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Steel Dynamics acquires CSN LLC for $400 mln in cash

CHICAGO — Steel Dynamics Inc. (SDI) has acquired CSN LLC from Brazilian iron ore and steel producer Cia Siderurgica Nacional (CSN) for $400 million in cash.

SDI has also restored the "Heartland" name to the Terre Haute, Indiana, steel processor, which became known as "LLC" in some quarters after CSN bought the company in 2001 for $50 million and the assumption of $19 million in debt.

The purchase price for Heartland - which converts hot bands into hot-rolled pickled-and-oiled (P&O), cold-rolled coil and galvanized material - includes $60 million in working capital, according to statements from both companies released after the close of business on Monday May 14.

Worthwhile investment. The deal for the Indiana mill will give SDI greater exposure to wide, light-gauge flat-rolled steel marts, the company said.

American Metal Market reported last month that SDI was interested in CSN's US subsidiary and suggested a valuation of $336 million - within $4 million of what the mini-mill steelmaker said was the replacement value of the facility.

The deal is expected to close within 90 days pending approval from the US Federal Trade Commission and the PAGE 2

Tube exclusion requests stoke supply doubts

NEW YORK — Section 232 product exclusion requests demonstrate that US domestic steel mills face a tall order in fulfilling a pledge to produce all the pipe and tube items required by American customers.

Some companies asking for exclusions are even using the domestic producers' previous statements and documents against them to support their cases for excusing imported materials from the 25% steel tariff.

The US Commerce Department has received tube-and-pipe exemption requests from a variety of parties ranging from end-users Chevron and BP Exploration to multinational steel mills including TMK Ipsco, plus a diverse sampling of distributors, traders and downstream manufacturers.

In some cases, exclusions are requested because domestic mills simply don't produce the item, usually defined by a certain range of diameters and wall thicknesses or chemistry. In other requests, the buyer argues that the item is not available in large-enough quantities or at a reasonable price or lead time. A few claim that the US mills don't measure up to the quality of the overseas source.

In support of a request to exempt Voestalpine Tubular's PAGE 3

232 won't hurt AM/NS Calvert slab supply: exec

Section 232 probably won't impact ArcelorMittal SA's ability to supply foreign slabs to its re-rolling facility in Calvert, Alabama, a company executive said.

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Most secondary ali scrap prices steady

Aluminium scrap prices in the United States mostly maintained a steady footing, although a combination of adequate supply and strong consumer inventory positions has put some wear on certain grades.

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US raw material imports rise in face of price hikes

US steelmakers increased purchases of foreign raw materials during March in order to supplement their melting needs due to a combination of further anticipated price increases for domestic ferrous scrap and strong order books for finished products.

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Uncertainty clouds US NF scrap export market

PITTSBURGH – The United States' non-ferrous scrap exports rose further in March but a cloud of uncertainty hangs over the industry due to lagging shipments of aluminium and copper scrap to China so far this year and concerns of future trade with the nation.

Non-ferrous scrap exports as a whole increased by 24,415 short tons sequentially in March but fell by 2,597 tons compared with the same month last year, according to US Commerce Department data.

Of the seven non-ferrous scrap grades - aluminium, used beverage cans (UBCs), copper, lead, lead-acid batteries, nickel and zinc - tracked by American Metal Market, zinc was the only scrap grade to post a month-on-month decline while copper and nickel scrap registered year-on-year declines.

Non-ferrous scrap trade with China has had a rocky start to the year due to dramatic shifts in trade policies between the nation and the US.

So far, 2018 has seen the advent of China's aggressive restrictions on contaminants in scrap metal imports, a 25% tariff on aluminium scrap imports and a 30-day suspension of the Chinese Certification and Inspection Group (CCIC) North America effective on Friday May 4.

These monumental changes PAGE 3

Steel Dynamics acquires CSN LLC for $400 mln in cash

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US Department of Justice, CSN said.

HEARTLAND

"The acquisition of Heartland represents a step in the continuation of our growth strategy," SDI chief executive officer Mark D. Millett said in statement. "It levers our core strengths, and at the same time fulfills our initiatives to further increase value-added product and market diversification.

The deal for Heartland - which has cold-rolled capacity of 1 million tons per year and galvanizing capacity of 360,000 tons annually - will give SDI greater exposure to wide, light-gauge flat-rolled steel markets, the company said.

Heartland had been operating at a low utilization rate because it primarily focused on making galvanizing material, SDI said. That will change under SDI, which said it would make the full range of Heartland's products to bring the plant to full capacity.

Heartland will source hot-rolled coil substrate from SDI's flat-rolled mills, which will give the steel processor a logistical advantage over competitors while also giving SDI's mills a captive home for their output.

SDI makes hot-rolled coil from two electric-arc furnace steel mills - one each in Butler, Indiana, and Columbus, Mississippi - with a combined hot-rolled coil capacity of 6.4 million tpy. The Butler mill is only 250 miles away from Heartland.

Heartland employs approximately 220 non-union employees, a key factor for SDI. Millett has said the cultural divide between mini-mills and integrated mills has prevented further steel industry consolidation. Unlike mini-mills, most integrated mills in the US employ a unionized workforce.

WHERE DO WE GO NOW?

Heartland has sourced hot-rolled coil-including foreign slabs re-rolled at US mills-from several North American steel suppliers. And most of those tons did not come from SDI, KeyBanc Capital Markets analyst Philip Gibbs wrote in a research note on Monday.

SDI "will likely curb that behavior" (sourcing re-rolled foreign slabs) and supply Heartland with hot band from its Butler mill, Gibbs predicted.

And with an extra 1 million tpy of cold-rolled from Heartland, SDI will be able to not only increase spot cold-rolled sales but also supply cold-rolled substrate required by the "The Techs," its galvanizing plants in the Pittsburgh area.

The Techs have sourced cold-rolled from other US mills, including U.S. Steel, which has operations nearby.

The logic of the Heartland deal is to boost SDI's cold-rolled output. But it is more likely that doing so is only a first step. SDI might add Galvalume and painted products to Heartland's portfolio because downstream products boast higher margins and are less vulnerable to import competition, Gibbs wrote.

"We believe the purchase was just an entry into the party, with much more long-term opportunity to come," he said

SDI's acquisition and subsequent expansion of its flat-rolled steel mill in Columbus, might serve as an example for Heartland, Gibbs wrote.

SDI bought Columbus from Russian steelmaker Severstal in July 2014 for $1.6 billion. The company in 2015 announced plans to spend $100 million to add a paint line and Galvalume capabilities to the mill.

CSN SAYS GOODBYE, SORT OF

CSN CEO Benjamin Steinbruch said in March that the company was considering a sale of its US subsidiary as part of a broader divestment campaign aimed at reducing debt.

And the sale will reduce CSN's net debt to 1.8 billion reais ($496.8 million), according to the company's May 14 notice.

CSN said it would retain a presence in the North American market via a new subsidiary that will focus on import and distribution.

Brazilian media reported that CSN might sell its US operations for $250 million. Sources contacted by American Metal Market noted that the purchase price was likely substantially higher because Section 232 has made US steel assets more valuable and because of competition from other bidders, including Nucor, the largest steelmaker in the US and SDI's chief mini-mill rival.

Section 232 has also given US steel prices a big lift. American Metal Market's hot-rolled coil index stands at $43.96 per hundredweight ($879.20 per ton), up 34.7% from $32.63 per cwt ($652.60 per ton) at the beginning of the year.

The sale appears to mark the end of an era for CSN, which has been rumored to be a suitor in several major steel industry acquisitions since acquiring Heartland in 2001 - including the former Gallatin Steel Co, acquired by Nucor in 2014, and the Columbus mill SDI succeeded in purchasing from Severstal.

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PRICING AT A GLANCE

NYMEX	
Copper	304.25¢
Hot-rolled coil	$875.00
Gold	$1,288.90
Platinum	$897.20
Silver	1,619.40¢
LME	
Aluminium	$2,313.00
Copper	$6,822.50
Lead	$2,346.00
Nickel	$14,490.00
Zinc	$3,060.50

Uncertainty clouds US NF scrap export market

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have stung US non-ferrous scrap export volumes and impacted some copper, brass and aluminium scrap grades that are heavily traded in the export market.

No 2 copper scrap has been hit particularly hard, with discounts for refiners' No 2 copper scrap rising by an average 3.5 cents per lb week on week on May 9, and those for brass ingot makers' No 2 copper scrap increasing by an average of 4.5 cents per lb in the same comparison, according to American Metal Market's latest assessment.

While US aluminium and copper scrap exports to China (including Hong Kong) both increased in March, shipments are lagging significantly in year-on-year and year-to-date comparisons.

Aluminium exports to the Asian nation totaled 76,332 tons in March, up 13.6% from 67,168 tons the previous month but down 14.4% from the year-earlier level of 89,225 tons. US copper scrap shipments to China totaled 57,861 tons during the month, up 9.4% from 52,869 tons in February but down 21% from 73,235 tons in March 2017.

A similar trend was evident for the first quarter of 2018, with shipments of aluminium scrap to China falling by 11.2% to 202,452 tons from 228,032 tons in the first three months of 2017 and those of copper scrap down by 22.4% to 156,222 tons from 201,348 tons in the same comparison.

With all the changes, market participants are keeping an eye on new markets in which to sell, as well as new equipment to process and upgrade lower-grade scrap items.

"We're investing in equipment to keep products in the States. More material is likely to stay [in the US] or go to China if [the Asian nation starts] buying higher-grade [scrap] imports again," one US exporter said.

Other exporters are beginning to see increases in the amount of material shipped to Southeast Asia, with Chinese scrap processors establishing new processing yards in the region, they said.

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US EXPORTS OF NON-FERROUS SCRAP
(in short tons)

	March	February	January	Year to date 2018	Year to date 2017	% change
Aluminium	149,632	132,984	121,040	403,656	374,498	▲7.8
UBCs	2,950	2,009	1,820	6,779	6,928	▼2.2
Copper	93,947	88,358	74,564	256,869	278,073	▼7.6
Lead	4,116	3,802	3,303	11,221	8,742	▲28.4
Lead-acid batteries	2,234	1,267	2,082	5,583	5,246	▲6.4
Nickel	3,316	2,494	2,957	8,767	8,805	▼0.4
Zinc	3,901	4,767	3,878	12,546	6,912	▲81.5
Total	**260,096**	**235,681**	**209,644**	**705,421**	**689,204**	**▲2.4**

Source: Compiled by American Metal Market from data released by the US Commerce Department.
Note: The data reflects the latest updates by Commerce and may not match what was previously published by AMM.

Tube exclusion requests stoke supply doubts

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premium oil country tubular goods (OCTG) that are imported from Austria, the Oklahoma-based distributor Industrial Piping Specialists argues that Voestalpine is a net exporter of tonnage from its US operations. Domestic mills "lack the technical capability" to match the Austrian company's premium grades imported from its home base.

Industrial Piping Specialists urges Commerce to excuse Voestalpine's line pipe, boiler tubes, heat exchangers and mechanical pipe from the Section 232 tariff.

"This is not a question of price. It is a question of quality and availability," Industrial Piping Specialists wrote. "The US producers simply do not produce all the product range we need, especially for critical applications."

MULTINATIONAL MILLS

Two other US domestic producers with foreign-based parent companies - Borusan Mannesmann Pipe USA and JSW Steel USA - have asked for Section 232 product exclusions for goods that they argue enable their US-based production and employment. Voestalpine emphasizes that its hot-briquetted iron venture in Texas provides feedstock to support US steel production, and the tubular business is a "fair trader" that limits imports of its parent company's pipe during hard times.

The Austrian steelmaker said products from Voestalpine Tubular, which is a joint venture with Houston-based National Oilwell Varco, are "critical" to the build-out of the US energy infrastructure desired by President Donald Trump's administration.

"It is very doubtful the domestic industry will produce sufficient quantities to meet demand for the immediate future, and older mills being brought back online do not have the capabilities to manufacture the grades or quality specifications required by customers for more extreme conditions," Voestalpine wrote in its exclusion request.

So far, Commerce has received more than 3,000 tariff exclusion requests and supporting documents and 8,000 comments. At various stages of the Section 232 process, domestic interests have urged US officials to limit nation and product exceptions, with the American Line Pipe Producers Association in particular insisting that domestic mills would be able to provide a full range of pipe products if unfairly traded imports were out of the picture.

American Metal Market's pricing assessment for US domestic X65 line pipe stands at $1,550-1,600 per ton fob mill. That price was consistently below $1,200 per ton before Section 232-related supply fears seized the market in early 2018.

Chickasaw Distributors asks that X65 line pipe with an outside diameter (OD) of 38 inches and a wall thickness of 1.5 inches be excused from the tariff. The Houston-based pipe distributor cited a previous statement from the domestic producers' own law firm affirming that the size can be excluded from an anti-dumping duty order involving imports from Japan because no US mill makes it.

"Due to the heavy wall size of the product, it is beyond the manufacturing capability of the United States domestic producers and it therefore fills a technological gap," Chickasaw wrote in its exclusion request. "It is complementary to the grades/sizes produced in the United States, allows for greater overall United States oil production and leads to increased oil-and-gas industry jobs for United States workers."

SIZE MATTERS

Plains All American Pipeline requests a tariff exclusion for 26-inch OD high-frequency-welded (HFW) steel pipe in lengths from 70 feet to 76 feet, 1 inch. The Houston-based crude and gas pipeline operator already had agreements in place to build a 526-mile mainline in Texas. Before Trump unveiled his Section 232 declaration in March, the pipe was already ordered from Corinth Pipeworks in Greece, and an initial delivery is due in June.

Aside from the Greek company, only two mills in the world can produce to that specification, and they are in Japan and China, Plains All American said.

"There are no US mills capable of manufacturing pipe that conforms to the specifications of 26-inch

continued ›

OD HFW pipe for this project," the company wrote to Commerce. In a "hypothetical scenario" that a domestic producer wanted to develop the capability, "the mill would not likely be able to meet the pipeline system's completion targets" especially considering that such an effort "does not even take into consideration a mill's current delivery commitments for previously placed orders."

Marubeni-Itochu Steel trading subsidiary Marubeni-Itochu Tubulars America asks for an exclusion covering hot-finished seamless alloy pipe from Japan's JFE Steel for similar reasons. The request specifies outside diameters ranging from 141.3 mm to 406.4 mm (about 5½ to 16 inches).

"We seek an exclusion because, to our knowledge, there is no domestic producer for this range of products," the Houston-based trading arm wrote. "This material requires complex heat treatment, making US mills [averse] to producing it."

Five US distributors or end-users submitted letters supporting the JFE pipe exclusion, with Philadelphia-based Tioga Pipe asking for immediate relief.

"A quick decision on our exclusion request is absolutely necessary, as we have material on order and en route to America currently," Tioga Pipe wrote on Tuesday April 10. Any delay "would hamper our ability to serve our customers," including US oil and chemical companies, utilities and users in industrial sectors including paper and pulp.

All of the exclusion requests are in the midst of 90-day public comment periods.

Autoliv, a supplier of safety equipment to carmakers, has asked for an exclusion for a type of tubing used in airbag systems. To support its request, the company submitted a transcript of December 2017 testimony from a recent trade case involving cold-drawn mechanical tubing. Witnesses at that hearing confirmed that no domestic mill produces airbag tubing, and to begin doing so, a large investment would be needed in equipment and testing. Airbag tubing is among the most difficult tubing to produce, according to that testimony, and it takes Autoliv four years to qualify a new supplier.

Robroy Industries, a Verona, Pennsylvania-based provider of conduit, fittings and enclosures, requested an exclusion for electrical conduit from Japanese producer Sumitomo, arguing that most US domestic suppliers cannot equal Sumitomo's quality. Robroy included a set of diagrams labeled "Sumitomo vs. domestic" in which it attempted to illustrate evidence that too much US-made conduit is marred by abrasion points, flaking, flattening or collapsing and residual zinc due to use of recycled scrap, contrasting with the Japanese company's use of 100% iron ore or direct-reduced iron.

Robroy bluntly states that it "has not been successful" using products from two of the three domestic producers - Western Tube and Republic Conduit. Robroy acknowledges that it has had success with Wheatland Tube material, but the Sharon, Pennsylvania-based mill does not have the capacity to provide all the volume that Robroy needs. Both Wheatland and Western are owned by Zekelman Industries.

ACKNOWLEDGMENT OF SCARCITY

To reinforce the lack of sufficient domestic availability, Robroy included in the docket a letter from Wheatland - in effect using the fellow western Pennsylvania-based supplier's own words to make the case to excuse foreign competitor Sumitomo's goods from the tariff.

According to The Wheatland letter, dated March 21, the Section 232 measure created a "two-pronged issue" for pipe and conduit customers: "Prices are higher and supply is scarcer," Wheatland told Robroy at the time.

"Domestic mills stopped releasing formal increase announcements to the market, in large part because all their capacity was being taken up by contract customers - leaving no availability for spot market buyers," the Wheatland letter stated.

Later in the same correspondence, Wheatland reassures Robroy by taking the position that a resumption of steel imports will bring a "rebalancing" and will "stabilize" the market.

"We will start to see import products that have been temporarily shut out of the supply chain return at a higher price [25% in most cases], which should improve the overall availability of hot-rolled coil and thus other downstream products like pipe and conduit," Wheatland wrote.

Barry Zekelman, executive chairman and chief executive officer of Zekelman Industries, has consistently supported the idea that customers should be granted exclusions if an item is truly unavailable domestically.

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232 won't hurt AM/NS Calvert slab supply: exec

CHICAGO — Section 232 probably won't impact ArcelorMittal SA's ability to supply foreign slabs to its re-rolling facility in Calvert, Alabama, a company executive said.

And on balance, the Trump administration's signature trade action could benefit the entire company - ArcelorMittal is the world's largest steelmaker and has operations around the globe - assuming Europe enacts similar measures to protect European mills from imports, Daniel Fairclough, vice president of corporate finance and head of investor relations, said during a conference call with analysts on Friday May 11.

There have been concerns about the implications of Section 232 for the company's operations outside of the United States, Fairclough acknowledged. But those fears should be eased by "encouraging developments" in negotiations, particularly regarding Brazil and Europe, he said, according to a transcript of the call prepared by Seeking Alpha.

ArcelorMittal supplements offerings from its US mills with exports from its European plants. It also supplies a significant quantity of slabs for AM/NS Calvert - its slab re-rolling joint venture with Japan's Nippon Steel & Sumitomo Metal Corp - from Brazil.

Calvert makes hot-rolled, cold-rolled and coated flat-rolled steel.

American Metal Market's hot-rolled coil index - a proxy for flat-rolled steel prices in general - stands at \$43.96 per hundredweight (\$879.20 per ton), up 34.7% from \$32.63 per cwt (\$652.60 per ton) at the beginning of the year. The gains are largely the result of Section 232 tariffs - 25% in the case of steel.

CALVERT'S SLABS GOING TO BE ALL RIGHT

"I think the slab supply arrangements that we currently have should be protected. But that being said, at the end of the day, we do have some degree of flexibility should that situation change," Fairclough said when asked by analysts about Section 232's potential impact on AM/NS Calvert's slab supplies.

The US has imposed quotas against Brazilian exports in exchange for exemption from Section 232 tariffs. Brazil's quota limit for semifinished steel products, a category that includes slab, was set at approximately 3.5 million tonnes.

Brazil through the first four months of 2018 had exported or was licensed to export 1.13 million tonnes of semifinished goods to the US, according to US Commerce Department data. The means Brazilian semifinished exports to the US would come in at 3.39 million tonnes for the year - narrowly below the quota ceiling - if that pace were to continue.

Calvert also sources from Mexico and from ArcelorMittal USA LLC's Indiana Harbor steelmaking complex outside of Chicago.

Mexico is exempt from Section 232 tariffs and quotas through June 1. Whether it remains exempt might hinge on the outcome of North American Free Trade Agreement (Nafta) talks.

Assuming there is progress in Nafta talks, Mexico and Canada want to see a quota equal to or above their average annual exports to the US - or no quota at all, sources familiar with the matter said.

Argentina, for example, received a quota of its steel exports to the US over the last three years plus an additional 35%. As free-trade partners, Canada and Mexico would therefore see the 70% quota to which South Korea agreed as a deal-breaker, two sources said.

EUROPEAN STEEL SAFEGUARDS IN LATE SECOND QUARTER?

Section 232 is "clearly" a positive for ArcelorMittal's business in the US, and similar measures could help the company in other regions of the world, Fairclough said. "But that probably does require Europe to take action against the ongoing increases in imports that we're seeing and a particular surge in imports last month," he said.

The European Commission started a safeguard investigation into 26 steel products on March 26 - three days after President Donald Trump signed off on Section 232 measures. The EC measure is aimed at protecting European steelmakers from any surge in imports that might result from steel redirected from the US to Europe as a result of Section 232.

"It's very appropriate that Europe has launched its own investigations to safeguard the European industry, and we look forward to seeing some progress there and some news flow towards the end of the second quarter," Fairclough said.

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Voestalpine taking planned HBI plant outage

NEW YORK — Voestalpine is taking a planned outage at its Texas-based hot-briquetted iron plant next month.

The Austrian steelmaker confirmed to American Metal Market sister publication Scrap Price Bulletin that the HBI plant in Corpus Christi is set for routine maintenance, but declined to comment on the date and duration of the outage. The company did say that "precautionary measures have been taken to secure the supply of material."

Sources believe Voestalpine's HBI plant could be down for somewhere between 20 to 22 days for the scheduled maintenance sometime in June.

A planned outages is also set for next month at Nucor's direct-reduced iron (DRI) plant in Louisiana. Nucor executives confirmed in a conference call last month that the 2.5-million-ton-per-year will be down for scheduled maintenance for 30 days around June 18.

Sean Barry, Scrap Price Bulletin, contributed to this report.

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US crude steel production slips by 1.8%

NEW YORK — Crude steel production in the United States totaled an estimated 1,747,000 net tons last week, down 1.8% from 1,779,000 tons the previous week, as mills operated at an average capacity utilization rate of 74.5%.

In the corresponding week last year, mills produced 1,718,000 tons at an average capacity utilization rate of 73.7%, according to the American Iron and Steel Institute, Washington.

Mills have produced 33,249,000 tons thus far this year at an average capacity utilization rate of 75.5%, up 1.7% from 32,688,000 tons at an average capacity utilization rate of 74.3% in the same period last year.

STEEL OUTPUT

Week ended	Net tons in thousands	Capacity utilization
January 6	1,649	70.7
January 13	1,707	73.2
January 20	1,693	72.6
January 27	1,719	73.8
February 3	1,747	75.0
February 10	1,737	74.5
February 17	1,751	75.1
February 24	1,783	76.5
March 3	1,834	78.7
March 10	1,813	77.8
March 17	1,826	78.3
March 24	1,803	77.4
March 31	1,776	76.2
April 7	1,805	77.0
April 14	1,784	76.1
April 21	1,788	76.3
April 28	1,754	74.8
May 5	1,779	75.9
May 12	1,747	74.5
Year to date*	**33,249**	**75.5**
Year ago to date*	**32,688**	**74.3**

* Reflects AISI adjustments.

STEEL PRODUCTION BY DISTRICTS
(in thousands of net tons)

	May 12	May 5	April 28
Northeast	220	216	207
Great Lakes	655	670	657
Midwest	165	148	163
Southern	637	667	652
Western	70	78	75
Total	**1,747**	**1,779**	**1,754**

Source: American Iron and Steel Institute.

Outlook murky for seaborne coking coal market

SINGAPORE — The outlook for the seaborne coking coal market remains unclear, with buyers and sellers not seeing eye to eye when it comes to prices.

A cargo of low-ranked premium hard coking coal was offered at $192-193 per tonne cfr China on Tuesday May 15, which resulted in a $7-8 per tonne gap with end-users' bids.

There are at least three cargoes of premium low-vol materials and seven cargoes of premium mid-vol materials with May and June laycan being offered in the spot market, according to various sources.

Three cargoes of semi-hard coking coal were heard to have been traded at $170-175 per tonne cfr China, sources told Metal Bulletin during the day.

"Buyers have more of an upper hand in the current market. They are just observing now due to the volatility in the seaborne market," an international trader source said.

At the Jingtang port in Tangshan, Hebei province, 20,000 tonnes of second-tier hard coking coal was heard traded at 1,470 yuan per tonne, which is equivalent to about $194.50 per tonne cfr China in the seaborne market.

A major cokery in the northern Chinese province is raising its selling price for coke by 50 yuan per tonne - its third over the past few weeks - effective Wednesday onward, amid sustained upward momentum in the spot market.

"Environmental standards are being stepped up in the country. We have no plans to procure [any coking coal] over the next couple of days," a Tangshan cokery source said.

On the Dalian Commodity Exchange, the most-traded September coking coal contract closed at 1,270.50 yuan per tonne, up 10 yuan per tonne from a day earlier.

The benchmark September coke contract closed at 2,102 yuan per tonne, up 18 yuan per tonne for the day.

Metal Bulletin's indices were all unchanged, at $193.49 per tonne cfr China and $183 per tonne fob Australia for premium hard coking coal, and $180 per tonne cfr China and $173.60 per tonne fob Australia for hard coking coal.

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SteelCo grows with Douglas asset buy

NEW YORK — SteelCo USA has purchased certain assets of West Coast steel processor Douglas Steel Supply to expand its production capabilities, according to the service center.

The move is in line with industry views that the service center sector is expected to enter a period of consolidation, which sources said last month is primarily being driven by fragmentation within the sector and the current strength of the steel industry.

Indeed, American Metal Market's hot-rolled coil index stands at $43.96 per hundredweight ($879.20 per ton), up 34.7% from $32.63 per cwt at the start of this year.

"The opportunity to acquire proven, class-leading processing equipment allows us to continue to grow and maintain the reputation for quality that our customers have come to rely on," SteelCo chief executive officer Erik Gamm said in a statement on Tuesday May 1.

The assets acquired by SteelCo include multiple large-scale production lines, material handling equipment, vehicles, tooling and inventory, the Chino, California-based company said. The acquired processing equipment comprised three 60-inch wide precision multiblanking lines, a 60-inch wide slitting line, a 51-inch wide slitting line and multiple overhead cranes and shears.

"The addition of this equipment to SteelCo USA's existing production operations marks a significant step forward in our ability to provide our customers with the breadth and depth of processing services that they need, while maintaining the level of quality and speed of service that they expect," SteelCo vice president and general manager Tim Miller added.

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Midwest ali premium steady on spot inactivity

NEW YORK — The US Midwest aluminium premium was flat on Tuesday May 15 due to steady supply and demand fundamentals and quiet trading.

"Fundamentals are unchanged," one seller source said. "Until the picture is clear, people will just wait."

"[Spot activity's] dead. No one's in a rush either way right now," according to a second seller.

American Metal Market's assessment of the P1020 premium again held at 22-22.5 cents per lb on May 15. The premium has remained at this level since May 8, and is off 0.11% from the three-year high reached in mid-April.

Still, the Midwest premium remains supported by a significant supply shortage that has persisted since March, when President Donald Trump announced Section 232 tariffs on aluminium imports, and that was only exacerbated by Russian aluminium producer UC Rusal's forced departure from the market in April.

"Ambiguity leads to higher prices [and] higher premiums [because] producers don't know what they can bring in, what they can't, what's tariffed, what's not," the first seller quipped.

Market participants have been eyeing the looming deadline for temporary exemptions from the Section 232 aluminium tariffs, which were extended to June 1. The 232 exclusion - given to Canada, the European Union and Mexico - offered a temporary reprieve for buyers and sellers, but has also extended uncertainty over the supply outlook.

Market participants told American Metal Market that both buyers and sellers have been holding off on spot transactions, frustrated with the lack of clarity provided by the Trump administration.

"The way that things are being handled could be better, especially since it's mid-May. The exemption ends at the end of the month and we still don't know what will happen," a third seller said.

"There's too many moving parts. Nobody has a clue what's going on or what [Trump's] going to do," a fourth seller commented.

While most market participants have been taking a wait-and-see approach, some buyers were actively in the market for supply, with some still looking to replace material made unavailable by the lockout at the Aluminerie de Bécancour smelter in Quebec.

At the same time, traders have been cautious about aggressively marketing their books ahead of the extension deadline and have been tightening available spot supply.

"I've been doing this a long time. I've never had to look this hard for material from a new supplier because suppliers we've used in the past just don't have additional units available," a buyer source said.

The lack of clarity and the unclear price direction could complicate the upcoming contracting season - which typically opens in September - when buyers and sellers enter into long-term supply deals.

"It's going to be an interesting mating season. Consumers don't know where they stand. Producers don't know where they stand. And traders really don't know where they stand," the first seller said.

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Novelis' Ky ali sheet plant targets auto demand

NEW YORK — Construction is under way at Novelis' $300-million automotive aluminium sheet manufacturing facility in Guthrie, Kentucky, with the company looking to capitalize on strengthening demand from automakers and a tight market for the product.

The Guthrie facility, which is slated to begin production in 2020, is Novelis' first new facility in the US in 30 years and will have an annual nameplate capacity of 200,000 tonnes.

"Aluminium is a growing material of choice for the automotive industry, offering a safe, sustainable and cost-effective way to lightweight vehicles that result in better performance and agility, increased fuel economy and reduced carbon emissions," according to Fiona Bell, Novelis' director of communications.

And despite the US Environmental Protection Agency's (EPA's) stated intention to roll back greenhouse gas and corporate average fuel economy (Cafe) standards, automakers' growing consumption of aluminium is unlikely to go away.

At the same time that automakers boost their appetites for aluminium, a major supply shortage of aluminium products is weighing on the market in the United States due to disruptions stemming from political actions in the form of the Section 232 tariffs and sanctions versus Russia's UC Rusal.

Metal Bulletin's assessment of the aluminium foundry alloy premium delivered duty-unpaid to the US Midwest – a price watched closely by the automotive industry – was at 15-17 cents per lb on Friday May 11, up 52% from 10-11 cents per lb in March, when President Donald Trump announced that he would impose tariffs on aluminium imports.

Novelis is betting on the growing adoption of aluminium by automakers to justify the $300-million investment.

"We do see a general tightness in the automotive aluminium market due to high demand, which is why we are making this investment," according to Bell.

Novelis was unable to provide details on which customers have already secured contracted volumes but noted that there the many nearby automotive manufacturing facilities. These include Ford Motor Co's facility in Louisville, Kentucky; Nissan Motor Co Ltd's Smyrna, Tennessee, operations; BMW's plant in Spartanburg, South Carolina; Mercedes-Benz's facility in Tuscaloosa County, Alabama; the General Motors Co plant in Arlington, Texas; and Toyota Motor Corp's operations in Georgetown, Kentucky, and Princeton, Indiana.

"We have contracted a portion of the volume and are in negotiations for more. With the demand projections for automotive aluminium over the next 10 years, Novelis is confident the remaining capacity will be pursued by automakers," Bell said.

The proximity of Guthrie to major automakers' facilities offers another benefit, allowing Novelis to process scrap metal that has been procured through closed-loop recycling partnerships at the company's recycling facilities.

"We use the same outbound trucks that deliver our coils to pick up the customer scrap and bring them back into our remelt centers, thus closing the loop and delivering solutions to our customers," Bell added.

The facility is also near Russellville, Kentucky-based Logan Aluminum, which will supply Guthrie with aluminium coils. Logan Aluminum is a joint venture between Atlanta-based Novelis and Louisville, Kentucky-based Tri-Arrows Aluminum Corp.

Novelis first unveiled its plans for the greenfield facility at the start of the year.

Representatives from Novelis, along with Senator Rand Paul (Republican, Kentucky), Kentucky Governor Matt Bevin and other community members broke ground on the facility on May 14, according to the company.

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US copper mart shows cautious optimism at ACC

CHICAGO — After a week of meetings and presentations, copper market participants came away from the American Copper Council spring conference in Denver with cautious optimism about the rest of the year.

Nearly every conversation on price and outlook, both on and off the record, was aggressively hedged due to uncertainty about trade policy developments.

Before the conference, China announced that it would suspend for 30 days customs inspections of non-ferrous scrap deliveries from the US. But the ban could last even longer than that, and could result in fully stocked export yards, depressed prices and wider spreads between primary and secondary metals.

"My phones [lit] up [after the Chinese scrap ban was announced]. I had to be on my phone eight straight hours on Friday [May 4]," a major copper buyer said.

"You can't say it's a boring market," one source said of the Chinese customs suspension, the development of Section 232 tariffs and quotas on steel and aluminium imports, and higher input costs in the form of trucking

continued ›

and financing.

Market participants have been hesitant to share price predictions given uncertainty surrounding these long-standing trade issues, as well as the renegotiation of the North American Free Trade Agreement.

"We did detect an air of uncertainty when it came to pricing - perhaps to be expected, given the uncertainty with regard to US tariff policy, coupled with last week's unexpected move by the Chinese to suspend pre-inspections of cargoes for 30 days," INTL FCStone analyst Edward Meir said. Suspending the pre-inspections leaves shipments stuck in limbo.

Finally, the lack of disruptions in production has been a negative for pricing. In total, 4 million tonnes of mined production and 700,000 tonnes of refined production were susceptible to strikes. But through the end of April, labor deals covering some 2 million tonnes of mined production were settled without a single incident between management and unions.

That has flipped the market from a modest deficit to a minor surplus, according to the International Copper Study Group.

The Lisbon, Portugal-based trade group said in March that it expected a 105,000-tonne shortfall this year before reversing that estimate in April to a modest 40,000-tonne surplus in 2018.

PREMIUM PRESSURE NOW AND LATER

A big concern was the upward pressure on cathode premiums. While American Metal Market's assessment of the US Midwest copper cathode premium stands at 5.5-6 cents per lb and hasn't changed since late January, a near-universal opinion was that premiums will rise this month.

Higher freight rates nationwide combined with increased financing rates are squeezing margins for the entire supply chain. And those costs are only expected to rise with fruit season arriving for the trucking industry and the Federal Reserve aiming to raise interest rates two additional times this year.

"Freight is becoming a real killer, especially domestically," a supplier source said, predicting a 0.25- to 0.50-cent rise in premiums in the next month due to freight costs.

According to Western Express chief operating officer Robert Stachura, spot freight rates were up by 35% in the first quarter compared with the 2017 quarter.

Looking ahead to the annual contracting season in the fall, negotiations are likely to be contentious, a physicals trader predicted, citing consumer resistance on higher premiums.

Several market participants expected mating season to revolve around freight rates and how the entire supply chain can help to absorb those costs.

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US copper premium said driving toward rise

CHICAGO — Copper cathode premiums in the United States are poised to post at least one increase in the next few weeks, with freight costs finally set to push the range higher.

Multiple market participants predicted at the American Copper Council spring meeting in Denver last week that premiums would have to rise to match the increase in freight rates.

A combination of higher freight rates nationwide and increased financing costs are squeezing margins for the entire supply chain, with both of these rates expected to rise further with the arrival of the fruit shipping season for the trucking industry and the Federal Reserve aiming for two additional rate increases this year.

"Premiums have to move up," one supplier source said. "The increased fuel costs are going to play an additional factor in raising premiums."

Meanwhile, American Metal Market's assessment of the US Midwest copper cathode premium was unchanged at 5.5-6 cents per lb on Tuesday May 15, a level it has maintained since late January.

But the market is contending with a host of issues, including the Chinese government's decision to implement a 30-day suspension on the Chinese Certification and Inspection Group (CCIC) North America division's inspection operations effective on May 4, which has disrupted the global scrap trade and shocked recyclers around the world.

"There's a fog on this market following the Chinese news," one scrap dealer source said.

Additionally, the global copper industry is dealing with too much metal, with a 40,000 tonne surplus predicted for 2018 by the International Copper Study Group (ICSG) after an anticipated deficit this year.

The lack of supply disruptions and a buildup in stocks in the US have created serious headwinds to any rise in premiums. CME Group copper warehouse stocks were at 248,053 short tons at the close of business on May 14, up 18% from 210,972 tons at the start of this year.

The vast glut of metal in the US has been a chief reason for premiums remaining stagnant for the majority of this year thus far, even with costs rising for traders.

As a result, even if premiums do rise in the next few months the market consensus is that the ceiling will remain at 6.5 cents per lb because consumers can either get CME copper or acquire it from overseas.

But until spot deals become more common, premiums will hold for now and market participants will wait for costly freight rates to eventually be factored into the market.

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Rise in China ali output, stocks may hit prices

SHANGHAI — Chinese electrolytic aluminium production reached 2.77 million tonnes in April, up 1.1% from the same period last year, with growing stocks likely to put downward pressure on prices.

Aluminium production also increased in 0.2% to 10.89 million tonnes in the first four months of 2018, according to key production data published by the country's National Bureau of Statistics (NBS) on Tuesday May 15 regarding industrial enterprizes above a designated size.

The small increases in production were due to the end to winter-season aluminium capacity cuts in China, market participants said.

To curb air pollution, China's environmental watchdog imposed a 30% cut in operational aluminium smelting and alumina refining capacity in two municipalities and 26 cities - in Shandong, Henan, Shanxi and Hebei provinces - from November 15, 2017, until March 15, 2018.

In addition, the robust aluminium prices seen in April also provided incentives for aluminium smelters to resume production.

Aluminium prices on the Shanghai Futures Exchange (SHFE) jumped by almost 10% in the first half of April before consolidating later in the month.

Prices for the most-actively traded July aluminium contract on the SHFE began to rise in late March, hitting 15,650 yuan ($2,469) per tonne on April 19 - its highest level since January 2.

But rising output and the resulting higher stock levels could put downward pressure on aluminium prices.

"There [has been] an acceleration in aluminium production resumption and fresh new aluminium production starts," Citic Futures Research said. "In addition, aluminium stocks are still at high levels, therefore aluminium prices are likely to [remain] subdued."

The July aluminium contract closed at 14,635 yuan per tonne on May 14, while aluminium inventories on the SHFE had grown by 5,818 tonnes to 992,023 tonnes as of May 11.

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MARKET PRICES

Prices are in cents per pound except as otherwise noted.

AMM Free Market	May 15	Revised	Prior Price
Copper cathode	309.75-310.25	05/15/18	313.35-313.85
Zinc	147.28-148.03	05/15/18	145.46-146.21
Aluminium	127.03-127.53	05/15/18	126.58-127.08
Nickel, 4x4 cathode	691.69-701.69	05/15/18	683.98-693.98
Nickel, briquette	684.69-691.69	05/15/18	676.98-683.98
Comex copper settlement	304.25	05/15/18	307.85
No. 2 copper scrap	270.00*	05/15/18	273.00*
Silver, Handy and Harman (¢/troy oz)	1,629.40	05/15/18	1,666.50

* Nominal for spot sales

Secondary ali scrap tags mostly steady

PITTSBURGH — Aluminium scrap prices in the United States mostly maintained a steady footing, although a combination of adequate supply and strong consumer inventory positions has put some wear on certain grades.

Secondary aluminium scrap prices saw mixed moves, with some prices taking a step back while others remained steady.

Prices for high-grade turnings shed a penny on the upper end of the range, while mixed-grade turnings and aluminium-copper radiators dropped by 1 cent per lb, according to American Metal Market's latest assessment. All other smelter-grade scrap prices were unchanged.

Some consumers said they are continuing to test the waters at lower prices for some items due to adequate inventory positions, steady flows and concerns that China's 30-day suspension of its North American inspections division would create oversupply pressures in the market.

"We are getting hammered with turnings. Looking at supply and demand, supply is overtaking demand. The China situation will eventually take its toll. The scrap is staying here in the states and not going to China. We haven't seen a big change in all the pricing, but something will give sometime," one consumer said.

"We're full, and people are just pounding on the doors to get turnings through. A lot of suppliers are inquiring about selling because others are full," a second consumer said. "Scrap is flowing. [There is] some softening on [certain] commodities; other items look to be in line."

Other buyers reported waiting to see whether the impact of the China issues will be cushioned – at least in part – by adequate inventories.

"It's wait and see. Scrap dealers are holding right now, and we have enough material that we can wait. They just want to hold to see what's going on. We haven't changed prices; we're just sitting here," a third consumer said.

"[We're] still figuring out what we're doing with [scrap purchases]. It is a good time for equipment guys. The prices haven't softened as much as we would have liked to see," a fourth consumer said.

But others have yet to see a jump in supply.

"We're not overly long on scrap. Produces have told us they are only making as much twitch as they can sell because they want to hold the prices," a fifth consumer said.

"We presently see good demand, and scrap flow remains fairly steady. Deliveries [and] logistics continue to present some challenges; however, I believe it is slightly improving," a sixth consumer said.

Meanwhile, mill-grade scrap tags were mixed, with declines on the London Metal Exchange taking a toll on some items.

Prices for mill-grade mixed low-copper alloy clips dropped by a penny on the upper end of the range, while painted aluminium siding dropped by 1 cent per lb, according the latest assessment.

Market participants attributed the softness to a combination of declines on the LME and limited demand.

The LME's three-month aluminium contract closed at $2,296 per tonne on Monday May 14, off 1.3% from $2,325.50 per tonne on Thursday May 10. The contract rebounded somewhat on Tuesday May 15, to close at $2,310.50 per tonne.

"I am covered through June, working on July [purchases] at a slow pace - which is at my doing. I have no doubt I can speed it up if I [need] to," a seventh consumer said.

"[We're] still holding, but mills have a healthy inventory," a supplier source said.

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SECONDARY ALUMINIUM PRICES
(cents per pound, delivered to Midwest)

Secondary Smelters' Scrap*	5/14/2018	5/10/2018
Mixed low-copper clips	67-69	67-69
Mixed high-copper clips	62-64	62-64
Mixed high-zinc clips	60-62	60-62
1-1-3 sows	63-64	63-64
Painted siding	62-64	62-64
Mixed clips	62-64	62-64
Old sheet	61-63	61-63
Old cast	63-64	63-64
Turnings, clean and dry (high grade)	57-58	57-59
Turnings, clean and dry (mixed grade)	54-55	55-56
Aluminium-copper radiators	137-141	138-142
Nonferrous auto shred (twitch)	68-70	68-70
Used beverage cans	84-86	84-86
Mills, Specialty Consumers' Scrap*	**5/14/2018**	**5/10/2018**
Segregated low-copper alloy clips (5052)	102-104	102-104
Segregated low-copper alloy clips (3105)	83-85	83-85
Mixed low-copper alloy clips	80-81	80-82
Painted siding	77-79	78-80

* Buying price

Source: AMM

WEEKLY SCRAP COMPOSITE PRICES
Averages calculated each Friday, based on data effective from the previous Friday to Thursday. Prices are in US$/gross ton.

SHREDDED SCRAP
— calculation date —

	05/11/18	Prior Wk	Year Ago
Alabama	$365.00	$385.00	$300.00
Chicago	372.00	380.00	293.00
Philadelphia	371.00	380.00	280.00
Pittsburgh	380.00	390.00	295.00
Composite	$372.00	$383.75	$292.00

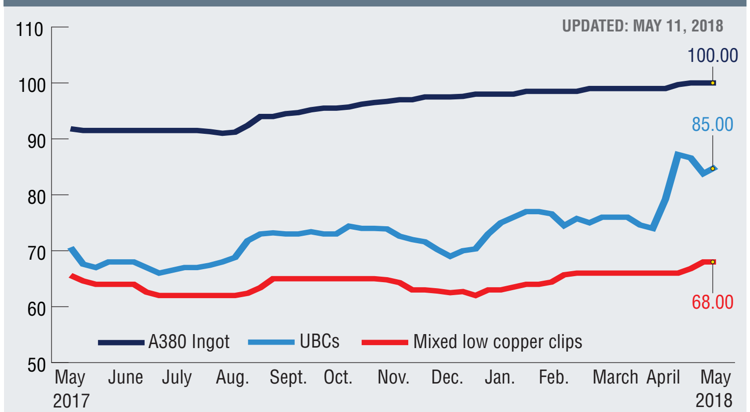
NO. 1 BUSHELING
— calculation date —

	05/11/18	Prior Wk	Year Ago
Chicago	$385.00	$385.00	$350.00
Cleveland	410.00	410.00	390.00
Pittsburgh	390.00	390.00	370.00
Composite	$395.00	$395.00	$370.00

NO. 1 HEAVY MELT
— calculation date —

	05/11/18	Prior Wk	Year Ago
Chicago	$337.00	$345.00	$260.00
Philadelphia	333.60	345.00	240.00
Pittsburgh	360.00	370.00	275.00
Composite	$343.53	$353.33	$258.33

AMM A380 INGOT/SCRAP ALUMINUM PRICES
(cents per pound)



Source: AMM

US raw material imports rise in face of price hikes

NEW YORK — Steelmakers in the United States increased their purchases of foreign raw materials during March in order to supplement their melting needs due to a combination of further anticipated increases in domestic ferrous scrap prices and strong order books for finished products.

March imports of steelmaking raw materials – booked in February – rose 18.7% month on month, US Census Bureau data show, with ferrous scrap, pig iron and direct-reduced iron (DRI) volumes up across the board.

US prices for primary and secondary scrap grades gained as much as $15 and $35 per gross ton respectively in March, when domestic mills entered the busiest production period thus far this year. Mills' capacity utilization rates peaked at 78.7% during the week ended March 3, up from 76.5% the previous week.

The higher domestic prices prompted US mills to shop for more material abroad, resulting in a 21% increase in ferrous scrap imports.

In early February, a cargo sale from the United Kingdom to Turkey saw shredded scrap trade at $353 per tonne cfr, or $359 per ton versus $370 per ton for shredded scrap in Alabama in March.

Three European cargoes – two from the Netherlands and one from Spain – landed on US shores in March. The two Dutch cargoes collectively contained 24,980 tonnes of No 1 bundles and 12,208 tonnes of shredded scrap, while the Spanish cargo had 22,009 tonnes of No 1 bundles.

Ferrous scrap deliveries from Canadian suppliers into Detroit, Chicago and Cleveland rose 10.9% month on month in March, boosted by increased inflows of No 1 bundles, plate and structural scrap, shredded scrap and an unspecified scrap grade.

Shipments of shredded scrap from Canada recorded the largest gain in March, rising by 35.6% to 47,523 tonnes from 35,036 tonnes, while imports of No. 1 bundles gained by 9.1% to 51,351 tonnes from 47,067 tonnes.

Meanwhile, pig iron imports showed a modest 6.7% increase in March as US steelmakers avoided making aggressive moves in February bookings. At that time, offer prices for pig iron from Brazil and from the Commonwealth of Independent States were similar at $390-395 per tonne cfr.

Brazilian suppliers delivered 103,583 tonnes of pig iron to the US in March after a one-month absence from the US market the previous month. This offset declines in shipments from Ukraine and Russia to 79,825 tonnes and 235,840 tonnes respectively from 156,709 tonnes and 239,847 tonnes in February.

One US steelmaker's imports of DRI from Trinidad and Tobago rebounded to 122,006 tonnes in March after volumes plummeted to 66,154 tonnes the previous month.

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US RAW MATERIAL TRADE
(in tonnes)

	March	February	% change	Year to date 2018	Year to date 2017	% change
IMPORTS						
Ferrous scrap	**259,526**	**214,397**	**▲21.0**	**717,195**	**851,201**	**▼15.7**
Canada	190,849	172,028	▲10.9	528,003	514,322	▲2.7
Other	68,677	42,369	▲62.1	189,192	336,879	▼43.8
Pig iron	434,268	406,823	▲6.7	1,332,020	1,063,332	▲25.3
Direct-reduced iron	**122,256**	**66,174**	**▲84.7**	**429,912**	**462,990**	**▼7.1**
Total imports	**816,050**	**687,394**	**▲18.7**	**2,479,127**	**2,377,523**	**▲4.3**
EXPORTS						
Ferrous scrap	**1,489,937**	**1,504,200**	**▼0.9**	**4,117,676**	**3,151,926**	**▲30.6**
Turkey	346,631	324,571	▲6.8	979,468	542,727	▲80.5
Mexico	127,790	220,038	▼41.9	475,304	442,738	▲7.4

Source: Compiled by AMM from data released by the U.S. Census Bureau.
Note: The data reflects the latest updates by Census and may not match what was previously published by AMM.

B.L. Duke adds steel terminal services

PITTSBURGH — Metals recycler B.L. Duke has expanded its scope of business with the addition of a subsidiary that offers stevedore services for finished steel products.

B.L. Duke River Transport has opened on a 30.5-acre facility in Joliet, Illinois, that includes 250,000 square feet of warehouse space.

The new division, which has indoor and outdoor storage, offers transloading and stevedore services that enable it to offload finished steel products coming off the river from mills in the South and Gulf Coast and then reload the steel onto rail or truck for further shipment, Forest View, Illinois-based B.L. Duke said.

"We're always looking for new ways to strengthen our services and improve cost-savings for our customers. This expansion allows us to help link mills with our customers and suppliers, and illustrates just one more way we're revolutionizing the recycling industry," B.L. Duke president and chief executive officer Lou Plucinski said.

The facility offers an advantage in that it is closer to Chicago and its suburban industrial areas compared with Indiana ports, B.L. Duke said, adding that the new site is in close proximity to several major highways and rail terminals.

"With trucking rates and availability becoming increasingly inhibitive, we will continue to grow our barge and rail services not only as a means to control our own logistics costs but now as a diversification strategy and new revenue source," Plucinski said.

Tight capacity and higher costs in the United States' freight market are likely to continue until year-end, keeping metals industry costs elevated, industry experts said last month, with one trader indicating that the cost of moving a truckload of material to the US Midwest increased by 38.9% year on year.

American Metal Market's hot-rolled coil index was at $43.96 per hundredweight fob Midwest mill on Thursday May 10.

The site, the former home to a Gerdau Long Steel North America rolling mill that closed in December 2013, expands B.L. Duke's footprint to 64 acres.

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UK cargo ends silence in Turkish scrap market

MUGLA, Turkey — Turkish steel producers broke their silence in the deep-sea ferrous scrap markets with the purchase of a UK cargo on Tuesday May 15.

A steel mill in the Marmara region booked the cargo, comprising 44,000 tonnes of an 80:20 mix of No 1 and No 2 heavy melting scrap at $345 per tonne and 22,000 tonnes of shredded at $366 per tonne cfr.

Shredded scrap usually trades at a $5-per-tonne premium over 80:20 heavy melt, but the supplier said that the unusual price difference between the two materials was because of tight supply and strong demand for shredded scrap.

Another Turkish source explained the gap as driven by strong activity in the Turkish domestic auto bundle scrap market.

"Turkish producers are trying to compensate for their inactivity in the deep-sea markets by buying auto bundle scrap in the local market. But, because of quality issues, they need to mix auto bundle with shredded scrap," he said.

Another source told Metal Bulletin that demand for shredded scrap was also strong in other markets, and this reduced the availability of material.

Turkish steel producers had been quiet in the deep-sea scrap markets since the beginning of last week and were buying auto bundle scrap in the local market to take advantage of the weakening lira, because they buy such material in the local currency.

The mills recently increased their auto bundle buy prices in lira, but decreased the prices paid for ship scrap because such material is bought with US dollars.

Meanwhile, the political uncertainty in Turkey, created by the decision to hold early elections next month, continued to weaken

continued ›

the lira against the dollar. The exchange rate was seen at 4.33 lira per dollar on May 15, compared with 4.25 lira per dollar a week earlier on May 8.

In a surprise move, Turkey's ruling Justice and Development Party and the Nationalist Movement Party agreed to hold parliamentary and presidential elections on June 24 this year - 17 months before they were expected.

As a result of the deep-sea transaction heard on May 15, the daily scrap indices inched downward.

Metal Bulletin's daily index for an 80:20 mix of northern European No 1 and No 2 heavy melting scrap closed on Tuesday at $345.44 per tonne cfr, down by $1.02 per tonne day on day.

The daily index for similar US material closed at $353.87 per tonne, down by $1.32 per tonne day on day.

This put the premium for US material over northern European scrap at $8.43 per tonne on May 15.

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American Metal Market

FERRO-ALLOYS

MAY 16, 2018

PRICE DESCRIPTION	LOCATION	CURRENT PRICE	ASSESSMENT DATE	PREVIOUS PRICE	ASSESSMENT DATE	CHANGE	% CHANGE
BULK ORES AND ALLOYS							
CHROME ORE							
Chrome Ore, South Africa, UG2 concentrates, 42% index basis, c.i.f. China, $ per tonne	South Africa	189	11-May-18	188	04-May-18	▲1	▲0.53%
Chrome Ore, Turkish lumpy 40-42%, c.f.r. main Chinese ports, $ per tonne	Turkey	270 - 280	11-May-18	280 - 300	04-May-18	▼15	▼5.17%
FERRO-CHROME							
High carbon							
Ferro-chrome 6-8% C, max. 60-65% Cr basis, 2% Si, United States in-warehouse Pittsburgh, $ per lb Cr	USA	1.40 - 1.48	10-May-18	1.40 - 1.48	03-May-18	0	0%
Ferro-chrome 6-8% C, max. 60% Cr basis, 1.5% Si, major European destinations, $ per lb Cr	EU	1.28 - 1.42	11-May-18	1.28 - 1.42	04-May-18	0	0%
Ferro-chrome low phosphorous, min. 65% Cr, max. 7% C, max. 1% Si, max. 0.015% P, max. 0.05% Ti, $ per lb	EU	1.35 - 1.4	04-May-18	1.35 - 1.4	20-Apr-18	0	0%
Ferro-chrome Japan import, 8-9% C, basis 60% Cr, c.i.f. Japan, duty unpaid, $ per lb Cr	Japan	0.93 - 0.96	10-May-18	0.95 - 0.98	03-May-18	▼0.02	▼2.07%
Ferro-chrome South Korea import, 8-9% C, basis 60% Cr, c.i.f. South Korea, duty unpaid, $ per lb Cr	South Korea	0.87 - 0.89	10-May-18	0.9 - 0.92	03-May-18	▼0.03	▼3.3%
Ferro-chrome China import, charge chrome 50% Cr index, c.i.f. Shanghai, duty unpaid, $ per lb Cr	China	0.86	11-May-18	0.85	04-May-18	▲0.01	▲1.18%
Ferro-chrome China spot, 6-8% C, basis 50% Cr, delivered duty paid, RMB per tonne	China	6,850 - 7,000	11-May-18	6,850 - 7,000	04-May-18	0	0%
Ferro-chrome China contract, 6-8% C, basis 50% Cr, delivered duty paid, RMB per tonne	China	6,646 - 6,950	11-May-18	6,646 - 6,950	04-May-18	0	0%
Ferro-chrome European Benchmark Indicator, Lumpy Cr, charge basis 52% (and high carbon), $ per lb	EU	1.28	11-May-18	1.27	04-May-18	▲0.01	▲0.79%
Ferro-chrome lumpy Cr, charge basis 52% Cr, quarterly, major European destinations, $ per lb Cr	EU	1.42	01-Apr-18	1.18	01-Jan-18	▲0.24	▲20.34%
Low carbon							
Ferro-chrome 0.10%C, min. 62% Cr, United States low-carbon, duty paid, f.o.b. Pittsburgh, $ per lb Cr	USA	2.25 - 2.30	10-May-18	2.25 - 2.30	03-May-18	0	0%
Ferro-chrome 0.05%C, min. 65% Cr, United States low-carbon, duty paid, f.o.b. Pittsburgh, $ per lb Cr	USA	2.4 - 2.45	10-May-18	2.4 - 2.45	03-May-18	0	0%
Ferro-chrome 0.15%C, min. 60% Cr, United States low-carbon, duty paid, f.o.b. Pittsburgh, $ per lb Cr	USA	2.2 - 2.23	10-May-18	2.2 - 2.23	03-May-18	0	0%
Ferro-chrome 0.10% C, average 60-70% Cr, major European destinations, $ per lb Cr	EU	2.27 - 2.45	04-May-18	2.26 - 2.42	20-Apr-18	▲0.02	▲0.84%
Ferro-chrome 0.06% C, max. 65% Cr, European low-carbon, in warehouse, $ per lb Cr	EU	2.32 - 2.50	04-May-18	2.31 - 2.47	20-Apr-18	▲0.02	▲0.85%
MANGANESE ORE							
Manganese Ore Index 44% Mn, c.i.f. Tianjin, $ per dmtu Mn	China	7.39	11-May-18	7.46	04-May-18	▼0.07	▼0.94%
Manganese Ore Index 37% Mn, f.o.b. Port Elizabeth, $ per dmtu Mn	South Africa	5.59	11-May-18	5.97	04-May-18	▼0.38	▼6.37%
FERRO-MANGANESE							
High carbon							
Ferro-manganese 78% Mn, standard 7.5% C, United States in-warehouse Pittsburgh, $ per long ton	USA	1,470 - 1,550	10-May-18	1,470 - 1,550	03-May-18	0	0%
Ferro-manganese basis 78% Mn (Scale pro rata), Standard 7.5% C, major European destinations, € per tonne	EU	1,050 - 1,100	11-May-18	1,050 - 1,100	04-May-18	0	0%
Ferro-manganese MB Chinese free market, min. 65% Mn, max. 7.0% C, in-warehouse, RMB per tonne	China	7,100 - 7,300	11-May-18	7,100 - 7,300	04-May-18	0	0%
Medium carbon							
Ferro-manganese medium carbon, max. 80% Mn, max. 1.5% C, ex-U.S. warehouse, $ per lb	USA	1.12 - 1.14	10-May-18	1.12 - 1.14	03-May-18	0	0%
Low carbon							
Ferro-manganese low carbon, max. 80% Mn, max. 0.80% C, ex-U.S. warehouse, ¢ per lb	USA	116 - 119	10-May-18	116 - 119	03-May-18	0	0%
SILICO-MANGANESE							
Silico-manganese United States in-warehouse Pittsburgh, $ per lb	USA	0.66 - 0.68	10-May-18	0.66 - 0.70	03-May-18	▼0.01	▼1.47%
Silico-manganese lumpy 65-75% Mn basis 15-19% Si (Scale pro rata), major European destinations, € per tonne	EU	1,000 - 1,050	11-May-18	1,000 - 1,050	04-May-18	0	0%
Silico-manganese min. 65% Mn, min. 16% Si, $ per tonne f.o.b. India	India	1,070 - 1,100	11-May-18	1,090 - 1,100	04-May-18	▼10	▼0.91%
Silico-manganese MB Chinese, min. 65% Mn, max. 17% Si, in-warehouse, RMB per tonne	China	7,100 - 7,500	11-May-18	7,200 - 7,500	04-May-18	▼50	▼0.68%

PRICE DESCRIPTION	LOCATION	CURRENT PRICE	ASSESSMENT DATE	PREVIOUS PRICE	ASSESSMENT DATE	CHANGE	% CHANGE
BULK ORES AND ALLOYS (cont'd)							
FERRO-SILICON							
Ferro-silicon, lumpy basis, 75% Si, United States free market, imported, in-warehouse Pittsburgh, $ per lb	USA	1.04 - 1.08	10-May-18	1.04 - 1.10	03-May-18	▼0.01	▼0.93%
Ferro-silicon, lumpy basis, 75% Si (Scale pro rata), major European destinations, € per tonne	EU	1,500 - 1,575	11-May-18	1,500 - 1,575	04-May-18	0	0%
Ferro-silicon, export from mainland China, min. 75% Si, 7.5% C, $ per tonne f.o.b.	China	1,350 - 1,400	11-May-18	1,340 - 1,400	04-May-18	▲5	▲0.36%
Ferro-silicon, MB Chinese free market, min. 75% Si, in-warehouse, RMB per tonne	China	6,400 - 6,800	11-May-18	6,200 - 6,400	04-May-18	▲300	▲4.76
NOBLE ORES AND ALLOYS							
MOLYBDENUM							
Molybdenum oxide							
Molybdenum, canned molybdic oxide, United States free market, in-warehouse, $ per lb Mo	USA	11.85 - 12	10-May-18	12.2 - 12.4	03-May-18	▼0.375	▼3.05%
Molybdenum, drummed molybdic oxide, free market, in-warehouse, $ per lb Mo	EU	11.55 - 11.7	11-May-18	11.8 - 11.9	09-May-18	▼0.225	▼1.9%
Molybdenum concentrate							
Molybdenum concentrate, MB Chinese free market, 45% Mo, RMB per mtu	China	1,650 - 1,680	09-May-18	1,630 - 1,660	02-May-18	▲20	▲1.22%
FERRO-MOLYBDENUM							
Ferro-molybdenum 65-70% Mo, United States free market, in-warehouse Pittsburgh, $ per lb	USA	13.5 - 13.7	10-May-18	13.5 - 13.9	03-May-18	▼0.1	▼0.73%
Ferro-molybdenum min. 65% basis, in-warehouse Rotterdam, $ per kg Mo	EU	28.2 - 28.75	11-May-18	28.8 - 29.1	09-May-18	▼0.375	▼1.64%
FERRO-TITANIUM							
Ferro-titanium 70% (max. 4.5% Al), MB free market, Europe, delivered duty paid, $ per kg Ti	EU	4.9 - 5.45	09-May-18	4.65 - 5.40	02-May-18	▲0.15	▲2.99%
Ferro-titanium 68-72%, ex-U.S. warehouse, $ per lb	USA	2.35 - 2.5	10-May-18	2.35 - 2.45	03-May-18	▲0.025	▲1.04%
TUNGSTEN							
APT							
Tungsten APT, European free market, $ per mtu	EU	328 - 335	11-May-18	328 - 335	04-May-18	0	0%
Tungsten APT, export from mainland China, Chinese No. 1 grade, min. 88.5% WO 3, $ per mtu f.o.b.	China	333 - 342	09-May-18	326 - 330	02-May-18	▲6	▲1.81%
Concentrate							
Tungsten concentrate, MB Chinese free market, 65% W03, in-warehouse, RMB per tonne	China	113,000 - 115,000	09-May-18	112,000 - 113,000	02-May-18	▲1,500	▲1.33%
FERRO-TUNGSTEN							
Ferro-tungsten, basis 75% W, in-warehouse Rotterdam, duty unpaid, $ per kg W	EU	40 - 40.6	11-May-18	40 - 40.6	09-May-18	0	0%
Ferro-tungsten, China export, min. 75%, f.o.b. China, $ per kg W	China	40 - 41	09-May-18	40 - 41	02-May-18	0	0%
VANADIUM PENTOXIDE							
Vanadium pentoxide, min. 98%, in-warehouse Rotterdam, $ per lb V2O5	EU	14.5 - 15	11-May-18	14.9 - 15.35	04-May-18	▼0.375	▼2.48%
FERRO-VANADIUM							
Ferro-vanadium, United States free market, 70-80% V, in-warehouse Pittsburgh, $ per lb	USA	32.25 - 33	10-May-18	33.5 - 34.25	03-May-18	▼1.2	▼3.69%
Ferro-vanadium, min. 78% basis, free delivered duty paid, consumer plant, 1st grade Western Europe, $ per kg V	EU	65.5 - 67.9	11-May-18	65.7 - 68	09-May-18	▼0.15	▼0.22%
MINOR METALS							
CHROMIUM METAL							
Chromium, alumino-thermic, min. 99%, ex-U.S. warehouse, $ per lb	USA	6.25 - 6.50	10-May-18	5.80 - 6.05	03-May-18	▲0.45	▲7.59%
Chromium, alumino-thermic, World MB free market, in-warehouse, min. 99%, $ per tonne	EU	13,250 - 13,995	11-May-18	13,250 - 13,995	04-May-18	0	0%
MANGANESE							
Manganese Electrolytic Metal, min. 99.7%, ex-U.S. warehouse, $ per lb	USA	1.25 - 1.30	10-May-18	1.30 - 1.35	03-May-18	▼0.05	▼3.77%
Manganese, min. 99.7% electrolytic manganese flake, MB free market, in-warehouse, $ per tonne C	EU	2,200 - 2,500	11-May-18	2,200 - 2,500	09-May-18	0	0%
SILICON METAL							
Silicon, United States free market, ¢ per lb	USA	140 - 143	10-May-18	142 - 144	10-Apr-18	▼1.5	▼1.05%
Silicon, MB free market, € per tonne	EU	2,200 - 2,245	11-May-18	2,230 - 2,275	04-May-18	0	0%
Silicon, export from mainland China, 98.5%, $ per tonne f.o.b.	China	1,890 - 1,950	11-May-18	1,910 - 1,960	04-May-18	▼15	▼0.78%

Source: Metal Bulletin

VANADIUM

Chinese export tags dive on low buying interest; EU, US prices dip on profit-taking

Global prices fell last week after Chinese exporters dropped offers amid a lack of buying interest, while European and US traders took advantage of arbitrage opportunities.

- Limited buying interest drags down Chinese export prices
- European prices decline on profit-taking activity
- US market softens amid weaker overseas markets

Falling prices in Europe and low buying interest from outside China have been dragging down fob China ferro-vanadium prices. But, owing to low availability, the fob China vanadium pentoxide (V2O5) market saw a deal at higher prices.

Metal Bulletin assessed fob China ferro-vanadium min 78% prices at $64-66 per kg on Thursday May 10, down from $65-69 in the prior week.

"The downtrend in the European ferro-vanadium market is still adding pressure to our export business, and I lowered my offers to $65-66 [per kg] from last week's $69," one vanadium exporter told Metal Bulletin.

"I got two inquiries over the past week, one from Europe and one from Japan, but no deals," a major ferro-vanadium exporter said, agreeing that the market had been quiet.

But in the fob China vanadium pentoxide market, there was a deal for 20 tonnes done at $15.30 per lb to South Korea. This widened the Metal Bulletin fob China vanadium pentoxide quotation to $14.40-15.30 on Thursday - up 40 cents on the high end and flat on the low end.

"Supply for domestic V2O5 is still tight, but inquiries are also thin. According to domestic V2O5 prices, the export cost is above $14, but as the V2O5 export market is small, oversea buyers prefer to place orders with their regular suppliers instead of wasting time searching for lower prices around the market. That is why sometimes the market sees deals at high prices but many offers at low levels," one V2O5 exporter told Metal Bulletin.

PROFIT-TAKING IN EUROPEAN MARKET

Meanwhile, the European ferro-vanadium market weakened last week thanks to traders turning to profit-taking to clear inventories and avoid potential losses from further price falls.

Metal Bulletin's spot European ferro-vanadium price softened to $65.50-67.90 per kg on Friday, delivered duty-paid in Europe, down slightly from $65.70-68 per kg during the mid-week assessment.

Although prices only posted modest losses from the mid-week assessment, the market took a more significant dip early in the week, with prices now down 2.98% from $68-69.50 per kg on May 4.

Traders bid aggressively early in the week, driving prices down markedly, to secure large tonnage business from a consumer. Following the early-week large tonnage business, spot demand slowed down, largely limited to 5-10 tonne transactions settling into the new price range.

Traders were able to take advantage of the arbitrage opportunities because Chinese offering prices had slid down far enough to entice imports to Europe.

"This is all basically driven by a lack of Chinese demand. Demand in Europe is quite well sustained, but the Chinese are actively pursuing exports in light of low domestic prices in China," a supplier source said.

Despite last week's abrupt decline, some market participants believed the price weakness would be short-lived.

"The fundamentals of the market have not changed. There is still not a lot of available material sitting around, and traders' inventories will dry out again. We could see prices turn around before too long," another market source said.

INCREASED IMPORTS FROM CHINA

The European vanadium pentoxide market also succumbed to downward pressure last week, due to an increase in imports from the Chinese market.

European vanadium pentoxide prices fell to $14.50-15 per lb on May 11, down 2.48% from $14.90-15.35 per lb in the previous week, according to Metal Bulletin's latest assessment.

Chinese exporters have shipped more material into Europe than expected, with prices in-warehouse Rotterdam suffering as a result.

Similarly, the US ferro-vanadium market weakened last week, attributed to lower prices in overseas markets weighing on domestic prices.

American Metal Market assessed US spot ferro-vanadium prices at $32.25-33 per lb on Thursday, down 3.69% from $33.50-34.35 per lb previously.

Weaker prices in Europe led traders and suppliers in the United States to offer more aggressively to secure spot business.

"I'm not surprised to see traders take advantage of the arbitrage opportunity that opened up between Europe and the US, especially with an abrupt drop in Europe prices recently," a supplier source said.

However, given the demand strength in the US, some market participants remained optimistic about pricing in the near term despite the recent weakness.

"The fact that most of the large mills have come out for more volume as early as May of this year shows that the second half of this year could be pretty interesting in terms of demand if their mill utilization rates stay stable," a second supplier source explained.

Anna Xu, Shanghai, contributed to this article.

CHRISTOPHER KAVANAGH

GLOBAL VANADIUM PRICES

	New price	Previous price	% Change
Ferro-vanadium basis 78% min, free delivered duty paid, consumer plant,1st grade Western Europe, $ per kg V	65.50-67.90	65.70-68	▼0.2
Vanadium pentoxide min 98%, in-warehouse Rotterdam $ per lb V2O5	14.50-15	14.90-15.35	▼2.5
Ferro-vanadium, 78% min fob China $ per kg V	64-66	65-69	▼3
Vanadium pentoxide min 98%, fob China, $/lb V2O5	14.40-15.30	14.40-14.90	▲1.4
Ferro-vanadium US free market 70-80% V in warehouse, Pittsburgh $ per lb	32.25-33	33.50-34.25	▼3.7

Source: Metal Bulletin

TUNGSTEN

China's environmental inspections continue to push APT prices higher

Both the European spot and Chinese export ammonium paratungstate (APT) markets continued to move higher last week amid concerns of supply disruptions due to continued environmental inspections in China.

- Concerns over disruptions at ammonium paratungstate smelters in Jiangxi province, a major production hub, continue
- More inquiries were seen in the European spot and Chinese export markets for ammonium paratungstate
- Ferro-tungsten prices continued to lag amid weak demand

Positive momentum for China ammonium paratungstate prices persisted last week, buoyed by domestic tightness and robust buying interest from overseas markets.

Metal Bulletin assessed fob China ammonium paratungstate prices at $330-335 per metric tonne unit (mtu) on Wednesday May 9, up 1.4% from $326-330 the previous week.

"I sold over 100 tonnes of APT, YTO [yellow tungsten oxide] and BTO [blue tungsten oxide] in total over the past week," one ammonium paratungstate exporter told Metal Bulletin.

"More inquiries came in, but few exporters can provide spot cargoes," the exporter said, adding that most producers have signed orders for deliveries in May and June.

Domestic tungsten concentrates followed ammonium paratungstate higher. Metal Bulletin's latest assessment for black tungsten concentrates 65% stood at 113,000-115,000 yuan ($17,779-18,093) per tonne on May 9, up from 112,000-113,000 yuan one week ago.

"Supply of tungsten concentrates is relatively sufficient, but the price increase in APT resulted from the production disruptions during the environmental inspection period and pushed up market confidence in tungsten concentrates," one concentrates trader said. "The tradable prices for black tungsten concentrates 65% are around 113,000-115,000 yuan [per mtu] depending on trading volume and the relationship between buyers and sellers."

In Europe, Metal Bulletin's benchmark quotation for ammonium paratungstate was assessed at $333-342 per mtu on Friday May 11, up from $328-335 per mtu in the previous week.

"It's a combination of good demand in Europe and the US [plus the] Chinese not offering anymore," a trader in Europe said.

"The environmental inspections are spreading to other steps of the value chain - and from what I'm hearing from China they are after the mines now, checking radioactivity levels there," that trader added.

The earliest shipment available for material is for June and July, market participants noted.

"More price positive news [is] coming out of China – up to eight private smelters are said to have stopped producing ahead of the environmental inspections," a second trader said. "Low production is expected to come out of China in May and June, and it's looking like there is going to be a shortage for the time being."

Meanwhile, China's ferro-tungsten export market continued to be quiet amid feeble demand, and prices remained unchanged from the previous week. Metal Bulletin assessed fob China ferro-tungsten min 75% at $40-41 per kg on May 9.

"We have not concluded any deals for ferro-tungsten over the past two weeks," one ferro-tungsten exporter said.

In-warehouse Rotterdam ferro-tungsten prices stood at $40-40.60 per kg on Friday, unchanged from the mid-week assessment, when prices had also remained stable.

"Ferro-tungsten is still lagging behind, with slow demand from [the] spot market," a third trader said.

Still, the downside remains limited, market participants noted.

"No one has any feed, there is no reason for prices to move down," a fourth trader said. "And if the mines start closing down due to environmental inspections, then that will have an impact on ferro-tungsten as well."

Ewa Manthey, London, contributed to this article.

ANNA XU

GLOBAL TUNGSTEN PRICES

	New price	Previous price	% Change
Ferro-tungsten basis 75% W Rotterdam duty unpaid $ per kg W in warehouse	40-40.6	40-40.6	0
Ferro-tungsten, China export min 75% $ per kg W, fob China	40-41	40-41	0
Tungsten APT export from mainland China, Chinese number 1 grade, min 88.5% WO 3, $ per mtu, fob	330-335	326-330	▲1.4
Tungsten concentrate MB Chinese free market, 65% W03, in warehouse China yuan per tonne	113,000-115,000	112,000-113,000	▲1.3
Tungsten APT European free market $ per mtu	333-342	328-335	▲1.8

Source: Metal Bulletin

FERRO-SILICON

Chinese prices rise on short supply; EU, US markets little changed

Chinese ferro-silicon prices strengthened in the week ended Friday May 11 after production was cut in the country due to higher electricity costs for producers, with this trend seen persisting through June.

- Chinese consumers look to buy ahead of higher prices
- US market sags amid inactivity, more imports
- European spot market stagnates after second-quarter settlements

Chinese domestic ferro-silicon prices moved higher in the past week amid active trading on persistently short supply. Metal Bulletin's Chinese domestic spot ferro-silicon (basis 75% silicon) prices increased by 200 yuan per tonne on the low end and by 400 yuan per tonne on the high end to 6,400-6,800 yuan ($1,010-1,073.19) per tonne on May 11.

According to sources, the market has been buoyed by short-covering against an expected short supply of ferro-silicon in the coming weeks.

"Most of the stock build-up had been consumed at the end of April, and most are quoting 6,400 yuan per tonne and more," a producer said.

Supply has been affected by higher power tariffs in the province of Qinghai, prompting most ferro-silicon producers there to operate mostly at night when power tariffs are lower. The move has effectively cut production by up to 30%.

Most industry sources now reckon market prices will increase until the end of the second quarter.

Steel mills were reported to be actively looking to buy ferro-silicon on expectations of further price increases in the weeks ahead.

"Steel mills do not have inventory, so they will buy spot cargoes from ferro-silicon producers," the same producer said. Traders were also reported to be pushing up prices aggressively.

Ferro-silicon contract prices on the Zhengzhou Commodity Exchange increased to 6,544 yuan per tonne at the market close on May 11, from 6,492 yuan per tonne on May 4. About 184,142 lots were traded on Friday.

In the Chinese ferro-silicon export market, prices have been mostly stable, according to Metal Bulletin's latest assessment. Mainland China ferro-silicon prices (basis 75% silicon, 7.5% carbon) were up $10 per tonne on the low end of the range at $1,350-1,400 per tonne fob China on May 11, from $1,340-1,400 per tonne a week before. The lowest trade was heard at $1,350 per tonne cif China.

Downstream magnesium prices also increased in the past week because of short supply from suppliers in the ferro-silicon sector against steady demand. Ferro-silicon is used as a reducing agent in magnesium production, and there are limited stock levels of magnesium at refineries, sources said.

Metal Bulletin assessed the magnesium Chinese free market, 99% min Mg, ex-works price at 15,200-15,300 yuan per tonne on Friday, up 100 yuan per tonne from 15,000-15,100 yuan per tonne on May 4.

US MARKET SLIPS AMID SLOW TRADING

Meanwhile, the US ferro-silicon market slipped in the past week amid subdued trading activity. Spot prices for ferro-silicon narrowed to $1.04-1.08 per lb on Thursday May 10, down 2 cents on the high end from the week before, according to American Metal Market's latest assessment.

The spot market has been mostly idle in recent weeks, with long-term negotiations for second-half annual contracts yet to be settled, and prices are forecast to drop in the near term due to expected lower-priced imports.

"We're still waiting for clear market price direction, so we are holding off on offering ferro-silicon for now," a supplier source told American Metal Market.

Industry sources anticipate clearer market direction for spot ferro-silicon prices after longer-term delivery settlements are concluded.

EUROPE MARKET STABILIZES LOSSES

The European market was flat in the past week amid virtually no spot demand, because many traders were on vacation for the May Day public holiday. Suppliers have held their offer prices after a run of losses in recent weeks, and are awaiting an increase in trading activity after the holiday to potentially stimulate spot price movement.

Metal Bulletin assessed the price of Europe-origin ferro-silicon, lumpy, basis 75% Si, at €1,500-1,575 ($1,794-1,884) per tonne on Friday. The current price range at a year-to-date low after hitting a peak this year of €1,700-1,760 per tonne in the last week of January.

Declan Conway, Galway, Ireland; and Karen Ng, Singapore, contributed to this article.

CHRISTOPHER KAVANAGH

GLOBAL FERRO-SILICON PRICES

	New price	Previous price	% Change
Ferro-silicon export from mainland China, min 75% Si, 7.5% C, fob, $ per tonne	1,350-1,400	1,340-1,400	▲0.4
Ferro-silicon lumpy basis 75% Si (scale pro rata), major European destinations, € per tonne	1,500-1,575	1,500-1,575	0
Ferro-silicon MB Chinese free market, min 75% Si, in-whs China, yuan per tonne	6,400-6,800	6,200-6,400	▲4.8
Ferro-silicon lumpy basis, 75% Si, U.S. free market, imported, in-whs Pittsburgh, $ per lb	1.04-1.08	1.04-1.10	▼0.9
Silicon grade 441, min 99% Si in-warehouse Rotterdam, € per tonne	2,200-2,245	2,230-2,275	▼1.3
Silicon grade 553, min 98.5% Si in-warehouse Rotterdam, € per tonne (was Silicon MB free market € per tonne)	2,045-2,080	2,065-2,100	▼1
Silicon export from mainland China, 98.5% $ per tonne, fob	1,890-1,950	1,910-1,960	▼0.8

Source: Metal Bulletin

FERRO-CHROME

Charge chrome, chrome ore prices edge up in China

China's import markets for charge chrome and chrome ore have shown signs of recovery over the past week after producers refused to cut offers.

- Charge chrome import prices gain in China
- Upper group two (UG2) chrome ore prices edge higher
- China's domestic ferro-chrome prices hold
- Alloy prices weaken in South Korea and Japan
- Alloy prices flatline in Europe and the United States

Charge chrome and chrome ore prices staged a modest rebound in China on Friday May 11 due to producers standing firm on offer prices. Metal Bulletin's charge chrome index cif Shanghai rose by 1 cent to 86 cents per lb.

Supplier sources said buying interest has returned to the market, and predicted stable or higher prices into this week.

"We are receiving bids at $0.86-0.87 per lb because the Chinese domestic market has improved," one supplier source told Metal Bulletin.

Metal Bulletin's price quotation for China's domestic spot ferro-chrome prices was 6,850-7,000 yuan ($1,080-1,104) per tonne on May 11, flat with the prior week.

"Ferro-chrome suppliers are not interested in selling at these prices, and trading volumes at tender prices are small," one ferro-chrome trader said.

Still, two major stainless steel mills have been preparing to undergo planned maintenance, and some sources warned that demand for ferro-chrome is likely to tighten in the near future as a result.

Metal Bulletin's UG2 chrome ore index edged $1 higher over the past week to $189.00 per tonne on May 11.

"The market saw more inquiries, but deals have not significantly increased, due to weak demand," one chrome ore importer told Metal Bulletin.

Metal Bulletin's price quotation for Turkish lumpy chrome ore dropped to $270-280 per tonne on May 11, down from $280-300 per tonne a week earlier.

Metal Bulletin's assessment of Chinese domestic contract ferro-chrome prices on a delivered basis was unchanged at 6,646-6,950 yuan ($1,046-1,094) per tonne on May 11, in line with May tender prices from steel mills.

Elsewhere in Asia, ferro-chrome prices slid on the back of the weaker prices in China in recent weeks and thin trading due to Japan's Golden Week holiday.

Metal Bulletin's price quotation for high-carbon ferro-chrome cif South Korea edged down to $0.87-0.89 per lb on May 10, off from $0.90-0.92 per lb a week earlier.

While inquiries have been picking up from South Korea and China, bids are still much lower than producers' offers, sources said.

Most buyers have been unwilling to deviate from Chinese tender prices, which they see as representative of the market. In Japan, buyers said they intend to look to Chinese tender prices - rather than the European benchmark price - as a purchase price reference.

"Prices are still low, and tradable levels are around $0.87-0.88 per lb," a market participant in South Korea told Metal Bulletin.

Metal Bulletin's price assessment for high-carbon ferro-chrome cif Japan dropped 2 cents to $0.93-0.96 per lb on Thursday May 10, down from $0.95-0.98 per lb on May 3.

Suppliers and traders disagreed as to future price direction, however.

"Inquiries from Japan are quiet, but the market should start to pick up next week if prices stay low," a second supplier said.

Still, traders thought most end-users had covered their purchasing requirements.

"The market is quiet now as most end-users have secured volumes on long-term contracts," a trader said.

The prospect of higher prices would be welcomed by South African charge chrome producers struggling against high costs and currency fluctuations.

Chrome producer Afarak, owner of South Africa's Mogale Alloys, reported negative earnings before interest, tax, depreciation and amortization (Ebitda) of €700,000 for the first quarter of 2018, blaming lower ferro-chrome prices, higher costs and the stronger South African rand.

South African chrome miner Tharisa is scheduled to report its results for the six months to March 31 on Wednesday May 16, and has warned that it expects a difference of at least 20% from the results of the same period last year, due to lower chrome ore prices and higher costs.

EUROPEAN, US MARKETS FLAT

Metal Bulletin's price quotation for high-carbon ferro-chrome delivered in Europe stood at $1.28-1.42 per lb on May 11, unchanged from the prior week.

Liquidity may pick up once traders return following the public holidays, sources said. Signals indicated that the market lacks a clear direction, and no dramatic movements are anticipated this week.

In the Untied States, the high-carbon ferro-chrome market remained flat and activity was minimal.

Spot prices for high-carbon ferro-chrome in warehouse Pittsburgh were at $1.40-1.48 per lb on May 10, unchanged from a week earlier, according to American Metal Market's latest assessment.

"From a spot standpoint, we had a real slow week this week once again," a supplier source told American Metal Market.

"However, from an overall demand standpoint, it is not slow by any means. May releases are as strong as they've ever been, and the same was true for April. So from a business standpoint, it's been quite good... just nothing going on in the spot market," that supplier added.

Suppliers said they have not been feeling pressure to move material at more aggressive numbers, so market participants expect stable prices in the near term.

Janie Davies and Jon Stibbs, both in London; Karen Ng, Singapore; and Anna Xu, Shanghai, contributed to this article.

CHRISTOPHER KAVANAGH

GLOBAL FERRO-CHROME AND CHROME ORE PRICES

	New price	Previous price	% Change
Ferro-chrome 6-8% C basis 60% Cr max. 1.5% Si major European destinations $ per lb Cr	1.28-1.42	1.28-1.42	0
Ferro-chrome 6-8% C basis 60-65% Cr max 2% Si United States free market in warehouse Pittsburgh $ per lb Cr	1.40-1.48	1.40-1.48	0
Ferro-chrome China import charge chrome 50% Cr index, cif Shanghai, duty unpaid, $ per lb contained chrome	0.86	0.85	▲1.2
Ferro-chrome Japan import 8-9% C, basis 60% Cr, cif Japan, duty unpaid, $ per lb contained chrome	0.93-0.96	0.95-0.98	▼2.1
Ferro-chrome South Korea import 8-9% C, basis 60% Cr, cif South Korea, duty unpaid, $ per lb contained chrome	0.87-0.89	0.90-0.92	▼3.3
Ferro-chrome China spot 6-8% C, basis 50% Cr delivered duty paid China yuan per tonne	6,850-7,000	6,850-7,000	0
Ferro-chrome European benchmark indicator, lumpy Cr charge basis 52% (and high carbon), $ per lb	1.28	1.27	▲0.8
Chrome ore South Africa UG2 concentrates index basis 42% cif China, $ per tonne	189	188	▲0.5
Nonferrous metals chrome ore c.f.r. main Chinese ports Turkish lumpy 40-42% $ per tonne	270-280	280-300	▼5.2

Source: Metal Bulletin

MANGANESE

Ore, alloy prices slide further

Manganese prices dropped further in China last week due to weaker downstream demand.

- Ore prices fall as much as 6%
- Chinese alloy prices slide on weaker steel mill demand
- Indian silico-manganese prices weaken
- European alloy prices flatline
- Ferro-manganese holds in the United States

Manganese ore prices continued to move lower on Friday May 11 amid weakening demand due to shrinking purchasing volumes for both ore and alloy.

Metal Bulletin’s price index for 37% manganese ore cif Tianjin, China, fell 38 cents to $6.22 per dry metric ton unit (dmtu).

Metal Bulletin’s price index for 37% manganese ore fob Port Elizabeth, South Africa, fell 38 cents to $5.59 per dmtu.

Metal Bulletin’s price index for 44% manganese ore cif Tianjin, China, fell 7 cents to $7.39 per dmtu.

There were fewer purchases of ore during the week and volumes were smaller, while steel mills also bought less manganese alloy.

“Steel mills are beginning to scale back on their production capacities and we are selling less,” a bulk alloy producer told Metal Bulletin.

The reduction in purchasing volumes has prompted some major manganese alloy producers to cut capacity by about 25%.

“We have cut production by 25-30% and we have also slashed our ore purchase volume,” one ferro-manganese producer told Metal Bulletin.

“Steel mills also don't want to buy from us at 7,500 yuan ($1,183) per tonne anymore as they have cut production. I feel that next month prices could fall another 300 yuan per tonne,” the producer added.

Metal Bulletin's price assessment for spot Chinese domestic silico-manganese slipped to 7,100-7,500 yuan per tonne on May 11, down from 7,200-7,500 yuan per tonne a week earlier.

The most-actively traded June silico-manganese contract on the Zhengzhou Commodity Exchange (ZCE) closed at 7,130 yuan per tonne on May 11 compared with a closing price of 7,334 yuan per tonne on May 4.

Metal Bulletin's price assessment for Chinese domestic ferro-manganese was unchanged over the past week at 7,100-7,300 yuan per tonne on May 11.

Yet a few miners said they were unfazed by the drop in prices and blamed the decline on market uncertainty and perceived further price risk rather than poor consumption.

“The market is softening. Rather than weakening demand, however, no one is buying because it is a falling market. Once it bottoms out everyone will come rushing back and demand will rally,” one market participant told Metal Bulletin.

There were indications of an increase in liquidity toward the end of the week.

“The market may be heading down but there is no panic yet,” a supplier source said.

Metal Bulletin’s price assessment for silico-manganese fob India dropped by $20 on the low end of the range over the past week to $1,070-1,100 per tonne on May 11. This compares with $1,220-1,230 per tonne a month ago.

“The downward trend of manganese ore prices is still not helping and alloy prices are continuously falling,” an alloy producer source said.

Smelters are mainly focusing on domestic business, but some have cut their offers in an effort to secure export sales, a trader source added.

Indian alloy prices are typically more exposed to fluctuations in manganese ore prices, given a greater exposure to prevailing spot prices.

European prices were consequently unchanged week on week, with no changes reported during a week dominated by public holidays in the region.

Metal Bulletin’s European price assessments for silico-manganese and ferro-manganese held at $1,000-1,050 per tonne and $1,050-1,100 per tonne respectively on May 11, both on a delivered basis.

In the United States, alloy markets remained stagnant in the absence of significant spot activity.

Spot prices for high-carbon ferro-manganese in-warehouse Pittsburgh held at $1,470-1,550 per long ton on May 10, according to American Metal Market’s assessment.

Tumbling ore prices and the significant gap between US and global alloy pricing have some market participants expecting a downward correction in the near term.

“It’s on the edge of collapse right now. It has been all year but there has not been enough spot business to move indices down and ore prices stayed high. Now that ore prices are falling, prices are losing a major point of support,” a supplier source told American Metal Market.

Spot prices for silico-manganese in-warehouse Pittsburgh dropped 2 cents on the high end of the range to 66-68 cents per lb on May 10, according to American Metal Market’s assessment.

Negotiations for long-term contracts for the second half of the year continued over the past week, with declining ore prices becoming a more significant factor.

“There are guys who are concerned about booking the third- and fourth-quarter business. With ore prices coming off, they are going to get more and more aggressive to secure those tonnages,” a supplier source said.

Market participants suspect prices might continue to weaken over the near term once long-term negotiations begin to wrap up.

Janie Davies, Charlotte Radford and Jon Stibbs, London; and Karen Ng, Singapore, contributed to this article.

CHRISTOPHER KAVANAGH

GLOBAL MANGANESE ORE AND ALLOY PRICES

	New price	Previous price	% Change
Manganese ore index 44% Mn, cif Tianjin, $ per dmtu of metal contained	7.39	7.46	▼ 0.9
Manganese ore index 37% Mn, fob Port Elizabeth, $ per dmtu of metal contained	6.22	6.6	▼ 5.8
Manganese Ore Index 37% Mn, cif Tianjin China, $ per dmtu of metal contained	5.59	5.97	▼ 6.4
Ferro-manganese 78% Mn standard 7.5% C, US free market, in-warehouse Pittsburgh, $ per long ton	1,470-1,550	1,470-1,550	0
Ferro-manganese 80% min Mn 1.5 max C, US free market, medium carbon, duty-paid, fob Pittsburgh, $ per lb	1.12-1.14	1.12-1.14	0
Ferro-manganese basis 78% Mn (scale pro rata), standard 7.5% C, major European destinations, € per tonne	1,050-1,100	1,050-1,100	0
Ferro-manganese MB Chinese free market, min 65% Mn, max 7.0% C, in-warehouse China, RMB per tonne	7,100-7,300	7,100-7,300	0
Silico-manganese lumpy 65-75% Mn basis 15-19% Si (scale pro rata), major European destinations, € per tonne	1,000-1,050	1,000-1,050	0
Silico-manganese US free market in-warehouse Pittsburgh, $ per lb	0.66-0.68	0.66-0.7	▼ 1.5
Silico-manganese MB Chinese free market, min 65% Mn max 17% Si, in-warehouse China, RMB per tonne	7,100-7,500	7,200-7,500	▼ 0.7
Silico-manganese 65% min Mn 16% min Si, fob India, $ per tonne	1,070-1,100	1,090-1,100	▼ 0.9

Source: Metal Bulletin

SILICON

Chinese prices fall on increased production; EU market weaker

Chinese silicon export market prices fell on Friday May 11 due to looming operation restarts at silicon refineries in Sichuan and Yunnan provinces during the rainy season, while European prices also weakened.

Metal Bulletin's Chinese grade-553 silicon export prices moved lower to $1,890-1,950 per tonne on Friday's assessment, down 0.8% from $1,910-1,960 per tonne previously.

On one hand, very prompt cargoes were still quoted and traded at robust levels due to the tight availability of materials among exporter traders.

"If buyers want any cargoes to be shipped outside China prior to May 20, that is the price they need to pay," a trader source said.

On the other hand, suppliers have lowered their offers to quickly secure bookings in anticipation of prices plummeting when refineries in Sichuan and Yunnan provinces restart operations in the coming weeks. This was cited as a major reason for the week-on-week drop in prices.

Silicon refineries in the two provinces had suspended or reduced operations over the dry season in the winter months, when electricity costs are higher due to the lack of hydroelectricity supply. With the rainy season around the corner, the producers are returning to the market because production costs are lower and profit margins can increase.

Some refineries in Yunnan province have already restarted, while it will take another couple of weeks for refineries in Sichuan to resume operations, Metal Bulletin understands.

Meanwhile, the stronger US dollar also resulted in lower quotations in the spot market. The exchange rate was around 6.35 yuan per dollar on Friday, compared with 6.3 in the same period last month.

"The yuan acting weaker against the dollar was another reason for suppliers to move down the spot quotation," a second trader said.

Europe market falls on Chinese price weakness

Silicon prices fell in Europe last week due to weakness in the Chinese market.

Metal Bulletin assessed the grade-553 silicon in-warehouse Rotterdam price at €2,045-2,080 ($2,431-2,473) per tonne on Friday, down from €2,065-2,100 a week earlier.

The grade-441 silicon price similarly fell to €2,200-2,245 ($2,616-2,669) per tonne, down from €2,230-2,275 in the previous assessment.

"The weakness in Chinese prices is again reflecting in the Rotterdam prices," a third trader said. "Some producers in China have increased production, and this has brought more supply into the market, leading to material offered at lower prices from China."

There was also additional supply in the European market from Brazil.

The Brazilian foreign trade ministry, MDIC, reported that silicon metal export volumes increased by 75.6% year on year in April, mostly due to higher demand from Europe. Exports totaled 17,681 tonnes during the month versus 10,067 tonnes in April 2017.

A fourth trader said Brazil's exports to Europe had increased as a result of the US Commerce Department's anti-dumping and countervailing duty investigations into imports of silicon metal from Australia, Brazil, Norway and Kazakhstan during the month of March, which the US International Trade Commission (ITC) eventually voted against.

"After the US threatened several countries - including Brazil - with anti-dumping duties, the Brazilian producers found their inventories increasing," the fourth trader said. "So, they ended up shipping to Europe."

But a producer source pointed to the power problems in Brazil last year.

"Last year Brazil was pretty much closed down due to high power prices until July 2017, when they made a deal to get power at a fixed price," he said. "Hence, the year-on-year figures will look rather high."

Susan Zou, Shanghai, contributed to this article.

TANYA ASHREENA

GLOBAL SILICON PRICES

	New price	Previous price	% Change
Silicon grade 441, min 99% Si in-warehouse Rotterdam, € per tonne	2,200-2,245	2,230-2,275	▼1.3
Silicon grade 553, min 98.5% Si in-warehouse Rotterdam, € per tonne	2,045-2,080	2,065-2,100	▼1
Silicon export from mainland China, 98.5% $ per tonne, fob	1,890-1,950	1,910-1,960	▼0.8
Silicon United States free market, cents per lb	140-143	142-144	▼1

Source: Metal Bulletin

NEWS

Largo achieves record quarterly net income in Q1

Brazil-focused Canadian vanadium producer Largo Resources has reaped the benefits of strong vanadium pentoxide prices in the three months to March 31, with the company reporting its highest quarterly net income in its financial report published on Monday May 7.

Largo declared a net income of $45.8 million in the first quarter of 2018, while revenues rose 210% year on year in the same period to $91 million, the company said.

The significant increase in Largo's net income and revenue was mainly attributed to multiyear high vanadium pentoxide prices in the quarter. Prices so far this year have reached levels last seen in October 2008.

Average prices for vanadium pentoxide in January-March 2018 were $13.21-13.70 per lb, up 67.5% quarter on quarter and 160.5% year on year, according to Metal Bulletin's benchmark quotation for vanadium pentoxide min 98%, in-warehouse Rotterdam.

Largo produced 2,214 tonnes of vanadium pentoxide in the first quarter of 2018, up 7% year on year, but down 13% from the fourth quarter of 2017.

The slight year-on-year production increase at Largo's Maracás Menchen mine in Bahia, Brazil, in the three-month period also contributed to the company's higher earnings.

"We are extremely pleased to report the highest net income recorded in the company's history for the first quarter of 2018. Operations at the Maracás Menchen mine continued to generate significant operating cash flows and the company remains committed to delivering strong financial performance for the balance of the year," Largo president and chief executive officer Mark Smith said.

"Production for the quarter was impacted by unexpected maintenance to the cooler refractory, which has since been resolved and operations exiting the quarter returned to normalized production levels," he added.

Maracás Menchen was hit by "unexpected production downtime" in January and February this year because of the premature wearing of the cooler refractory, but the issue was resolved in March, according to Largo.

Production of vanadium pentoxide totaled 706 and 645 tonnes in January and February respectively, with March's output of 863 tonnes returning to "expected levels". The company forecasts smooth operation for the remainder of 2018.

ANNA XU

Afarak confirms Q1 loss, cites lower FeCr benchmark

Afarak has confirmed a first-quarter loss of €700,000 ($836,000) due to lower ferro-chrome prices, higher costs and a stronger rand.

The London and Helsinki-listed mining and metallurgical group, which owns the Mogale ferro-alloys plant in South Africa, reported negative earnings before interest, tax, depreciation and amortization (Ebitda) of €700,000 compared with positive Ebitda of €12.7 million for the same period in 2017.

The company had recently issued a first-quarter profit warning, saying it expected to lose about €1 million.

It cited the sharp drop in the European first-quarter ferro-chrome benchmark price as the main reason for its performance, which it described as "resilient despite challenging business conditions."

"The charge chrome benchmark price for quarter one 2018 was 30% lower than a year earlier and 15% less than quarter four 2017. This decline led to lower revenues and profitability levels," Afarak chief executive officer Guy Konsbruck said.

"Furthermore, cost pressures also impacted on profitability as raw materials such as graphite electrodes and ferro-silicon all increased significantly. Profitability was further impacted by a weakening of the US dollar and a strengthening of the South African rand," he said.

Afarak also suffered a number of technical issues including breakdowns and temporary stoppages, which caused output reductions and affected raw material supply and chrome ore sales, Konsbruck added.

Metal Bulletin's charge chrome index cif Shanghai, which stood at 86 cents per lb on Friday May 11, started 2018 at 90 cents per lb and rose as high as $1.03 per lb in mid-March before ores and alloys prices started to slide.

Metal Bulletin's UG2 chrome ore index cif China began the year at $199 per tonne and had traded as high as $245 per tonne by mid-March. The index was most recently at $189 per tonne on May 11.

The charge and high-carbon ferro-chrome benchmark price for the first quarter of 2018 stood at $1.18 per lb, compared with $1.65 per lb for the same period of 2017.

The 2018 second quarter benchmark settled at $1.42 per lb versus $1.54 per lb for the second quarter of 2017.

JANIE DAVIES

Malaysian Mn ore stocks overtake Australian lump at Tianjin port

Malaysian manganese ore stocks at the port of Tianjin in China slightly outweighed those of Australian lump in late April, stock data from the port showed.

Total manganese ore stocks at the port had risen to 2.3 million tonnes, comprising material from nine countries. This compares with a total of 1.65 million tonnes in early January.

The increased volume of manganese ore stocks at the port came amid a rally in prices for the material during the first quarter of 2018.

Metal Bulletin's 37% manganese ore index fob Port Elizabeth had risen as high as $7.57 per dry metric tonne unit (dmtu) on March 9 compared with $5.80 per dmtu at the beginning of January. The index was most recently at $5.97 per dmtu on May 4.

South African material of all grades and types, including chips, accounted for 46% of the 2.3-million-tonne total, while Australian material of all grades and types made up 16% of the volume.

Although material from Australia made up the second largest volume by origin, Malaysian ores at 267,892 tonnes slightly overtook Australian lump's 262,892 tonnes.

It is unusual for Malaysian ores to make up such a large proportion of stocks, further illustrating that Malaysia has emerged as a significant ferro-alloy hub in recent years.

Metal Bulletin reported in October 2017 that South African manganese ore exports to Malaysia increased three-fold between January and September that year to feed a series of manganese alloy plant start-ups in 2016.

In March 2018, a silico-manganese smelter source confirmed that manganese miners from Asian countries including Malaysia were ramping up efforts to sell into China.

Metal Bulletin's assessment of the combined total of manganese ore stocks at the ports of Tianjin and Qinzhou stood at 2.55-2.9 million tonnes on May 2.

At the end of April, port data showed that the rest of the material was listed as having been mined in Brazil, Gabon, Ivory Coast, India and Mexico.

Irrespective of origin, high-grade ore made up 40% of stocks at the port.

JANIE DAVIES

NEWS

Blockade hits key South African semi-carbonate manganese export route

Industrial action has halted traffic along a key road for moving semi-carbonate manganese ore from mines in Hotazel in South Africa's Northern Cape.

The R31 main road was blockaded on Tuesday morning in a dispute over pay to truck drivers.

"This could seriously affect deliveries to all parts for all the miners in the area," a source said.

The R31 is used to access various ports for "huge volumes" of manganese ore, a second source told Metal Bulletin.

The relative strength of manganese ore prices this year - in relation to last year - means exports are likely to be higher this year than in 2017, when an estimated 3 million tonnes of ore was transported in non-Manganese Export Capacity Allocation (MECA) transport. The MECA system includes rail freight.

The Metal Bulletin index for 37% manganese ore fob Port Elizabeth was $5.59 per dry metric tonne unit on May 11. The Metal Bulletin index had been at $4.38 on May 8, 2017.

The police are also on the scene of the industrial action.

The impact of the action will depend on the length of time of negotiations between the representatives of the truckers and the service companies that tend to employ them. The truck drivers are campaigning for higher wages.

"It is premature to say what the implications will be. We should give it a day or two, but I am not concerned at this point - time will tell," a source at a mining company said.

Another source said the problem would be solved with no implications for the exports.

"This is just normal industrial action, our operations are not impacted," a source close to Kudumane Manganese Resources said. "This is to do with truckers and is not mining related."

Miners South32, UMK and Tshipi were unable to comment when approached by Metal Bulletin.

JON STIBBS

American Metal Market MEXICO

WEDNESDAY, MAY 16, 2018 / VOLUME 3 / NUMBER 20

SCRAP

CONSUMER BUYING PRICES

DEL MONTERREY	MXN/MT	change/MXN	USD/MT
No. 1 heavy melt	6,200	–	$319
Cut structural/plate 3ft. max.	6,500	–	$335
Shredded auto scrap	6,650	–	$343
No. 1 busheling	6,600	–	$340
Machine shop turnings	5,700	–	$294

effective week ended May 11, 2018

DEL BAJIO	MXN/MT	change/MXN	USD/MT
No. 1 heavy melt	6,050	▼ 200	$312
Cut structural/plate 3ft. max.	6,350	▼ 250	$327
Shredded auto scrap	6,400	–	$330
No. 1 busheling	6,350	▼ 250	$327
Machine shop turnings	5,650	▼ 250	$291

MXN = Mexican peso MT = metric ton

MONTERREY FERROUS SCRAP PRICES HOLD STEADY; BAJIO PRICES RETREAT

The direction of ferrous scrap prices took a curious turn in the steelmaking regions of Bajio and Monterrey this past week, with sellers reporting that mills have lowered their prices yet some grades have remained stable.

In Monterrey, sellers reported that mills have lowered buying prices between 250 and 300 pesos per tonne, but all prices in American Metal Market's assessment were unchanged from the prior week. "The reason is mills have plenty of scrap," a seller into numerous regions in Mexico and the United States said regarding the motivation for producers to lower their buying prices.

No 1 heavy melt in Monterrey was trading at 6,200 pesos per tonne, with sellers reporting a range between 5,950 and 6,450 pesos per tonne. No 1 busheling continued to trade at 6,600 pesos per tonne, with sellers reporting a range between 6,250 and 6,800 pesos per tonne.

In Bajio, shredded scrap was still trading at 6,400 pesos per tonne while all other grades retreated. Bajio sellers reported that prices being paid by mills had fallen between 150 and 300 pesos per tonne over the past week. No 1 heavy melt was selling for 6,050 pesos per tonne, and No 1 busheling was selling for 6,350 pesos per tonne, representing drops of 200 and 250 pesos per tonne, respectively.

The exchange rate weakened again, to 19.41 pesos per dollar from 18.92 pesos per dollar the prior week.

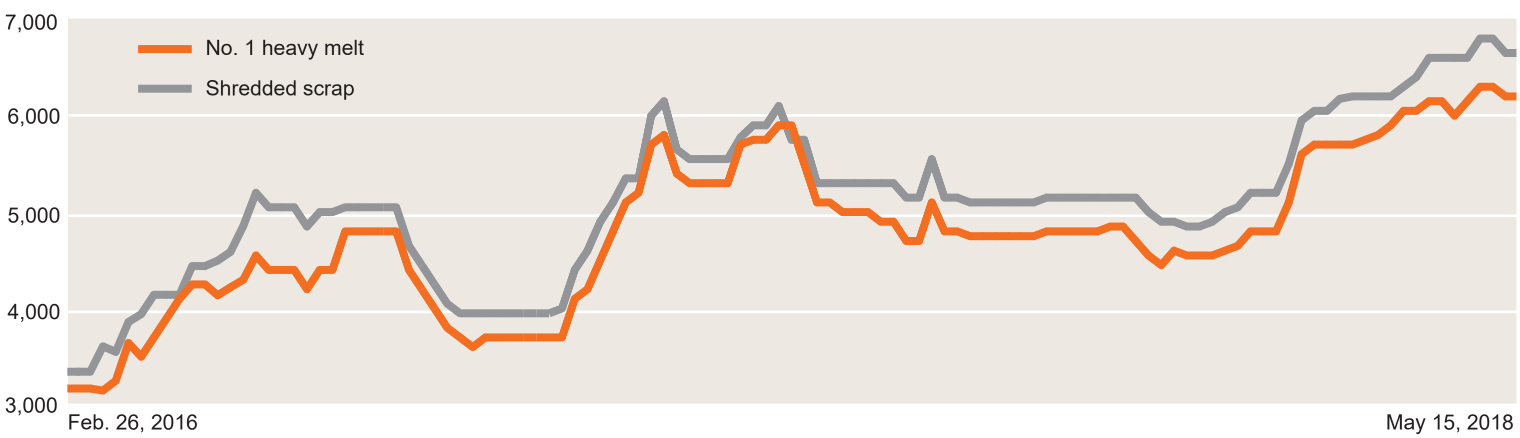
LISA GORDON

TO BECOME A PRICE CONTRIBUTOR

AMM-MEXICO invites you to become a pricing/assessment contributor. Please send your name, company, contact details and metals/categories of interest to Thorsten Schier, at tschier@amm.com.

CONSUMER BUYING PRICES FOR NO. 1 HEAVY MELT AND SHREDDED SCRAP*

(in pesos per tonne)



* Delivered to Monterrey, Mexico

EXCHANGE RATE $1 USD = MXN 19.41 *(five-day average for week ended May 11, 2018)*

Source: Mexican Central Bank

AMM STEEL PRICES

PRICES EFFECTIVE TUESDAY, MAY 15, 2018

STAINLESS STEELS

Market prices, f.o.b. mill, by grade, not including extra charges for size, finish, temper, packaging, shipping and other specifications.

COILED PLATE

Plate produced on a continuous mill.

Grade	US$/cwt
304	122.50
304L	124.50
316/316L	171.00

BAR

Smooth-turned round bar, 1" diameter, mostly in 10,000-lb quantities.

Grade	US$/cwt
303	158.00
304	155.00
316	209.00
416	107.00
17Cr4Ni	208.50

COLD-ROLLED SHEET

Grade	US$/cwt
304	138.00
304L	140.00
316L	184.00

NA--Not available

IMPORT PRICES

Port of Houston prices, c.f.r. port, in US$/short ton.

Reinforcing bar	$617-$794
Wire rod (low carbon)	$600-$635
Hot-rolled coil	$820-$880
Plate	$900-$940
Cold-rolled coil	$920-$980
Hot-dipped galvanized,0.012-0.015", G30	$1,180-$1,220

Port of Houston prices, d.d.p., in US$/short ton.

Merchant bar	$640-$680
Beams	$760-$800

WORLD EXPORT PRICES

Prices in US$/tonne. China, Turkey and India prices are f.o.b. main port. CIS prices are f.o.b. Black Sea.

China export cold-rolled coil (rev. 05/15/18)	$610-$625
China export galvanized coil (rev. 05/15/18)	$685-$695
China export wire rod (rev. 05/15/18)	$565-$570
Turkey export rebar (rev. 05/10/18)	$550-$560
Turkey export wire rod (rev. 05/10/18)	$585-$595
CIS export hot-rolled coil (rev. 05/14/18)	$550-$570
CIS export cold-rolled coil (rev. 05/14/18)	$610-$630
India export galvanized coil (rev. 05/11/18)	$840-$845

To become a price contributor see "Metal Exchanges" page.

SHEET AND COIL

Midwest market prices per hundredweight, f.o.b. mill.

Hot-rolled coil index	$43.96
Cold-rolled (Class I)	$49.75
Hot-dipped galvanized (base price)	$49.75
Hot-dipped galvanized*	$54.50
Galvalume	$49.25
Aluminized (Type 1)	$51.75

* The price for hot-dip galvanized sheet represents a base price plus a G90 coating on material 0.040 inch (1 millimeter) thick.

PLATE

Market prices per hundredweight, f.o.b. mill.

CARBON GRADE PLATE

National mills	
Cut-to-length	$46.25
Coiled	$45.25

PIPE AND TUBE

Market prices in US$/short ton.

Domestic	
OCTG J55 casing	$1,250-$1,400
Line pipe X52	$1,310-$1,400
Standard pipe A53 Grade B	$1,200-$1,220
OCTG seamless casing P110	$1,750-$1,800
Import	
OCTG J55 casing	$1,030-$1,200
Line pipe X52	$1,100-$1,175
Standard pipe A53 Grade B	$1,000-$1,100
OCTG seamless casing P110	$1,500-$1,600

BARS

Market prices per hundredweight, f.o.b. mill.

MERCHANT PRODUCTS

(base prices)

Reinforcing bar, Grade 60, No. 5	$35.00-$36.00
2 x 2 x 1/4" angle	$36.55
3 x 3 x 1/4" angle	$37.00
8 x 11.5 channels	$36.25
1/2 x 4" flat	$36.75

COLD-FINISHED

1" round, 1018 (carbon)	$62.00
1" round, 12L14 (carbon)	$70.50
1" round, 4140 (alloy)	$81.50

HOT-ROLLED

(special bar quality)

1" round, 1000 series (carbon)	$45.00
1" round, 4100 series (alloy)	$52.00

ROD

Market prices per hundredweight, f.o.b. mill.

Mesh quality low carbon	$37.00
Industrial quality low carbon	$38.00-$40.00
High carbon	$40.00
Cold-heading quality	$41.50

BEAMS

Market prices per hundredweight, f.o.b. mill.

W8 x 8	$42.00

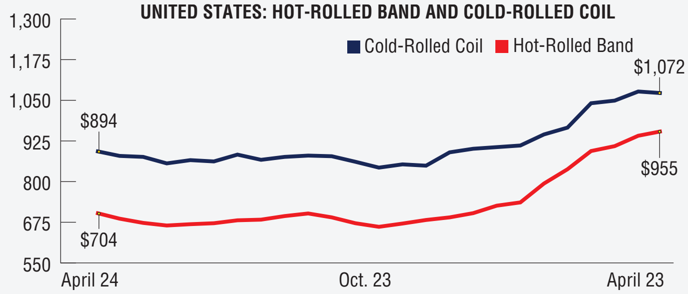
STRUCTURAL TUBING

Market prices in $/short ton

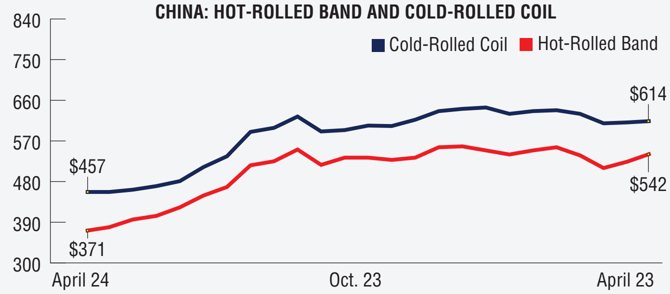
ASTM A500 Grade B	$1,090.00-$1,130.00

STEELBENCHMARKER PRICING 2017-2018 *(dollars per tonne)*

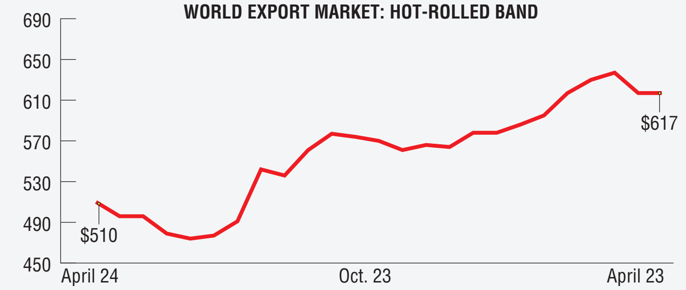
UNITED STATES: HOT-ROLLED BAND AND COLD-ROLLED COIL



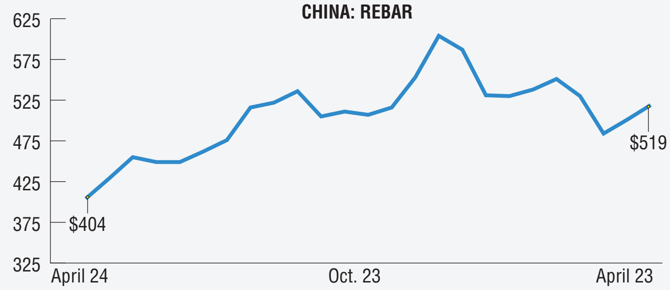
CHINA: HOT-ROLLED BAND AND COLD-ROLLED COIL



WORLD EXPORT MARKET: HOT-ROLLED BAND



CHINA: REBAR



SteelBenchmarker was officially launched in 2006 by World Steel Dynamics Inc. Prices are published twice monthly. SteelBenchmarker is designed to provide a reliable set of benchmark prices for participants in the steel industry and others without requiring disclosure of actual transaction prices.

Note: Prices for the United States are f.o.b. mill, east of Mississippi; China is ex-works; and World Export Market is f.o.b. port of export. Source: World Steel Dynamics Inc., Englewood Cliffs, N.J.

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

AMM NONFERROUS SCRAP PRICES

PRICES EFFECTIVE TUESDAY, MAY 15, 2018

ESTIMATED DEALER BUYING PRICES, IN ¢/LB. DELIVERED TO YARD. MONTREAL AND TORONTO PRICES ARE IN CANADIAN CURRENCY

COPPER (rev. 05/15/18)

	Atlanta	Boston	Buffalo	Chicago	Cincinnati	Cleveland	Detroit	Houston	L.A.	N.Y.	Philly	P'burgh	S.F.	St. Louis	Montreal	Toronto
No. 1 heavy copper and wire	238-248	215-225	231-241	225-240	226-241	228-238	220-235	229-239	241-251	216-231	232-242	234-249	229-244	242-252	298-308	289-304
NO. 2 HEAVY COPPER AND WIRE	**225-235**	**202-212**	**214-224**	**216-231**	**212-227**	**214-229**	**211-226**	**215-225**	**228-238**	**202-217**	**218-233**	**220-235**	**223-233**	**228-238**	**280-290**	**280-290**
Light copper	205-220	192-202	194-204	196-211	197-212	194-204	196-211	198-208	197-207	192-207	198-213	195-210	195-205	211-221	260-270	251-266
RED BRASS SOLIDS	181-191	175-185	182-192	182-192	176-186	181-191	177-187	168-173	202-212	175-185	173-183	184-194	206-216	189-199	196-206	200-210
Red brass turnings, borings	165-175	139-149	126-136	156-166	150-160	140-150	156-166	137-147	159-169	154-164	162-172	153-163	160-170	176-186	145-155	149-159
Cocks and faucets	133-143	......	139-149	144-154	133-143	133-143	139-149	143-153	147-157	137-147	145-155	141-151	155-165	164-174	190-200	184-194
Brass pipe	143-153	142-152	144-154	149-159	153-163	155-165	159-169	153-163	172-182	152-162	155-165	146-156	175-185	164-174	190-200	......
YELLOW BRASS SOLIDS	**149-159**	**124-134**	**137-147**	**137-147**	**141-151**	**131-141**	**130-140**	**139-149**	**165-175**	**136-146**	**148-158**	**139-149**	**161-171**	**152-162**	**178-188**	**180-190**
Mixed yellow brass turnings, borings	99-109	102-112	99-109	109-119	108-118	108-118	109-119	120-130	127-137	97-107	94-104	110-120	138-148	124-134	130-140	129-134
Yellow brass rod ends	148-158	142-152	144-154	139-149	148-158	143-153	139-149	156-166	155-165	147-157	150-160	146-156	168-178	167-177	198-208	......
Yellow brass rod turnings	143-153	132-142	134-144	134-144	148-158	138-148	139-149	148-158	162-172	147-157	149-159	145-155	158-168	152-162	190-200	......
70-30 brass clips	149-159	148-158	145-155	145-155	149-159	144-154	160-170	169-179	168-178	148-158	156-166	152-162	164-174	183-193	191-201	......
AUTO RADIATORS (UNSWEATED)	**153-163**	**135-145**	**152-162**	**142-152**	**155-165**	**140-150**	**137-147**	**139-149**	**172-182**	**138-148**	**153-163**	**144-154**	**165-175**	**157-167**	**167-177**	**154-164**
High-grade bronze gears	160-170	174-184	176-186	166-176	164-174	164-174	161-171	180-190	184-194	174-184	176-186	168-178	182-192	......	196-206	193-203
High-grade low lead bronze	150-160	......	......	161-171	154-164	154-164	171-176	175-185	174-184	......	......	158-168	182-192	166-176	186-196	......
Manganese bronze solids	140-150	149-159	146-156	141-151	159-169	149-159	146-156	155-165	164-174	144-154	145-155	152-162	167-177	161-171	189-199	186-196
Miscellaneous nickel-"silver" solids	145-155	149-159	151-161	146-156	139-149	154-164	141-151	165-175	159-169	154-164	155-165	157-167	162-172	161-171	189-199	......
Manganese bronze turnings	100-110	94-104	101-111	106-116	104-114	109-119	101-111	110-120	109-119	94-104	96-106	113-123	112-122	99-109	134-144	131-141

ALUMINUM (rev. 05/15/18)

	Atlanta	Boston	Buffalo	Chicago	Cincinnati	Cleveland	Detroit	Houston	L.A.	N.Y.	Philly	P'burgh	S.F.	St. Louis	Montreal	Toronto
Segregated low copper clips	48-53	46-49	49-52	46-48	41-46	40-43	44-47	35-37	54-58	41-44	44-46	44-47	46-47	54-55	58-60	55-57
Mixed low copper clips	46-51	42-44	47-49	42-43	40-42	37-40	42-44	32-35	48-51	38-41	43-48	41-44	44-45	53-54	54-56	52-54
Mixed clips	43-45	43-44	47-49	40-44	40-43	38-40	40-45	32-35	50-54	38-41	40-45	42-45	44-45	52-54	55-56	50-52
Aluminum borings, turnings, clean and dry	26-31	26-29	21-26	24-29	22-27	20-25	26-31	16-21	30-35	22-27	23-28	24-29	24-26	33-38	30-34	26-30
Old aluminum, sheet and cast	43-48	41-43	43-44	43-48	41-46	38-41	40-45	37-38	50-53	37-40	42-45	43-48	41-43	46-48	49-51	48-50
Used beverage cans, clean and dry	48-51	37-39	39-40	41-46	40-45	37-39	36-41	43-48	49-51	47-49	48-51	41-46	41-44	50-52	40-42	42-44
Industrial castings	42-45	41-42	39-40	42-47	......	41-46	44-49	36-37	......	43-46	43-47	......	......	......	51-53	49-51
63S aluminum solids	54-56	56-57	55-56	52-57	......	49-54	52-57	45-49	......	......	53-58	......	......	60-65	65-67	66-68
75S aluminum clips	41-44	38-40	41-43	40-45	......	35-40	44-49	32-33	59-62	......	42-45	......	50-53	48-52	50-52	49-51
75S borings, turnings, as is	28-31	......	......	37-42	......	25-30	32-37	19-22	33-38	......	30-33	......	19-22	......	33-35	32-34
Aluminum utensils	43-47	......	42-43	31-35	......	33-38	37-42	31-33	......	38-41	......	......	......	......	40-42	40-42
Painted aluminum siding	42-47	40-42	45-46	38-43	......	37-42	39-44	33-36	49-52	......	38-42	......	39-41	48-51	51-53	50-52
Litho sheets	58-63	54-57	......	49-54	......	......	49-54	47-51	58-63	......	......	......	52-57	61-64	......	......

LEAD (rev. 05/15/18)

	Atlanta	Boston	Buffalo	Chicago	Cincinnati	Cleveland	Detroit	Houston	L.A.	N.Y.	Philly	P'burgh	S.F.	St. Louis	Montreal	Toronto
HEAVY SOFT LEAD	**45-50**	**52-55**	**51-56**	**50-55**	**......**	**50-55**	**46-50**	**48-53**	**......**	**46-51**	**54-59**	**......**	**42-47**	**53-57**	**56-61**	**50-55**
Mixed hard lead	41-44	......	50-52	46-48	......	49-53	45-49	47-51	......	......	......	......	41-45	50-54	52-53	......
Undrained,whole old batteries	......	......	31-33	......	......	30-35	......	......	......	30-32	......	31-33	27-31	......	40-41	......
WHEEL WEIGHTS	**33-37**	**30-32**	**37-41**	**25-29**	**......**	**31-35**	**30-34**	**35-39**	**......**	**27-31**	**34-37**	**28-32**	**25-29**	**......**	**38-42**	**......**

ZINC (rev. 05/15/18)

	Atlanta	Boston	Buffalo	Chicago	Cincinnati	Cleveland	Detroit	Houston	L.A.	N.Y.	Philly	P'burgh	S.F.	St. Louis	Montreal	Toronto
New zinc die cast	41-46	36-38	41-46	43-47	......	......	43-48	41-45	43-48	38-43	......	......	43-48	47-52	36-41	......
OLD ZINC DIE CAST	**35-40**	**37-39**	**40-45**	**36-41**	**......**	**......**	**36-41**	**42-44**	**44-49**	**37-42**	**......**	**......**	**41-46**	**44-49**	**36-41**	**39-44**
Old zinc scrap	35-40	37-39	37-39	36-41	......	......	36-41	40-42	39-44	37-42	......	......	40-45	44-49	33-38	......
Zinc die cast automotive grilles	......	41-46	37-42	44-49	......	......	44-49	38-42	......	......	......	......	......	47-53	42-48	......

NICKEL – DEALER BUYING PRICES (rev. 05/02/18)

Nominal price a dealer will pay for items delivered to his yard, in ¢/lb.

	Chicago	Detroit	Houston	Pittsburgh
Nickel scrap solids	325-385	365-370	350-460	425-450
Nickel turnings scrap	370-375	360-375	295-420	375-400
Monel R-400 scrap solids and clips	240-250	235-240	285-310	250-275
Monel scrap turnings	185-195	205-210	235-275	200-225
Monel K-500 (castings) solids and clips	225-235	200-225	220-330	200-225
Inconel 600 scrap solids and clips	290-300	305-310	240-245	300-350
309 stainless steel scrap solids	55-65	65-66	54-55	64-80
310 stainless steel scrap solids	80-85	95-97	80-100	85-115
330 stainless steel scrap solids	125-145	145-150	125-160	100-190
Invar scrap solids and clips	125-135	140-145	90-140	150-175
Inconel 601 scrap solids and clips	230-250	235-240	220-240	225-250
17-4PH solids	22-24	29-30	12-25	18-30

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NICKEL – BROKER/PROCESSOR BUYING PRICES (rev. 05/02/18)

Nominal price a broker/processor will pay for items delivered to his yard, in ¢/lb.

	Chicago	Detroit	Houston	Pittsburgh
Nickel scrap solids	545-580	514-515	555-575	525-560
Nickel turnings scrap	500-565	490-500	485-525	475-540
Monel R-400 scrap solids and clips	360-413	329-330	395-420	350-375
Monel scrap turnings	310-328	280-285	325-350	300-325
Monel K-500 (castings) solids and clips	320-383	295-325	370-390	300-325
Inconel 600 scrap solids and clips	435-445	404-421	415-450	400-430
309 stainless steel scrap solids	89-93	88-91	85-94	80-90
310 stainless steel scrap solids	139-143	128-134	125-140	115-135
330 stainless steel scrap solids	215-220	199-208	200-219	175-210
Invar scrap solids and clips	210-220	194-201	200-216	170-200
Inconel 601 scrap solids and clips	355-365	319-333	345-408	325-350
17-4PH solids	36-43	42-43	32-37	32-43

SCRAP

Estimated buying prices

(carload lots, delivered buyers' works)

In ¢/lb except as otherwise noted.

BRASS MILL SCRAP

No. 1 copper	295.50*

REFINERS' COPPER SCRAP

No. 1 copper	290.00*
No. 2 copper	270.00*

BRASS INGOT MAKERS' SCRAP

(rev. 05/15/18)

Copper	
No. 1 bare bright	295.00-297.00*
No. 1	287.00-289.00*
No. 2	267.00-269.00*
Light copper	261.00-263.00*
No. 1 comp. solids (rev. 05/09/18)	243.00-245.00
Comp., borings, turnings (rev. 05/09/18)	239.00-241.00
Radiators (rev. 05/09/18)	204.00-206.00
Yellow brass solids (rev. 05/09/18)	200.00-205.00

* Nominal for spot sales.

SMELTERS' LEAD SCRAP

Buying prices heavy soft lead (cwt), including delivery to smelter

(rev. 05/08/18)

Scrap lead	$92.00-$94.00
Remelt lead	$95.00-$97.00
Whole batteries	$44.00-$45.00
Cable lead	$96.00-$98.00

SMELTERS' ZINC SCRAP

(rev. 05/08/18)

New zinc clippings	88.00-90.00
Old zinc (clean)	71.00-73.00
Galvanizers' dross	81.00-83.00

SECONDARY SMELTERS' ALUMINUM SCRAP

Buying prices delivered to Midwest smelters in full truckloads containing several grades

(rev. 05/14/18)

Mixed low copper clips	67.00-69.00
Mixed high copper clips	62.00-64.00
Mixed high zinc clips	60.00-62.00
1-1-3 sows	63.00-64.00
Siding, painted	62.00-64.00
Mixed clips	62.00-64.00
Old sheet	61.00-63.00
Old cast	63.00-64.00

Turnings, clean and dry	
High grade	57.00-58.00
Mixed grade (max. 5% Zn)	54.00-55.00
Aluminum-copper radiators	137.00-141.00
Nonferrous auto shred (90% alum.) *	68.00-70.00

* Unmixed full truckload, "twitch" grade

DOMESTIC ALUMINUM PRODUCERS

Buying prices for processed used aluminum cans in carload lots, f.o.b. shipping point

(rev. 05/14/18)

Used beverage can scrap	84.00-86.00

MILLS, SPECIALTY CONSUMERS' BUYING PRICES

(rev. 05/14/18)

Segregated low copper alloy clips	
5052	102.00-104.00
3105	83.00-85.00
Mixed low copper alloy clips	80.00-81.00
Painted siding	77.00-79.00

To become a price contributor see "Metal Exchanges" page.

Scrap Prices Today

Copper scrap price changes were made for: **Atlanta, Boston, Buffalo, Chicago, Cincinnati, Cleveland, Detroit, Houston, Los Angeles, New York, Philadelphia, Pittsburgh, San Francisco, St. Louis, Montreal, Toronto**

Aluminium scrap price changes were made for: **Atlanta, Boston, Buffalo, Chicago, Cincinnati, Cleveland, Detroit, Houston, Los Angeles, New York, Philadelphia, Pittsburgh, San Francisco, St. Louis, Montreal, Toronto**

Lead scrap prices were reviewed for: **Atlanta, Boston, Buffalo, Chicago, Cleveland, Detroit, Houston, New York, Philadelphia, Pittsburgh, San Francisco, St. Louis, Montreal**

Lead scrap price changes were made for: **Toronto**

Zinc scrap prices were reviewed for: **Atlanta, Boston, Buffalo, Chicago, Detroit, Houston, Los Angeles, New York, San Francisco, St. Louis, Montreal, Toronto**

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

AMM SCRAP IRON AND STEEL PRICES

PRICES EFFECTIVE TUESDAY, MAY 15, 2018

CONSUMER BUYING PRICES

Estimated domestic consumer buying prices in US$/gross ton; delivered mill price. (a) Appraisal price NA--Not available †Canadian currency; in net tons

	Alabama	Ark/Tenn Border	Chicago - historical footprint	Chicago - expanded footprint	Cincinnati	Cleveland	Detroit	N. Carolina/ Virginia	Philadelphia	Pittsburgh	South Carolina	Hamilton, Ontario†	Composites
DATE REVIEWED:	*05/04/18*	*05/07/18*	*05/07/18*	*05/07/18*	*05/04/18*	*05/04/18*	*05/03/18*	*05/07/18*	*05/08/18*	*05/04/18*	*05/07/18*	*05/07/18*	......
NO. 1 HEAVY MELT	**335**	**340**	**335**	**340**	**355**	**348**	**340**	**340**	**326**	**360**	**340**	**292**	**340.33**
No. 2 heavy melt	325	......	320	325	......	......	......	......	......	......	......	......	......
No. 1 bundles	407	400	390	385	365	410	375	......	360	371	......	387	......
No. 2 bundles *	......	297	260	260	......	......	......	......	260	241	......	......	......
No. 1 busheling	412	405	385	385	368	410	380	385	360	390	385	373	395.00
No. 1 industrial bundles	......	......	......	......	......	......	......	......	......	397	......	......	......
Shredded auto scrap	365	370	370	370	375	380	355	355	365	380	355	302	370.00
MACHINE SHOP TURNINGS	**280**	**250**	**230**	**245**	**215**	**208**	**210**	**285**	**260**	**220**	**285**	**......**	**......**
Cast iron borings	......	......	271	271(a)	......	......	......	......	......	225	......	......	......
Cut structural/plate, 2' max	......	......	459	459	......	......	......	......	443(a)	......	......	......	......
Cut structural/plate, 3' max.	375	......	......	......	......	......	......	......	378(a)	392	......	......	......
Cut structural/plate, 5' max.	355	365	370	370	365	370	355	350	336	378	350	313	......
Foundry steel, 2' max.	......	......	359	359	......	317	370	......	418(a)	320(a)	......	......	......
Cupola cast	......	......	407	407	......	240	420(a)	......	320(a)	353(a)	......	......	......
CLEAN AUTO CAST	**......**	**......**	**445**	**445**	**......**	**385(a)**	**450(a)**	**......**	**361(a)**	**392**	**......**	**......**	**......**
Unstripped motor blocks	......	......	354	354	......	425	......	......	320(a)	465(a)	......	......	......
Heavy breakable cast	......	......	352	352	......	225	......	......	266(a)	303	......	......	......
Drop broken machinery cast	......	......	387	387	......	353	......	......	371(a)	......	......	......	......
Rail crops, 2' max.	......	......	450(a)	450(a)	......	480(a)	......	......	360	465(a)	......	......	......
Random rails	......	......	364(a)	364(a)	......	......	......	......	300(a)	385(a)	......	......	......
Steel car wheels	......	......	380	380	......	435(a)	......	......	......	......	......	......	......
Rerolling rails	......	......	390	390	......	......	......	......	......	......	......	......	......
STEEL (TIN) CAN BUNDLES	**......**	**......**	**323**	**323**	**......**	**345**	**335**	**......**	**......**	**305**	**......**	**......**	**......**

* Shredders may also be considered consumers for this grade

AMM INDEXES

Ferrous Scrap Export Index ($/tonne, evaluated 05/09/18)	
HMS 1&2 (80:20) East Coast (f.o.b. New York)	327.75
HMS 1&2 (80:20) West Coast (f.o.b. Los Angeles)	371.00
Shredded Steel Scrap, East coast (f.o.b New York)	333.75
Midwest Ferrous Scrap Index ($/gross ton, evaluated 05/10/18)	
No. 1 heavy melt	337.00
No. 1 busheling	384.47
Shredded steel scrap	364.42
MB Iron Ore Index ($/tonne, evaluated 05/15/18)	
MBIO Index	67.28

CONSUMER BUYING PRICE TREND

Estimated trends in US$/gross ton, from prior month

	Houston	Seattle/Portland
DATE REVIEWED:	*05/08/18*	*05/08/18*
No. 1 heavy melt	-20	-10
No. 1 busheling	-10	......
Shredded auto scrap	-20	-10
Machine shop turnings	-20	-10
Cut structural/plate, 5' max	-20	-10

To become a price contributor see "Metal Exchanges" page.

DEALER SELLING PRICES

Estimated prices in US$/gross ton, shipping point dealer yard †Canadian currency; in net tons

	Atlanta	Buffalo	Houston	St. Louis	Montreal†
DATE REVIEWED:	*05/07/18*	*05/04/18*	*05/08/18*	*05/09/18*	*05/08/18*
No. 1 heavy melt	293	270	259	277	315
No. 1 bundles	......	......	......	340	......
No. 1 busheling	353	358	272	340	332
Shredded auto scrap	310	327	290	325	345
Machine Shop Turnings	180	168	182	170	275
Cut structural/plate, 5' max.	303	280	289	287	330

EXPORT YARD BUYING PRICES

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

	Boston	L.A.	N.Y.	Philly	S.F.	Seattle/Portland
DATE REVIEWED:	*05/09/18*	*05/10/18*	*05/10/18*	*05/09/18*	*05/10/18*	*05/10/18*
No. 1 heavy melt	305	180	300	305	145	175
No. 2 bundles	210	140	250	230	105	......
No. 1 busheling	......	190	......	......	160	......
Machine shop turnings	......	120	250	......	115	115
Mixed cast	315	......	310	305	......	......
Unstripped motor blocks	290	170	315	300	145	150
Auto bodies	200	140	270	270	105	160
Cut structural/plate 5' max.	315	190	310	315	155	185

Scrap Prices Today

Ferrous scrap price changes were made for these cities: **None**

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

AMM STAINLESS STEEL SCRAP PRICES

PRICES EFFECTIVE TUESDAY, MAY 15, 2018

DEALER BUYING PRICES

	Boston	Buffalo	Chicago	Cleveland	Detroit	Houston	L.A.	N.Y.	P'burgh	S.F.	Southeast	Montreal†
DATE REVIEWED:	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*
DEALERS' BUYING PRICES (¢/lb.) † Canadian currency												
316 solids, clips	55-66	49-55	68-72	50-65	65-66	60-65	50-52	62-63	55-60	50-62	55-60	104-106
304 solids, clips	35-43	45-46	42-46	40-50	46-52	40-45	40-44	42-43	45-50	40-44	42-43	71-72
304 turnings	34-38	25-26	36-40	35-40	38-44	31-40	28-32	34-35	35-40	28-32	38-39	59-60
304 new clips (prompt industrial scrap)	......	45-46	42-46	40-50	46-52	......	40-44	42-43	45-50	40-44	42-43	71-72
430 new clips (prompt industrial scrap)	11-15	......	13-15	9-11	14-16	......	......	11-13	9-11	......	8-9	......
DEALERS' BUYING PRICES (US$/gross ton) † Canadian currency												
316 solids, clips	1,232-1,478	1,098-1,232	1,523-1,613	1,120-1,456	1,456-1,478	1,344-1,456	1,120-1,165	1,389-1,411	1,232-1,344	1,120-1,389	1,232-1,344	2,330-2,374
304 solids, clips	784-963	1,008-1,030	941-1,030	896-1,120	1,030-1,165	896-1,008	896-986	941-963	1,008-1,120	896-986	941-963	1,590-1,613
304 turnings	762-851	560-582	806-896	784-896	851-986	694-896	627-717	762-784	784-896	627-717	851-874	1,322-1,344
304 new clips (prompt industrial scrap)	......	1,008-1,030	941-1,030	896-1,120	1,030-1,165	......	896-986	941-963	1,008-1,120	896-986	941-963	1,590-1,613
430 new clips (prompt industrial scrap)	246-336	......	291-336	202-246	314-358	......	......	246-291	202-246	......	179-202	......

BROKER/PROCESSOR BUYING PRICES

	Chicago	Cleveland	Detroit	Houston	N.Y.	P'burgh	Southeast
DATE REVIEWED:	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*
BROKER/PROCESSOR BUYING PRICES (¢/lb.)							
316 solids, clips	90-91	90-91	90-91	86-91	90-91	90-91	90-91
304 solids, clips	64-65	64-65	64-65	62-65	62-65	64-65	64-66
304 turnings	58-60	58-60	58-60	54-60	55-60	58-60	58-59
430 bundles, solids	23-25	......	22-23	20-24	......	23-24	23-24
430 turnings	15-20	......	......	......	......	16-20	16-20
409 bundles, solids	20-23	......	20-22	17-20	......	20-21	20-22
409 turnings	12-17	......	12-13	......	......	13-16	13-17
BROKER/PROCESSOR BUYING PRICES (US$/gross ton)							
316 solids, clips	2,016-2,038	2,016-2,038	2,016-2,038	1,926-2,038	2,016-2,038	2,016-2,038	2,016-2,038
304 solids, clips	1,434-1,456	1,434-1,456	1,434-1,456	1,389-1,456	1,389-1,456	1,434-1,456	1,434-1,478
304 turnings	1,299-1,344	1,299-1,344	1,299-1,344	1,210-1,344	1,232-1,344	1,299-1,344	1,299-1,322
430 bundles, solids	515-560	......	493-515	448-538	......	515-538	515-538
430 turnings	336-448	......	......	......	......	358-448	358-448
409 bundles, solids	448-515	......	448-493	381-448	......	448-470	448-493
409 turnings	269-381	......	269-291	......	......	291-358	291-381

CONSUMER BUYING PRICES

	Pittsburgh
DATE REVIEWED:	*05/10/18*
CONSUMER BUYING PRICES (¢/lb.)	
316 solids, clips	98-101
304 solids, clips	68.5-70.5
304 turnings	61.65-63.45
430 bundles, solids	27.9-28.8
409 bundles, solids	23.44-24.33
CONSUMER BUYING PRICES (US$/gross ton)	
316 solids, clips	2,195-2,262
304 solids, clips	1,534-1,579
304 turnings	1,381-1,421
430 bundles, solids	625-645
409 bundles, solids	525-545

To become a price contributor see "Metal Exchanges" page.

EXPORT YARD BUYING PRICES

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

	Boston	L.A.	N.Y.	Philly	S.F.
DATE REVIEWED:	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*	*05/15/18*
STAINLESS STEEL SCRAP PRICES (¢/lb.)					
304 solids, clips	......	55.8-58.04	63-64	63-64	55.8-58.04
304 turnings	......	31.25-32.37	40-42	40-42	31.25-32.37
430 bundles, solids	11-12	8.93-9.82	10-12	10-12	8.93-9.82
STAINLESS STEEL SCRAP PRICES (US$/gross ton)					
304 solids, clips	......	1,250-1,300	1,411-1,434	1,411-1,434	1,250-1,300
304 turnings	......	700-725	896-941	896-941	700-725
430 bundles, solids	246-269	200-220	224-269	224-269	200-220

(a) Appraisal price

Scrap Prices Today

Dealer buying prices were reviewed for: **Buffalo, Cleveland, Los Angeles, New York, Pittsburgh, Montreal**
Dealer buying price changes were made for: **Boston, Chicago, Detroit, Houston, San Francisco, Southeast**
Broker/processor buying prices were reviewed for: **Pittsburgh**
Broker/processor buying price changes were made for: **Chicago, Cleveland, Detroit, Houston, New York, Southeast**
Export yard buying prices were reviewed for: **Boston**
Export yard buying price changes were made for: **Los Angeles, New York, Phiadelphia, San Francisco**

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

METAL EXCHANGES

PRICES EFFECTIVE TUESDAY, MAY 15, 2018

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.

	05/15/18		05/14/18	
	Bid	Ask	Bid	Ask
ALUMINUM -- HIGH GRADE				
1st session				
Cash	2,312.00	2,313.00*	2,285.00	2,285.50*
3 months	2,310.00	2,310.50	2,295.00	2,296.00
	Stocks	1,247,100	Stocks	1,259,300
ALUMINUM -- ALLOY (380-1, DIN 226, ADC 12)				
1st session				
Cash	1,875.00	1,880.00*	1,920.00	1,930.00*
3 months	1,885.00	1,895.00	1,930.00	1,940.00
	Stocks	12,100	Stocks	12,100
ALUMINUM-ALLOY (North American Special)				
1st session				
Cash	1,818.00	1,820.00*	1,798.00	1,800.00*
3 months	1,850.00	1,860.00	1,835.00	1,845.00
	Stocks	170,700	Stocks	170,920
COBALT				
1st session				
Cash	90,500.00	91,000.00*	91,000.00	91,500.00*
3 months	90,500.00	91,000.00	91,000.00	91,500.00
	Stocks	585	Stocks	586
COPPER -- GRADE A				
1st session				
Cash	6,822.00	6,822.50	6,826.00	6,828.00
3 months	6,861.00	6,863.00*	6,860.00	6,862.00*
	Stocks	291,350	Stocks	289,975
LEAD				
1st session				
Cash	2,345.50	2,346.00*	2,379.00	2,380.00*
3 months	2,358.50	2,359.00	2,391.00	2,392.00
	Stocks	131,225	Stocks	131,225
MOLYBDENUM				
1st session				
Cash	24,000.00	26,000.00*	24,000.00	26,000.00*
3 months	24,000.00	26,000.00	24,000.00	26,000.00
	Stocks	0	Stocks	0
NICKEL				
1st session				
Cash	14,480.00	14,490.00*	14,310.00	14,320.00*
3 months	14,550.00	14,555.00	14,350.00	14,355.00
	Stocks	308,478	Stocks	311,448
TIN				
1st session				
Cash	21,000.00	21,025.00*	21,000.00	21,025.00*
3 months	20,900.00	20,925.00	20,925.00	20,950.00
	Stocks	2,290	Stocks	2,380
ZINC -- SPECIAL HIGH GRADE				
1st session				
Cash	3,060.00	3,060.50*	3,020.00	3,020.50*
3 months	3,079.00	3,080.00	3,044.00	3,045.00
	Stocks	232,800	Stocks	233,700

NEW YORK FUTURES

COMEX COPPER	
(¢/pound)	
Comex, high grade, electrolytic cathode	
Settlement (eff. 05/15/18)	
Spot (May)	304.25¢
Jun	304.60¢
Jul	305.60¢
Aug	306.75¢
Opening stocks, short tons	248,986
COMEX GOLD	
(US$/troy ounce)	
Comex settlement (99.5%, eff. 05/15/18)	
May	$1,288.90
Jun	$1,290.30
Aug	$1,296.20
Oct	$1,302.50
COMEX SILVER	
(¢/troy ounce)	
Comex settlement (99.5%, eff. 05/15/18)	
May	1,619.40¢
Jun	1,622.50¢
Jul	1,626.90¢
Sep	1,635.50¢
PLATINUM AND PALLADIUM	
(US$/troy ounce)	
(Nymex settlement prices, eff. 05/15/18)	
Platinum (99.95%), Jul	$897.20
Platinum (99.95%), Oct	$902.10
Palladium (99.95%), Jun	$983.20
Palladium (99.95%), Sep	$980.10
NATURAL GAS	
(¢/mmBtu)	
(Nymex settlement prices, eff. 05/15/18)	
Henry Hub, Jun	$283.60
HOT-ROLLED COIL	
(US$/short ton)	
(Nymex settlement prices, eff. 05/15/18)	
May	$875.00
Jun	$862.00
Jul	$827.00
Aug	$815.00
MIDWEST NO. 1 BUSHELING FERROUS SCRAP	
(US$/gross ton)	
(Nymex settlement prices, eff. 05/15/18)	
Jun	$395.00
Jul	$392.00
Aug	$385.00
Sep	$385.00

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SHANGHAI FUTURES EXCHANGE

(in China yuan/tonne)

(prices effective 05/15/18)

Aluminum	14,595
Copper	51,000
Lead	19,500
Zinc	23,900

EXCHANGE RATES

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

	$ per	per $
Euro	1.1858	0.8433
Canada (dollar)	0.7767	1.2876
Japan (yen)	0.009067	110.2850
Britain (pound)	1.3508	0.7403
China (yuan)	0.1568	6.3778
Mexico (peso)	0.0507	19.7330
Russia (Ruble)	0.0160	62.5047
Switzerland (franc)	1.0003	0.9997
Australia (dollar)	0.7472	1.3383
South Africa (Rand)	0.0795	12.5769

PRICES EFFECTIVE TUESDAY, MAY 15, 2018

PRECIOUS METALS

(all precious metal prices effective 05/15/18)

GOLD	
(US$/troy ounce)	
Handy and Harman (bullion base)	$1,295.00
Handy and Harman (fabricated form)	$1,437.450
Engelhard (bullion base)	$1,299.85
Engelhard (fabricated form)	$1,397.34
IRIDIUM	
(US$/troy ounce)	
Johnson Matthey	$1,250.00
PLATINUM	
(US$/troy ounce)	
Engelhard (unfab.)	$904.00
Engelhard (fab.)	$1,004.00
Johnson Matthey	$902.00
PALLADIUM	
(US$/troy ounce)	
Engelhard (unfab.)	$975.00
Engelhard (fab.)	$1,075.00
Johnson Matthey	$974.00
RUTHENIUM	
(US$/troy ounce)	
Johnson Matthey	$250.00
RHODIUM	
(US$/troy ounce)	
Johnson Matthey	$2,100.00
SILVER	
(¢/troy ounce)	
Engelhard (bullion base)	1,626.00¢
Engelhard (fabricated form)	1,951.20¢
Handy and Harman (bullion base)	1,629.40¢
Handy and Harman (fabricated form)	2,036.80¢
Heraeus Precious Metals	1,629.80¢
Metalor USA Refining	1,625.40¢

FOOTNOTE

* Price is sourced from U.S. Department of Commerce data compiled by the U.S. Geological Survey.

BASE METALS

ALUMINUM	
LME(99.7%) unofficial prices Spot(¢/lb)	105.05
3-month (¢/lb)	105.01
Midwest Premium (rev. 05/15/18)	22.00¢-22.50¢
AMM Free Market, ¢/lb	127.03¢-127.53¢
6063 extrusion billet upcharge	15.00¢-17.00¢
Domestic producer estimated prices ($/lb)	
C355.2	1.51
A356.2	1.46
6061 (extrusion hom.)	1.29-1.31
6063 (extrusion hom.)	1.37-1.39
SECONDARY ALUMINUM	
AMM Free Market, ¢/lb, delivered Midwest (rev. 05/14/18)	
A380.1	99.00-101.00
319.1	107.00-109.00
356.1	112.00-114.00
A360.1	110.00-111.00
A413.1	110.00-111.00
COPPER	
Premium (rev. 05/15/18)	5.50¢-6.00¢
AMM free market cathode, ¢/lb	309.75¢-310.25¢
LEAD	
Premium (rev. 05/15/18)	9.00¢-11.00¢
AMM free market price, ¢/lb	115.37¢-117.37¢
NICKEL	
4x4 cathode	
Premium (rev. 05/15/18)	35.00¢-45.00¢
AMM free market price, ¢/lb	691.69¢-701.69¢
Briquette	
Premium (rev. 05/15/18)	28.00¢-35.00¢
AMM free market price, ¢/lb	684.69¢-691.69¢
TIN	
Grade A premium (US$/tonne) (rev. 05/15/18)	$550.00-$625.00
AMM free market price US$/tonne	$21,550.00-$21,625.00
¢/lb	977.50¢-980.90¢
ZINC	
Special high grade premium (rev. 05/15/18)	8.50¢-9.25¢
AMM free market price, ¢/lb	147.28¢-148.03¢
SHG average week ending 05/11/18	147.16¢

ZINC - DIE CASTING ALLOYS

(rev. 05/15/18)

	Premium	Price, ¢/lb
Nos. 3 and 7	18.00¢-19.00¢	156.78¢-157.78¢
No. 5	19.00¢-21.00¢	157.78¢-159.78¢
No. 2	21.00¢-23.00¢	159.78¢-161.78¢
Zinc-aluminum foundry alloys		
No. 8	19.00¢-21.00¢	157.78¢-159.78¢
No. 12	22.00¢-24.00¢	160.78¢-162.78¢
No. 27	27.00¢-30.00¢	165.78¢-168.78¢

MINOR METALS

ANTIMONY (rev. 05/11/18)	
MB free market, US$/tonne	$8,050.00-$8,350.00
BISMUTH (rev. 05/11/18)	
MB free market, US$/lb	$4.90-$5.30
CADMIUM (rev. 05/11/18)	
MB free market	
min 99.95%, ¢/lb in warehouse	135.00¢-150.00¢
min 99.99%, ¢/lb in warehouse	135.00¢-155.00¢
CHROMIUM METAL (rev. 05/11/18)	
MB free market, US$/tonne	$13,250.00-$13,995.00
COBALT (rev. 05/11/18)	
MB free market	
High grade, US$/lb in warehouse	$43.20-$44.05
Low grade, US$/lb in warehouse	$43.20-$44.00
GERMANIUM (rev. 05/11/18)	
MB free market, US$/kg	$1,070.00-$1,320.00
INDIUM (rev. 05/11/18)	
MB free market, US$/kg	$320.00-$350.00
MAGNESIUM	
MB Europe free market, US$/tonne (rev. 05/11/18)	$2,450.00-$2,475.00
AMM free market (US), US$/lb (rev. 04/25/18)	$1.98-$2.00
MERCURY (rev. 05/11/18)	
MB free market, US$/flask	$2,750.00-$3,000.00
SELENIUM (rev. 05/11/18)	
MB free market, US$/lb	$23.50-$25.00
SILICON METAL (rev. 05/10/18)	
AMM free market, ¢/lb	140.00¢-143.00¢

TITANIUM

Estimated market prices in US$/lb, f.o.b. shipping point.

Sponge, imported for consumption, including tariff	
Japan, rotor quality (rev. 05/14/18) *	$4.85
Ingot, 6Al-4V (rev. 04/10/18)	$8.00-$8.25
Plate, alloy, AMS 4911 1/2 inch x 48-in x 120-in (rev. 04/10/18)	$30.00-$32.00
Bar, alloy, AMS 4928 1-in. dia. round (rev. 04/10/18)	$23.00-$25.00
Plate, commercially pure, ASTM-B265 Grade 2, 1/2-in x 96-in x 240-in (rev. 04/10/18)	$9.50-$10.00
Sheet, commercially pure, ASTM-B265 Grade 2, 1/8-in x 36-in x 96 in (rev. 04/10/18)	$12.00-$13.00

FERROALLOYS

FERROCHROME (rev. 05/10/18)	
High carbon	
AMM free market, ¢/lb	140.00¢-148.00¢
Low carbon	
AMM free market, ¢/lb	
0.05%C-65% min Cr	240.00¢-245.00¢
0.10%C-62% min Cr	225.00¢-230.00¢
0.15%C-60% min Cr	220.00¢-223.00¢
FERROMANGANESE (rev. 05/10/18)	
High carbon	
AMM free market, US$/long ton	$1,470.00-$1,550.00
Medium carbon	
AMM free market, ¢/lb	112.00¢-114.00¢
Low carbon	
AMM free market, ¢/lb	116.00¢-119.00¢
SILICOMANGANESE (rev. 05/10/18)	
AMM free market, ¢/lb	66.00¢-68.00¢
FERROSILICON (rev. 05/10/18)	
AMM free market, ¢/lb	104.00¢-108.00¢
MOLYBDENUM (rev. 05/10/18)	
AMM free market	
Canned molybdic oxide, US$/lb	$11.90-$12.00
FERROMOLYBDENUM (rev. 05/10/18)	
AMM free market, US$/lb	$13.50-$13.70
TUNGSTEN (rev. 05/11/18)	
MB free market, APT, US$/mtu	$333.00-$342.00
VANADIUM PENTOXIDE (rev. 05/11/18)	
MB free market, min 98% V2O5, US$/lb	$14.50-$15.00
FERROVANADIUM (rev. 05/10/18)	
AMM free market, US$/lb	$32.25-$33.00

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