm.com

Manufacturing grows but at slower pace

CHICAGO — U.S. manufacturing activity grew for a fourth straight month in March but at a slower pace as declines were seen in new orders, production and prices, according to the Institute for Supply Management (ISM).

The ISM’s purchasing managers index (PMI) for March dropped 2.9 percentage points from the previous month to 51.3, which still indicates overall growth in the domestic manufacturing economy.

The new orders index fell 6.4 percentage points to 51.4, the production index slipped 5.4 points to 52.2 and the prices index declined 7 points to 54.5.

Both primary metal producers and fabricators said they experienced production growth last month, although producers saw a decline in new orders. Fabricators saw a rise in new orders in March while continuing to hire workers and build inventories. “Automotive is still very strong,” one surveyed fabricator said.

Metal producers lowered their inventories in March and deemed their customers’ inventories as too high; both fabricators and metal producers reported that their order backlogs had increased.

“A company we buy steel from also precuts steel for new home construction,” a purchasing manager member of ISM’s Chicago chapter said. “Back in 2007, they shipped 110 rig packages per week; today, they ship two rig packages per week.”

Fabricators said they paid lower prices last month, while producers’ input prices were flat compared with February.

Meanwhile, fabricators saw export orders rise, but producers’ export orders fell. Metal producers saw imports decline; conversely, fabricators saw an increase in imports.

“The most encouraging indicator in the report was export orders, whose index hit its highest level since April 2012,” Gault said.

Corinna Petry
cpetry@amm.com

www.amm.com

It is a violation of AMM copyright to photocopy/distribute this product.
Alcoa slates $52M for prep work for planned NY potline

CHICAGO — Alcoa Inc. plans to invest $52 million through 2015 to modernize its operations in Massena, N.Y., including site work and support projects ahead of the planned construction of a new potline at its Massena East facility.

If the proposed investment moves forward, work is expected to begin in June 2013, the Pittsburgh-based aluminum producer said.

“Modernizing Massena will help us move farther down the aluminum cost curve,” Alcoa executive vice president and president of global primary products Chris Ayers said in a statement.

This latest phase of a minimum $600-million investment at the Massena facility hinges upon Alcoa receiving approval to rehabilitate the Grasse River, the company said.

The U.S. Environmental Protection Agency last year released Alcoa’s $85-million plans for cleaning up roughly four decades’ worth of pollutants from the upstate New York river (amm.com, Oct. 4).

The planned investment in Massena also comes as part of a new power supply contract between Alcoa and the New York Power Authority (NYPA), a utility based in White Plains, N.Y.

The NYPA has agreed to supply power to Alcoa’s Massena operations for another 30 years after a current contract expires in 2013, Alcoa said, noting that it has the option to extend the deal by another 10 years. But to secure that power arrangement, Alcoa must invest at least $600 million in total to modernize its facilities, it said.

Alcoa operates two smelters at its Massena facility that have a combined nameplate capacity of 252,000 tonnes per year, according to the company website.

International Wire Group’s earnings decline 46% in ‘12

NEW YORK — International Wire Group Holdings Inc’s full-year net income fell to $10.8 million in 2012, a 46-percent decline from $20.1 million in 2011.

The Camden, N.Y.-based wire producer attributed the decline to its debt refinancing in October as well as higher interest expenses.

Full-year sales fell 16 percent to $733.9 million from $870.2 million in 2011, which the company attributed to lower copper prices, a higher proportion of tolled copper in 2012, unfavorable currency exchange rates and lower customer prices for other metals, including silver, nickel and tin.

The company reported a net loss of $7.1 million in the fourth quarter compared with a net gain of $3.6 million in the year-ago quarter. Fourth-quarter sales totaled $161.7 million, a 15-percent decline from $191 million in the fourth quarter of 2011.

While solid automotive and specialty vehicle demand helped boost the company’s bare wire business, International Wire’s other main markets were flat to down, chief executive officer Rodney Kent said in a statement.

International Wire also serves the aerospace, consumer, electronics, appliances, data communications, energy and medical device end-markets.

Int’l Wire plans $52M in Massena improvements

Alfiniti targeting HVAC, auto growth

CHICAGO — Alfiniti Inc. plans to add two new aluminum extrusion presses to its Alfiniti Precision Tube subsidiary in Winston, N.C., over the next five years as it looks to continue to expand into the automotive sector, as well as the heating, ventilation and air conditioning (HVAC) markets, a company executive said.

The Chicoutimi, Quebec-based custom aluminum extrusion and tubing producer said the fourth quarter press, along with related equipment, at its Winston site, Alfiniti Precision Tube president Richard “Steve” James said in an interview with AMM.

The total cost of the expansion—which included the press, billet heater and handling systems, all made in China—was slightly more than $3 million, James said. Alfiniti also acquired coilers from a U.S. company, but declined to disclose a figure for that equipment.

The future expansions will be roughly the same as the most recent one, James said.

The new press was ordered in February 2012 from China’s Mingsheng Machinery Manufacturing Co. Ltd. and was delivered in late November, with installation continuing until the company pushed its first billet Feb. 1, James said. Coiling capability will be added in April, he noted.

“Roughly 50 percent of the capacity from the new press will be consumed internally for the company’s bench drawn tubes, which are produced for the general industrial market, James said. “Flag poles and weed-whacker handles, those kinds of things,” he said.

At the same time, Alfiniti is looking to expand its presence in the HVAC market, given opportunities for aluminum to replace copper because of the red metal’s higher price, James said.

The company should also benefit from increased automotive demand thanks to both higher build rates and increased aluminum usage in the sector, he added.

“We think there are significant growth opportunities,” James said, forecasting growth of as much as 30 percent over the next two years at the North Carolina facility. The operation’s sales currently stand at some $20 million per year, he said.

Many presses in North America date from the 1950s to the early 1970s and tend to be repaired rather than replaced, James said.

“There is nothing wrong with reconditioning those and keeping them in good shape—and they’ll continue to run for a long time—but there have been some technological advances,” he said.

But Alfiniti wouldn’t have been able to afford to expand if it had turned to more conventional equipment suppliers in Germany, Japan or North America rather than an equipment producer in China, James said.

“But even if acquiring and installing the equipment was “a zoo,” it has nonetheless been “absolutely superb” since, James said.

Michael Cowden mcowden@amm.com
First Nickel refines amid ‘serious financial difficulty’

NEW YORK — First Nickel Inc. has restructured its debt as it tries to improve its liquidity position and help finance development of its Lockerby Mine in Sudbury, Ontario, acknowledging that it “is in serious financial difficulty.”

The Toronto-based company has announced a refinancing initiative that will boost the principal amount of its revolving credit facility with the Bank of Nova Scotia to $15 million from $10 million, as well as extend the maturity date to March 30, 2015.

The company also has extended the maturity dates of its loan agreements with Resource Capital Fund IV LP, Resource Capital Fund V LP and a fund managed by West Face Capital Inc.

While the company is required to obtain shareholder approval for such refinancing under Toronto Stock Exchange (TSX) guidelines, First Nickel said it has applied to TSX for an exemption “on the basis that the company is in serious financial difficulty.”

“Although the company recognizes that reliance upon the financial hardship exemption is not a preferred route, the board and management of (First Nickel) believe it is a necessary route given the serious immediate financial needs the company faces,” the company said.

The company’s liquidity position was affected by reduced nickel production in the fourth quarter of 2012, First Nickel president and chief executive officer Thomas Boehlert said in February (amm.com, Feb. 7).

The company also has been seeking longer-term sources of financing to continue the buildout of its Lockerby Mine, which has faced “higher-than-originally-planned capital expenditures for development in 2013.”

TSX has told First Nickel that it will start a delisting review, but the miner said it is confident that it will be in compliance with all of the exchange’s continued-listing requirements.

Daniel Fitzgerald dfitzgerald@amm.com

Codelco’s copper sales fall 10.7% year on year in 2012

SÃO PAULO — Chilean copper producer Corporación Nacional del Cobre de Chile’s (Codelco’s) copper sales revenues fell by 10.7 percent year on year in 2012 on the back of lower copper prices, higher costs and lower mined grades.

Copper production at Codelco hit the lowest level since 2009, reporting a 5.1-percent fall in output over 2011 to 1.65 million tonnes.

The state-owned company’s copper sales in the period totaled $12.79 billion, compared with $14.33 billion in 2011. However, pre-tax profits rose to $7.52 billion from $7.03 billion due to gains from its August 2012 purchase of a stake in Anglo American Sur SA, it said.

Taking into account the company’s stakes in Freeport McMoRan Copper & Gold Inc’s El Abra Mine and the Anglo American Sur mine, copper sales volumes fell 6.1 percent year on year to 1.74 million tonnes in 2012.

Average copper prices in the period fell to $3.61 per pound ($7.936 per tonne) vs. $4 per pound ($8.796 per tonne) in 2011, according to Codelco. Revenues from byproducts, such as molybdenum, totaled $696 million in 2012 vs. $1 billion a year earlier.

Century aims to keep Ky. smelter going

CHICAGO — Century Aluminum Co. will still push to keep its smelter in Hawesville, Ky., up and running, a company spokesman told AMM April 1.

“Century is committed to maintaining operations at the Hawesville smelter and sustaining family wage manufacturing jobs for the 700 men and women employed at the facility,” the spokesman for the Monterey, Calif.-based producer said via e-mail.

“Towards this end, Century continues to actively pursue access to competitively priced energy for the Hawesville smelter.”

Power provider Big Rivers Electric Corp., Henderson, Ky., told AMM last week that it had resumed negotiations with Century and Montreal-based Rio Tinto Alcan about the aluminum producers’ smelters in the state potentially tapping the open market to meet their power needs (amm.com, March 29).

The Century spokesman declined to confirm whether the company was in talks with Big Rivers or, if discussions were occurring, what their status might be.

Rio Tinto Alcan’s smelter in Sebree, Ky., like Century’s in Hawesville, is in the western half of the state and is served by Big Rivers.

Century gave Big Rivers a 12-month power termination notice for the Hawesville smelter in August (amm.com, Aug. 20), while Rio Tinto Alcan gave its 12 months’ notice Jan. 31 (amm.com, Feb. 4). The two smelters together account for about 70 percent of Big Rivers’ power generation.

Talks between Big Rivers and the aluminum producers resumed after proposed legislation, backed by Century and introduced in both the Kentucky House and Senate, died in the legislature after lawmakers went home March 26 without voting on the measure. The proposal was aimed at allowing the smelters to access electricity on what Century considered more favorable terms than those offered by Big Rivers. Big Rivers said it considered the potential legislation a hindrance to talks.

Michael Cowden mcowden@amm.com

Vale to move underground at Voisey’s Bay

NEW YORK — Vale SA will extend the life of its Voisey’s Bay nickel mine in the Canadian province of Newfoundland and Labrador past 2030 by moving from open-pit to underground.

Vale committed to the government of Newfoundland and Labrador to develop the underground mine because of a delayed construction schedule at its Long Harbour nickel processing plant.

The delay means that the plant will not be ready to process all of the nickel concentrate from Voisey’s Bay until 2015. The underground mine will have a capacity of approximately 40,000 tonnes of nickel per year, according to a statement from the provincial government who also highlighted that the mine would ensure more jobs and benefits are created in the province. It will start producing ore in 2019 and is expected to remain in production past 2030, extending the life of the mine by at least 15 years.

“Underground mining is the next natural evolution in our operations at Voisey’s Bay, and today’s announcement allows us to unlock additional value in this world-class operation.”

—Jeff McLaughlin, Vale

www.amm.com

MARKET PRICES

Prices are in cents per pound except as otherwise noted.

<table>
<thead>
<tr>
<th>AMM Free Market</th>
<th>April 1</th>
<th>Revised</th>
<th>Prior Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper cathode</td>
<td>341.25-342.25</td>
<td>341.25-342.25</td>
<td>341.25-342.25</td>
</tr>
<tr>
<td>Zinc</td>
<td>82.31-93.31</td>
<td>82.31-93.31</td>
<td>82.31-93.31</td>
</tr>
<tr>
<td>Aluminum</td>
<td>98.90-97.40</td>
<td>98.90-97.40</td>
<td>98.90-97.40</td>
</tr>
<tr>
<td>Lead</td>
<td>107.04-109.94</td>
<td>107.04-109.94</td>
<td>107.04-109.94</td>
</tr>
<tr>
<td>Nickel, melting</td>
<td>764.89-774.89</td>
<td>764.89-774.89</td>
<td>764.89-774.89</td>
</tr>
<tr>
<td>Nickel, blistered</td>
<td>798.08-908.89</td>
<td>798.08-908.89</td>
<td>798.08-908.89</td>
</tr>
<tr>
<td>Tin (99.9%)</td>
<td>23,725-23,875</td>
<td>23,725-23,875</td>
<td>23,725-23,875</td>
</tr>
<tr>
<td>Copper scrap</td>
<td>305.00</td>
<td>305.00</td>
<td>305.00</td>
</tr>
<tr>
<td>Silver, Handy and Harman (p.troy oz)</td>
<td>2,799.00</td>
<td>2,799.00</td>
<td>2,799.00</td>
</tr>
<tr>
<td>* Nominal for spot sales</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is a violation of AMM copyright to photocopy/distribute this product.

April 2, 2013 | 6

NONFERROUS
Private equity firm signs deal to manage, turn around ISA

PITTSBURGH — Industrial Services of America Inc. (ISA) has entered into an agreement to be managed by a private equity firm in an effort to turn the company around.

The Louisville, Ky.-based scrap processor has signed a one-year agreement with Blue Equity LLC, which is run by scrap metals veteran Jonathan Blue.

Blue Equity will work with ISA’s existing management to review operations and identify opportunities for growth to help the company improve its core business, secure strategic alliances and diversify its holdings in the domestic and international markets.

Louisville–based Blue Equity has purchased 125,000 shares of ISA’s common stock at $4 per share—a premium to the stock’s April 1 opening at $3.38 per share—and has an option to pick up a total of 1.5 million shares at $5 per share.

Blue, the private equity firm’s chairman and managing director, began his career in the scrap recycling industry, working at family-owned Louisville Scrap Material Co., which was sold to Caterpillar Inc.’s Progress Rail Services Corp. in 1998.

“Blue Equity’s business philosophies and practices have successfully transcended a diverse range of industries and now it seems we have come full circle, returning with this transaction to the scrap and recycling businesses,” Blue said in a statement.

ISA founder and chief executive officer Harry Kletter told AMM that the partnering is part of his exit strategy, which is set to take place in May (amm.com, Jan. 18). Kletter said that privately held recycling companies, including ISA, are struggling. ISA last turned a profit, just $8,531, in the first quarter of 2012 on $60.6 million in sales (amm.com, May 9).

ISA president and chief operating officer Brian Donaghy said he will work closely with Blue Equity.

Blue Equity’s portfolio includes investments in an array of sectors from oil and gas to real estate to financial services.

Blue said he is attracted to working with companies that are ripe for turnaround or growth.

“We don’t buy into a company to keep it the same size. One of the attractions is ISA is public, so we have a lot of plans going to forward,” he said. Those plans could include expanding to nonmetallic recyclable commodities. “The sky is the limit. We are open to everything to help it become a big growth vehicle,” he said.

Lisa Gordon
lgordon@amm.com

Export markets await Turkish interest

NEW YORK — U.S. ferrous scrap bulk export prices trended in different directions this past week as tags for West Coast sales dropped while continued inactivity from Turkey left East Coast prices unchanged.

East Coast export prices to Turkey have been flat for more than two weeks as mill buyers have shown no interest in U.S. cargoes. As a result, AMM’s East Coast Ferrous Scrap Export Index for an 80/20 mix of No. 1 and No. 2 heavy melt, “Buyers are trying for $390 to $395 per tonne for U.S. HMS 1&2 (80:20), but sellers insist on $400. Expectations are between $395 and $400 for a potential deal,” he said.

One North American exporter said anticipated weakness in the U.S. domestic market could result in weaker export tags. “I think the American market now looks like it will be down for an 80/20 mix of No. 1 and No. 2 heavy melt. “Buyers are trying for $390 to $395 per tonne for U.S. HMS 1&2 (80:20), but sellers insist on $400. Expectations are between $395 and $400 for a potential deal,” he said.

Idaho passes bill clamping down on scrap metal sales

NEW YORK — The Idaho legislature has passed a bill that would impose additional rules on scrap metal sales in the state.

Passed by the Senate in a 23-to-12 vote, the bill would require dealers to obtain either photographs or digital recordings lasting more than 30 seconds for nonferrous and stainless steel metal sold to scrapyards, and would require detailed photographs of sellers and the vehicles they use to transport material.

The bill amends current state law requiring scrap metal dealers to obtain copies of sellers’ state-issued photo identification. Used beverage containers are exempt from the requirements.

“They felt that it was a necessary step to take. ... We will comply, of course, but it means a lot more legwork for us,” one Idaho scrap dealer told AMM.

“Legislators didn’t ask for the opinions of law enforcement or the recyclers before they put this thing into action; they told us to do it,” said one Idaho scrap dealer.

Sean Davidson
sdavidson@amm.com

Idaho scrap dealer told AMM.

“It’s East Coast Ferrous Scrap Export Index for an 80/20 mix of No. 1 and No. 2 heavy melt, “Buyers are trying for $390 to $395 per tonne for U.S. HMS 1&2 (80:20), but sellers insist on $400. Expectations are between $395 and $400 for a potential deal,” he said.

One North American exporter said anticipated weakness in the U.S. domestic market could result in weaker export tags. “I think the American market now looks like it will be down for an 80/20 mix of No. 1 and No. 2 heavy melt. “Buyers are trying for $390 to $395 per tonne for U.S. HMS 1&2 (80:20), but sellers insist on $400. Expectations are between $395 and $400 for a potential deal,” he said.

New York scrap dealer told AMM.

“It’s East Coast Ferrous Scrap Export Index for an 80/20 mix of No. 1 and No. 2 heavy melt, “Buyers are trying for $390 to $395 per tonne for U.S. HMS 1&2 (80:20), but sellers insist on $400. Expectations are between $395 and $400 for a potential deal,” he said.

One North American exporter said anticipated weakness in the U.S. domestic market could result in weaker export tags. “I think the American market now looks like it will be down for an 80/20 mix of No. 1 and No. 2 heavy melt. “Buyers are trying for $390 to $395 per tonne for U.S. HMS 1&2 (80:20), but sellers insist on $400. Expectations are between $395 and $400 for a potential deal,” he said.

New York scrap dealer told AMM.
Wuhan’s acquisition of TWB receives approval from FTC

NEW YORK — The U.S. Federal Trade Commission (FTC) has given the green light to China’s Wuhan Iron & Steel (Group) Corp. to acquire ThysenKrupp AG’s stake in automotive parts venture TWB Co. LLC, according to an early termination notice dated March 29 and issued April 1.

The FTC’s approval means that there are no pending U.S. antitrust issues concerning Wuhan’s acquisition of TWB, a venture between ThysenKrupp and Columbus, Ohio-based Worthington Industries Inc.

Wuhan will purchase ThysenKrupp’s stake, which is the majority part of the company, a source familiar with the deal told AMM. The company has yet to receive approval from the Committee on Foreign Investment in the United States (CFIUS), an interagency committee of the Treasury Department that reviews transactions that could result in control of a U.S. business by a foreign entity.

ThysenKrupp said last year it was selling TWB to the Chinese steelmaker as part of its restructuring program, although the two parties agreed not to disclose the purchase price.

Monroe, Mich.-based TWB was formed in 1992 and makes tailored-welded blanks used in the automotive industry.

It is unclear whether Wuhan has plans to purchase Worthington Industries’ stake as well.

Calls to ThysenKrupp AG and Worthington were not returned.

Expected up tick in copper imports will not last: US mill

Continued from page 1

sheet and strip, likely will rise in coming months.

Although the mill source believes lead times “will straighten themselves out” after the “natural drop-off in demand” in the summer, he said U.S. mills are still evaluating if it’s worth adding staff or boosting capacity to avoid losing business to imports.

Aurubis Buffalo Inc. told AMM earlier this year that it was considering hiring more workers at its Buffalo, N.Y. mill (amm.com, Feb. 11).

These are not decisions mills make lightly, however, the mill source said. “You can restart existing equipment, you can add personnel. But you always have to be wary. It’s expensive to restart machines and hire staff. And if the demand doesn’t stay, you’re caught having to go the other way, and it’s also expensive to get rid of people and mothball equipment. That’s the dilemma for a supplier. Will demand last? Is it worth starting up capacity and hiring more people? Or is it better to restrict it and be happy with a full plant?”

Not everyone believes OEMs will turn to imports.

“There may be some pick-up in business where imports are actually quicker than domestic (material), but I think everyone is attuned to the scheduling to meet their requirements,” a second service center source said. “It’s not like this just happened overnight.”

Imports of copper and brass sheet, strip, plate and foil products dipped to 8.89 million pounds in January from 12.73 million pounds in December, according to Copper and Brass Fabricators’ Council data.

Suzy Waite
swaite@amm.com

Wells Fargo denies RG creditors’ claims

NEW YORK — Wells Fargo Capital Finance LLC has denied claims from creditors of RG Steel LLC that the bank acted improperly before the steelmaker’s bankruptcy because of its relationship with a Renco Group Inc. executive.

The Santa Monica, Calif.-based bank called the accusations “baseless,” telling the U.S. Bankruptcy Court in Delaware that it only acted as an agent to the cash collateral when dealing with Ira Rennert, chairman and chief executive officer of New York-based Renco.

The issue centers on Wells Fargo’s capacity as an agent for the first-lien lenders based on a 2011 credit agreement. Creditors filed a complaint in February arguing that Rennert used his personal influence so that the bank didn’t draw down its available cash collateral, even though it would have made sense for the lender at the outset of a bankruptcy.

Wells Fargo, however, denied the claims, saying it was not the largest holder of debt among the first-lien lenders, but only an agent. It added that the cash collateral was an additional, third-party source of security available to the first-lien lenders, but those lenders had no legal obligation to apply in order to reduce the debtors’ obligations.

“Wells Fargo never concealed from the committee its relationship with Rennert or its preference not to apply Renco’s collateral,” it said. “No matter how longstanding a relationship Wells Fargo had with Rennert, the decision as to whether and when to apply Renco’s collateral was a decision made by the requisite majority of first-lien lenders, of which Wells Fargo was just one voice.”

Counsel for the creditors could not be reached for comment.

Firth Rixson titanium import plan draws ire

LOS ANGELES — Three U.S. senators are opposing an effort by Firth Rixson Inc. to import titanium billets duty free to its Monroe, N.Y., aerospace forgings facility.

A recommendation by U.S. Commerce Department staff members to allow Firth Rixson to import the product duty free would “quickly lead to significant harm to domestic titanium producers and forgers,” the senators—Sherrod Brown (D., Ohio), Rob Portman (R., Ohio) and Robert P. Casey Jr. (D., Pa.)—argued this past week in a letter to Rebecca M. Blank, acting secretary of commerce.

All three of the largest U.S. titanium producers—Titanium Metals Corp., a subsidiary of Portland, Ore.-based Precision Castparts Corp.; and Allegheny Technologies Inc. and RTI International Metals Inc., both based in Pittsburgh—have operations in the senators’ home states of Ohio and Pennsylvania—or in both.

The senators stressed in the letter that they support an earlier recommendation by the Commerce Department’s Foreign Trade Zones Board to exempt from duty only those billets consumed for forgings and subsequently exported outside the United States.

The senators maintained that full approval of Firth Rixson’s application could “pressure U.S. titanium producers to lower their prices by proposing to take their business to Firth Rixson, which could provide them duty-free imported titanium.”

Firth Rixson, a specialist in aerospace engine components, began applying in 2011 for foreign trade zone (FTZ) status to allow its Monroe operation to import raw billets without paying a 15-percent import tariff, according to government documents.

East Hartford, Conn.-based Firth Rixson couldn’t be reached for comment.

Frank Haffich
fhaffich@amm.com

TRADE TRACKER

The U.S. International Trade Commission (ITC) is expected to issue a preliminary determination by May 13 on whether there is a reasonable indication that imports of diffusion-annealed nickel-plated steel flat products from Japan are injuring or threatening injury to the U.S. industry. The anti-dumping trade petition was filed by Thomas Steel Strip Corp., a Warren, Ohio-based division of India’s Tata Steel Ltd. (amm.com, March 29).

The Commerce Department’s International Trade Administration (ITA) is conducting administrative reviews of anti-dumping duty orders on imports of magnesium metal, non-malleable cast iron pipe fittings and steel threaded rod from China from April 1, 2012, to March 31, 2013.

The Commerce Department is automatically initiating five-year sunset reviews of anti-dumping duty orders on imports of light-walled rectangular pipe and tube from China, Mexico, South Korea and Turkey, and a countervailing duty order on the same product from China.
Construction metrics better but order books still mixed

Continued from page 1

A rebar mill source agreed that the expected seasonal boost to construction demand had yet to materialize. "We haven’t seen the spring bump," the mill source said. "Our volumes are trickling along (but) we haven’t seen any sustenance for (further) price increases at this point. We’re getting what we’re getting and it’s chugging along.

"We’re getting what we’re getting and it’s chugging along, but it’s not what I would call a feeding frenzy."
—Rebar mill source

but it’s not what I would call a feeding frenzy."

Several rebar mills reported selling higher volumes in March, especially after a $25-per-ton increase in the rebar list price announced in mid-March for April 1 shipments appeared to bring some would-be buyers in off the sidelines. The uptick, however, was not universal, and many players in the sector say they are still holding out for more noticeable improvement in construction activity as April takes hold.

"It’s just been a wet, cold winter, so a lot of work is being pushed back. A lot of people expect things to pop up here when the ground thaws," a second mill source said. "I was looking at a couple of job sites, but they have to wait for the ground to thaw."

But while many steelmakers say demand hasn’t been much to write home about, the data suggests things are, in fact, on the mend. For example, total seasonally adjusted construction spending in February totaled $885.13 billion, up 7.9 percent from February 2012 levels, led by a 19.2-percent year-on-year spike in residential construction spending, U.S. Census Bureau data show.

"There is little doubt that construction of new houses and apartments will continue to boom in the next several months," Associated General Contractors of America (AGC) chief economist Ken Simonson said in a statement.

At the same time, nonresidential construction spending was up 2.6 percent year over year in February, marking a slower—but still welcome—return for the recently lagging sector.

"There’s also been an improvement in some of the steel-intensive nonresidential sectors, such as power and manufacturing construction," Simonson told AMM.

And after a slow start to the year on the construction front, any uptick is a good up tick, steel producers and distributors maintained.

"The first couple of months have really been impacted by weather. ... We’ve been inundated," said a South Carolina-based wire fabricator. "(But) we’re optimistic that all the indicators, even nonresidential construction, are picking up."

"People are ready to pop the champagne corks, but it hasn’t translated yet," said the first rebar mill source added.

Timken blasts shareholder’s analysis

CHICAGO — Timken Co. has filed an updated investor presentation highlighting what it calls “serious flaws” in an analysis behind a proposal that the company spin off its steel business.

In an April 1 filing with the U.S. Securities and Exchange Commission (SEC), Timken picked apart shareholder Relational Investors LLC’s analysis, saying that it overvalued Timken’s bearings business against its peers and did not select its peer group in a fair and balanced manner, and that “significant synergies would be lost” in a spinoff.

Canton, Ohio-based Timken is urging shareholders to vote against the proposal from Relational Investors and the California State Teachers’ Retirement System (amm.com, March 14), arguing that its steel and bearings businesses are integrated in ways that benefit each other and that the board’s plan to create long-term shareholder value is working.

“Timken has (a) strong track record of delivering shareholder value as a result of its existing strategy.”

‘We urge shareholders not to be misled ... and support the Timken strategy.’
—Timken

Timken Steel is one of the company’s highest (return on invested capital) businesses; and has invested in improving the steel unit’s cost structure and profitability, according to the presentation. “We believe Relational’s break-up valuation analysis has serious flaws.”

Timken’s process, mobile, aerospace and defense businesses have sourced 58 percent of their steel needs from the steel division over the past five years, the company said, while the steel business has supplied guaranteed quality, shorter lead times, lower costs, faster customization of specialty products, enhanced customer service and on-time product delivery.

The steel division’s expertise benefits the company’s other businesses, extending to competition, application engineering, research and development, Timken said.

Should the steel business be spun off, Timken said it would become the smallest competitor among its peers, dwarfed by the likes of Steel Dynamics Inc. and Allegheny Technologies Inc., among others. Such a position might push Timken into a non-investment-grade credit rating, which would drive up capital costs, leading to limited liquidity and less financial flexibility, especially in taking on large projects.

“We urge shareholders not to be misled by (the California State Teachers’ Retirement System) and Relational Investors and support the Timken strategy,” the company said.

“It is shocking that Timken would underestimate its shareholders’ intelligence by using such erroneous analysis as justification to not unlock value,” Ralph Whitworth, founder and principal of Relational, said in a statement April 1. “In our conversations with many of Timken’s largest shareholders, there is a consensus view that the company should spin off the steel business.”

Timken’s annual shareholders’ meeting is scheduled for May 7.

Corinna Petry
cpetry@amm.com

A123 changing name to B456

NEW YORK — A123 Systems Inc. is changing its name to B456 Systems Inc., according to a filing with the U.S. Securities and Exchange Commission.

Waltham, Mass.-based A123, a developer and manufacturer of lithium-ion batteries, earlier this year sold a majority of its businesses to Wanxiang America Corp., a unit of Chinese parts maker Wanxiang Group (amm.com, Dec. 10).

The change was made to reduce confusion between businesses now operating successfully under Wanxiang’s ownership and the A123 businesses still involved in bankruptcy proceedings.

The ongoing businesses in automotive, grid energy storage and lead-acid replacement continue to operate under the A123 brand, and our legal name is A123 Systems LLC,” Kessen said, noting that he hoped the announcement would clarify the “distinction between the old ‘Inc.’ and the new ‘LLC.’”

SURCHARGES

NAS increases extras on angles

NEW YORK — North American Stainless Inc. (NAS) is increasing surcharges on its Type 304L and 316L alloy angles by 5 percent this month. The company said the increase is “necessary to support further investment in our business.”

Ghent, Ky.-based NAS also said it is maintaining the fuel surcharge of 36 percent for flat and long products. The fuel surcharge is reviewed on a monthly basis. The company announced its monthly surcharges on March 21, with most 300-series alloy surcharges dropping from March levels (amm.com, March 21).

PRICING AT A GLANCE

NYMEX

<table>
<thead>
<tr>
<th>Metal</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>$366.75c</td>
</tr>
<tr>
<td>Hot-rolled coil</td>
<td>$615.00</td>
</tr>
<tr>
<td>Gold</td>
<td>$1,600.00</td>
</tr>
<tr>
<td>Platinum</td>
<td>$1,596.40</td>
</tr>
<tr>
<td>Silver</td>
<td>$2,791.30c</td>
</tr>
</tbody>
</table>

LME

<table>
<thead>
<tr>
<th>Metal</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td></td>
</tr>
<tr>
<td>Nickel</td>
<td></td>
</tr>
<tr>
<td>Zinc</td>
<td></td>
</tr>
</tbody>
</table>

www.amm.com

It is a violation of AMM copyright to photocopy/distribute this product.
HELP WANTED

Schnitzer Steel MRB (Metals Recycling Business) is seeking an Outside Buyer for their Fresno, CA, location. The position is responsible for:

• Generating purchases of ferrous and nonferrous metals.
• Visiting facilities of current and potential suppliers within their regions such as demolition contractors, scrap dealers, auto-wreckers, and construction projects.
• Investigating sources of scrap & developing relationships leading to procurement of metals.
• Serving as the “point person” for organization & communicating with facility managers so that purchases are in line with production requirements & overall buy plan for the region.
• Focusing on developing and building customer/supplier relationships and negotiating prices and contracts that build, grow, and retaining the supplier base.
• Having knowledge of costs associated with the purchase of ferrous and nonferrous materials as well as the current market and sales to provide optimum pricing strategies.
• Having knowledge and understanding of costs associated with freight in; handling, processing of ferrous & nonferrous materials.
• Providing optimum pricing to the supplier while achieving desired metal margins.
• Being in close contact with the Commercial Operations Manager and utilizing the capabilities within the Commercial Support Group to assist with bid preparation and job costing.

Schnitzer Steel offers excellent benefits & competitive salary commensurate with experience. All qualified candidates, with at least three years of ferrous & non-ferrous metals buying experience, should send their resume with salary history to: ssilva@schn.com

SPECIALTY ROLLED METALS

YOUR SOURCE FOR STAINLESS AND ALUMINUM FLAT ROLLED PRODUCTS

STAINLESS: 200, 300 & 400 SERIES    ALUMINUM: 3003, 3105, 5005, 5052 & 6061

OPENING OF OUR NEWEST DISTRIBUTION CENTER,
LOCATED OUTSIDE OF PHILADELPHIA:

SRM - PHILADELPHIA
4220 POTTSVILLE PIKE
BUILDING 7 SUITE 4432
READING, PA 19605
P: 484.638.6513

ISO 9001: 2000 certified

WWW.SPECIALTYROLLEDMETALS.COM

GET AHEAD
Invest in classified advertising

> Kelly Brogan
T: (212) 224-3919
F: (212) 213-6273
kelly.brogan@amm.com

Kelly Brogan
T: (212) 224-3919
F: (212) 213-6273
kelly.brogan@amm.com

Networking
Networking
Networking
Networking

Networking
Networking
Networking
Networking
AMM U.S. Midwest Ferrous Scrap Index Methodology Guide

AMM is the leading independent supplier of market intelligence and pricing to the North American metals industries and publisher of the widely-used reference prices for scrap.

AMM’s U.S. Midwest Ferrous Scrap Index builds upon the publication’s extensive experience in reporting scrap prices in a wide range of grades and locations, and utilizes an established and leading index methodology.

AMM U.S. Midwest Ferrous Scrap Index

The AMM U.S. Midwest Ferrous Scrap Index has been developed to provide a fair, transparent and objective representation of the market.

The AMM Index methodology is a tonnage-weighted calculation of transactions that have been normalized to our base specification using value-in-use (VIU) curves as defined by the market.

Our methodology aims to use the input of high-quality data. AMM has been reporting on the U.S. scrap market for over 100 years and, therefore, has a unique level of expertise and knowledge in providing benchmark prices to the industry.

The Index is based on actual transactions, which are reported to AMM by any market participant who is conducting trades on a delivered Midwest mill basis, and is not restricted to a panel or selected group.

The AMM U.S. Midwest Ferrous Scrap Index also utilizes aggregate transaction data, where available, in order to maximize the proportion of the market represented in the final Index.

AMM is impartial and has no financial or other interest in the level or direction of the Index. AMM will not pay any market player to participate in the Index.

AMM U.S. Midwest Ferrous Scrap Index Specifications

The details below are the base specification. The Index is quoted in USD per gross ton, delivered to the mill, and calculated for three grades: No. 1 heavy melting scrap, No. 1 busheling and shredded steel scrap. The grades are based on Institute of Scrap Recycling Industries (ISRI) specifications from 2012.

Trades in similar grades are normalized back to the base specification to reflect the whole market and to increase liquidity in the calculation.

The trades are normalized using the value-in-use of the different grades as defined by the market itself and are updated on a regular basis as the market movements dictate. In addition, where there is variation in other contract terms, such as a difference in pricing terms, these are adjusted back to the base specification.

Index calculation

The Index consists of two sub-indices, based on data received from sellers and buyers of scrap.

The sub-indices are each based on a tonnage-weighted average of the normalized trade information, and the two indices are combined with equal weighting to ensure that the market is fairly represented across all participants. Only the final Index is published.

Data quality and verification

All data points that vary by more than 4 percent from the calculated Index are excluded and the Index recalculated to a single iteration. Outliers can be investigated and attempts to influence the Index unfairly will result in the data provider being warned or excluded.

In some cases, where prices appear out of line or anomalous, participants may be asked to provide evidence of the transaction in the form of a signed contract. Participants will have the right to decline to provide this and AMM will have the right to exclude prices that cannot be substantiated.

The number of trades available for use in the Index does, of course, vary depending on the market conditions prevailing, but AMM seeks to utilize as many trades as possible.

Where insufficient transactions have taken place in the market, defined as less than 20 percent of the average monthly market volumes over the past 12 months, AMM reserves the right to include assessments, bids and offers from market participants in the Index calculation.

Material of all origin is included in the calculation with no sources specifically excluded. However, the origin may have an influence on the normalization coefficients used, if appropriate to the grade.

Data is submitted in a secure manner by phone and e-mail survey.

AMM’s Midwest Ferrous Scrap Index

The Index consists of two sub-indices, based on data received from sellers and buyers of scrap. Transactions that are conducted on different payment or credit terms will be normalized back to the base specifications, taking into account discounts, current interest rates and standard commercial terms.

Low liquidity

There may be periods when the number of transactions available for inclusion in the Index calculation will fall, for example, due to poor market conditions. AMM has established formal methodologies to address this issue. Where insufficient transactions have taken place in the market, defined as less than 20 percent of the average monthly market volumes over the past 12 months, AMM reserves the right to include assessments, bids and offers from market participants in the Index calculation. These are treated in the same way as transactions, but weighted at a minimum tonnage, and subject to exclusion under the same rules.

What happens if the material is downgraded on delivery?

The transaction is done on the expected delivery specifications, including grade and payment terms, and the price settled on this basis. If it turns out to be different, then that is an issue between the two parties who entered the contract, and the Index is not revised retroactively.
### CONSUMER BUYING PRICES

Estimated domestic consumer buying prices in US$/gross ton, delivered mill price.

<table>
<thead>
<tr>
<th>Date Reviewed</th>
<th>Birmingham</th>
<th>Carolinas</th>
<th>Chicago</th>
<th>Cleveland</th>
<th>Detroit</th>
<th>Houston area</th>
<th>N.Y.</th>
<th>Philadelphia</th>
<th>P'burgh</th>
<th>Portland</th>
<th>St. Louis</th>
<th>Youngstown</th>
<th>Hamilton, Ontario</th>
<th>Montreal</th>
<th>Composites</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/07/13</td>
<td>301</td>
<td>305</td>
<td>379</td>
<td>412</td>
<td>300</td>
<td>375</td>
<td>385</td>
<td>400</td>
<td>355</td>
<td>320</td>
<td>320</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>03/20/13</td>
<td>352</td>
<td>405</td>
<td>382</td>
<td>415</td>
<td>380</td>
<td>385</td>
<td>415</td>
<td>410</td>
<td>385</td>
<td>385</td>
<td>385</td>
<td>385</td>
<td>385</td>
<td>385</td>
<td>385</td>
</tr>
</tbody>
</table>

*Shredders may also be considered consumers for this grade

### ADDITIONAL GRADES

- Midwest Ferrous Scrap Index ($/gross ton, effective 03/11/13)
- No. 1 heavy melt
- No. 1 busheling
- Mix of turnings and bushels
- Steel car wheels
- Rail crops, 2' max.
- Random rails
- Clean used densified cans

### ADVERTISABLE GRADES

- Steel rails
- Steel axle sections
- Heavy forge bar crops
- Plate steel
- Punching and plate, 12' max.
- Pittsburgh (reviewed 03/07/13)

### STAINLESS CONSUMER PRICES

($/gross ton)

<table>
<thead>
<tr>
<th>Date Reviewed</th>
<th>Pittsburgh (reviewed 03/13/13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>316 solids, clips</td>
<td>2,400-2,450</td>
</tr>
<tr>
<td>304 solids, clips</td>
<td>1,780-1,860</td>
</tr>
<tr>
<td>304 turnings</td>
<td>1,600-1,630</td>
</tr>
<tr>
<td>430 bundles, solids</td>
<td>585-610</td>
</tr>
<tr>
<td>409 bundles, solids</td>
<td>510-535</td>
</tr>
</tbody>
</table>

### STAINLESS STEEL SCRAP

($/tonne)

<table>
<thead>
<tr>
<th>Date Reviewed</th>
<th>Pittsburgh (reviewed 03/13/13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>304 solids, clips</td>
<td>1,475-1,545</td>
</tr>
<tr>
<td>304 turnings</td>
<td>1,325-1,375</td>
</tr>
<tr>
<td>430 bundles, solids</td>
<td>465-500</td>
</tr>
<tr>
<td>409 bundles, solids</td>
<td>370-405</td>
</tr>
</tbody>
</table>

### EXPORT YARD BUYING PRICES

Estimated prices an export dealer, broker or processor will pay for items delivered to his yard, in US$/gross ton.

<table>
<thead>
<tr>
<th>Date Reviewed</th>
<th>Boston</th>
<th>L.A.</th>
<th>N.Y.</th>
<th>S.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/20/13</td>
<td>355</td>
<td>335</td>
<td>325</td>
<td>325</td>
</tr>
<tr>
<td>No. 1 heavy melt</td>
<td>235(a)</td>
<td>225(a)</td>
<td>215(a)</td>
<td>215(a)</td>
</tr>
<tr>
<td>No. 2 bundles</td>
<td>235(a)</td>
<td>225(a)</td>
<td>215(a)</td>
<td>215(a)</td>
</tr>
<tr>
<td>No. 1 busheling</td>
<td>235(a)</td>
<td>225(a)</td>
<td>215(a)</td>
<td>215(a)</td>
</tr>
<tr>
<td>Machine shop turnings</td>
<td>155(a)</td>
<td>155(a)</td>
<td>175(a)</td>
<td>175(a)</td>
</tr>
<tr>
<td>Mix of turnings and bushels</td>
<td>225(a)</td>
<td>225(a)</td>
<td>225(a)</td>
<td>225(a)</td>
</tr>
<tr>
<td>Unstripped motor blocks</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
</tr>
<tr>
<td>Auto bodies</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
</tr>
<tr>
<td>Cut structural/plate, 5' max.</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
</tr>
</tbody>
</table>

### BROKER BUYING PRICES

Estimated prices in US$/gross ton, f.o.b. car

<table>
<thead>
<tr>
<th>Date Reviewed</th>
<th>Atlanta</th>
<th>Boston</th>
<th>Buffalo</th>
<th>Cincinnati</th>
<th>Detroit</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/07/13</td>
<td>285</td>
<td>285</td>
<td>285</td>
<td>285</td>
<td>285</td>
</tr>
<tr>
<td>No. 2 heavy melt</td>
<td>275</td>
<td>275</td>
<td>275</td>
<td>275</td>
<td>275</td>
</tr>
<tr>
<td>No. 1 heavy melt</td>
<td>260</td>
<td>260</td>
<td>260</td>
<td>260</td>
<td>260</td>
</tr>
<tr>
<td>No. 1 busheling</td>
<td>290</td>
<td>290</td>
<td>290</td>
<td>290</td>
<td>290</td>
</tr>
<tr>
<td>Machine shop turnings</td>
<td>275</td>
<td>275</td>
<td>275</td>
<td>275</td>
<td>275</td>
</tr>
<tr>
<td>Unstripped motor blocks</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
</tr>
<tr>
<td>Auto bodies</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
</tr>
<tr>
<td>Cut structural/plate, 5' max.</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
</tr>
<tr>
<td>Cut structural/plate, 2' max.</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
</tr>
<tr>
<td>Mix of turnings and bushels</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
</tr>
<tr>
<td>Unstripped motor blocks</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
</tr>
<tr>
<td>Auto bodies</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
<td>325</td>
</tr>
</tbody>
</table>

*F.o.b. (free on board at the shipping point) from dealer to broker where freight rate is absorbed by broker; freight rate based on single-car shipments.

### SCRAPPY SCRAP PRICES

<table>
<thead>
<tr>
<th>Date Reviewed</th>
<th>Boston</th>
<th>L.A.</th>
<th>N.Y.</th>
<th>P'burgh</th>
<th>Portland</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/25/13</td>
<td>215</td>
<td>215</td>
<td>215</td>
<td>215</td>
<td>215</td>
</tr>
<tr>
<td>No. 1 heavy melt</td>
<td>225</td>
<td>225</td>
<td>225</td>
<td>225</td>
<td>225</td>
</tr>
<tr>
<td>No. 2 bundles</td>
<td>235(a)</td>
<td>235(a)</td>
<td>235(a)</td>
<td>235(a)</td>
<td></td>
</tr>
<tr>
<td>No. 1 busheling</td>
<td>235(a)</td>
<td>235(a)</td>
<td>235(a)</td>
<td>235(a)</td>
<td></td>
</tr>
<tr>
<td>Machine shop turnings</td>
<td>155(a)</td>
<td>155(a)</td>
<td>175(a)</td>
<td>175(a)</td>
<td></td>
</tr>
<tr>
<td>Mix of turnings and bushels</td>
<td>225(a)</td>
<td>225(a)</td>
<td>225(a)</td>
<td>225(a)</td>
<td></td>
</tr>
<tr>
<td>Unstripped motor blocks</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td></td>
</tr>
<tr>
<td>Auto bodies</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td></td>
</tr>
<tr>
<td>Cut structural/plate, 5' max.</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td></td>
</tr>
<tr>
<td>Cut structural/plate, 2' max.</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td></td>
</tr>
<tr>
<td>Mix of turnings and bushels</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td></td>
</tr>
<tr>
<td>Unstripped motor blocks</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td></td>
</tr>
<tr>
<td>Auto bodies</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td>325(a)</td>
<td></td>
</tr>
</tbody>
</table>

*F.o.b. (free on board at the shipping point) from dealer to broker where freight rate is absorbed by broker; freight rate based on single-car shipments.

Prices are subject to the disclaimer appearing on the "Metal Exchanges" page.

April 2, 2013 | 13
**LONDON METAL EXCHANGE**

Settlement price (*) is the same as the first-session cash asking price. Prices in US$/tonne. Stocks represent total tonnes in LME warehouses at the end of the preceding day.

<table>
<thead>
<tr>
<th>April 1, 2013</th>
<th>March 29, 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALUMINIUM -- HIGH GRADE</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>ALUMINIUM -- ALLOY (380-1, DIN 226, ADC 12)</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>ALUMINIUM-ALLOY (North American Special)</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>COBALT</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>MOLYBDENUM</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>NICKEL</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>STEEL BILLET</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>TIN</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>ZINC -- SPECIAL HIGH GRADE</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
</tbody>
</table>

**NEW YORK FUTURES**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COBALT</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>MOLYBDENUM</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>NICKEL</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>STEEL BILLET</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>TIN</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>ZINC -- SPECIAL HIGH GRADE</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
</tbody>
</table>

**BASE METALS IN-WAREHOUSE PREMIUMS**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STEEL BILLET</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>TIN</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
<tr>
<td><strong>ZINC -- SPECIAL HIGH GRADE</strong></td>
<td></td>
</tr>
<tr>
<td>1st session</td>
<td></td>
</tr>
</tbody>
</table>

**SHANGHAI FUTURES EXCHANGE**

<table>
<thead>
<tr>
<th></th>
<th>(in China yuan per tonne)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aluminum</strong></td>
<td>14.480</td>
</tr>
<tr>
<td><strong>Copper</strong></td>
<td>53.860</td>
</tr>
<tr>
<td><strong>Lead</strong></td>
<td>14.205</td>
</tr>
<tr>
<td><strong>Zinc</strong></td>
<td>14.530</td>
</tr>
</tbody>
</table>

**EXCHANGE RATES**

Selling prices in US dollars at 11:00 am in NY, based on Reuters quotes.

<table>
<thead>
<tr>
<th></th>
<th>$ per $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euro</td>
<td>1.2981</td>
</tr>
<tr>
<td>Canada (dollar)</td>
<td>0.9836</td>
</tr>
<tr>
<td>Japan (yen)</td>
<td>0.010724</td>
</tr>
<tr>
<td>Britain (pound)</td>
<td>0.5236</td>
</tr>
<tr>
<td>China (yuan)</td>
<td>0.1611</td>
</tr>
<tr>
<td>Mexico (peso)</td>
<td>0.0810</td>
</tr>
<tr>
<td>Russia (Ruble)</td>
<td>0.0321</td>
</tr>
<tr>
<td>Switzerland (franc)</td>
<td>1.0669</td>
</tr>
<tr>
<td>Australia (dollar)</td>
<td>1.0420</td>
</tr>
<tr>
<td>South Africa (Rand)</td>
<td>0.1089</td>
</tr>
</tbody>
</table>

**Disclaimer:**

Important Please Read Carefully

This Disclaimer is in addition to our Terms and Conditions as available on our website (click here) and shall not supersede or otherwise affect these Terms and Conditions.

Prices and other information contained in this publication have been obtained by us from various sources believed to be reliable. This information has not been independently verified by us. Those prices and price indices that are evaluated or calculated by us represent an approximate evaluation of current levels based upon dealings (if any) that may have been disclosed prior to publication to us. Such prices are collated through regular contact with producers, traders, dealers, brokers and purchasers although not all market segments may be contacted prior to the evaluation, calculation, or publication of any specific price or index. Actual transaction prices will reflect quantities, grades and qualities, credit terms, and many other parameters. The prices are in no sense comparable to the quoted prices of commodities in which a formal futures market exists.

Evaluations or calculations of prices and price indices by us are based upon certain market assessments and evaluation methodologies, and may not conform to prices or information available from third parties. There may be errors or defects in such assessments or methodologies that cause resultant evaluations to be inappropriate for use. Your use or reliance on any prices or other information published by us is at your sole risk. Neither we, nor any of our officers, employees or representatives shall be liable to any person for any losses or damages incurred, suffered or arising as a result of use or reliance on the prices or other information contained in this publication, however arising, including but not limited to any direct, indirect, consequential, punitive, incidental, special or similar damage, losses or expenses.

We are not an investment advisor, a financial advisor or a securities broker. The information published has been prepared solely for informational and educational purposes and is not intended for trading purposes or to address your particular requirements. The information provided is not an offer to buy or sell or a solicitation of an offer to buy or sell any security, commodity, financial product, instrument or other investment or to participate in any particular trading strategy. Such information is intended to be available for your general information and is not intended to be relied upon by users in making (or refraining from making) any specific investment or other decisions. Your investment actions should be solely based upon your own decisions and research and appropriate independent advice should be obtained from a suitably qualified independent advisor before making any such decision.

www.amm.com

AMERICAN METAL MARKET

April 2, 2013 | 14

It is a violation of AMM copyright to photocopy/distribute this product.
### BASE METALS

**ALUMINUM**
- LME (99.7%) unoff. prices
  - Hol.
  - Spot (cents/lb)
  - 3-month (cents/lb)
  - Hol. Midwest Premium (rev. 03/28/13)
    - 11.50¢-12.00¢
  - AMM Free Market, $/lb
    - 96.90¢-97.40¢
  - 6063 extrusion billet exchange
    - 12.00¢-13.00¢
  - Domestic produced estimated prices ($/lb) †
    - 355 (35S.2)
      - 1.28
    - 356.1
      - 111.10-112.00
    - 356.1
      - 111.10-112.00
  - 6061 (exh. hom.)
    - 1.08-1.10
  - 6063 (exh. hom.)
    - 1.16-1.18

**SECONDARY ALUMINUM**
- AMM Free Market, $/lb, delivered Midwest (rev. 03/28/13)
  - A38.1
    - 104.00-105.00

### MINOR METALS

**ANTIMONY**
- MB free market, $/short ton
  - $10,800.00-$11,300.00
- BISMUTH
  - MB free market, $/lb
    - $1.99-$2.60

**CADMIUM**
- MB free market
  - min 99.95%, $/lb in warehouse
    - 85.00¢-85.00¢
  - min 99.99%, $/lb in warehouse
    - 87.50¢-100.00¢

**CHROMIUM METAL**
- MB free market, $/short ton
  - $27.500.00-$29.000.00

**CORAL**
- MB free market
  - High grade, $/lb in warehouse
    - $11.30-$12.00
  - Low grade, $/lb in warehouse
    - $11.10-$11.80

**GERMANIUM**
- MB free market, $/kg
  - $1.275.00-$1.350.00

**INDIUM**
- MB free market, $/lb
  - $540.00-$570.00

**MAGNESIUM**
- MB European free market, $/tonne
  - $2,900.00-$3,000.00

**MERCURY**
- MB free market, $/lask
  - $3,300.00-$3,600.00

**SILICON METAL**
- AMM Free market, $/lb
  - 123.00¢-128.00¢

**TITANIUM**
- Estimated market prices in $/lb, t.o.b. shipping point.
- Sponge, imported for consumption, including tariff

**ZINC**
- AMM Free market, $/tonne
  - Grade A premium ($/tonne)
    - 600.00¢-607.00¢

**ZINC - DIE CASTING ALLOYS**
- Premium price, $/lb

<table>
<thead>
<tr>
<th>No.</th>
<th>Premium price, $/lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>13.00¢-13.50¢</td>
</tr>
<tr>
<td>4</td>
<td>19.00¢-21.00¢</td>
</tr>
<tr>
<td>6</td>
<td>22.00¢-25.00¢</td>
</tr>
<tr>
<td>8</td>
<td>21.00¢-23.00¢</td>
</tr>
<tr>
<td>12</td>
<td>24.00¢-25.00¢</td>
</tr>
<tr>
<td>27</td>
<td>27.00¢-30.00¢</td>
</tr>
</tbody>
</table>

### TITANIUM

- Estimated market prices in $/lb, t.o.b. shipping point.
- Sponge, imported for consumption, including tariff

**FOOTNOTES**
† - AMM estimated prices based on quotes from aluminum mills.
* - Price is sourced from U.S. Department of Commerce data compiled by the U.S. Geological Survey.