DAILY

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FOCUS: Lithium's volatile evolution prompts companies to rethink how best to trade

LONDON, BEIJING

The dramatic shift in the dynamics of the lithium market over the past four years has changed business practices and increased demand for price transparency.

The dramatic shift in the dynamics of the lithium market over the past four years has changed business practices and increased demand for price transparency.

Fueled by anticipated growth in the global battery market and the consequent price swings and supply responses in China, the epicenter of the lithium market, this volatility has at different times disadvantaged one side of the market or the other.

Buyers and sellers have historically chosen to lock in fixed prices on long-term contracts, which "has risks for buyer and seller", Daniel Jimenez, partner at mining consultancy iLimarkets and former vice president of sales at Chilean lithium producer SQM, told Fastmarkets.

Now though, companies are seeking greater exposure to the spot market, concerned that they will miss out when a price swing works in their favor if they are locked into long-term fixed-price contracts. Many have therefore been changing the way that they conduct business across the supply chain.

(Governments, interested in ensuring maximal returns on their natural resources of lithium, also incidentally support more transparent and market-based pricing, as this interview shows.)

Below, Fastmarkets outlines what is driving these changes in behavior and what it means for lithium sales and procurement.

WILD PRICE SWINGS

The lithium industry paid scant attention to the insubstantial spot market before the dramatic spikes of 2015. There was little reason to do so given the tiny proportion of business done on spot - lithium was largely traded on long-term contracts at a price agreed between the buyer and the seller in a steady market.

More recently, however, the rapid growth in lithium demand and the production of lithium compounds in China have fundamentally altered the market's dynamics and turned the focus of the market onto independently assessed benchmark prices.

China dominates lithium's upstream and downstream - it is home to more than half the world's production of lithium ion batteries and 61% of global lithium chemical production.

Fastmarkets' lithium prices have swung dramatically in the past four years. The carbonate 99.5% Li2CO3 min, battery grade, spot price exw domestic China almost quadrupled to \$27 per kg in June 2016 from \$7.70 per kg in June 2015.

The price then fell by more than half to 70,000-77,000 yuan (\$10,175-11,193) per tonne on June 20, 2019 from 165,000-175,000 yuan per tonne on December 21, 2017.

(Fastmarkets changed the currency and unit in this price from dollars per kg to yuan per tonne in November 2017 to better capture the market in China.)

Fastmarkets has captured similar behavior in the price of battery grade lithium hydroxide monohydrate compounds.

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FUNDAMENTAL DRIVERS

The major swings in lithium prices were largely driven by marginal output from new producers coming online in response to higher prices caused by growing demand, mostly from the battery sector, Fastmarkets senior analyst Vicky Zhao said.

This took the lithium market from undersupply in 2015-2017 to oversupply in 2018. Fastmarkets' research team estimated global demand in 2017 as high as 237,000 tonnes of lithium carbonate equivalent (LCE), exceeding total global supply of as much as 228,000 tonnes.

Fastmarkets pegged demand of LCE at 262,000 tonnes in 2018 but by then supply had swollen to 290,000 tonnes, predominantly because of the increase in lithium units produced by converters in China. These typically have higher operating costs than lithium chemical producers in Chile or Argentina - the other main lithium-producing nations.

In 2019, Fastmarkets expects supply of lithium to be as high as 355,000 tonnes of LCE, outstripping demand of 300,000 tonnes and causing the global surplus to grow.

This marginal production at the higher end of the cost curve is the first to come under pressure when prices fall.

While high-cost producers may sell material close to or below production costs to generate cashflow for short periods, this is unsustainable in the long term, Zhao said: producers at the high end of the cost curve may have to halt output.

Earlier this year North American Lithium suspended its lithium spodumene production because of lower prices demanded by spodumene converters in China.

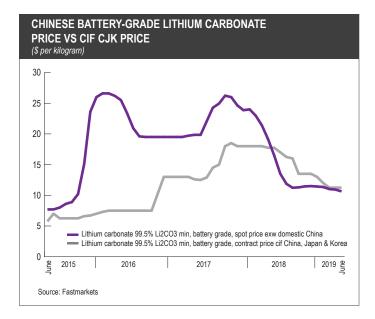
Lithium spodumene is used in the production of lithium carbonate and hydroxide in China. Lower prices for these compounds in China have pressured spodumene prices lower over the past year, causing some defaults on contracts at the end of 2018.

The lithium spodumene 5-6% LiO2 min, cif China price fell by 34% to \$585-650 per tonne on June 26 from \$900-970 per tonne on June 27 last year.

CHANGES TO STRATEGY

The response of prices to both demand outstripping supply initially and now, conversely, to supply temporarily outstripping demand, has changed how many participants buy or sell in this volatile market.

In the absence of a price benchmark that would enable them to manage price risk efficiently, some lithium producers have over the



past three years shortened the length of their contracts. In China, short-term contracts are increasingly the norm.

"Affected by the frequent fluctuation of lithium prices since last year, most cathode producers in China choose to negotiate with lithium producers each month or even each week when they need to purchase material due to the fear of further price changes," Liu Yiding, the general manager of Sichuan Fuhua New Energy, told Fastmarkets.

"Some cathode makers agree on a reasonable price fluctuation range when they [sign long-term contracts]," he added. "The current lithium market fluctuates a lot and concluded prices are in a wide range. There are some transaction prices lower than spot prices but, when bargaining with suppliers, we will refer to spot prices."

Consumers of lithium compounds have also responded by managing with lower stock levels. When lithium was in short supply between the end of 2015 and the start of 2018, many locked in as much material as they could to avoid high prices.

But since the start of 2018 when the market swung to oversupply, lithium consumers have operated with lower stocks, opting to buy more on a spot basis in a downward-trending market.

Developments such as this have ensured that market participants are also looking for more transparent pricing mechanisms. Producers and consumers sometimes refer to weighted averages calculated using trade statistics when negotiating prices, especially during periods of high volatility, in an attempt to settle at a fair and independent level.

But this is not always the case. One side could be put at a disadvantage by trade statistics because they ignore aspects such as the quality of material that have an impact on the final price of lithium compounds.

Although trade statistics are still considered by some during negotiations, iLimarkets' Jimenez argues that other options are more favorable.

"The most common pricing practice among lithium players is trade statistics, which in my opinion are the worst index because of serious contamination of data: mix of grades, off spec product, rebates (not accounted for in trade stats), transfer pricing etc.

Therefore, a reliable spot price index will the closest to perfect and would certainly enable long-term and fair relationships," he said.

Instead, other producers and consumers are seeking more exposure to the spot market, hoping to secure business at the latest price, making transparent pricing data more relevant.

(It is worth noting that while trade statistics do capture spot transactions, by their nature they also lag the market, thus reducing their utility.)

Increasingly, the price agreed in a term contract includes a floating element with a floor and a ceiling. The price rises or falls in line with changes discovered by a price reporting agency (PRA) such as Fastmarkets.

Referencing a third-party price helps smooth contract negotiations for the supply of lithium, sources said. If a buyer and seller cannot agree on a price, they will typically use a weighted average of a specific index or trade statistics.

This has led to the marginal tonnage sold in the spot market, the basis of PRA prices such as those published by Fastmarkets, gaining in relevance and support.

CHINA'S INFLUENCE IN SPOT PRICING TO GROW FURTHER

Some lithium producers remain uncomfortable with the concept of settling contracts basis an independent, market-based price, preferring long-term fixed prices.

But regardless of this, lithium companies must increasingly pay attention to the Chinese spot market to understand market



dynamics, particularly while that market grows in size and in importance.

Spot and short-term sales also look set to gain in relevance given their increasing share of total global sales, according to Zhao.

Zhao expects global lithium production to reach 355,000 tonnes this year, including 240,000 tonnes from China.

"In 2019, more material will be traded on the spot market due to the downward trend of lithium prices and the supply surplus, especially in China, owing to weaker price expectations and weaker demand due to the decrease in new energy vehicle subsidies in China," she said.

Of course, producers acknowledge the significance of pricing in $\mbox{\it China}.$

"China is currently the largest and fastest-growing lithium market. We are convinced that China will be leading the demand growth over the coming years so we need to be present," Felipe Smith, commercial vice president Asia Pacific at SQM, told Fastmarkets

In addition, Chinese producers are likely to look to book more sales overseas, particularly in the wider Asian region, when the arbitrage allows, because of the domestic surplus and the small premium still available in nearby export markets, Zhao said.

"The growth in the market in China, combined with the seaborne material traded on a cif China, Japan and Korea basis will therefore provide a global benchmark that is both responsive to the domestic trends in China as well as the market for material from international suppliers," Zhao said.

In the lithium market, price volatility in China and beyond, driven by the fundamentals of demand and supply, has generated the spot-traded volumes that feed PRA's benchmarks at the same time as it has driven the recognition of their practical application and value.

MARTIM FACADA, CARRIE SHI



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Assessed

25 Jul 19

19 Jul 19

19 Jul 19

19 Jul 19

19 Jul 19

25 Jul 19

19 Jul 19

19 Jul 19

19 Jul 19

28 Jun 19

Assessed

19 Jul 19

19 Jul 19

19 Jul 19

24 Jul 19

19 Jul 19

24 Jul 19

Base metals

FASTMARKETS' KEY PRICES			
Daily base metal prices and premiums (\$/t)			
	Price	Change [†]	Assessed
LME copper cash settlement	6,010.00	1.04%	▲ 25 Jul 19
Weekly copper premium (cif Rotterdam)	40.00-50.00	0%	23 Jul 19
Daily copper premium (cif Shanghai)	53.00-69.00	0%	25 Jul 19
Daily copper premium (in-whs Shanghai)	53.00-70.00	0%	25 Jul 19
LME aluminium cash settlement	1,795.50	-1.75%	▼ 25 Jul 19
Daily aluminium premium DUP (in-whs Rotterdam)	95.00-105.00	5.26%	▲ 25 Jul 19
Twice weekly aluminium premium DP (in-whs Rotterdam)	6,185.00-6,185.0	0 -3.36%	▼ 24 Jul 19
Weekly aluminium premium (cif Shanghai)	95.00-105.00	0%	16 Jul 19
Twice weekly aluminium premium (cif MJP)	90.00-100.00	-7.32%	▼ 23 Jul 19
Weekly aluminium premium (cif MKP)	95.00-100.00	0%	23 Jul 19
Twice weekly aluminium premium (dlvd US MW)	0.178-0.183	0%	23 Jul 19
LME zinc cash settlement	2,436.00	-1.66%	▼ 25 Jul 19
Weekly zinc premium (fca duty-paid Rotterdam)	90.00-110.00	0%	23 Jul 19
Weekly zinc premium (in-whs Shanghai)	80.00-90.00	0%	23 Jul 19
LME nickel cash settlement	13,995.00	-4.7%	▼ 25 Jul 19
Weekly nickel premium (cif Shanghai)	180.00-200.00	-15.56%	▼ 23 Jul 19
LME lead cash settlement	2,123.50	5.12%	▲ 25 Jul 19

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Ferro-molybdenum, basis 65-70% Mo. in-whs Rotterdam (\$/kg Mo) Molybdic oxide, in-whs Rotterdam (\$/lb Mo) Ferro-tungsten, basis 75% W, in-whs Rotterdam (\$/kg W) Cobalt (low-grade) in-whs Rotterdam (\$/lb) Cobalt (high-grade) in-whs Rotterdam (\$/lb)

FASTMARKETS' KEY PRICES: INDICES

Alumina index fob Australia (\$/t)

Charge chrome index 50% Cr cif

Manganese ore index 44% Mn cif

Manganese ore index 37% Mn cif Tianjin China (\$/dmtu)

Manganese ore index 37% Mn fob Port

MB Index CFR Turkey HMS 1&2 (80:20)

HMS 1&2 ferrous scrap index (80:20)

Copper concentrate Asia-Pacific index TC import \$/dmt

Copper concentrate Asia-Pacific index RC import US cents/lb

Zinc concentrate spot treatment

Ferro-chrome, 6-8% C, basis 60% Cr. del European consumers (\$/lb Cr)

Silico-manganese, basis 65-75% Mn, 15-19% Si, del European consumers (€/t)

Ferro-silicon, basis 75% Si, del European consumers (€/t)

Ferro-titanium, 70% Ti, ddp (\$/kg)

European consumers (€/t)

Ferro-manganese, basis 78% Mn, del

FASTMARKETS' KEY PRICES: ASSESSMENTS

charge (TC) cif Asia Pacific, \$/t

Shanghai (\$/lb Cr)

Tianiin (\$/dmtu)

Elizabeth (\$/dmtu)

(North Europe material)

fob Rotterdam (\$/t)

Price

303.06

0.72

5.77

4.83

5.63

287.16

266.28

51.60

5.16

Price

0.74-0.84

950-985

925-950

4.70-4.95

27.30-27.70

11.80-11.90

28.00-28.80

12.35-12.70

12.55-13.10

1,020.00-1,050.00 0%

260.00-290.00

Change[†]

0.52%

0%

-2 37%

2.77%

2.55%

-1 75%

0.23%

-1.71%

-1.71%

0%

Change[†]

0%

0%

0%

0%

1.29%

2.16%

0.53%

-1.96%

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Base metals

FASTMARKETS' KEY ALUMINIUM PRICES			
	Price	Change [†]	Assessed
Alumina index fob Australia (\$/t)	303.06	0.52%	▲ 25 Jul 19
Group 1 pure 99% Al & litho scrap, del UK (£/t)	1,260-1,300	0%	24 Jul 19
Cast aluminium wheels, del UK (£/t)	1,050-1,080	0%	24 Jul 19
LME aluminium cash settlement (\$/t)	1,795.50	-1.75%	▼ 25 Jul 19
Daily aluminium premium, duty-unpaid (in-whs Rotterdam) (\$/t)	95.00-105.00	5.26%	▲ 25 Jul 19
Weekly aluminium premium, duty-unpaid (cif Shanghai) (\$/t)	95.00-105.00	0%	16 Jul 19
Twice weekly aluminium premium (cif MJP) (\$/t)	90.00-100.00	-7.32%	▼ 23 Jul 19
Weekly aluminium premium, duty-free (cif MKP) (\$/t)	95.00-100.00	0%	23 Jul 19
Twice weekly aluminium premium, dlvd (US MW) (cents/lb)	99.47-99.97	-0.88%	▼ 24 Jul 19
Extrusion billet premium, 6063, duty-paid, in-whs Rotterdam (\$/t)	310-330	0%	19 Jul 19
LM24 pressure diecasting ingot (del UK consumers) (£/t)	1,240-1,280	0%	24 Jul 19
LM6/LM25 gravity diecasting ingot (del UK consumers) (£/t)	1,600-1,660	0%	24 Jul 19
DIN226 pressure diecasting ingot (del European consumers) (€/t)	1,310-1,360	0%	19 Jul 19
Aluminium ingot ADC 12 spot (MJP) \$/tonne	1,420-1,460	-0.35%	▼ 24 Jul 19

LONDON

European zinc market rallies around Nyrstar-Teck 'benchmark' deal, Glencore numbers absent

Market participants are referring to a zinc concentrates deal between miner Teck Resources and smelter Nyrstar as a European benchmark, aligning with deals at the same level in Asia.

Nyrstar locked in 2019 supplies of zinc concentrates with Canada's Teck with Treatment Charges (TCs) set at \$245 per tonne based on an outright cash price of \$2,700 per tonne.

Scales, which adjust TCs when prices rise and fall were placed at 2% below \$2,700 per tonne, 0% between \$2,700 and \$3,000 per tonne and +5% above \$3,000 per tonne.

The deal reflects exactly the same headline terms as the annual contract agreed between Teck and Korea Zinc in Asia, meaning the level, which is a four-year high, constitutes a global benchmark.

"It's been acknowledged by the market. I will sell to Nyrstar at \$245 [TC] and our contract says European number," a source told Fastmarkets, referring to supply contracts that refer to a benchmark rather than a fixed number.

Four separate companies told Fastmarkets they were following the \$245 per tonne TC terms as a benchmark in Europe.

Nyrstar acknowledged in its latest results that a \$245 per tonne deal was in the market but, in keeping with common practice in the zinc concentrates market, did not say whether it had itself done a deal at that level.

The market falling behind a Nyrstar-set level comes with rival European smelter and traditional benchmark setter Glencore's number remaining out of the public domain.

Whether Glencore signed contracts at the same level is a matter of conjecture in the market; in Japan, Mitsui Mining & Smelting locked a deal based on TCs of \$248 per tonne with a cash zinc price of \$3,000 per tonne and zeroed scales.

Teck, Nyrstar and Glencore do not comment on commercial negotiations.

Spot terms for zinc concentrates have risen to their highest level in at least four years and were most recently assessed by Fastmarkets in June at \$260-290 per tonne, up from \$20-40 per tonne a year earlier.

ARCHIE HUNTER

NEW YORK

Trade, politics, tariffs hit metals M&A, PwC says

The headwinds created by political uncertainties, on-and-off trade negotiations and the enactment of tariffs hurt mergers and acquisitions (M&A) activity in the metals sector during the second quarter of this year, according to a quarterly report by consultancy group PwC.

While overall deal volume remained relatively consistent with the trailing 12-month average, overall disclosed deal volume declined to a 24-month low, PwC noted.

Deal value during the second quarter was \$5.3 billion, a decline of 68% over the previous quarter, although deal volume rose by 1% from the previous quarter.

Average deal size in the period was \$75.2 million, a 65% decline from the prior quarter, with a lack of large and megadeals seen. The largest transaction in the second quarter of this year was Wieland-Werke AG's acquisition of Global Brass & Copper Holdings Inc for \$989 million.

"Despite the continued Iull in M&A activity, recent North American trade negotiations and increased steel demand may be an indication of a more favorable deal climate in the coming quarters," PwC said.

"However, corporate and private equity investors will undoubtedly continue to face uncertainties around the global markets and geopolitical factors including Brexit and international trade relations," it added.

Despite having to navigate weak demand and falling prices largely driven by trade conflicts over the last several months, the steel sector experienced demand increases and stabilizing prices in long steel products during the second quarter, PwC noted.

The driver of long steel demand is mainly attributable to increases in nonresidential construction, it said. But higher steel prices still did not materialize overall due to low demand for rolled steel products driven by the automobile industry.

ANDREA HOTTER

NEW YORK

Aluminium facing auto headwinds, Constellium's top executive says

The downward trend in automotive sales in the United States, Europe and China is weighing on aluminium suppliers, although its impact on Constellium NV has been modest, the company's top executive said.

Constellium chief executive officer Jean-Marc Germain highlighted the growth in the company's automotive sector during a call on the company's second-quarter earnings results.

The results would have been greater if not for the "difficult auto market," he said.

"Our auto shipments have increased by 17% in the first half of the year, but if the [auto] market had done better, if automakers had launched some new models, we would have done better," Germain said during the call on Wednesday July 24.

"We are not immune to what happens in the market," he added. Fastmarkets assessed the aluminium P1020A premium, ddp





Base metals

Midwest US, at 17.75-18.25 cents per lb on July 23, unchanged since declining to a 16-month low on July 12.

Additionally, aluminium non-ferrous auto shred and aluminium scrap turnings prices have fallen to decade lows in the US due to plentiful supply and lackluster demand.

Fastmarkets assessed the aluminium scrap non-ferrous auto shred (90% Al) buying price, delivered to Midwest secondary smelters, at 44-46 cents per lb on July 22, unchanged since July 8 but still the lowest level since reaching 41-42 cents per lb on April 6, 2009.

The Netherlands-based company posted shipment volumes of 413,000 tonnes in the second quarter ended June 30, up by 4% year on year from 397,000 tonnes.

Constellium posted net income of \le 17 million (\$18.9 million), down by 69.1% from the \le 55 million in the same 2018 period, despite a 4% gain in revenue to \$1.54 billion during the quarter from \$1.47 billion.

Higher shipments in the Packaging and Automotive Rolled Products segment and consolidation of the company's auto body sheet joint venture, Constellium-UACJ ABS, in Bowling Green, Kentucky, contributed to a 7% year-on-year increase in revenue for the segment.

"SMALL IMPACT" FROM BOEING 737 MAX GROUNDING

The grounding of Boeing's 737 Max models will only have a small impact on the company, Germain said.

"Boeing is a very important customer," he said, "but the 737 Max is just one platform of many. Even if [the 737] doesn't fly until next year, the impact will be small."

The Boeing 737 Max planes were grounded by a number of airlines and governments following two deadly crashes that were later attributed to faulty software.

Boeing delivered 24 of the 737s in the second quarter, the aircraft manufacturer said in a quarterly delivery report issued on July 9, down by 73% from the 89 planes delivered in the first quarter.

Chicago-based Boeing said in late June that it was still working to fix the issue.

RIJUTA DEY BERA

SÃO PAULO

Brazilian aluminium output down 2.4% in June, but rate of decline slows

The rate of decline in Brazil's production of primary aluminium slowed in June, when Norsk Hydro's Albras smelter started to ramp-up production to more than 50% capacity, the country's association for the sector, Abal, said on Wednesday July 24.

Data from Abal showed that the country produced 48,600 tonnes of aluminium ingots and extruded billets in June, 2.40% less than the 49,800 tonnes of June 2018.

Despite Abal still reporting a fall in output, the rate of this downtrend was slower than in May and much slower than had been reported in earlier months.

Brazil produced 50,000 tonnes of primary aluminium in May, down by 3.10% in comparison with 51,600 tonnes in the corresponding month of 2018, while output totaled 48,400 tonnes in April, down by 19.70% year on year from 60,300 tonnes.

For the first half of 2019, total production was down by 17.60% to 294,000 tonnes, compared with 356,800 tonnes in the same part of 2018, the association added.

The Albras smelter, 51%-owned by Norwegian producer Norsk

Hydro, ran at half-capacity for more than a year during an environmental investigation that restricted the Alunorte alumina refinery to operating at 50% capacity.

Federal and state authorities have now authorized Alunorte to return to full throughput again, and the refinery started to increase production following a favorable judicial ruling on May 20. The Albras smelter followed the same path shortly after.

Albras has capacity for around 460,000 tonnes per year. Fastmarkets assessed the aluminium P1020A premium, delivered São Paulo region, at \$220-240 per tonne on July 16. This has been unchanged since April 30 because of an illiquid market and discounts granted by local producers.

RENATO ROSTÁS

NEW YORK

Trade issues, macro sentiment hurt copper demand, Freeport CEO says

Trade issues and macro-economic sentiment were affecting copper prices and short-term consumption, but customer demand was "certainly not falling off a cliff," according to the chief executive officer of US producer Freeport McMoRan.

Richard Adkerson said on Wednesday July 24, during a call for the company's second-quarter results, that uncertainties from the trade dispute between the United States and China were affecting confidence levels among some customers and, to a limited degree, short-term demand.

"We're certainly not falling off a cliff with regard to customer demand, but there is concern due to the trade issues," Adkerson said in the call.

Global markets were at a crossroads, he added, while they waited to see whether the trade issues would be resolved to avoid a more severe contraction in economic growth.

"It's a question to which nobody knows the answer yet," he said. Despite the uncertainties around trade issues, he said, the copper market had been "incredibly tight" through 2018 and into 2019.

"We supply around one-third of the US downstream copper needs from our mines in the US, and last year we were having to buy limited amounts of copper to meet demand from our customers," Adkerson told participants in the call.

"Overall, the market remains tight, and many of our customers are very positive, while there are others that are concerned about trade issues," he added.

According to Adkerson, supply developments continued to support the copper market. There were twice the number of mine disruptions in the first half of 2019 as there were in the first six months of 2018, he said, and inventories were low by historical standards.

Global mine supply was expected to decline in 2019, he said, with an annual deficit expected for the year.

"[But] we remain very positive about the long-term outlook for copper," he said. "Significant new supply is needed to meet long-term demand, and higher prices will be required."

Fastmarkets assessed the copper grade-1 cathode premium, ddp Midwest US, at \$0.07-0.08 per lb on July 23, widening downward from the previous range of \$0.0725-0.08 per lb amid an oversupply of scrap material and weak demand.

ANDREA HOTTER



Ores & alloys

	Price	Change [†]	Assessed
Molybdic oxide, in-whs Rotterdam (\$/lb Mo)	11.80-11.90	2.16%	▲ 24 Jul 19
Molybdic oxide, USA (\$/lb Mo)	11.80-12.20	0%	18 Jul 19
Ferro-molybdenum, basis 65% min, in-whs Rotterdam (\$/kg Mo)	27.30-27.70	1.29%	▲ 24 Jul 19
Tungsten, APT, in-whs Rotterdam (\$/mtu)	210.00-225.00	0%	19 Jul 19
Ferro-tungsten, basis 75% W, in-whs Rotterdam (\$/kg W)	28.00-28.80	0.53%	▲ 24 Jul 19
Ferro-vanadium, basis 78% min, free delivery duty paid consumer plant, 1st grade, Western Europe (\$/kg V)	30.00-31.05	3.47%	▲ 24 Jul 19
US free market ferro-vanadium \$/Ib in-warehouse Pittsburgh	15.00-15.50*	-8.96%	▼ 18 Jul 19
Vanadium pentoxide, min 98% V, (\$/lb V2O5)	6.20-6.70	0%	19 Jul 19
FASTMARKETS' KEY BULK ALLOYS AND O	RE PRICES		
	Price	Change [†]	Assessed
Charge chrome 50% Cr index cif Shanghai (\$/lb Cr)	0.72	0%	19 Jul 19
Manganese ore index 44% Mn cif Tianjin (\$/dmtu)	5.77	-2.37%	▼ 19 Jul 19
Manganese ore index 37% Mn fob Port Elizabeth (\$/dmtu)	4.83	2.77%	▲ 19 Jul 19
Manganese ore index 37% Mn cif Tianjin China (\$/dmtu)	5.63	2.55%	▲ 19 Jul 19
Ferro-chrome, 6-8% C, basis 60% Cr, del European consumers (\$/lb Cr)	0.74-0.84	0%	19 Jul 19
South African UG2 chrome ore concs, index basis 42%	146-146	3.55%	▲ 19 Jul 19
Ferro-manganese, basis 78% Mn, del European consumers (€/t)	1,020-1,050	0%	19 Jul 19
Ferro-manganese, basis 78% Mn, in-whs Pittsburgh (\$/long ton)	1,300-1,400	-1.1%	▼ 18 Jul 19
Silico-manganese, basis 65-75% Mn,		00/	40 1-140
15-19% Si, del European consumers (€/t)	950-985	0%	19 Jul 19

LONDON

Molybdenum prices up on rise in Asia spot activity, Europe follows higher

The global molybdenum market continued to move up in the first half of the week starting on July 22 amid increased spot activity in Asia, with the European market following it higher.

Fastmarkets assessed the price of drummed molybdic oxide, in-warehouse Busan, at \$11.90-12.10 per lb on Wednesday July 24, up from \$11.75-11.85 per kg the previous week.

Strong demand from the steel market in Asia increased liquidity and pushed the price back up after it dipped to \$11.50-11.70 per lb on July 10.

The last time molybdic oxide prices in Busan were trading above \$12 per lb was on June 26, according to Fastmarkets historical data.

European molybdic-oxide market prices then climbed up, as is typical, trading at levels just below the Asian market.

Fastmarkets assessed the price of European drummed molybdic oxide, in-warehouse Rotterdam, at \$11.80-11.90 per lb on July 24, up from \$11.70-11.80 per lb previously.

"Rotterdam is driven by Busan and retesting \$12 [per lb] but it's still lagging behind Asia. We need to see more demand first for prices to move higher," a producer said.

The alloy market in Europe also moved up this week, although

activity was slower than in the molybdic oxide market.

Fastmarkets assessed the price of ferro-molybdenum, basis 65%, in-warehouse Rotterdam, at \$27.30-27.70 per kg on Wednesday, up from \$27.15-27.40 per kg on July 17.

"There is still a lot of ferro-molybdenum around and offers aren't aggressive for smaller quantities and there's just no demand for full truck quantities," a trader said. "The market in Rotterdam is oversupplied. It makes more sense to sell in Asia now."

The ferro-molybdenum market in Asia was also trading higher, with business concluded at \$28.50 per kg, in-warehouse Busan, on Thursday July 25, sources said.

Tightening availability and the good demand from the Asian steel sector are pushing offers higher, market sources said.

Still, molybdenum continues to face headwinds from a generally weakening global economy with any further potential upside limited going forward, market sources said.

"Although it seems like prices have reached the bottom for now, the general sentiment in ferro-alloys is not great and I would be cautious taking a long position," a second trader said.

EWA MANTHEY

LONDON

Eramet manganese ore, alloy production in H1 2019 sets new record

Eramet produced record half-year volumes of manganese ore and alloy in the first six months of 2019, the mining and metallurgical group said on Thursday July 25, adding that it was negatively affected by lower prices for manganese and nickel.

Manganese ore volumes transported during the period rose by 9% year on year to a record 2 million tonnes, while external sales hit 1.6 million tonnes, also up 9%.

The group said manganese ore prices declined by 13% year on year, reducing operating income by \le 45 million (\$50 million), but described the market as remaining at a high level above \$6 per dry metric tonne unit (dmtu) until dropping to \$5.75 per dmtu in June.

The average price for manganese ore during the half year was \$6.40 per dmtu the company said.

Fastmarkets' manganese ore 44% Mn, index, cif Tianjin was last calculated at \$5.77 per dmtu on Friday July 19.

Manganese alloy production rose 12% year on year to 376,000 tonnes while sales rose 8% to 367,000 tonnes.

Average prices for ferro-manganese, which makes up 60% of the company's manganese alloy production, came in at €1,551 per tonne in the half year period, down 5% year on year, causing a continued margins squeeze, the company said.

Fastmarkets' price assessment for ferro-manganese basis 78% Mn max, standard 7.5% C, delivered Europe was €1,020-1,050 per tonne also on Friday.

The group's earnings before interest, tax, depreciation and amortization (Ebitda) dropped to \le 307 million in January-June 2019, compared with \le 432 million in the first half of 2018.

Manganese alloys producers have been suffering from squeezed margins due to high ore prices and declining alloy prices, leading to shutdowns.

The squeeze on margins over the six-month period negatively affected Eramet's operating income by €40 million, it said.

The company also cited an 11% drop in London Metal Exchange nickel price over the six-month period, which negatively affected operating income by \in 59 million.

Eramet confirmed a production target of 4.5 million tonnes of manganese ore for the full year 2019.

JANIE DAVIES



FASTMARKETS' KEY MINOR METAL PRICES				
	Price	Change [†]		Assessed
Antimony, ingots (regulus), in-whs Rotterdam (\$/t)	5,950-6,150	-0.41%	•	24 Jul 19
Antimony, MMTA standard grade II, in-whs Rotterdam (\$/t)	5,800-6,000	0%		24 Jul 19
Bismuth, min 99.99% Bi, in-whs Rotterdam (\$/lb)	2.85-3.00	0%		24 Jul 19
Cobalt (standard-grade) in-whs Rotterdam (\$/lb)	12.35-12.70	-1.96%	•	24 Jul 19
Cobalt (alloy-grade) in-whs Rotterdam (\$/lb)	12.55-13.10	-2.1%	•	24 Jul 19
Cobalt sulfate, Co 20.5%, China ex-works (yuan/tonne)	35,000-36,000	0%		24 Jul 19
Indium, min 99.99% In, in-whs Rotterdam (\$/kg)	159-175	0.6%	A	24 Jul 19
Manganese flake, in-whs Rotterdam (\$/tonne)	1,950-2,000	0%		24 Jul 19
Selenium, min 99.5% Se, in-whs Rotterdam (\$/lb)	8.15-9.85	-1.64%	•	24 Jul 19
Tellurium, min 99.9% Te, in-whs (\$/kg)	48.00-60.00	0%		24 Jul 19

SHANGHAI

CHINA COBALT SNAPSHOT: Metal price steady after speculative buying fades

Key data from the Wednesday July 24 pricing session in Shanghai.

COBALT 99.8% CO MIN, EX-WORKS CHINA (in yuan per tonne)						
New price	Previous price	Change to midpoint of range				
220,000-230,000	220,000-230,000	0	0			
Source: Fastmarkets						

COBALT TETROXIDE 72.6% CO MIN, DELIVERED CHINA (in yuan per tonne)						
New price	Previous price	Change to midpoint of range				
145,000-150,000	145,000-150,000	0	0			
Source: Fastmarkets						

COBALT SULFATE 20.5% CO BASIS, EXW CHINA (in yuan per tonne)						
New price	Previous price	Change to midpoint of range				
35,000-36,000	35,000-36,000	0	0			
Source: Fastmarkets						

KEY DRIVERS

- The price of cobalt metal in China is steady so far this week after narrowing upward on July 19 against a backdrop of aggressive speculative buying. But the number of spot trades fell despite active inquiries after investors took a more cautious stance following the increase in prices.
- Spot availability is tightening, according to some suppliers, who said some producers are likely to have less metal to provide to the spot market due to having large-tonnage commitments over the next few months.
- That said, weak downstream demand and investors' decreased appetite for the blue metal is likely to cap any further upside, and

- could even lead to a downturn in the market, market participants told Fastmarkets.
- Prices for battery raw materials in China, including cobalt sulfate and tetroxide, were broadly stable after producers held their offer prices steady to prevent incurring further losses.
- Some sulfate producers even raised their offer prices this week following the strong performance of the cobalt metal market, but persistently weak demand is likely to keep a cap on any price gains in sulfate

KEY QUOTES

- "Spot offers for cobalt metal have risen by about 10,000-20,000 yuan (\$1,454-2,908) per tonne [since early last week]. Meanwhile, local futures prices lost the momentum to go up further, therefore, investors' buying appetite faded," a cobalt metal trader
- "We received quite a few inquiries [for metal] from investors, however, they are acting more cautiously and slowing down their procurement," - producer 1
- "The sulfate price stabilized but we haven't seen any significant recovery in demand from the battery cathode sector," - producer 2

SUSAN ZOU

GALWAY

TITANIUM SNAPSHOT: Alloy market finds floor after losses; scrap steady

Key data from Fastmarkets' Wednesday July 24 pricing session in Europe:

FERRO-TITANIUM 70% (in \$ per kg, delivered duty paid			
New price	Previous price	Change to midpoint of range	
4.70-4.95	4.70-4.95	0	0
Source: Fastmarkets			

(in \$ per lb, cif Europe)						
New price	Previous price	Change to midpoint of range				
0.95-1	0.95-1	0	0			
Source: Fastmarkets						

TITANIUM SCRAP TURNINGS, UNPROCESSED (0.5-2% SN) (in \$ per lb, cif Europe)						
New price	Previous price	J				
0.80-0.90	0.80-0.90	0	0			
Source: Fastmarkets						

KEY DRIVERS

- The ferro-titanium market has stabilized after a run of losses and while there was one sale around \$4.50 per kg and below the current range, it was in isolation, with most sources expecting a stabilizing in the market.
- The ferro-titanium market is establishing a price floor, with producer supply cited to be in "strong hands", while UK producer FE Mottram has yet to restart production after a fire damaged its plant in April.
- A tender for shipment of 150 tonnes of alloy for delivery in the third quarter in Germany was settled in recent days, with offer prices around 20-30 cents either side of \$4.50 per kg ddp, although there were no firm reports of concluded prices.
- The titanium scrap market was stable in the past week, with deals reported within the current price range for low tin content grade.





KEY QUOTES

- "We sold at \$4.75 kg delivered and a price of \$4.20-4.40 per kg ddp does not exist in our view" - European trader
- "The market has definitely bottomed out. We have a lot of interest in spot lots, but we have little to offer. We think prices are still the same, but that a tightness of supply will start shortly, and we are not offering anything below \$5 per kg from now. We think titanium scrap will move up with ferro-titanium next week onward" - UK ferro-titanium producer
- "The alloy market seems to have turned. There has been an influx of inquires from various parts of the world. At least for the moment the availability of scrap is scant, with prices above \$1 per Ib and we have been holding off selling much in expectation of stronger pricing. Time will tell if it is only a bounce in prices or an established trend" - Russian trader
- "The FE Mottram situation has not been sorted, and Russian suppliers are increasing their offer prices, while demand from Asian steelmakers is stronger now and they want more titanium" - second European trader
- "Last week there was a bigger tender for 150 tonnes from a German steel plant and we know that about five or six suppliers offered material at \$4.20-4.80 per kg. We offered at \$4.75 per kg, similar to British suppliers, because we thought that was possible in Germany but suppliers with bigger stocks want to reduce their holdings before summer vacations. In scrap, alloy is available and producers are not in urgent need because August is a vacation month, with no big tenders or much need of refinery material" - third European trader

DECLAN CONWAY

ANTIMONY SNAPSHOT: Falling European prices find support from uptick in trader

Key data from the Wednesday July 24 pricing session in Europe.

EUROPEAN ANTIMONY PRICES			
	New price	Previous price	% Change
Antimony max 100 ppm Bi, in-whs Rotterdam, \$/tonne	5,950-6,150	5,950-6,150	0
Antimony MMTA standard grade II, in-whs Rotterdam, \$/tonne	5,800-6,000	5,800-6,000	0
Source: Fastmarkets			

KEY DRIVERS

- Antimony prices are holding firmer for both grades in Rotterdam with slightly more interest from traders than in previous weeks. Some major suppliers are said to be resuming production while traders refused to cut offers despite thin spot trading activity.
- Some sources have reportedly offered material above \$6,000 per tonne for standard grade II and some tonnages have been sold around those levels.
- Despite the steady prices, market participants do not expect significant increases in the near term due to persistent weak fundamentals, and the only potential rebound could start in September when consumption picks up after the summer.

KEY QUOTES

• "I am receiving more calls from traders that need to secure

- material; there is certainly more activity" European trader 1
- "Prices are on the way up, many producers in China are suspending production [...] there are only a few offers in the market and it is possible to achieve higher levels" - European trader 2
- "Prices are more stable now but I do not see reasons for the market to go up since sooner or later Chinese [producers] will need to liquidate material" – Indian trader
- "I am hearing there is more activity above \$6,000 per tonne and we are offering at that level, although we have no business concluded yet" - European trader 3

CRISTINA BELDA

LONDON

5N Plus cuts bismuth refining in favor of purchasing on multi-year low prices

Canadian minor metals and specialty chemicals producer 5N Plus has "significantly" reduced the production of bismuth at its refining and recycling facilities and will increase procurement of the material due to low metal prices, the company said on Monday July 22.

Until now, 5N Plus has relied on process technologies to extract bismuth from the various residues and secondary streams in its refining and recycling facilities. Bismuth is generally recovered as a byproduct of lead and copper.

5N Plus utilizes bismuth as an active ingredient in its products and is a major consumer of bismuth metal.

The company refines around 200 tonnes per year of bismuth, Fastmarkets understands. Fastmarkets approached 5N Plus to inquire by how much it will cut bismuth refining and how much material it will purchase after this change, but the producer did not reply by the time of publication.

"With bismuth notations continuing to decline and currently at a level not seen in nearly 25 years, certain suppliers have declared this part of their activities uneconomical and have begun to stop marketing these residues," the company said.

Fastmarkets' price assessment for bismuth 99.99% Bi min, in-whs Rotterdam is at multi-year lows of \$2.85-3 per lb as of Wednesday July 24 - the lowest level since 2003. The Fastmarkets price has fallen by 34.6% year on year from \$4.05-4.90 per lb on July 25, 2018.

Material oversupply, slow downstream consumption and particularly a 25% US tariff on imports of Chinese bismuth have forced suppliers to cut their offer prices to stimulate export demand. The bismuth sales price is close to the cost of production and suppliers are operating at very low margins.

Several small bismuth refineries are struggling to offset losses and producers are considering shutting down operations in China, Fastmarkets reported late last year.

On top of this, there are around 19,228 tonnes of bismuth held in failed Fanya Metal Exchange warehouses in China, accounting for about a year's global production. Constant rumors that the material could be auctioned in the near term are dampening traders' buying appetite and putting pressure on bismuth prices.

In a cost environment where it may be uneconomical to produce its own bismuth, 5N Plus will purchase more material from the market, although it has not specified whether the purchases will be tied to long-term contracts or the spot market.

"Given the current availability and price level for bismuth metal, 5N Plus will increase its commercial-grade bismuth metal purchases to compensate for the reduction in bismuth output from its refining activities," the statement notes.

5N Plus does not expect any disruption in terms of supply, however: "The company will implement this change seamlessly and the measure will have no impact on the customers of 5N Plus." It



also added that the market for the company's bismuth-based materials and specialty chemicals remains strong.

The Canadian company recently expanded its portfolio of products, moving into materials with less metal content, such as specialty semiconductors, specialty chemicals and powders, and more value-added transformation.to substantially reduce the company's exposure to minor metal prices.

CRISTINA BELDA

SHANGHAI

Trade log July 2019: Cobalt sulfate

Trade log for cobalt sulfate in China including transactions, bids and offers reported to Fastmarkets MB.

WEDNESDAY JULY 24

PRICE UNCHANGED AT 35,000-36,000 YUAN (\$5,089-5,234) PER TONNE (DISCOUNT AT \$2.13-2.41 PER LB)

- Offer at about 35,000-36,000 yuan per tonne
- Deal heard at about 36,000 yuan per tonne
- Offer reported at about 35,000 yuan per tonne
- Offer at about 37,000 yuan per tonne
- Small tonnage sold at about 36,000 yuan per tonne
- Offer at about 37,000-38,000 yuan per tonne
- Price indicated at 35,000-36,000 yuan per tonne
- \bullet Price indicated at 35,000 yuan per tonne
- Price indicated at 35,000 yuan per tonne
- Offer at about 38,000 yuan per tonne
- Price indicated at 35,000 yuan per tonne
- Deal heard at about 36,000 yuan per tonne
- Offer reported at about 34,000-35,000 yuan per tonne

FRIDAY JULY 19

PRICE UNCHANGED AT 35,000-36,000 YUAN (\$5,085-5,230) PER TONNE (DISCOUNT AT \$2.32-2.61 PER LB)

- Small tonnage sold at about 33,000 yuan per tonne
- Price indicated at 34,000-35,000 yuan per tonne
- Small tonnage sold at about 35,000 yuan per tonne
- Price indicated at 35,000 yuan per tonne
- Offer at about 39,000 yuan per tonne
- Price indicated at 35,000-36,000 yuan per tonne
- Price indicated at 35,000 yuan per tonne
- Large tonnage sold at about 34,000 yuan per tonne
- Offer at about 35,000 yuan per tonne
- Price indicated at 35,000-36,000 yuan per tonne
- Offer at about 35,000 yuan per tonne

WEDNESDAY JULY 17

PRICE UNCHANGED AT 35,000-36,000 YUAN PER TONNE (DISCOUNT AT \$2.33-2.62 PER LB)

- Large tonnage sold at about 35,000 yuan per tonne
- Price indicated at 36,000 yuan per tonne
- Deal heard at about 35,000 yuan per tonne
- Offer at about 35,000 yuan per tonne
- Price indicated at 35,000 yuan per tonne
- Price indicated at 35,000 yuan per tonne
- Offer at about 35,500-36,000 yuan per tonne

- Price indicated at 35,000 yuan per tonne
- Price indicated at 38,000 yuan per tonne
- Price indicated at 37,000 yuan per tonne

FRIDAY JULY 12

NEW PRICE AT 35,000-36,000 YUAN PER TONNE (DISCOUNT AT \$2.42-2.71 PER LB)

- Price indicated at 35,000 yuan per tonne
- Small tonnage sold at about 35,000 yuan per tonne
- Price indicated at 35,000 yuan per tonne
- Price indicated at 35,000 yuan per tonne
- Small tonnage sold at about 36,000 yuan per tonne
- Price indicated at 35,000 yuan per tonne
- Price indicated at 35,000 yuan per tonne
- Offer at about 35,000 yuan per tonne
- Bid at about 34,000 yuan per tonne
- Price indicated at 35,000 yuan per tonne

WEDNESDAY JULY 10

NEW PRICE AT 35,000-37,000 YUAN PER TONNE (DISCOUNT AT \$2.25-2.82 PER LB)

- Price indicated at 35,000 yuan per tonne
- Large tonnage sold at about 35,000 yuan per tonne
- Deal heard at about 35,000 yuan per tonne
- Price indicated at 35,000 yuan per tonne
- Price indicated at 36,000 yuan per tonne
- Price indicated at 37,000 yuan per tonne
- Deal heard at about 34,000-35,000 yuan per tonne
- Price indicated at 35,000-36,000 yuan per tonne
- Offer at about 35,000 yuan per tonne

FRIDAY JULY 5

PRICE UNCHANGED AT 36,000-38,500 (DISCOUNT AT \$2.11-2.82 PER LB)

- Price indicated at 36,000 yuan per tonne
- Offer at about 35,000 yuan per tonne
- Price indicated at 36,000 yuan per tonne
- Price indicated at 36,000 yuan per tonne
- Standard tonnage sold at about 37,000-38,000 yuan per tonne
- Price indicated at 36,000 yuan per tonne
- ullet Price indicated at 36,000 yuan per tonne
- Price indicated at 35,000 yuan per tonne
- Price indicated at 36,000 yuan per tonne
- Offer at about 35,000-37,000 yuan per tonne

WEDNESDAY JULY 3

NEW PRICE AT 36,000-38,500 YUAN (\$5,240-5,604) PER TONNE

- Offer at about 36,500-37,000 yuan per tonne
- Price indicated at 36,000 yuan per tonne
- Small tonnage sold at about 36,000 yuan per tonne
- Offer at about 38,500 yuan per tonne
- Offer at about 40,000 yuan per tonne
- Deal heard at about 36,000 yuan per tonne
- Deal heard at about 35,000 yuan per tonne
- Deal heard at about 36,000 yuan per tonne
- Offer at about 36,000 yuan per tonne
- Price indicated at 36,000-37,000 yuan per tonne
- Large tonnage sold at about 35,500-36,500 yuan per tonne
- Offer at about 37,000-38,000 yuan per tonne
- Small tonnage sold at about 36,000 yuan per tonne
- Offer at about 35,000 yuan per tonne
- Offer at about 37,000-38,000 yuan per tonne

SUSAN ZOU



LONDON

Trade log July 2019: Cobalt

Cobalt trade log including business, bids and offers reported to

Unless otherwise stated, all prices are per lb on an in-warehouse (in-whs) basis. Delivered prices are netted back.

FASTMARKETS PRICES

Fastmarkets launched two reference prices for the cobalt hydroxide market on February 28 this year.

WEDNESDAY JULY 24 ALLOY-GRADE - \$12.55-13.10

- Bid at \$12.50
- Large tonnage sold at \$12
- Large tonnage sold at \$12.40
- Large tonnage sold at \$12.70
- Large tonnage sold at \$13.50
- Mall tonnage sold at \$12.55 (offgrade)
- Material reportedly sold at \$11.90
- Offer for small tonnage at \$13.05
- Offer for standard tonnage at \$12.50
- Prices indicated at \$12.20-13
- Prices indicated at \$12.55-13.10
- Prices indicated at \$12.60
- Prices indicated at \$13
- Small tonnage sold at \$12.65 (offgrade)
- Small tonnage sold at \$12.95
- Standard tonnage sold at \$12.70

STANDARD-GRADE - \$12.35-12.70

- Bid at \$12.50
- Material reportedly sold at \$12
- Material reportedly sold at \$12.20-12.25
- Offer at \$12.40-12.50
- Offer at \$12.65
- Offer at \$12.65
- Offer at \$12.75
- Offer for small tonnage at \$12.65
- Offer for small tonnage at \$12.65
- Offer for small tonnage at about \$13.30
- Offer for standard tonnage at \$13.40
- Prices indicated at \$11.80-12.15
- Prices indicated at \$12.20-12.60
- Prices indicated at \$12.20-12.80
- Prices indicated at \$12.25-12.55
- Prices indicated at \$12.55-12.90
- Prices indicated at \$12.55-12.90
- Prices indicated at \$12.60
- Prices indicated at \$12.65
- Small tonnage reportedly sold at \$12.25
- Small tonnage reportedly sold at \$12.40
- Small tonnage reportedly sold at \$12.45
- Small tonnage sold at \$12.20
- Small tonnage sold at \$12.20
- Small tonnage sold at \$12.45

- Small tonnage sold at \$12.60
- Small tonnage sold at \$12.65
- Standard tonnage sold at \$12.50
- Standard tonnage sold at \$12.65

FRIDAY JULY 19 ALLOY-GRADE - \$12.55-13.10

- Large tonnage sold at \$12.70
- Large tonnage sold at \$12.95
- Offer for small tonnage at \$12.55
- Offer for small tonnage at \$12.90
- Offer for standard tonnage at \$12.55
- Prices indicated at \$12.15-13.10
- Prices indicated at \$12.55-13
- Prices indicated at \$12.55-13
- Small tonnage sold at \$12.55
- Small tonnage sold at \$13.10
- Standard tonnage sold at \$12.15 (forward)
- Standard tonnage sold at \$12.75 (forward)

STANDARD-GRADE - \$12.55-12.90

- Bids at \$12.40-12.50
- Offer at \$12.45
- Offer at \$12.55
- Prices indicated at \$12
- Prices indicated at \$12.15-12.55
- Prices indicated at \$12.40-12.575
- Prices indicated at \$12.45-12.90
- Prices indicated at \$12.55-13
- Small tonnage sold at \$12.55

WEDNESDAY JULY 17 ALLOY-GRADE - \$12.65-13.55

- Bid at \$11.80
- Bid for small tonnage at \$12.90
- Large tonnage sold at \$12.65
- Material reportedly sold at \$12.70
- Material reportedly sold at \$13-13.50
- Offer at \$12.40
- Offer at \$13.20
- Offer for small tonnage at \$13.10
- Offer for small tonnage at \$13.50
- Prices indicated at \$12.65-12.75
- Prices indicated at \$12.80-13.25
- Prices indicated at about \$12.65-13.50
- Small tonnage sold at \$13.85
- Small tonnages sold at about \$12.70-12.75 (offgrade)
- Standard tonnage sold at \$13.80

STANDARD-GRADE - \$12.55-13

- Bid at \$12
- Large tonnage reportedly sold at \$12.40
- Material reportedly sold at \$12.70
- Offer at \$12.60
- Offer for small tonnage at \$12.65
- Offer for small tonnage at \$12.65
- Offer for small tonnage at \$12.75
- Offer for small tonnage at \$12.80
- Offer for standard tonnage at \$12.60-12.80
 Offer for standard tonnage at \$12.85
- Offer for standard tonnage at \$12.90
- Offers at \$12.25-12.40
- Prices indicated at \$12.40-12.90



- Prices indicated at \$12.45-13.20
- Prices indicated at \$12.50-12.75
- Prices indicated at \$12.65-12.75
- Prices indicated at \$12.65-13.10
- Small tonnage reportedly sold at \$12.50
- Small tonnage sold at \$12.65
- Small tonnage sold at \$12.75
- Small tonnage sold at \$13
- Standard tonnage reportedly sold at \$12.75

FRIDAY JULY 12

ALLOY-GRADE - \$13-13.95

- Bid for small tonnage at \$12.20
- Offer at \$13
- Offer for small tonnage at \$13
- Offer for standard tonnage at \$12.85
- Offer for standard tonnage at \$12.85 (offgrade)
- Prices indicated at \$13.15-14.10
- Small tonnage sold at \$12.60 (offgrade)
- Standard tonnage sold at \$13.05

STANDARD-GRADE - \$12.65-13.10

- Bid for small tonnage at \$12.30
- Bid for small tonnage at \$12.75
- Bid for standard tonnage at \$12.30
- Offer at \$12 (material outside Fastmarkets' specifications)
- Offer at \$12.40-12.50
- Offer at \$12.75
- Offer at \$12.75
- Offer at \$12.80
- Offer at \$12.85-12.90
- Offer at \$13.80
- Offer for small tonnage at \$12.75
- Offer for small tonnage at \$12.80
- Offer for small tonnage at \$12.80
- Offer for small tonnage at \$12.90
- Offer for small tonnage at \$13.35
- Offer for standard tonnage at \$12.65
- Offer for standard tonnage at \$12.75
- Prices indicated at \$12.40-12.90Prices indicated at \$12.65-13.10
- Prices indicated at \$12.05-1
 Prices indicated at \$12.75
- Prices indicated at \$12.75
 Prices indicated at \$12.75-13.20
- Small tonnage at \$13.05
- Small tonnage sold at \$12.75

WEDNESDAY JULY 10

ALLOY-GRADE - \$13.25-14.20

- Material offered at \$14.05 (forward)
- Offer for small tonnage at \$13.60
- Offer for standard tonnage at \$13.50
- Prices indicated at \$13.05
- Prices indicated at \$13.25-13.75
- Prices indicated at \$13.25-14.30
- Prices indicated at \$13.80-14.50
- Small tonnage sold at \$12.85 (offgrade)
- Small tonnage sold at \$13.15

- Small tonnage sold at \$13.90
- Standard tonnage sold at \$12.85
- Standard tonnage sold at \$13.10
- Standard tonnage sold at \$13.25 (forward)
- Standard tonnage sold at \$14.20

STANDARD-GRADE - \$12.75-13.20

- Bids at \$12.50-12.60
- Material reportedly sold at \$12.50-12.60
- Offer at \$12.90
- Offer at \$13.30
- Offer for small tonnage at \$12.75
- Offer for small tonnage at \$12.90-13.05
- Offer for small tonnage at \$13
- Offer for small tonnage at \$13.05
- Offer for small tonnage at \$13.50
- Offer for standard tonnage at \$12.75
- Prices indicated at \$12.70-12.90
- Prices indicated at \$12.85
- Prices indicated at \$12.85-13.65
- Prices indicated at \$12.90-13.50
- Prices indicated at \$12.95-13.45
- Prices indicated at \$13
- Small tonnage reportedly sold at \$12.90
- Small tonnage sold at \$12.75
- Small tonnage sold at \$13
- Small tonnage sold at \$13.15
- Small tonnage sold at \$13.20
- Small tonnage sold at \$13.20
- Standard tonnage reportedly sold at \$12.50

FRIDAY JULY 5

ALLOY-GRADE - \$14-14.45

- Prices indicated at \$14-14.45
- Prices indicated at \$14-14.45
- Offer at \$13 (offgrade)
- Offer for standard tonnage at \$13.60
- Prices indicated at \$13.80-14.50

STANDARD-GRADE - \$13.05-13.65

- Bid at \$12.95
- Offer at \$13
- Offer for small tonnage at \$13.15
- Offer for small tonnage at \$13.15
- Offer for standard tonnage at \$13.20
- Prices indicated at \$12.95
- Prices indicated at \$13
- Prices indicated at \$13.15
- Prices indicated at \$13.15-13.85
- Prices indicated at \$13-13.50
- Prices indicated at \$13-13.50
- Small tonnage sold at \$13.15

• Small tonnage sold at \$13.15

WEDNESDAY JULY 3 ALLOY-GRADE - \$14-14.45

• Offer for large tonnage at \$13.60 (forward)

- Offer for large tonnage at \$15
- Offer for large tonnage at \$15 (forward)
- Offer for small tonnage at \$13.60
- Offer for small tonnage at \$14.60Offer for standard tonnage at \$14.50
- Prices indicated at \$13.35



- Prices indicated at \$13.90-14.35
- Prices indicated at \$14.05-14.15
- Prices indicated at \$14.15-14.60
- Prices indicated at \$14.15-14.60
- Prices indicated at \$14.15-14.60
- Small tonnage sold at \$14.15
- Small tonnage sold at \$14.15
- Small tonnage sold at \$14.60
- Standard tonnage reportedly sold at \$13.90

STANDARD-GRADE - \$13.15-13.85

- Material reportedly sold at \$12.85-13.25
- Material reportedly sold at \$13
- Offer at \$13.15
- Offer at \$13.65
- Offer at \$15.15
- ullet Offer for small tonnage at \$13.25
- Offer for small tonnage at \$13.35
- Offer for small tonnage at \$13.45
- Offer for small tonnage at \$13.95
- Offer for small tonnage at \$13-13.05
- ullet Offer for standard tonnage at \$13.40
- Offers at \$13.20-13.25
- Prices indicated at \$13.25-13.35
- Prices indicated at \$13.35

- Prices indicated at \$13.35-13.95
- Prices indicated at \$13.35-13.95
- Prices indicated at \$13.95
- Prices indicated at \$13-13.50
- Small tonnage reportedly sold at \$13.10-13.20
- Small tonnage reportedly sold at \$13.25
- Small tonnage sold at \$13.15
- Small tonnage sold at \$13.35
- Small tonnage sold at \$13.85
- Small tonnage sold at about \$13Small tonnage sold at about \$15.20
- Standard tonnage sold at \$13.15
- Standard tonnage sold at \$13.25 (forward)

CHARLOTTE RADFORD



Industry leading manufacturer of structural steel parts for vehicles sought a way to mark alpha-numeric characters onto truck frame rails produced in their Roanoke, Virginia plant. After their formation, the rails require a mark on three sides for quick and easy product identification by forklift operators. Matthews Engineered Solutions team came up with a fast, cost saving solution for marking crisp, large alpha-numeric codes onto the product. Learn how.



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Exchange news & prices

LONDON

New LME warehousing consultation targets higher stock levels, more transparency

The London Metal Exchange has launched a consultation process on warehousing reforms that aims to attract higher stock levels, Matthew Chamberlain, LME chief executive, announced on Thursday July 25.

The consultation began on Thursday and is open until September 2019.

It includes changes to evergreen rent deals and the controversial queue-based rent capping (QBRC) rule as well as the introduction of off-warrant stock reporting.

"There is general market agreement that higher LME stocks would be desirable, but two opposing views on how to achieve this," Chamberlain said.

"The LME understands the perspective of those who seek lower rents and enhanced logistics from LME-listed warehouses – and while we are introducing many logistical enhancements in this consultation, we believe that fundamentally reforming the LME network in an attempt to compete with highly discounted off-warrant storage may fail, and indeed result in reduced stock levels," he added.

Therefore, the LME is proposing to extend of the current freeze on maximum levels of rent and free-on-truck (fot) until 2027-2028.

It said this is to ensure that the gap between headline rates for LME storage and storage rates for off-warrant or bilaterally negotiated LME storage does not widen further.

"On the other hand, the LME understands that many warehouse operators feel that they could bring more metal to the system if rules were relaxed – and while we wish to support our warehouses' businesses, this must be balanced with the need for robust consumer protection," Chamberlain said.

"Our proposed package of measures is therefore designed to bring together the best elements of these various approaches," he added.

OFF-WARRANT STOCK REPORTING

The exchange is proposing to introduce a stock reporting process that reflects off-warrant storage to achieve increased transparency of global metal stocks.

Many metal owners choose off-warrant storage as an alternative to warranting metal onto the LME, but they still have the ability to warrant it onto the exchange should they wish.

"Such metal owners benefit, in the view of the LME, from the option of LME warranting and should, therefore, be willing to contribute to off-warrant stock reporting," an LME said in a press release on Thursday.

"The LME is proposing a set of rules which will create requirements and incentives for off-warrant metal to be reported to the LME, if metal owners may wish to warrant such metal at a future point in time," it added.

There will be three categories that off-warrant stock reporting will fall under:

• In the first category, off-warrant metal will have to be reported if the metal is stored under an agreement requiring the use of LME-registered sheds.

- Secondly, it will have to be reported if the metal is stored under an agreement where the owner has the right to warrant.
- Thirdly, the metal owner will be asked to voluntarily report their stocks. If owners do not do so, the LME can consider an alternative approach whereby the metal placed at LME-registered warehouses and not voluntarily disclosed, at the earliest opportunity, could be subject to more onerous warranting conditions such as cost or tonnage limitations.

The LME will assess the data and will publish it on an anonymized basis if the information meaningfully aids transparency.

QBRC LIBERALIZED TO 80 DAYS

The LME has also proposed in the consultation the first progressive changes to its QBRC rule.

"The LME is mindful of the desire among many warehouse operators to relax and simplify its load-out related rules, which would provide scope for a greater financial incentive for the warranting of stocks," the LME said.

The QBRC threshold will be extended from 50 days to 80 days over a nine-month period, and the phased element of rent reduction will also be removed.

The LME aims that on February 1, 2020, to rule will move to 50 days full rent, from the current rule of 30 days full rent and 20 days half rent

Then the increase will be staggered across the quarters until reaching 80 days full rent, after which no rent will be due, on November 1, 2020.

As a part of its 2013 warehousing reform package, the LME launched QBRC in 2016 in an attempt to minimize structural queues forming at LME warehouses.

It removed any financial incentive for warehouse owners to allow queues to build up by introducing reduced rent after 30 days and free storage after 50. It reduced LME queues but means that stocks moved from the LME to cheaper off-warrant storage.

If the changes to QBRC and a greater clarity in its linked load-in / load-out (LILO) rules prove successful, the LME said it will consider a future simplification of its rules.

This would mean a move to a logistically simpler "percentage load-out" model, whereby warehouses would simply be required to load out a given proportion of their stock each day.

CHANGES TO 'EVERGREEN' RENT DEALS

The LME is also proposing restrictions on "evergreen" rent deals that will only allow warehouse companies to enter into such agreements with the party placing metal onto LME warrant.

An "evergreen" rent deals is where a metal owner puts metal onto warrant in exchange for a share of the rent for as long as the metal stays in the warehouse.

The reform means a deal would not be possible with metal owners who have purchased metal that is already warranted.

"This proposal is designed to allow incentivization for metal owners bringing new stock to the LME system, while reducing the incidence of existing warrants being acquired on the LME purely for the purpose of extracting evergreen rent deals from warehouse operators," the LME said.

ALICE MASON



Exchange news & prices

LONDON

Traders cautious of zinc warrant business amid volatile financing

Warrant traders dealing in zinc have reported a steady uptick in the metal's warrant premium levels over July, while an easing in the metal's cash/three-month spread suggests that there are more supportive financing conditions, although market participants remain reluctant to commit to purchases.

So far in July, Fastmarkets' assessment of the zinc SHG min 99.995% warrant premium, in-whs North Europe, has climbed to \$30-50 per tonne on Wednesday July 24 from \$20-30 per tonne on July 3.

Over the same period, the London Metal Exchange's on-warrant zinc inventory has fallen by a little less than 40%, predominantly due to large cancelations out of LME-registered warehouses in Europe.

These developments have come amid broadly stagnant LME prices for the galvanizing metal. Its three-month futures price has consolidated around \$2,450 per tonne during July, a discount of nearly 17% from prices seen in April, when zinc futures approached \$3,000 per tonne.

The price spread of the metal was in its widest backwardation since 2006 at \$161 per tonne in late May, before it flipped to a \$20 per tonne contango in June. It recently narrowed to a contango of \$3.25 per tonne.

Yet traders have expressed reticence toward engaging in zinc warrant business in recent weeks, with some suggesting that forward spreads must widen further to meet carry costs.

"I still see no sense in [zinc] warrant business at the moment," a European-based warrant trader told Fastmarkets. "The habit of going straight to the physical market is pretty embedded."

At a more granular level, however, the volatility of zinc's forward spread has deterred consistent warrant business since May, coinciding with the seasonally slower summer period.

"If you look at the August-September spread, it's a 28-day month from prompt to prompt, but you're probably going to need a cash/three-month contango in the region of \$5-6 per tonne on a rent deal to make it work," a second European-based warrant trader told Fastmarkets.

"[Trading operates on] fine margins in zinc. The plays made on the spread in May flushed everyone out," the trader added. "I'd expect deliveries into Europe soon, but zinc is tightly held. If the opportunities present themselves, then yes, maybe you'd commit. But right now, I'm not seeing much interest."

Market participants have repeatedly suggested that the LME's zinc inventory is among the most fragmented across the base-metals complex, partly due to a historic build-up of Spain-origin material in LME-registered warehouses in New Orleans that began before 2008.

New Orleans LME stock levels were currently at 37,725 tonnes on-warrant, more than 80% of total deliverable zinc stocks, which were 44,775 tonnes on July 25.

But this material was reported to be poor-quality zinc, significantly damaged by the effects of Hurricane Katrina on August 2005, which remains the costliest hurricane in US history with estimated damages exceeding \$150 billion.

This leaves just 7,050 tonnes of zinc in the LME systems that

traders consider "desirable" material – namely, newer production special high grade (SHG) zinc. And this may mean that LME zinc has a much smaller market than some believe.

HASSAN BUTT



Carbon steel flat products

	Price	Change [†]	Assessed
HRC, EU imports (cfr main EU port, northern Europe) (€/t)	465-475	0%	24 Jul 19
HRC, EU imports (cfr main EU port, southern Europe) (€/t)	450-475	0.54%	▲ 24 Jul 19
HRC, CIS exports (fob stowed main Black Sea port) (\$/t)	490-500	0.51%	▲ 22 Jul 19
HRC, UAE imports (cfr Jebel Ali) (\$/t)	500-510	0%	23 Jul 19
HRC, Turkish imports (cfr main Turkish port) (\$/t)	505-510	0%	19 Jul 19
HRC, Latin America exports (fob stowed main Latin American port) (\$/t)	485-490	0%	19 Jul 19
HRC, commodity grade, US imports (cfr Gulf port) (\$/short ton)	560-600	0%	24 Jul 19
HRC, US Midwest index (fob mill) (\$/short ton)	588-588	3.85%	▲ 24 Jul 19
HRC, China export index (fob main China port) (\$/t)	507-507	-0.38%	▼ 25 Jul 19
HRC, South East Asia imports (cfr Vietnam) (\$/t)	515-525	1.46%	▲ 22 Jul 19
HRC, Saudi Arabia imports (cfr main port) (\$/t)	515-520	0%	23 Jul 19
CRC, EU imports (cfr main EU port, northern Europe) (€/t)	545-560	2.31%	▲ 24 Jul 19
CRC, EU imports (cfr main EU port, southern Europe) (€/t)	525-530	-0.47%	▼ 24 Jul 19
CRC, CIS exports (fob stowed main Black Sea port) (\$/t)	553-555	0.73%	▲ 22 Jul 19
CRC, UAE imports (cfr main Jebel Ali) (\$/t)	570-575	0%	23 Jul 19
CRC, Turkish imports (cfr main Turkish port) (\$/t)	570-570	0%	19 Jul 19
CRC, Latin America exports (fob stowed main Latin American port) (\$/t)	565-580	0%	19 Jul 19
CRC, US imports (cfr Gulf) (\$/short ton)	700-740	-1.37%	▼ 24 Jul 19
CRC, US domestic (fob mill) (\$/short ton)	710-710	1.43%	▲ 18 Jul 19
CRC, China export (fob main China port) (\$/t)	540-550	0%	23 Jul 19

SHANGHAI

CHINA HRC: Prices rise on expectations of stricter steelmaking curbs

China's hot-rolled coil prices rebounded on Thursday July 25 in line with rising futures bolstered by expectations of stricter production curbs toward the end of the month.

DOMESTIC

- Eastern China (Shanghai): 3,840-3,860 yuan (\$558-561) per tonne, up 10 yuan per tonne
- Northern China (Tianjin): 3,840-3,850 yuan per tonne, up 10 yuan per tonne

Prices rebounded amid an increase in trading activity in the spot market amid futures gains.

A Shanghai-based trader said that several securities companies were expecting mills in Tangshan, the country's steelmaking hub in the northern region, to observe stringently production curbs ordered by the local government last weekend.

A domestic steel consultancy has already reported a 44,100-tonne drop in HRC output to 3.32 million tonnes for the week to Thursday.

But market participants are not expecting any dramatic price increases, given that inventory levels across the country remained high, the trader in Shanghai said.

As such, HRC prices are largely expected to remain stable for the near term.

While transaction prices in the morning were on the lower end of the assessment range, they went on to rise to the higher end in the afternoon due to robust trading.

The Shanghai-based trader suggested that domestic demand was stable, with buyers stepping up their procurement rates as soon as prices fell to ranges acceptable to them.

EXPORT

• Fastmarkets' steel hot-rolled coil index export, fob main port China: \$506.75 per tonne fob, up \$0.25 per tonne

Most mills' still considered \$510 per tonne fob as the lowest price that they would accept orders at on the belief that domestic prices in China would not drop significantly as long as the Tangshan government enforces its steelmaking curbs strictly.

But overseas buyers continued to bid around \$500 per tonne fob, keeping trading sparse.

Sources told Fastmarkets that mills in other regions were selling steel products at prices below those for Chinese cargoes. For instance, a major Japanese mill is said to be selling its HRC and plate at around \$10 per tonne below Chinese prices.

MARKET CHATTER

"I believe mills will channel more of their products to the domestic market rather than cut export prices to stimulate sales in that segment. They have already set their export prices around \$10 per tonne below their domestic ex-works prices, which still doesn't help them to secure more bookings," a source in Tianjin said.

SHANGHAI FUTURES EXCHANGE

The most-traded October HRC futures contract closed at 3,866 yuan per tonne on Thursday, up 39 yuan per tonne from the previous trading day.

MIRANDA SONG



Carbon steel flat products

DNEDE

EUROPE PLATE: Domestic prices largely stable in slow market

Domestic prices for heavy steel plate have been largely stable across Europe over the past week in the slow market, sources told Fastmarkets this week

Demand will decline further in August due to the traditional market slowdown over the summer period.

"The market is slow, which is normal at this time of the year," an Italian source said.

"Mills will try to increase offers [for plate] in September, but [the long-term] trend remains blurry - although demand should recover at the start of autumn," he added.

Fastmarkets' weekly price assessment for steel, domestic, plate 8-40mm, exw Southern Europe, was €490-505 (\$546-563) per tonne ex-works on Wednesday July 24, compared with €490-510 per tonne ex-works a week earlier.

The assessment reflects the deals and offers heard in the market. Due to the lack of domestic demand, Italian mills have been offering heavy steel plate to Germany at €550-560 per tonne delivered in the southern regions of the country.

And Fastmarkets' weekly price assessment for steel, domestic, plate 8-40mm, exw Northern Europe, was ${\leqslant}560\text{-}575$ per tonne ex-works this week, slightly up from ${\leqslant}560\text{-}570$ per tonne a week earlier.

The assessment represents what sources described as "workable" prices, although official offers have been reported at €10-20 per tonne higher.

Northern European plate suppliers have been forced to redirect larger volumes to the spot market due to a smaller number of long-term projects, according to market sources. This situation is likely to remain an issue for the mills in autumn when market activity is expected to recover.

MARIA TANATAR

LONDON

Flat Steel Products Trade Log, July 25, 2019

The latest bids, offers and deals in the global markets for hot-rolled coil, cold-rolled coil, hot-dipped galvanized coil, pre-painted galvanized iron, steel plate, steel sheet and other flat steel products.

LATEST TRANSACTIONS: HOT-ROLLED COIL

- East China, domestic, commercial-grade HRC (4.5-12mm), traded at 3,840-3,860 yuan (\$558-561) per tonne, including VAT.
- North China, domestic, commercial-grade HRC (4.5-12mm), traded at 3,840-3,850 yuan per tonne, including VAT.



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Carbon steel long products

FASTMARKETS' KEY LONG STEEL PRICES			
	Price	Change [†]	Assessed
Rebar, China export index (fob main China port) (\$/t)	509-509	0%	25 Jul 19
Rebar, EU import (cfr main EU port, northern Europe) (€/t)	460-480	-3.09%	7 24 Jul 19
Rebar, EU import (cfr main EU port, southern Europe) (€/t)	460-480	-0.53%	7 24 Jul 19
Rebar, CIS exports (fob stowed main Black Sea port) (\$/t)	450-460	0%	22 Jul 19
Rebar, Turkish exports (fob main Turkish port) (\$/t)	450-460	0%	25 Jul 19
Rebar, UAE imports (cfr Jebel Ali) (\$/t)	522-525	4.18%	23 Jul 19
Rebar, US imports (cfr Gulf) (\$/short ton)	630-640	-2.31%	▼ 17 Jul 19
Rebar, US domestic (fob mill) (\$/short ton)	630-650	-0.78%	▼ 17 Jul 19
Rebar, Latin America exports (fob stowed main Latin American port) (\$/t)	560-565	0%	08 Mar 19
Rebar, South East Asia imports (cfr Singapore) (\$/t)	485-495	-0.91%	7 22 Jul 19
Rebar, Southern Europe exports (fob main port) (€/t)	445-460	-0.55%	7 24 Jul 19

SHANGHAI

CHINA REBAR: Selling pressure keeps prices flat amid rising futures

Gains in the futures market failed to stimulate China's rebar prices on Thursday July 25, with sellers being under pressure to secure orders.

DOMESTIC

- Eastern China (Shanghai): 3,920-3,960 yuan (\$570-576) per tonne, unchanged
- Northern China (Beijing): 3,880-3,910 yuan per tonne, unchanged Weak demand attributed to bad weather over the past week resulted in rebar inventory levels at mills and the spot market to increase, sources said.

Mills across the country had 2.42 million tonnes of rebar in their inventories on Thursday - up 46,000 tonnes from a week earlier - while the spot market had 6.17 million tonnes - up 207,600 tonnes - a trader in Shanghai said, quoting a local industry information provider.

Sellers were actively destocking during the day, which led them to keep prices flat despite rising futures to stimulate sales, sources said.

EXPORT

• Fastmarkets' steel reinforcing bar (rebar) index export, fob China main port: \$509.25 per tonne, down \$0.13 per tonne Rebar offers were flat during the day, at \$505-530 per tonne fob. These, coupled with the stability in the domestic market, led market participants to maintain their estimate of mills' acceptable prices at \$505-515 per tonne fob.

A few buyers were heard to have reached out to sellers in China, but no deals were heard at the time of writing.

Buyers in smaller markets such as Cambodia might be prepared to pay up to \$505 per tonne fob for cargoes, an export trader in

eastern China said.

Those in larger markets such as Hong Kong and Singapore might bid at levels equivalent to around \$480 per tonne fob China if they had demand, which is too low for sellers in China, sources said.

MARKET CHATTER

"The central government is pushing forward with its support for small businesses and privately owned companies, which will be beneficial to the downstream steel-consuming industries. This could have been the major driver of futures today," an industry analyst in Shanahai said.

Chinese Premier Li Keqiang reiterated at the country's State Council executive meeting on Wednesday that the central government would use various financial tools to reduce funding costs for small businesses and privately owned companies.

BILLET

As at 3pm, billet was being traded at 3,640 yuan per tonne including value-added tax in Tangshan. The price had risen 20 yuan per tonne on Thursday after falling by the same amount late on Wednesday.

SHANGHAI FUTURES EXCHANGE

The most-traded October rebar futures contract closed at 3,940 yuan per tonne on Thursday, up 41 yuan per tonne from a day earlier.

BURSA

EGYPT STEEL REBAR, BILLET: Billet prices fall, uncertainty keeps demand weak

The price of steel billet imported into Egypt fell in the week to Thursday July 25 on lower offers, with demand still poor due to continuing uncertainty over import duties.

"Offer prices have fallen but there are no bookings because of the ongoing uncertainty about safeguard duties," a local market source told Fastmarkets.

In April, Egypt imposed a temporary additional import duty on rebar and billet in response to the increase in volumes entering the country, with duties set at 25% for rebar and 3-15% for billet.

The duties were suspended by the country's Administrative Court on July 4.

Egyptian mills then appealed against the suspension of the duty on July 7.

The Administrative Court refused the appeal against the suspension of the safeguard duty on July 16.

And on July 25, it again refused all objections against the removal of the temporary duties. However, the Egyptian customs authorities have not received any official notification yet, and are still asking for the duties, Egyptian sources told Fastmarkets.

A final session on the safeguard duties will be held at a higher court on August 4.

About 400,000 tonnes of billet is waiting to be unloaded at Egyptian ports, a trader said, but nothing will happen until the final official decision on the duties.

CIS-origin billet was on offer to Egypt at \$435 per tonne cfr this week, sources said, down from \$450-450 per tonne cfr a week earlier.

No major bookings were heard, but one trader believed \$425 per tonne cfr was a workable price.

Fastmarkets' weekly price assessment for steel billet, import, cfr main port Egypt, was \$425-435 per tonne on July 25, down from \$435-445 per tonne a week earlier.

Offers of rebar in Egypt's domestic market remained steady over the week, according to sources, leaving Fastmarkets' weekly price



Carbon steel long products

assessment for steel reinforcing bar (rebar), domestic, exw Egypt, at E£11,580-11,980 (\$686-709) per tonne including 14% VAT on July 25, unchanged since May 16.

SERIFE DURMUS

LONDON

EUROPE WIRE ROD: Southern European mills push for higher domestic prices ahead of summer break

The price of mesh-quality wire rod in Southern Europe continued to narrow upwards week on week on Wednesday July 24, with Italian mills looking to raise their offer prices ahead of the summer slowdown, sources told Fastmarkets.

Fastmarkets' weekly price assessment for steel wire rod (mesh-quality), domestic, delivered Southern Europe, was €480-500 (\$536-559) per tonne on Wednesday, narrowing up from €475-500 per tonne on July 17.

Market participants said a price level of \le 475 per tonne delivered was 'workable' for larger volumes of about 1,000 tonnes, but Fastmarkets' European domestic mesh-quality wire rod specifications assesses deals, bids and offers with a maximum tonnage of 500 tonnes.

"For now, it is still difficult to close orders as buyers are still asking for lower prices to cover themselves for August, which is normally a

quiet month," a Southern European mill source said.

Fastmarkets' weekly domestic price assessment for steel wire rod (mesh-quality), domestic, delivered Northern Europe, was unchanged at €495-505 per tonne on Wednesday.

Fastmarkets' weekly steel wire rod export, fob main port Southern Europe, widened downwards this week to €450-470 per tonne on July 24, amid low offers heard in Spain. This was down from €465-470 per tonne fob on July 17.

VIRAL SHAH

LONDON

Long Steel Products Trade Log, July 25, 2019

The latest bids, offers and deals in the global markets for rebar, wire rod, steel beams and other long steel products.

LATEST TRANSACTIONS: REBAR

- East China, domestic, grade III 16-25mm rebar, traded at 3,920-3,960 yuan (\$570-576) per tonne, including value-added tax.
- North China, domestic, grade III 16-25mm rebar, traded at 3,880-3,910 yuan per tonne, including VAT.



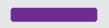
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Carbon steel semifinished products

FASTMARKETS' KEY SEMI-FINISHED S	TEEL PRICES		
	Price	Change [†]	Assessed
Slab, CIS exports (fob stowed main Black Sea port) (\$/t)	415-425	1.2%	▲ 22 Jul 19
Slab, Brazil export (fob main port) (\$/t)	420-430	0%	19 Jul 19
Slab, South East/East Asia (cfr main port) (\$/t)	430-445	-0.57%	▼ 22 Jul 19
Billet, CIS exports index (fob Black Sea port) (\$/t)	415	-1.19%	▼ 25 Jul 19
Billet, Turkish exports (fob main Turkish port) (\$/t)	420-430	-0.58%	▼ 25 Jul 19
Billet, Turkish imports (cfr main Turkish port) (\$/t)	420-430	-1.16%	▼ 25 Jul 19
Billet, UAE imports (cfr Jebel Ali) (\$/t)	453-465	-0.76%	▼ 23 Jul 19
Billet, Latin American exports (fob stowed main Latin America port) (\$/t)	430-440	0%	19 Jul 19
Billet, Indian exports (fob main India port) (\$/t)	425-430	0%	19 Jul 19
Billet, South East Asia imports (cfr main port) (\$/t)	455-455	0.55%	▲ 25 Jul 19
Billet, Iran export (fob Iranian ports) (\$/t)	385-395	0.52%	▲ 24 Jul 19
Billet, Egypt imports (cfr main port) (\$/t)	425-435	-2.27%	▼ 25 Jul 19

DNEPR

CIS STEEL BILLET: Prices weaken as customers lose appetite

The CIS export billet market has softened through the past week amid a lack of interest among customers in the major outlet regions, Fastmarkets heard on Thursday July 25.

Fastmarkets' daily steel billet index, export, fob Black Sea, CIS, was \$415 per tonne on July 25, down by \$2 per tonne day on day.

Offers of CIS-origin billet from mills and traders were heard around \$415-425 per tonne fob Black Sea, depending on destination, but no new bookings were heard done this week.

Customers in Egypt reported offers of CIS-origin billet at \$435 per tonne cfr, equivalent to \$415 per tonne fob Black Sea, down from \$440-450 per tonne heard a week earlier.

But these lower offers have not sparked much buying activity in the country because a lot of material is sitting at ports waiting for customs clearance amid uncertainty over safeguard duties, sources told Fastmarkets.

In the latest development, on July 25 the Administrative Court of Egypt again refused to consider objections against the removal of temporary duties. The Egyptian customs authorities have not yet received official notification of this, however, and were still asking for duty payments, Egyptian sources told Fastmarkets.

In Algeria, interest in imported billet was also low due to the poor demand for finished long steel products in the country.

In addition, local market participants expected billet import volumes to the country to run dry in the near term due to the development of pellet and DRI capacities inside the country, which will allow local producers fully to integrate their steelmaking processes.

In neighboring Tunisia, offers of CIS-origin billet were heard at

\$440-450 per tonne cfr from traders, equivalent to around \$415-425 per tonne fob Black Sea. But no major bookings were heard done this week

Turkish buyers received offers of CIS billet at \$430 per tonne cfr (\$415 per tonne fob Black Sea), but customers considered this price to be too high, given the weak export rebar market. As a result, bids did not exceed \$420 per tonne cfr.

In the wider Middle East region, buying activity was limited by the approaching Hajj religious holiday and was expected to remain low until late August.

VLADA NOVOKRESHCHENOVA

LONDON

Semi-finished Steel Products Trade Log, July 25, 2019

The latest bids, offers and deals in the global markets for steel billet, slab and bloom.

LATEST TRANSACTIONS: BILLET

• China, billet, domestic, traded at 3,640 yuan (\$529) per tonne, including value-added tax, at 3pm.



Stainless & special steels

FASTMARKETS' KEY STAINLESS STEEL	PRICES			
	Price	Change [†]		Assessed
Grade 304 HRC, Asia import (cif East Asian port) (\$/t)	1,920-1,960	0.52%	•	24 Jul 19
Grade 304 2mm CRC, 2B Asia import (cif East Asian port) (\$/t)	2,020-2,060	0.49%	A	24 Jul 19

SINGAPORE

East Asian stainless steel prices edge up amid fire at Tsingshan Indonesia

Import prices for stainless steel in East Asia picked up some strength over the past week after a fire broke out at the Indonesia subsidiary of Chinese stainless steelmaker Tsingshan Holding Group, which has been supplying cargoes - often at a discount - to the region.

The weekly Fastmarkets import price assessment for stainless steel cold-rolled coil, Asia grade 304 (2mm 2B), cif East Asian port was \$2,020-2,060 per tonne on Wednesday July 24, narrowing upward by \$20 per tonne from a week earlier.

PT Indonesia Tsingshan Stainless Steel will delay its shipment of stainless cold-rolled products because of damage caused to its pickling line by a fire that broke out at its cold-rolling mill last week, sources told Fastmarkets.

Repairs to the pickling line are expected to take two months and the mill will only be able to fulfill pending orders in October, market sources said.

These developments are likely to provide some short-term support for stainless steel prices because PT Indonesia Tsingshan's prices were among the most competitive in the region due to lower production costs at its integrated complex at the Morowali Industrial Park in Indonesia's Central Sulawesi province, market participants said.

Indonesia exported 88,636 tonnes of cold-rolled stainless flat steel classified under HS code 72193300 in the first four months of 2019, compared with 7,773 tonnes a year earlier, according to data from Indonesia's statistics bureau.

Over the week, Chinese stainless CRC was offered at \$2,060-2,130 per tonne cif East Asia, while cargoes from Taiwan were available at \$2,100-2,130 per tonne cif East Asia.

Market participants estimated that stainless CRC was likely to trade at \$2,020-2,060 per tonne during the week.

"With the exception of buyers who are urgently in need of materials, other customers have no interest in making any bookings at the current price," a trader in eastern China said.

"I have received very few inquiries and no firm bids recently because prices moved upward too quickly following the surge in the price of nickel," he added.

The three-month nickel contract on the London Metal Exchange ended the official trading session on Wednesday at \$14,450-14,480 per tonne, up \$210-230 per tonne week on week.

The contract exceeded \$14,000 per time for the first time this year last Thursday and has remained above that level since.

The price surge was attributed to various factors including expectations of tightening supply, strong Chinese demand as well as output of stainless steel products, and a positive outlook for future nickel consumption by the electric vehicles industry.

Fastmarkets' weekly import price assessment for stainless steel

hot-rolled coil Asia grade 304, cif port East Asia also narrowed upward by \$20 per tonne week on week to \$1,920-1,960 per tonne on Wednesday.

Stainless HRC from China was offered at \$1,960-2,030 per tonne cif East Asia while Taiwanese products were offered at \$2,000-2,030 per tonne cif East Asia.

China's Ministry of Commerce said earlier this week that it would impose anti-dumping duties on imports of stainless steel billet, slab, hot-rolled plate and coil produced in the European Union, Japan, South Korea and Indonesia for the next five years.

Market participants expect little impact to come from the duties because imports from the four sources had already fallen significantly since March, when Chinese authorities started requiring importers to pay a deposit to bring in shipments from abroad.

For instance, South Korea did not export any semi-finished stainless steel products classified under HS code 72189100 to China in June, compared with 2,631 tonnes a year earlier, according to South Korean customs data. This HS code lists under it semi-finished stainless steel products with rectangular cross sections, but not square ones.

LEE KEN KIAT

SHANGHAI

China's stainless steel prices mirror fluctuation in nickel market

Domestic stainless steel prices in China strengthened over the past week, though the past few days saw some of those gains being shed amid fluctuating nickel futures.

Fastmarkets' price assessment for stainless steel cold-rolled coil 2mm grade 304 domestic, ex-whs China in the country's major market of Wuxi was 14,900-15,400 yuan (\$2,166-2,239) per tonne including value-added tax for the week ended Wednesday July 24, up 200-500 yuan per tonne from a week earlier.

Prices rose to 15,100-15,400 yuan per tonne last Friday after two days of strong gains for nickel futures on the Shanghai Futures Exchange in the latter half of last week.

The October nickel contract - which became the most-traded one this week, overtaking August - closed at 118,430 yuan per tonne last Friday, up 7,010 yuan per tonne from last Wednesday.

But nickel futures fell over the first three days of this week. The October contract ended Wednesday's trading session at 112,320 yuan per tonne, down 6,110 yuan per tonne from last Friday.

Stainless steel prices tracked these movements. Transaction prices were at 14,900-15,200 yuan per tonne by Wednesday, sources said.

Nickel prices on the London Metal Exchange also had a similar pattern.

The three-month nickel contract on the exchange ended its official trading session at \$14,725-14,730 per tonne last Thursday - up \$480-485 per tonne from a day earlier. The contract closed at \$14,450-14,480 per tonne on Wednesday July 24, down \$250-275 per tonne from last Thursday's 12-month high.

Demand for stainless steel products was generally steady over the past week despite the price fluctuations, a trader in eastern China said.

"Only a few customers suspended their procurement on Wednesday to see how the market develops," he said.

A second trader in the region noted that end-user demand was still seasonally low, so downstream manufacturers could slow down their purchases if prices continued to trend downward.

JESSICA ZONG



Ferrous scrap

FASTMARKETS' KEY FERROUS SCRAP F	PRICES		
	Price	Change [†]	Assessed
MB Index CFR Turkey HMS 1&2 (80:20) (North Europe material)	287.16	-1.75%	▼ 25 Jul 19
MB Index CFR Turkey HMS 1&2 (80:20) (USA material)	294.34	-1.71%	▼ 25 Jul 19
MB Index Shredded India import cfr (\$/t)	314.23	-1.52%	▼ 19 Jul 19
HMS 1&2 ferrous scrap index (80:20) fob Rotterdam (\$/t)	266.28	0.23%	▲ 19 Jul 19
HMS 1&2 (80:20) UK export fob main port (\$/t)	271-273	0.74%	▲ 19 Jul 19
HMS 1&2 (80:20) Taiwan import cfr (\$/t)	280-283	-0.88%	▼ 25 Jul 19
US Index domestic Midwest No1 busheling (\$/gross ton)	275.27	-2.29%	▼ 10 Jul 19
US Index domestic Midwest shredded (\$/gross ton)	253.67	-2.08%	▼ 10 Jul 19
Vietnam ferrous scrap (\$/t)	315-315	1.12%	▲ 19 Jul 19

PITTSBURGH

Signs of revival in US stainless scrap market

The stainless steel scrap market in the United States is showing signs of recovery, with nickel prices remaining well over the \$6-per-lb mark on the London Metal Exchange.

"Continued upward movement in LME nickel has resulted in improved prices for the 300-series stainless grades... If we had more mill demand and stronger chrome and iron values, prices would be even better," one US dealer source said.

"Prices are a little unstable with conflicting information coming in about domestic demand, global demand, nickel prices, etc," a major stainless processor said.

Nickel prices have been on a robust run over the past few weeks, but sentiment was mixed with the metal retreating somewhat in the early part of this week.

A second processor welcomed the pickup in nickel pricing but does not see it lasting. "Nickel is falling and will continue to fall," this source said

Fastmarkets AMM's assessment for the 300-series grades in Pittsburgh showed stainless steel scrap 316 solids, clips, broker buying price, delivered to processor, in a wider range of 67-72 cents per lb (\$1,501-1,613 per gross ton) on Tuesday July 23 compared with 69-70 cents per lb one week earlier. The price for 304 solids, clips widened upward by 3 cents to 46-52 cents per lb and 304 turnings widened upward by 1 cent to 40-45 cents per lb.

The 400-series stainless grades continued to show very little movement, with most dealers and processors hoping for something positive in the ferrous scrap market next month.

Fastmarkets AMM's assessment of broker buying prices for stainless steel scrap 430 bundles, solids and 430 turnings were steady at 12-15 cents per lb and 8-10 cents per lb respectively. Type 409 bundles, solids fell by a penny to 9-13 cents per lb and 409 turnings moved to 6-8 cents per lb from 5-8 cents per lb previously.

The nickel LME official cash contract closed at \$14,305 per tonne (\$6.49 per Ib) on July 23, up by 2.8% from \$13,920 per tonne one week earlier but down by 2.6% from the one-year high of \$14,685 per tonne reached on July 18. The contract closed the official session at \$14,475 per tonne on Wednesday.

"Looks like nickel is coming down almost as fast as it went up. I

am seeing very consisitent pricing, so there hasn't been too much of an over-reaction by the processors," a second dealer said.

While sentiment on the nickel market varied, most sources expect the price to come back down.

"I think the recent run-up may be a little overinflated as the market typically knee-jerks up or down, then settles back somewhat. So, \$6-6.25 [per lb] feels more like where nickel should settle," a third processor said.

LME nickel stocks stood at 145,056 tonnes at the start of business on Wednesday, down by 3,174 tonnes from 148,230 tonnes at the close on July 17.

JAMES LAWRENCE



Ferrous raw materials

FASTMARKETS KEY IRON ORE PRICES				
cfr main China port \$ per dry metric tonne				
	Price	Change [†]		Assessed
Iron ore index (62% fe)	117.00-117.00	-2.42%	\blacksquare	25 Jul 19
Iron ore pellet index cfr Qingdao (65% fe)	143.97-143.97	-1.82%	•	19 Jul 19

SINGAPORE

IRON ORE DAILY: Seaborne prices rise on firmer spot transactions

Seaborne iron ore prices pushed up on Thursday July 25, with firmer spot trades supporting the increases, sources told Fastmarkets.

FASTMARKETS' INDEX FOR IRON ORE 62% FE FINES, CFR QINGDAO:

\$117 per tonne, up \$2.03 per tonne.

FASTMARKETS' INDEX FOR IRON ORE 62% FE PILBARA BLEND FINES, CFR QINGDAO:

\$116.92 per tonne, up \$2.03 per tonne.

FASTMARKETS' INDEX FOR IRON ORE 62% FE LOW ALUMINA FINES, CFR QINGDAO:

\$117.28 per tonne, up \$1.47 per tonne.

FASTMARKETS' INDEX FOR IRON ORE 58% FE FINES HIGH-GRADE PREMIUM, CFR QINGDAO:

\$103.51 per tonne, down \$1.26 per tonne.

FASTMARKETS' INDEX FOR IRON ORE 65% FE BRAZIL-ORIGIN FINES, CFR QINGDAO:

\$124.90 per tonne, up \$1.60 per tonne.

FASTMARKETS' INDEX FOR IRON ORE 62% FE FINES, FOT GINGDAO:

865 yuan per wet metric tonne (implied 62% Fe China Port Price \$116.32 per dry tonne), down 1 yuan per wmt.

KEY DRIVERS

The iron ore market saw two fixed-price spot transactions concluded, while market participants considered the transacted prices to be firmer, lending support to the seaborne prices.

A deal for Pilbara Blend fines was said to have been concluded at \$115.15 per tonne cfr China, while a consignment of Brazilian iron ore Carajas exchanged hands at \$124.90 per tonne cfr China.

China's iron ore futures prices had initially trended down in the morning trading session, but started to climb towards the close of the afternoon trading session.

Chinese steel futures also trended up before the close of the

Several securities companies were expecting mills in the country's steelmaking hub of Tangshan, to observe the stringent production curbs ordered by the local government last weekend, prompting futures to trend upwards.

However, the ongoing environmental restrictions were also

limiting port trading activity in the Tangshan region.

A similar upward trend was also observed for the 62% Fe derivative contract on the Singapore Exchange (SGX), with the August contract up by around \$1.05 per tonne to \$112.15 per tonne from the previous day's closing price of \$111.10 per tonne.

Meanwhile, Fortescue Metals Group (FMG) has set its shipment guidance for its financial year of 2020 (FY20) to 170-175 million tonnes, up from 165-170 million tonnes over FY19, according to its quarterly report released on Thursday.

The Australian miner expects to see strong demand from Chinese steel mills as focusing on optimizing raw materials costs in response to lower steel margins.

As a result, FMG shipped a record of 46.6 million tonnes of iron ore in April-June, up by 22% from 38.3 million tonnes shipped in the first quarter of 2019.

The second-quarter total was 0.2% higher than the 46.5 million tonnes shipped in the same quarter in 2018.

Strong demand from its customers prompted an increase in shipped volumes for all FMG products in the second quarter, the miner said, with 10% of the total, or 4.7 million tonnes, being taken up by its new 60.1% Fe West Pilbara fines, which only started shipping in December 2018.

Fastmarkets' index for iron ore 62% Fe fines rose by \$2.03 per tonne, while the daily index for iron ore 65% Fe Brazil-origin fines increased \$1.60 per tonne.

The price movements were based on the visible market activity detailed below, which was included in the index calculation according to the published methodology.

Any data received under Data Submitter Agreements or subject to a confidentiality request will not be published.

QUOTE OF THE DAY

"Market participants were [probably] expecting [to see major production] cuts in Tangshan, thus most traders were being optimistic [about] the September loading contracts," a Singapore-based broker told Fastmarkets.

TRADES/OFFERS/BIDS HEARD IN THE MARKET

- Vale, Global Ore, 108,000 tonnes of 65% Fe Iron Ore Carajas, traded at \$124.90 per tonne cfr China, bill of lading dated July 19.
- Rio Tinto, bilateral sale, 170,000 tonnes of 61% Fe Pilbara Blend fines, traded at \$115.15 per tonne cfr China, laycan August 8-17.
- BHP, private tender, 110,000 tonnes of 60.8% Fe Mining Area C fines, traded at the August average of two 62% Fe indices, adjusted for Fe content, plus a premium of \$0.80 per tonne, laycan August 6-15.
- BHP, private tender, 100,000 tonnes of 57.1% Fe Yandi fines, traded at the September average of two 62% Fe indices, adjusted for Fe content, plus a premium of \$1 per tonne, September arrival.
- BHP, private tender, joint cargo, 130,000 tonnes of 59.5% Fe Jimblebar fines, traded at the September average of two 62% Fe indices, adjusted for Fe content, plus a discount of \$2.35 per tonne; and 110,000 tonnes of 57.1% Fe Yandi fines, traded at the September average of two 62% Fe indices, adjusted for Fe content, plus a premium of \$0.51 per tonne, laycan August 16-31.
- Global Ore, 170,000 tonnes of 62% Fe Pilbara Blend fines, offered at \$116.50 per tonne cfr China, laycan August 22-31.
- Rio Tinto, tender, joint cargo, 100,000 tonnes of 59.6% Fe SP10 fines, and 70,000 tonnes of 60.7% Fe SP10 lump, laycan August 17-26.

PORT PRICES

Pilbara Blend fines traded at around 850-873 yuan per tonne in Shandong province and Tangshan city during the day, compared with 850-870 yuan per tonne a day earlier.



Ferrous raw materials

The latest price range was equivalent to \$114.30-117.50 per tonne cfr China in the seaborne market.

DALIAN COMMODITY EXCHANGE

The most-traded January iron ore futures contract closed at 739 yuan per tonne on Thursday, up 3.50 yuan per tonne from the previous day's close.

ALEX THEO

SINGAPORE

COKING COAL DAILY: Prices for premium products plummet

Prices for seaborne cargoes of premium hard coking coal tumbled on Thursday July 25, with pervading pessimism taking hold of this segment of the market.

An August-loading cargo of premium low-vol hard coking coal was traded at \$185.50 per tonne cfr China during the day, sources said.

This sent the Fastmarkets index for premium hard coking coal, cfr Jingtang to \$184.16 per tonne, down \$5.62 per tonne from a day earlier and its lowest since early August last year.

Another cargo was heard to have changed hands at around \$174 per tonne cfr China, but its specifications could not be confirmed by the 6pm cutoff time for Fastmarkets' data collection. As such, this

transaction was not taken into consideration for the calculation of Fastmarkets' indices.

On the Global Coal trading platform, offers for premium hard coking coal in the branded segment stood at \$173-172 per tonne fob Australia during the day, sources said.

Fastmarkets' index for premium hard coking coal, fob DBCT fell \$2.45 per tonne on Thursday to reach \$174.01 per tonne, also its lowest since early August last year.

Prices in the second-tier hard coking coal segment were stable amid a limited supply of cargoes.

Fastmarkets' index for hard coking coal, cfr Jingtang was at \$179.63 per tonne during the day while the fob DBCT index was at

Spot market transactions involving hard coking coal brands have fallen by over 40% on a tonnage basis in the January-June period in comparison with a year earlier, according to Fastmarkets' data.

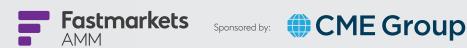
While prices for premium hard coking coal and second-tier hard coking coal typically share a similar trajectory at any given time, tight supply in the latter appears to be closing the gap between the two segments.

Meanwhile, mining major Anglo American said on Thursday that its board had approved the Aquila project to extend the life of its Capcoal underground hard coking coal operations in Queensland, Australia by six years to 2028.

The Capcoal complex includes the Capcoal open-cut and Grasstree underground mines.

Anglo American said it produced 5.8 million tonnes of metallurgical coal in the June guarter, up 11% year on year. Its Capcoal operations accounted for 1.7 million tonnes of these.

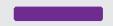
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Ferrous raw materials

Elsewhere, Canada's Teck Resources on Wednesday revised its annual production guidance downward to 25.5-26 million tonnes from 26-26.5 million tonnes previously amid logistical, geological and geotechnical issues.

The Dalian Commodity Exchange's most-traded September coking coal futures contract closed at 1,409 yuan (\$205) per tonne on Thursday, unchanged from a day earlier.

The most-traded coke contract closed at 2,139 yuan per tonne, up 17 yuan per tonne for the day.

The Fastmarkets indices for low-vol pulverized coal injection were unchanged, at \$124.44 per tonne cfr Jingtang and \$109.85 per tonne for DBCT

DEEPALI SHARMA



During the past 15 years, wind turbine towers have increased in height from 80 meters (262.5 feet) to 100 meters (368 feet) or higher to harvest the more dependable and consistent wind resources at higher altitudes. Unlike traditional steels unable to scale to the new taller standard, niobium-containing steel offers a solution.

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Prices

 $\underline{ \mbox{For the latest prices go to http://www.metalbulletin.com/My-price-book.html} }$

	Price	Change [†]	Assesse
Comex: Copper high grade cents/lb			
Settlement	270.40	-0.22%	▼ 24 Jul 1
Open interest	264,229	-0.99%	▼ 23 Jul 1
Stocks (short ton)	38,406	3.16%	▲ 23 Jul 1
Comex: Gold \$/troy oz			
Settlement	1,422.80	0.11%	▲ 24 Jul 1
Open interest	616,859	2.49%	▲ 23 Jul 1
Stocks (troy oz)	7,749,869	0.04%	▲ 23 Jul 1
Nymex: Palladium \$/troy oz			
Settlement	1,538.5	-0.3%	▼ 24 Jul 1
Stocks (troy oz)	65,135	-4.99%	▼ 23 Jul 1
Nymex: Platinum \$/troy oz			
Settlement	875.20	3.98%	▲ 24 Jul 1
Stocks (troy oz)	174,635	1.72%	▲ 23 Jul 1
Comex: Silver cents/troy oz			
Settlement	1,655.40	4.16%	▲ 24 Jul 1
Open interest	234,735	2.3%	▲ 23 Jul 1
SHANGHAI FUTURES			
	Price	Change [†]	Assesse
Aluminium yuan/tonne	13,870	0.18%	▲ 25 Jul 1
Copper yuan/tonne	46,980	0.53%	▲ 25 Jul 1
Nickel cathode yuan/tonne	109,700	-6.13%	▼ 25 Jul 1
Tin ingot yuan/tonne	133,800	-0.15%	▼ 25 Jul 1
Zinc yuan/tonne	19,290	-1.58%	▼ 25 Jul 1
Steel rebar month 1 yuan/tonne	4,063	-0.64%	▼ 25 Jul 1
Steel rebar month 2 yuan/tonne	3,981	-2.04%	▼ 25 Jul 1
Steel rebar month 3 yuan/tonne	3,918	-2.39%	▼ 25 Jul 1
Weekly stocks deliverable			
Aluminium (tonnes)	422,022	0.71%	▲ 19 Jul 1
Copper (tonnes)	154,520	******	▲ 19 Jul 1
Nickel cathode (tonnes)	27,211	5.39%	▲ 19 Jul 1
Tin ingot (tonnes)	6,736	0.0270	▼ 19 Jul 1
Zinc (tonnes)	75,519	1.96%	▲ 19 Jul 1
Steel rebar (tonnes)	15,510	-8.74%	▼ 19 Jul 1

DAILY METAL AND STEEL

London forward LME settlement prices. All prices per tonne, unless otherwise stated, in LME warehouse, EU duty, if any paid for buyers account

Price	Change [†]		Assessed
1,795-1,795.5	-1.75%	\blacksquare	25 Jul 19
1,802-1,804	-1.07%	▼	24 Jul 19
1,823-1,825	-1.14%	•	25 Jul 19
1,830-1,832	-0.49%	▼	24 Jul 19
1,796.06	0.34%	A	24 Jul 19
987,975	0.79%	A	24 Jul 19
1,305-1,315	3.15%	\blacktriangle	25 Jul 19
1,305-1,315	5.65%	A	24 Jul 19
1,300-1,310	2.76%	A	25 Jul 19
1,300-1,310	5.67%	A	24 Jul 19
6,740	37.55%	A	24 Jul 19
	1,795-1,795.5 1,802-1,804 1,823-1,825 1,830-1,832 1,796.06 987,975 1,305-1,315 1,305-1,315 1,300-1,310 1,300-1,310	1,795-1,795.5 -1.75% 1,802-1,804 -1.07% 1,823-1,825 -1.14% 1,830-1,832 -0.49% 1,796.06 0.34% 987,975 0.79% 1,305-1,315 3.15% 1,305-1,315 5.65% 1,300-1,310 2.76% 1,300-1,310 5.67%	1,795-1,795.5 -1.75% ▼ 1,802-1,804 -1.07% ▼ 1,823-1,825 -1.14% ▼ 1,830-1,832 -0.49% ▼ 1,796.06 0.34% △ 987,975 0.79% △ 1,305-1,315 3.15% △ 1,305-1,315 5.65% △ 1,300-1,310 2.76% △ 1,300-1,310 5.67% △

N. Amorican enocial aluminium alless	Price	Change		Assesse
N. American special aluminium alloy LME cash official	1,205-1,215	4.99%	•	25 Jul 1
LME cash unofficial	1,195-1,205	7.14%		24 Jul 1
LME 3 months official	1,210-1,220	3.85%		25 Jul 1
LME 3 months unofficial	1,200-1,210	5.7%		24 Jul 1
_ME stocks (tonnes)	85,840	-3.85%	•	24 Jul 1
Copper grade A \$	03,040	-0.0070		24 301 1
LME cash official	6,009.5-6,010	1.06%	•	25 Jul 1
LME cash unofficial		0.89%	-	24 Jul 1
LME 3 months official	5,983.5-5,985.5 6,030-6,035	1.29%	<u> </u>	25 Jul 1
LME 3 months unofficial		1.01%	<u> </u>	24 Jul 1
LME Tapo notional average price (NAP)	6,003-6,005 5,935.72	0.38%		24 Jul 1
		-0.86%	—	
LME stocks (tonnes)	295,475	-0.00%		24 Jul 1
Lead \$	0.400.0.400.5	E 440/		05.1.14
LME cash official	2,123-2,123.5	5.14%		25 Jul 1
LME cash unofficial	2,076.5-2,078.5	4.84%		24 Jul 1
_ME 3 months official	2,110-2,111	4.53%		25 Jul 1
LME 3 months unofficial	2,075-2,077	4.37%	_	24 Jul 1
_ME stocks (tonnes)	56,100	-9.95%	•	24 Jul 1
Nickel\$				
LME cash official	13,980-13,995	-4.72%	•	25 Jul 1
LME cash unofficial	14,490-14,500	2.38%	A	24 Jul 1
LME 3 months official	14,030-14,040	-4.7%	•	25 Jul 1
LME 3 months unofficial	14,530-14,540	2.27%	A	24 Jul 1
_ME stocks (tonnes)	145,500	-1.84%	•	24 Jul 1
Tin\$				
_ME cash official	17,750-17,755	-0.48%	\blacksquare	25 Jul 1
LME cash unofficial	17,890-17,940	0.56%	A	24 Jul 1
LME 3 months official	17,755-17,760	-0.41%	•	25 Jul 1
LME 3 months unofficial	17,900-17,950	0.42%	A	24 Jul 1
LME stocks (tonnes)	6,185	-3.36%	•	24 Jul 1
Zinc special high grade \$				
LME cash official	2,435.5-2,436	-1.65%	•	25 Jul 1
LME cash unofficial	2,450.5-2,452.5	-0.75%	•	24 Jul 1
LME 3 months official	2,442-2,444	-1.39%	•	25 Jul 1
LME 3 months unofficial	2,454-2,456	-0.61%	•	24 Jul 1
LME stocks (tonnes)	76,225	-5.31%	•	24 Jul 1
Cobalt min 99.3%	· · · · · · · · · · · · · · · · · · ·			
LME cash official	26,500-28,500	0%		25 Jul 1
LME 3 months official	27,000-29,000	0%		25 Jul 1
LME stocks (tonnes)	840	0%		24 Jul 1
Gold \$/troy oz	0.0	0,0		_ 10011
London morning	1,425.55	1.77%	•	24 Jul 1
London afternoon	1,426.95	1.18%	<u> </u>	24 Jul 1
Handy/Harman	1,426.95	1.18%		24 Jul 1
-	1,420.33	1.1070	_	24 Jul
Silver per troy oz	1 201	E 040/		04 1.14
London spot pence	1,321	5.01%	<u> </u>	24 Jul 1
London spot cents	1,653.5	5.93%	<u> </u>	24 Jul 1
Handy/Harman	1,658.5	4.13%		24 Jul 1
Palladium \$/troy oz				
_ondon morning	1,530	0.66%		24 Jul 1
_ondon afternoon	1,527	-0.84%	•	24 Jul 1
Platinum \$/troy oz				
London morning	862	3.23%	A	24 Jul 1
	869	3.82%	_	24 Jul 1

†week-on-week change continued >

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continued>

	Price	Change		Assessed	MB BASE METAL PREMIUMS				
Kuala Lumpur tin market					All prices \$/tonne unless otherwise stated				
Tin \$/tonne	17,930	0.17%	A	25 Jul 19	*MB Copyright				
CDX						Price	Change [†]		Assesse
Tin PB300 settlement price \$/tonne	17,720	-1.61%	•	25 Jul 19	Copper				
Tin PB300 volume, tonnes	132	169.39%	A	25 Jul 19	Annual premium 8mm wire rod, cif				
					Nhava Sheva, \$/tonne	130-175*	-12.86%	▼	07 Sep 1
RAND FIXING PRICES					Rotterdam, Grade A, cathode, cif,	40.0.50.0*	00/		02 1
Rand fixing prices per tonne for London Metal E	Exchange trade				\$/tonne	40.0-50.0*	0%		23 Jul ′
	Price	Change [†]		Assessed	Germany, Grade A, cathode, delivered, \$/tonne	80.0-90.0*	0%		16 Jul
Copper	83,424.81	0.14%	A	25 Jul 19	North European warrants, Grade A				
Aluminium	24,923.34	-2.63%	•	25 Jul 19	cathode, in-warehouse, \$/tonne	5.0-10.0*	0%		24 Jul
_ead 	29,476.30	4.18%	_	25 Jul 19	South European warrants, Grade A	E 0 40 0*	00/		04 1
Zinc	33,814.12	-2.54%	_	25 Jul 19	cathode, in-warehouse, \$/tonne	5.0-10.0*	0%		24 Jul
Nickel	194,264.60	-5.55%	_	25 Jul 19	Leghorn, copper low-high premium, Grade A, cathode, cif, \$/tonne	45.0-55.0*	0%		16 Jul
Tin	246,457.16	-1.42%	•	25 Jul 19	Japan, copper, Grade A, cathode,				
					cif, \$/tonne	60.0-70.0*	0%		16 Jul 1
EXCHANGE RATES					South Korea, copper low-high	40.0.60.0*	00/		02 1
	Price	Change [†]		Assessed	premium, Grade A, cathode, cif, \$/tonne Southeast Asian warrants. Grade A	40.0-60.0*	0%		23 Jul 1
LME settlement conversion rates					cathode, in-warehouse, \$/tonne	5.0-10.0*	0%		24 Jul 1
\$/£	1.2485	-0.02%	•	25 Jul 19	East Asian warrants, Grade A				
\$/¥	108.1400	0.31%	A	25 Jul 19	cathode, in-warehouse, \$ per tonne	5.0-10.0*	0%		24 Jul
\$/€	1.1114	-0.94%	▼	25 Jul 19	Southeast Asia, Grade A cathode,	50.0.00.04	201		00.1.1
Closing rates, midpoint					cif, \$ per tonne	58.0-68.0*	0%		23 Jul
\$/£	1.2500	0.56%	A	24 Jul 19	Shanghai, copper low-high premium, Grade A, cathode, in-warehouse, \$/tonne	53.0-70.0*	0%		25 Jul
5/¥	108.0650	-0.02%	▼	24 Jul 19	Shanghai, copper low-high premium,				
\$/€	1.1143	-0.73%	▼	24 Jul 19	Grade A, cathode, cif, \$/tonne	53.0-69.0*	0%		25 Jul
£/€	1.1217	1.3%	A	24 Jul 19	Shanghai, copper cif ER, premium,				
\$/CNY	6.8748	-0.07%	•	24 Jul 19	Grade A, cathode, \$/tonne	58.0-69.0*	0%		25 Jul 1
					Shanghai, copper cif SX-EW, premium, Grade A, cathode, \$/tonne	53.0-58.0*	0%		25 Jul 1
BASE METALS ARBITRAGE					Shanghai, copper bonded in-warehouse,				
	Price	Change [†]		Assessed	SX-EW, premium, Grade A, cathode, \$/tonne	53.0-58.0*	0%		25 Jul 1
Aluminium					Shanghai, copper bonded in-warehouse,	50.0.70.04	201		05.1.1
Import arbitrage, \$/tonne	-189.19*	-15.03%	\blacksquare	25 Jul 19	ER, premium, Grade A, cathode, \$/tonne	58.0-70.0*	0%		25 Jul
Import arbitrage, yuan/tonne	-1,303.64*	-15.11%	•	25 Jul 19	Taiwan, Grade A cathode, cif, \$ per tonne	60.0-68.0*	0%		16 Jul 1
Import arbitrage, cfr Owensboro -					United States warrants, Grade A cathode, \$/tonne	5.0-15.0*	0%		24 Jul ²
origin LME Warehouses, Busan, \$/tonne	253.26*	-0.08%	•	03 Jul 19	Copper Cathode, Grade 1 premium,	0.0 10.0	070		21001
Import arbitrage, cfr Owensboro - origin LME Warehouses, Johor, \$/tonne	260 42*	0.000/		03 Jul 19	Delivered Domestic US, US cents/pound	7.0-8.0*	-1.64%	▼	23 Jul ′
Import arbitrage, cfr Owensboro -	260.13*	0.82%	_	03 Jul 19	Copper Cathode, Grade 1 premium,				
origin LME Warehouses, Port Klang, \$/tonne	260.13*	0.82%		03 Jul 19	Delivered Domestic US, \$/tonne	154.3-176.4*	-1.64%	V	23 Jul ′
Import arbitrage, cfr Owensboro -					Aluminium				
origin LME Warehouses, Singapore, \$/tonne	245.06*	0.72%	A	03 Jul 19	Aluminium P1020A, in-warehouse Rotterdam duty-unpaid, spot low-high,				
Copper					\$/tonne	95.0-105.0*	5.26%	A	25 Jul ′
Import arbitrage, \$/tonne	-51.53*	-9.39%	▼	25 Jul 19	Aluminium P1020A, cif main Korea				
Import arbitrage, yuan/tonne	-355.10*	-9.48%	▼	25 Jul 19	ports, spot low-high, \$/tonne	95-100*	0%		23 Jul
Nickel					Aluminium P1020A, Southeast Asian	40.0.00.0*	00/		04.1.1
Import arbitrage, \$/tonne	-448.01*	2.65%		25 Jul 19	warrants, in-warehouse, \$/tonne	10.0-20.0*	0%		24 Jul 1
Import arbitrage, yuan/tonne	-3,087.14*	2.56%	A	25 Jul 19	Aluminium P1020A, East Asian warrants, in-warehouse, \$/tonne	10.0-15.0*	0%		24 Jul 1
Zinc					Aluminium P1020A, cif Shanghai, spot				
mport arbitrage, \$/tonne	-114.13*	-7.3%	▼	25 Jul 19	low-high, \$/tonne	95.0-105.0*	0%		16 Jul 1
mport arbitrage, yuan/tonne	-786.43*	-7.39%	▼	25 Jul 19	Aluminium P1020A, South Korea, fca,	110 0 115 0*	00/		00.1.4
					\$/tonne	110.0-115.0*	0%		23 Jul ′
					Aluminium P1020A, Shanghai, in-warehouse, \$/tonne	95.0-105.0*	0%		16 Jul
					Aluminium P1020A, Taiwan, cif,	00.0 100.0	J / 0		10 001
					\$/tonne	100.0-110.0*	-4.55%	•	16 Jul
					Aluminium P1020A, Italy, fca				
					duty-paid, spot, \$/tonne	175.0-185.0*	2.86%	<u> </u>	23 Jul 1
					Aluminium P1020A, Spain, fca duty-paid, \$/tonne	170.0-180.0*	0%		16 Jul 1
					ασιγ-ραία, φποιπιο	170.0-100.0	U /0		10 Jul

† week-on-week change





	Price	Change	Assessed		Price	Change		Assessed
Aluminium P1020A, Turkey, cif	00.0.00.04	201	40 1 140	India, 99.97% purity, cif, \$/tonne	70.0-130.0*	0%		23 Jul 19
duty-unpaid, \$/tonne	80.0-90.0*	0%	16 Jul 19	India, 99.99% purity, cif, \$/tonne	130.0-150.0*	0%		23 Jul 19
Aluminium ingot ADC 12 ex-works China, duty-paid, yuan/tonne	13,000-13,400*	-0.38%	2 4 Jul 19	South European warrants, 99.97% purity, in-warehouse, \$/tonne	10.0-15.0*	0%		24 Jul 19
Aluminium ingot ADC 12 spot, main Japanese ports, \$/tonne	1,420-1,460*	-0.35%	24 Jul 19	US warrants, 99.97% purity, in-warehouse, \$/tonne	20.0-30.0*	0%		24 Jul 19
Aluminium P1020A, cif main Japanese ports, spot low-high, \$/tonne	90.0-100.0*	-7.32% T	7 23 Jul 19	US lead premium 99.97%, delivered domestic, cents/lb	9-11*	0%		23 Jul 19
Aluminium P1020A, cif main Japanese ports, quarterly, \$/tonne	108.0-108.0*	2.86%	24 Jun 19	US lead premium 99.99%, delivered domestic, cents/lb	11-13*	0%		23 Jul 19
Aluminium P1020A, in-warehouse Rotterdam duty-paid, spot \$/tonne	145.0-155.0*	0%	23 Jul 19	Nickel				
Aluminium 6063 extrusion billet, in-warehouse Rotterdam duty-paid, spot,				Shanghai, nickel low-high premium, 99.8% purity in-warehouse, \$/tonne	190.0-210.0*	-14.89%	•	23 Jul 19
\$/tonne Aluminium P1020A, free market	310.0-330.0*	0%	19 Jul 19	Shanghai, nickel low-high premium, 99.8% purity, full plate, cif, \$/tonne	180.0-200.0*	-15.56%	•	23 Jul 19
delivered, cents per pound	99.47-99.97*	-0.88% ▼	2 4 Jul 19	Shanghai, nickel premium, 99.80% purity, briquette, duty-free, cif, \$/tonne	240.0-290.0*	0%		25 Jun 19
Aluminium P1020A, duty paid premium, delivered Midwest, cents per pound	17.75-18.25*	0%	23 Jul 19	Southeast Asian warrants, min 99.80% full plates, in-warehouse, \$/tonne	150-200*	0%		24 Jul 19
Aluminium P1020A, cif Baltimore premium, US cents/lb	5.5-5.75*	0%	23 Jul 19	Southeast Asian warrants, min 99.80%				
Aluminium P1020A, US warrants, in-warehouse, \$/tonne	115.0-125.0*	0%	24 Jul 19	briquettes, in-warehouse, \$/tonne East Asian warrants, min 99.80% full	10-15*	0%		24 Jul 19
Aluminium P1020A, delivered Sao Paulo region, spot, \$/tonne	220.0-240.0*	0%	16 Jul 19	plates, in-warehouse, \$/tonne East Asian warrants, min 99.80%	150-200*	0%		24 Jul 19
Aluminium P1020A, cif Brazilian main				briquettes, in-warehouse, \$/tonne North European warrants, min 99.80%,	10-15*	0%		24 Jul 19
ports duty-unpaid, spot, \$/tonne Aluminium 6063 + 6060 extrusion	155.0-165.0*	0%	16 Jul 19	in-warehouse, \$/tonne	90-140*	0%		24 Jul 19
billet, cif Brazilian main ports, spot	200 0 205 0*	2.40/	7 10 Iul 10	uncut cathodes premium indicator	200.0-230.0*	0%		23 Jul 19
(premium over LME cash), \$/tonne Aluminium billet, delivered	300.0-325.0*	-3.1% V	7 19 Jul 19	4x4 cathodes premium indicator	460.0-500.0*	0%		23 Jul 19
duty-paid North Germany (Ruhr region) over				briquettes premium indicator	200.0-250.0*	0%		23 Jul 19
LME 30-day pay, \$/gross tonne Aluminium billet, delivered	350.0-370.0*	0%	19 Jul 19	Nickel 4x4 cathode premium, delivered consumer works US, US cents per pound	37-45*	0%		23 Jul 19
duty-paid Italy (Brescia area) over LME 60-day pay, \$/gross tonne	330.0-350.0*	-2.86% V	7 19 Jul 19	Nickel briquette premium, delivered consumer works US, US cents per pound	18-24*	-4.55%	▼	23 Jul 19
Aluminium billet, delivered duty-paid Spain				Tin				
over LME 60-day pay, \$/gross tonne Aluminium billet, cif Thailand duty-unpaid	340.0-350.0*	0%	19 Jul 19	Rotterdam spot premium, 99.9% low lead ingots, in-warehouse \$/tonne	475-530*	0%		16 Jul 19
over LME cash pay, \$/gross tonne Aluminium billet, cif Japan duty-unpaid	190.0-210.0*	0%	05 Jul 19	Rotterdam spot premium 99.9% ingot, in-warehouse \$/tonne	380-430*	0%		16 Jul 19
over MJP and LME cash pay, \$/gross tonne	140.0-155.0*	0%	19 Jul 19	South East Asian warrants, min 99.85% ingots, in-warehouse \$/tonne	30-80*	37.5%	_	24 Jul 19
Aluminium billet, cif Turkey (Marmara region) duty-unpaid over LME cash pay, \$/gross tonne	270.0-300.0*	0%	19 Jul 19	Shanghai spot premium, 99.9% ingots,			_	16 Jul 19
Aluminium foundry alloy premium, delivered duty-paid, Germany, \$/tonne	340.0-355.0*	-0.71% T	7 12 Jul 19	cif, \$/tonne Shanghai spot premium, 99.9% low	230-250*	0%		
Aluminium foundry alloy premium, delivered duty-paid, Eastern Europe, \$/tonne	360.0-375.0*	-0.68% T	7 12 Jul 19	lead ingots, cif, \$/tonne Taiwan spot premium, 99.9% ingots,	320-350*	0%		16 Jul 19
Aluminium foundry alloy premium, delivered duty-unpaid, US midwest, \$/tonne	9.0-12.0*	-22.22% V	7 12 Jul 19	cif, \$/tonne Baltimore premium, 99.85% ASTM grade	200-220*	0%		16 Jul 19
Aluminium foundry alloy premium, delivered duty-paid cif Turkey, \$/tonne	170.0-180.0*	0%	12 Jul 19	A ingots, in-warehouse \$/tonne US midwest premium, 99.85% ASTM	450-525*	0%		16 Jul 19
Annual aluminium wheel alloy silicon 7 ingot cif main Japanese ports				grade Aingots, delivered \$/tonne	515-590*	0%		16 Jul 19
(Yokohama, Osaka, Nagoya) \$/tonne	120.0-140.0*	15.56%	11 Jan 19	Zinc				
Annual aluminium wheel alloy silicon				North European warrants, min 99.995% SHG ingots, \$/tonne	30.0-50.0*	33.33%	•	24 Jul 19
7 ingot cif main South Korean ports (Busan, Gwangyang, Incheon) \$/tonne	95.0-125.0*	22.22%	11 Jan 19	MB EU: Special high grade, fca				
Lead				Rotterdam, \$/tonne Malaysia fca, 99.995%, \$/tonne	90.0-110.0*	0%		23 Jul 19 23 Jul 19
North European warrants, min 99.97%				Southeast Asia cif, 99.995%, \$/tonne	140.0-120.0*	0%		23 Jul 19
ingots, in-warehouse, \$/tonne	10.0-15.0*	0%	24 Jul 19	Singapore, zinc premium, 99.995%	140.0-130.0	076		23 Jul 19
Southeast Asian warrants, min 99.97% ingots, in-warehouse, \$/tonne	10.0-20.0*	0%	24 Jul 19	purity, fca \$/tonne	110.0-120.0*	0%		23 Jul 19
East Asian warrants, min 99.97% ingots, in-warehouse, \$/tonne	10.0-20.0*	0%	24 Jul 19	Shanghai, zinc low-high premium, 99.995% purity, in-warehouse, \$/tonne	80.0-90.0*	0%		23 Jul 19
Southeast Asia, min 99.97% cif,				Shanghai 99.995% purity, cif \$/tonne	70.0-90.0*	0%		23 Jul 19
\$/tonne	70.0-80.0*	0%	23 Jul 19	Taiwan 99.995% purity SHG ingots, cif\$/tonne	140.0-150.0*	0%		16 Jul 19
Southeast Asia, 99.99% cif, \$/tonne	120.0-140.0*	0%	23 Jul 19	India 99.995% purity, cif duty-unpaid				
Taiwan, 99.97% purity, cif, \$/tonne Taiwan, 99.99% purity, cif, \$/tonne	70.0-90.0* 135.0-145.0*	0%	16 Jul 19 16 Jul 19	\$/tonne	120.0-140.0*	0%		16 Jul 19
	.00.0 110.0	- ,,,	10 001 10	† week-on-week change			conf	tinued >





	Price	Change		Assessed
India 99.995% purity, cif duty-paid \$/tonne	230.0-250.0*	0%		16 Jul 19
Antwerp 99.995% purity, duty-paid fca \$/tonne	90.0-110.0*	0%		23 Jul 19
Italy 99.995% purity, duty-paid fca \$/tonne	140.0-150.0*	3.57%	A	23 Jul 19
Italy 99.995% purity, delivered duty-paid \$/tonne	175.0-185.0*	0%		23 Jul 19
US warrants 99.995% purity,	50400*	00/		04 140
in-warehouse \$/tonne MB US: Special high grade, cents/lb	5.0-10.0* 80-90*	0%		24 Jul 19 23 Jul 19
MID 03. Special High grade, certis/ib	00-90	0 70		23 301 13
BASEMETALS				
	Price	Change [†]		Assessed
Alumina				
MB Chinese free market, metallurgical			_	
grade, delivered duty-paid, yuan/tonne	2,420.0-2,520.0*	-1.2%	▼	25 Jul 19
Alumina Index fob Australia Alumina Index fob Brazil	303.06* -10.63*	0.52%	A	25 Jul 19 18 Jul 19
Alumina Index fob Brazil, inferred	-10.03			10 Jul 19
Brazil price \$ per dry metric ton	292.43*			25 Jul 19
Aluminium				
Shanghai bonded aluminium stocks, tonnes	7,000-8,000*	36.36%		01 Jul 19
Calcined petroleum coke, aluminium anode grade, fob US Gulf Coast, \$/tonne	290-310*	-6.98%	•	04 Jul 19
Calcined petroleum coke, aluminium anode grade, fob China, \$/tonne	330-340*	0%		04 Jul 19
Aluminium 6063 extrusion conversion	330-340	0 /0		04 301 13
margin, exw Germany, \$/tonne	695-700*	0%		04 Jul 19
Aluminium 6063 extrusion conversion margin, exw US Midwest, cents/lb	65-75*	0%		04 Jul 19
Aluminium FRP 1050 sheet conversion margin, exw Germany, \$/tonne	660-665*	0%		04 Jul 19
Aluminium FRP 5052 sheet conversion margin, exw US cents/lb	83-87*	0%		04 Jul 19
Aluminium FRP 5000 sheet conversion margin, exw China, \$/tonne	620-640*	-2.33%	•	04 Jul 19
Bauxite				
fob Kamsar, Guinea \$/tonne per dmtu	35*	-5.41%	•	18 Jul 19
fob Trombetas, Brazil \$/tonne per dmtu	37*	1.37%	A	18 Jul 19
Copper & Brass				
Producer premium				
Aurubis European Grade A cathode ex-works \$/tonne	96.0	11.63%	A	01 Oct 18
Codelco: Contract Grade A cathode (average)	98.0	11.36%	•	26 Sep 18
South Africa: Palabora copper rod 7.90mm, Rand/tonne	98,336.440	-1.82%	•	28 Jun 19
Blister copper 98-99% spot RC cif China \$ per tonne	150-160*	-6.06%	_	28 Jun 19
Blister copper 98-99% annual				
benchmark RC cif China \$ per tonne Copper concentrate Asia-Pacific	165-180*	0%		28 Feb 18
Index RC import, US cents/lb	5.16*	-1.71%	▼	19 Jul 19
Copper concentrate Asia-Pacific Index TC import, \$/dmt	51.60*	-1.71%	•	19 Jul 19
Shanghai bonded copper stocks, tonnes	415,000-419,000*	-4.79%	•	15 Jul 19

	Price	Change	Assessed
Nickel			
Nickel pig iron high grade NPI content 10-15% contract price delivered duty-paid China yuan per nickel unit price	1,040-1,060*	7.14%	19 Jul 19
Nickel pig iron high grade NPI content 10-15% spot price China yuan per nickel unit price	1,050-1,070*	7.89%	19 Jul 19
Shanghai bonded nickel stocks, tonnes	11,500-18,500*	-34.78% ▼	7 01 Jul 19
Nickel ore			
Laterite ore with 1.5% nickel content cif China, \$/tonne	30-31*	7.02%	19 Jul 19
Nickel ore 1.8% basis cif China, 15-20% Fe, water content: 30-35%, Si:Mg ratio less than 2, lot size 50,000 tonnes, \$/tonne	50-52*	4.08%	19 Jul 19
Nickel sulfate min 21%, max: 22.5%; cobalt 10ppm max, China ex-works, yuan/tonne	23,500-24,000*	6.74%	19 Jul 19
Lead			
Lead concentrate spot treatment charge (TC) high silver CIF China, \$/tonne	40-60*	0%	28 Jun 19
Lead concentrate spot treatment charge (TC) low silver CIF China, \$/tonne	20-30*	150%	28 Jun 19
Lead concentrate (TC) high silver, annual benchmark, \$/tonne	98*	0%	03 Jun 19
Lead concentrate (TC) low silver, annual benchmark, \$/tonne	99*	0%	15 Mar 18
Zinc			
UK: Special high grade, delivered monthly average price £/tonne	2,212*	-3.87% ▼	7 01 Jul 19
Zinc concentrate spot treatment charge (TC) CIF Asia-Pacific \$/tonne	260-290*	0%	28 Jun 19
Zinc concentrate spot treatment charge (TC) deliverd North China yuan/tonne	6,600-6,900*	0%	28 Jun 19
Zinc concentrate spot treatment charge (TC) deliverd South China yuan/tonne	6,400-6,600*	0%	28 Jun 19
Shanghai bonded zinc stocks, tonnes	92,500-99,500*	-11.93% ▼	7 01 Jul 19

†week-on-week change continued >

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Assessed

24 Jul 19

24 Jul 19 24 Jul 19

24 Jul 19

19 Jul 19

24 Jul 19 24 Jul 19

19 Jul 19

19 Jul 19

19 Jul 19 19 Jul 19

24 Jul 19 19 Jul 19

19 Jul 19

24 Jul 19

PRECIOUS METALS					Price (Chang
	Price	Change [†]	Assessed	Cobalt hydroxide payable indicator, min 30% Co, cif China, % payable of Fastmarkets'		
ridium				standard-grade cobalt price (low-end)	59-60*	-1.65
//B free market: min 99.9%, \$/troy oz	4 440 4 540*	00/	04 1-140	Cobalt tetroxide min 72.6% Co		
n-warehouse	1,410-1,510*	0%	24 Jul 19	delivered China yuan/tonne	145,000-150,000*	0%
lohnson Matthey base price: (unfab) 6/troy oz (08 hrs)	1,480	0%	25 Jul 19	Cobalt sulfate, Co 20.5% basis, China ex-works, yuan/tonne	35,000-36,000*	0%
Englehard base price: \$/troy oz	1,485	0%	25 Jul 19	Cobalt sulfate, Co 20.5% basis,		
Palladium				adjustment to standard-grade cobalt low-end price, exw China, \$/lb	-2.412.13*	-8.2
European free market: min 99.9%,	4 500 4 500*	0.400/	— 04 bil40	Gallium	2 2	
i/troy oz in-warehouse	1,522-1,536*	-0.49% 0%	▼ 24 Jul 19 25 Jul 19	MB free market \$/kg	153-160*	0%
Englehard base price: \$/troy oz	1,551	U%	25 Jul 19	MB China domestic, min 99.99%,	100 100	070
ohnson Matthey base price: (unfab) 5/troy oz (08 hrs)	1,546	-0.06%	▼ 25 Jul 19	yuan/kg	1,000-1,030*	0%
Platinum				Germanium		
European free market: min 99.9%,				Germanium dioxide MB free market \$/kg	950-1,150*	0%
/troy oz in-warehouse	855-866*	2.08%	▲ 24 Jul 19	Germanium metal \$/kg Rotterdam	1,100-1,250*	0%
Englehard base price: \$/troy oz	883	3.4%	▲ 25 Jul 19	Germanium metal MB China domestic,	7.550.0.400*	0.0
ohnson Matthey base price: (unfab) /troy oz (08 hrs)	886	3.75%	▲ 25 Jul 19	min 99.999%, yuan/kg	7,550-8,100*	0.3
, , ,	000	3.7370	25 301 19	Hafnium		
Rhodium				Hafnium 1% Zr max, in-warehouse global locations, \$/kg	900-1,050*	0%
European free market: min 99.9%, 5/troy oz in-warehouse	3,450-3,600*	0%	25 Jul 19	giobai iocations, \$/kg	300 1,000	0 /0
Englehard base price: \$/troy oz	3,545	-0.84%	▼ 25 Jul 19		159-175*	0.0
ohnson Matthey base price: (unfab)	-,- · -			MB China domestic, min 99, 99% yuan/kg	1,080-1,140*	1.8
i/troy oz (08 hrs)	3,515	-0.99%	▼ 25 Jul 19	MB China domestic, min 99.99% yuan/kg	1,000-1,140"	1.8
Ruthenium				Magnesium	0.450.0.550*	00/
European free market: min 99.9%,				European free market \$ per tonne	2,450-2,550*	0%
/troy oz in-warehouse	200-255*	0%	24 Jul 19	China free market min 99.8% Mg, fob China main ports, \$ per tonne	2,350-2,370*	1.7
inglehard base price: \$/troy oz	255	0%	25 Jul 19	MB Chinese free market min 99% Mg,	2,000 2,010	1.7
ohnson Matthey base price: (unfab)	052	00/	05.1.140	ex-works yuan/tonne	15,650-15,700*	1.6
/troy oz (08 hrs)	253	0%	25 Jul 19	Manganese flake		
AINOR METALO				MB free market 99.7%, \$/tonne	1,950-2,000*	0%
MINOR METALS				Electrolytic manganese flake basis		
	Price	Change [†]	Assessed	99.7%, fob China \$/tonne	1,850-1,860*	0%
Antimony				Mercury		
MB free market Regulus, min 99.65%, nax Se 50 ppm, max 100 ppm Bi,				MB free market \$ per flask	2,400-2,700*	0%
S/tonne in-warehouse Rotterdam	5,950-6,150*	-0.41%	▼ 24 Jul 19	Rhenium in-warehouse Rotterdam duty paid		
MMTA Standard Grade II, \$/tonne				Metal pellets, min 99.9% \$/Ib	650-715*	0%
n-warehouse Rotterdam	5,800-6,000*	0%	24 Jul 19	APR catalytic grade \$/kg Re	1,300-1,500*	0%
MB Chinese free market MMTA Standard				Selenium		
Grade II, delivered duty-paid yuan/tonne	37,500-39,000*	0%	24 Jul 19	MB free market \$/lb	8.15-9.85*	-1.6
Arsenic				MB China domestic, min 99.9%, yuan/kg	130-160*	0%
//B free market \$/Ib	1.20-1.5*	0%	19 Jul 19	Silicon		
Bismuth				Grade 441, min 99% Si in-warehouse		
//B free market \$/Ib	2.85-3*	0%	24 Jul 19	Rotterdam, €/tonne	1,625-1,675*	-1.4
MB China domestic, min 99.99%,	44 000 40 0000	4.000/	40.1.140	Grade 553, min 98.5% Si in-warehouse		
/uan/tonne	41,000-42,000*	1.22%	▲ 19 Jul 19	Rotterdam, €/tonne	1,590-1,690*	0%
Cadmium		•••		US free market cents/lb	105-110*	-1.8
/IB free market min 99.95% cents/lb	105-115*	0%	24 Jul 19	Export from mainland China min	1 260 1 110*	4.4
/IB free market min 99.99% cents/lb	110-120*	0%	24 Jul 19	98.5%, \$/tonne fob	1,360-1,410*	-1.4
Chromium				Tellurium	40.00*	
/IB free market alumino-thermic min	7 250 7 600*	0 F70/	40 1:140	MB free market 99.9-99.99%, \$/kg	48-60*	0%
99% \$/tonne	7,350-7,600*	-0.57%	▼ 19 Jul 19	MB China domestic, min 99.99%, yuan/kg	390-410*	0%
Cobalt					550 TIU	0 /0
/IB free market alloy-grade \$/lb	12.55-13.10*	-2.1%	▼ 24 Jul 19	Titanium MB froe market force titanium 70%		
/IB free market standard-grade \$/Ib	12.35-12.70*	-1.96%	▼ 24 Jul 19	MB free market ferro-titanium 70% (max 4.5% Al) \$/kg Ti d/d Europe	4.70-4.95*	0%
IB alloy-grade, weighted average of Il confirmed international trades, \$/lb	12.66*	1 /10/	▼ 24 Jul 19	Titanium ores \$/tonne		370
, ,	12.00	-1.4%	▼ 24 JUI 19	Rutile conc min 95% Tio2 bagged,		
MB standard-grade, weighted average of all confirmed international trades, \$/lb	12.54*	-2.11%	▼ 24 Jul 19	fob/Aus	1,250-1,350	4%
MB China domestic, min 99.8%	.2.0	2,0	2100110	Rutile bulk conc min 95% Tio2		
	000 000 000 000	2.27%	▲ 24 Jul 19	fob/Aus	1,100-1,200	0%
	220,000-230,000*	2.21 /0	24 Jul 13			
ruan/tonne Cobalt hydroxide index min 30% Co,	220,000-230,000	2.21 /0	24 001 13	Ilmenite concentrate, 47-49% Tio2 cif China	180-200	0%





continued >

NOBLE ALLOYS & ORES					01 4/	Price	Change		Asse
	Price	Change [†]	A	Assessed	Chrome ore \$/tonne				
Molybdenum molybdic oxide					Chrome ore cif main Chinese ports				
Europe drummed molybdic oxide \$/lb Mo	11.80-11.90*	2.16%	A	24 Jul 19	South African UG2 chrome ore concs, index basis 42%	146*	3.55%	•	19
Molybdenum MB drummed molybdic oxide	11.90-12.10*	3.23%	A	24 Jul 19	Turkish lumpy 40-42% cfr main Chinese ports	195-200*	0%		19
Mo, in-whs Busan, \$/lb JS canned molybdic oxide \$/lb Mo	11.80-12.10	0%		18 Jul 19	Chrome Ore inventories at the main				
Ferro-molybdenum	11.00-12.20	070		10 301 13	ports of Tianjin, Qinzhou,	0.55.0.50*	4.400/	_	0.0
Basis 65% min, in-warehouse Rotterdam					Lianyungang and Shanghai, million tonnes	2.55-2.58*	-1.16%	•	22
5/kg Mo	27.30-27.70*	1.29%	A	24 Jul 19	Ferro-manganese basis 78% Mn (scale pro rata)				
JS free market 65-70% Mo \$/lb					standard 7.5% C €/tonne	1,020-1,050*	0%		19
n-warehouse Pittsburgh	12.95-13.40*	0.57%	_	18 Jul 19	US free market 78% Mn standard 7.5%				
Tungsten		•••			C \$/long ton in-warehouse Pittsburgh	1,300-1,400*	-1.1%	▼	18
European free market APT \$/mtu	210-225*	0%		19 Jul 19	US free market medium carbon duty-paid fob Pittsburgh, 80% min Mn 1.5% max C \$/lb	1.13-1.15*	0%		18
Export from mainland China APT Chinese No1 grade, min 88.5% W03, S/mtu fob	200-210*	0%		24 Jul 19	MB Chinese free market min 65% Mn	1.13-1.13	U 70		10
MB Chinese free market concentrate	200 2.10	• • • • • • • • • • • • • • • • • • • •		2.000	max 7.0% C in-warehouse China yuan/tonne	6,800-6,900*	0%		19
5% Wo3 in-warehouse China yuan/tonne	73,000-75,000*	0.68%	A	24 Jul 19	Manganese ore				
- Ferro-tungsten					44% Mn index, cif Tianjin \$/dmtu of				
Basis 75% W min \$/kg W in-warehouse					metal contained	5.77*	-2.37%	▼	19
Rotterdam duty-unpaid	28-28.80*	0.53%	<u> </u>	24 Jul 19	37% Mn index, fob Port Elizabeth	1 83*	2 770/		40
/anadium					\$/dmtu of metal contained 37% Mn index, cif Tianjin \$/dmtu of	4.83*	2.77%		19
erro-vanadium basis 78% min, fob, China \$/kg V	36-38*	2.78%	A	25 Jul 19	metal contained	5.63*	2.55%	•	19
Ferro-vanadium basis 78% min, free	00 00	2.10/0	_	20 Jul 13	base 37% Mn port index, range				
lelivery duty paid consumer plant,					35-39%, fot Tianjin yuan/dmtu	47*	-2.08%	•	19
st grade, Western Europe \$/kg V	30-31.05*	3.47%	A	24 Jul 19	base 44% Mn port index, range	40.00*	0.000/	_	41
JS free market ferro-vanadium \$/Ib n-warehouse Pittsburgh	15-15.5*	-8.96%	•	18 Jul 19	42-48%, fot Tianjin yuan/dmtu Inventories at the main ports of	48.80*	-2.98%	•	19
/anadium pentoxide 98% min, fob,	13-13.3	-0.30 /0	•	10 Jul 19	Tianjin and Qinzhou, million tonnes	3.43-3.53*	-3.2%	\blacksquare	2
China \$/Ib V205	8.20-8.5*	3.09%	A	25 Jul 19	Ferro-nickel				
/anadium pentoxide min 98%,					China premium, 26-32% nickel				
n-warehouse Rotterdam \$/Ib V205	6.20-6.70*	0%		19 Jul 19	contained, cif China, \$/tonne	-300200*	66.67%	A	24
					Ferro-silicon				
BULKALLOYS					Lumpy basis 75% Si (scale pro rata),	005.050+	201		
	Price	Change [†]	A	Assessed	major European destinations, €/tonne	925-950*	0%		19
Ferro-chrome \$/lb Cr					US free market \$/lb in-warehouse Pittsburgh lumpy basis 75% Si - imported	0.78-0.83*	-1.23%	•	18
China import charge chrome 50% Cr	0.70*	00/		40 1 140	Export from mainland China, min 75%				
ndex, cif Shanghai, duty-unpaid	0.72*	0%		19 Jul 19	Si, 7.5% C, \$/tonne, fob	1,200-1,260*	0%		24
Ferro-Chrome European Benchmark ndicator, Lumpy Cr charge basis 52%					MB Chinese free market min 75% Si,	0.500.0.700*	00/		0.
and high carbon), \$ per lb	0.98*	0%		19 Jul 19	in-warehouse China, yuan/tonne	6,500-6,700*	0%		24
Spot 6-8% C basis 50% Cr delivered	0.400.0.000*	20/		40 1 1 40	Silico-manganese				
duty paid China yuan/tonne	6,100-6,300*	0%		19 Jul 19	Lumpy basis 65-75% Mn basis 15-19% Si (scale pro rata), major European				
Contract 6-8% C basis 50% Cr delivered duty paid China yuan/tonne	6,050-6,300*	0%		19 Jul 19	destinations, €/tonne	950-985*	0%		19
umpy Cr charge basis 52% Cr (and	.,				US free market \$/Ib in-warehouse	0.00.000			
nigh carbon) quarterly	1.04*	-13.33%	▼	01 Jul 19	Pittsburgh	0.60-0.65*	0%		18
High carbon 6-8.5% C basis 60-70% Cr	0.74.0.04*	00/		10 1-140	MB Chinese free market min 65% Mn max 17% Si in-warehouse duty-paid				
nax 1.5% Si, major European destinations	0.74-0.84*	2.78%	_	19 Jul 19	China yuan/tonne	7,400-7,500*	-0.33%	▼	19
).10% C average 65-70% Cr European low carbon in-warehouse	1.70-1.80*	-2.78%	V	12 Jul 19	65% min Mn 16% min Si \$/tonne fob India	1,030-1,050*	0%		19
0.06% C max - 65% Cr	1.78-1.83*	0%		12 Jul 19					
ow phosphorous Cr min 65% C max 7%									
Si max 1% p max 0.015% Ti max 0.05%	0.88-0.95*	0%		12 Jul 19					
High-carbon ferro-chrome 57-65% Cr,	0.71.0.75*	1 350/	_	18 Jul 19					
if duty-updaid Japan, \$/lb ligh carbon ferro-chrome 57-65% Cr,	0.71-0.75*	-1.35%		10 Jul 19					
if duty-unpaid South Korea, \$/lb	0.71-0.74*	0%		18 Jul 19					
JS free market low carbon duty-paid fob Pit									
JS free market in-warehouse Pittsburgh	-								
-8% C basis 60-65% Cr max 2% Si	1-1.10*	-4.98%	▼	18 Jul 19					
1.05%C - 65% min Cr	2.07-2.10*	0%		18 Jul 19					
0.10% C - 62% min Cr	1.90-1.92*	-0.26%	▼	18 Jul 19					
	1.85-1.88*	0%		18 Jul 19					

† week-on-week change



CARBON STEEL - EUROPE				CARBON STEEL - CIS				
	Price	Change [†]	Assessed		Price	Change [†]		Assessed
Northern Europe imports				CIS exports (Black Sea)				
Fastmarkets MB's assessment of cfr prices for	or imported, non-EU o	rigin, commercial-q	uality carbon	Fastmarkets MB's assessment of CIS mil		the CIS of co	mmerc	ial-quality
steel, € per tonne cfr main EU port	400 400*	2.000/	04 1-140	carbon steel, \$ per tonne fob stowed mair	·	4.400/	_	05 1146
Rebar	460-480*	-3.09%		Billet index	415*	-1.19%	▼	25 Jul 19
Wire rod (mesh quality)	490-500*	0%	24 Jul 19	Slab	415-425*	1.2%		22 Jul 19
Plate (8-40mm)	540-550*	0%	24 Jul 19	Rebar Wire and (meah)	450-460*	0%		22 Jul 19
Hot rolled coil	465-475*	0%	24 Jul 19	Wire rod (mesh)	490-500*	0%		22 Jul 19
Cold rolled coil	545-560* 600-610*	2.31%		Heavy plate (8-50mm)	570-600* 490-500*	0%		22 Jul 19 22 Jul 19
Hot-dip galvanized coil	000-010	0%	24 Jul 19	Hot rolled coil Cold rolled coil	553-555*	0.51%	A	22 Jul 19
Southern Europe imports					303-000	0.73%	_	ZZ JUI 13
Fastmarkets MB's assessment of cfr prices fo steel, € per tonne cfr main EU port	or imported, non-EU o	rigin, commercial-q	uality carbon	Russia domestic Fastmarkets MB's assessment of prices w	within Russia for commerci	ial-quality car	bon ste	el. rubles pe
Rebar	460-480*	-0.53%	7 24 Jul 19	tonne, carriage paid to (cpt) inc VAT		4		,
Wire rod (mesh quality)	480-490*	-1.02% T	7 24 Jul 19	Rebar	41,000-41,500*	-0.6%	\blacksquare	22 Jul 19
Plate (8-40mm)	515-530*	0%	24 Jul 19	Hot rolled sheet	44,500-45,000*	2.29%	A	22 Jul 19
Hot rolled coil	450-475*	0.54%	24 Jul 19	Cold rolled sheet	51,000-51,200*	1.89%	A	22 Jul 19
Cold rolled coil	525-530*	-0.47%	7 24 Jul 19	Plate	43,700-44,300*	-0.56%	•	22 Jul 19
Hot-dip galvanized coil	565-590*	-2.12% T	7 24 Jul 19		· · · · ·			
Southern Europe exports				CARBON STEEL - MIDDLE EAST				
Fastmarkets MB's assessment of Southern E	Furone mills' nrices for	evnort outside Sou	ithern Furone of		Price	Change [†]		Assessed
commercial-quality carbon steel, € per tonne		•	unom Europe or	Turkish exports				
Rebar	445-460*	-0.55%	7 24 Jul 19	Fastmarkets MB's assessment of Turkish	mills' prices for export of c	ommercial-ai	ıalitv ca	rhon steel S
Wire rod (mesh quality)	450-470*	-1.6%	7 24 Jul 19	per tonne fob main Turkish port	Timio priodo ioi osportoro	ommoroidi q	aumy ou	. 2011 010 01, 4
Northern Europe domestic				Billet	420-430*	-0.58%	•	25 Jul 19
Fastmarkets MB's assessment of prices within	in the ELL (excluding t	he LIK) for commen	rial-quality	Rebar	450-460*	0%		25 Jul 19
carbon steel of EU origin, € per tonne delivere		ie orgioi commen	лат-чиату	Wire rod (mesh quality)	500-510*	0.5%	A	25 Jul 19
Rebar	500-520*	0%	24 Jul 19	Merchant bars	530-540*	0%		25 Jul 19
Wire rod (mesh quality)	495-505*	0%	24 Jul 19	Structural pipe	560-580*	0%		10 Jul 19
Sections (medium)	615-630*	-0.4%	7 24 Jul 19	Hot rolled coil	490-500*	0%		19 Jul 19
Beams	570-600*	0%	24 Jul 19	Hot dip galvanized	655-670*	0.38%	A	19 Jul 19
Southern Europe domestic				Turkish domestic				
Fastmarkets MB's assessment of prices within	, ,	he UK) for commerc	cial-quality	Fastmarkets MB's assessment of prices w	within Turkey for commerci	al-quality can	bon stee	el of Turkish
carbon steel of EU origin, € per tonne delivere Rebar	470-485*	0%	24 Jul 19	origin, \$ per tonne ex-works Billet	425-435*	-1.71%	•	25 Jul 19
				Hot rolled coil	520-525*	0.97%	Ť	19 Jul 19
Wire rod (mesh quality)	480-500* 610-650*	0.51%		Cold rolled coil	590-600*	0.97 %	_	19 Jul 19
Sections (medium)				Hot dip galvanized	660-670*	0.76%	_	19 Jul 19
Beams	610-615*	0%	24 Jul 19	Prepainted galvanized	765-770*	0.66%	_	19 Jul 19
Central Europe domestic € per tonne ex-w		00/	04.1.140					
Hot rolled coil Poland domestic zloty per tonne ex-works	460-470*	0%	24 Jul 19	Fastmarkets MB's assessment of prices v origin, TRY per tonne ex-works 18% VAT	-	ai-quaiity cari	oon sie	el Ol Türkisti
* '		2 20/	10 10110	Rebar	3,080-3,100*	0.16%	•	25 Jul 19
Rebar	2,070-2,120*	2.2%	19 Jul 19	Wire rod (mesh quality)	3,350-3,400*	0%		25 Jul 19
Northern Europe € per tonne ex-works	500 5754	0.440/	04.1.140	Turkish imports				
Plate (8-40mm)	560-575*	0.44%		Fastmarkets MB's assessment of prices f	or imported commercial a	uality carbon	steel \$	nertonne cfr
Hot rolled coil	470-485*	-0.52%		main Turkish port	or imported commercial-qu	danty carbon.	<i>σοι, ψ</i>	oer torine cir
Cold rolled coil	560-570*	-1.74%		Billet	420-430*	-1.16%	•	25 Jul 19
Hot-dip galvanized coil	560-600*	-0.85%	7 24 Jul 19	Hot rolled coil	505-510*	0%		19 Jul 19
Southern Europe € per tonne ex-works				Cold rolled coil	570-570*	0%		19 Jul 19
Plate (8-40mm)	490-505*	-0.5%		UAE imports	,			2 20. 10
Hot rolled coil	440-460*	0%	24 Jul 19	·	or imported commercial ~	uality carbon	ctaal ¢	nertonno ef
Cold rolled coil	515-550*	0%	24 Jul 19	Fastmarkets MB's assessment of prices f Jebel Ali	ог ппропец соппнетстат-qt	ианку сагроп :	sieel, \$	uer torine cir
Hot-dip galvanized coil	515-560*	0%	24 Jul 19	Billet	453-465*	-0.76%	•	23 Jul 19
				Rebar	522-525*	4.18%		23 Jul 19
				Hot rolled coil	500-510*	0%		23 Jul 19
				Cold rolled coil	570-575*	0%		23 Jul 19
					680-750*	0%		23 Jul 19
				Hot dip galvanized coil	000-700	U /0		25 Jul 18
				Saudi Arabia imports				

Hot rolled coil

† week-on-week change

Fastmarkets MB's assessment of prices for imported commercial-quality carbon steel, \$ per tonne cfr

515-520*

23 Jul 19



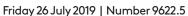


	Price	Change	Assessed		Price	Change		Assessed
JAE domestic				Wire rod (low carbon)	645-680*	0%		16 Jul 19
Fastmarkets MB's assessment of prices w	rithin UAE for commercia	l-quality carbon st	eel of UAE origin,	Medium sections	710-720*	-8.92%	•	27 Jun 19
dirhams per tonne ex-works				Medium plate	760-820*	0%		24 Jul 19
Rebar	1,950-1,953*	0%	23 Jul 19	Hot rolled coil (commodity)	560-600*	0%		24 Jul 19
ran exports				Cold rolled coil	700-740*	-1.37%	•	24 Jul 19
Fastmarkets MB's assessment of prices qu	uoted by Iranian supplier	s for commercial-	quality carbon	Hot dipped galvanized 0.012-0.015, G30	960-980*	0%		24 Jul 19
steel to overseas buyers, \$ per tonne fob Ir				ERW linepipe (X42)	1,010-1,060*	-4.17%	•	25 Jun 19
Billet	385-395*	0.52%	▲ 24 Jul 19	OCTG API5CT - casing J55	900-940*	-5.64%	•	25 Jun 19
Slab	375-390*	0%	24 Jul 19	US domestic				
Egyptian domestic				Fastmarket AMM's assessment of prices with	in the USA for comme	rcial-quality ca	arbon st	eel of US or
Fastmarkets MB's assessment of prices w	ithin Egypt for commerci	al-quality carbon s	teel of Egyptian	Canadian origin, \$ per short ton, delivery term	ns as indicated			
origin, E£ per tonne ex-works				Rebar (fob mill)	630-650*	-0.78%	\blacksquare	17 Jul 19
Rebar	11,580-11,980*	0%	25 Jul 19	Plate (fob mill)	710-710*	-2.74%	•	19 Jul 19
Egyptian import				Hot rolled sheet Midwest index (fob mill)	587.60-587.60*	3.85%	A	24 Jul 19
Fastmarkets MB's assessment of prices fo	or imported commercial-	quality carbon stee	l, \$ per tonne cfr	Cold rolled sheet (fob mill)	710-710*	1.43%	A	18 Jul 19
main port	,	,	,	Hot-dip galvanized (base) Midwest				
Billet	425-435*	-2.27%	▼ 25 Jul 19	(fob mill)	720-720*	1.41%	A	18 Jul 19
				OCTG API5CT - casing J55 (fob mill)	1,000-1,100*	-7.69%	•	25 Jun 19
CARBON STEEL - LATIN AMERICA				Fastmarket AMM's assessment of prices with		rcial-quality ca	irbon ste	eel of US or
	Price	Change [†]	Assessed	Canadian origin, \$ per hundredweight, deliver	-	E ===:		00.
Latin American exports				Merchant bar 3 x 3 1/4 angle (fob mill)	34.25-34.25*	-5.52%		28 Jun 19
Fastmarkets MB's assessment of Latin Am	nerican mills' prices for e	onort outside Latin	America of	CARBON STEEL - ASIA				
commercial-quality carbon steel, \$ per toni	·		runonoa or		Price	Change [†]		Assessed
Billet	430-440*	0%	19 Jul 19	China exports	11100	onunge		ASSESSED
Slab, Brazil	420-430*	0%	19 Jul 19	·		. ,		
Wire rod mesh quality	520-530*	0%	19 Jul 19	Fastmarkets MB's assessment of Chinese mi	ils prices for export of (commerciai-qu	ланту са	arbon steel, \$
Heavy plate over 10mm	565-575*	0%	19 Jul 19	per tonne fob main China port Rebar index	509-509*	0%		25 Jul 19
Hot rolled coil (dry)	485-490*	0%	19 Jul 19					
Cold rolled coil	565-580*	0%	19 Jul 19	Wire rod (mesh quality)	520-525*	1.46%	_	23 Jul 19
South America imports	000 000	070	10 001 10	Heavy plate	515-520*	-0.38%	_	23 Jul 19 25 Jul 19
•				Hot rolled coil index	507-507*		_	
Fastmarkets MB's assessment of cfr prices \$ per tonne cfr main ports	s tor importea, commerc	iai-quality carbon i	steel,	Cold rolled coil	540-550*	0%	_	23 Jul 19
Plate	560-570*	0%	19 Jul 19	Galvanized coil 1mm	590-605*	0.42%		23 Jul 19
Hot rolled coil	540-550*		▲ 19 Jul 19	Eastern China domestic				
Cold rolled coil	580-590*		▲ 19 Jul 19	Fastmarkets MB's assessment of prices in ea		ercial-quality c	arbon s	teel of
Galvanized coil	640-650*	0.00 %	19 Jul 19	Chinese origin, yuan per tonne ex-warehouse			_	
Galvariizeu coii		0%	19 Jul 19	Rebar	3,920-3,960*	-1.13%		25 Jul 19
Calvaluma sail		0%	19 Jul 19	Wire rod (mesh)	4,050-4,120*	-0.24%	•	19 Jul 19
Galvalume coil	730-745*			Sections	3,850-3,900*	0%		19 Jul 19
Argentina domestic \$ per tonne ex-worl	ks							
Argentina domestic \$ per tonne ex-worl	ks	ercial-quality carb	on steel, \$ per	Plate	3,810-3,910*	-0.26%	•	19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices wittonne	ks vithin Argentina for comm		·	Hot rolled coil (min 2mm)	3,840-3,860*	-1.03%	*	25 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w. tonne Hot rolled coil	ks vithin Argentina for comm 720-725*	0%	12 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm)	3,840-3,860* 4,180-4,240*	-1.03% 0%	▼	25 Jul 19 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices we tonne Hot rolled coil Cold rolled coil	ks vithin Argentina for comm 720-725* 815-820*	0%	12 Jul 19 12 Jul 19	Hot rolled coil (min 2mm)	3,840-3,860*	-1.03%		25 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices witonne Hot rolled coil Cold rolled coil Galvanized coil	ks 720-725* 815-820* 1,045-1,125*	0% 0% 0%	12 Jul 19 12 Jul 19 12 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm)	3,840-3,860* 4,180-4,240*	-1.03% 0%	▼	25 Jul 19 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w. tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar	ks vithin Argentina for comm 720-725* 815-820*	0%	12 Jul 19 12 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil	3,840-3,860* 4,180-4,240* 4,570-4,650*	-1.03% 0% -0.11%	*	25 Jul 19 19 Jul 19 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices we tonne Hot rolled coil Cold rolled coil Galvanized coil	ks 720-725* 815-820* 1,045-1,125*	0% 0% 0%	12 Jul 19 12 Jul 19 12 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic	3,840-3,860* 4,180-4,240* 4,570-4,650* wrthem China for comm	-1.03% 0% -0.11%	*	25 Jul 19 19 Jul 19 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w. tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar	720-725* 815-820* 1,045-1,125* 850-860*	0% 0% 0%	12 Jul 19 12 Jul 19 12 Jul 19 12 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no	3,840-3,860* 4,180-4,240* 4,570-4,650* wrthem China for comm	-1.03% 0% -0.11%	*	25 Jul 19 19 Jul 19 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices we tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar Brazil domestic Fastmarkets MB's assessment of prices we tonne ex-works	ks 720-725* 815-820* 1,045-1,125* 850-860*	0% 0% 0% 0% 0% al-quality carbon s	12 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no Chinese origin (Tangshan), yuan per tonne ex	3,840-3,860* 4,180-4,240* 4,570-4,650* wrthem China for commic-works 3,640-3,640*	-1.03% 0% -0.11% nercial-quality	▼ carbon	25 Jul 19 19 Jul 19 19 Jul 19 19 Jul 19 steel of 25 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w. tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar Brazil domestic Fastmarkets MB's assessment of prices w. tonne ex-works Hot rolled coil	ks 720-725* 815-820* 1,045-1,125* 850-860* within Brazil for commercial 2,517-2,565*	0% 0% 0% 0% al-quality carbon s	12 Jul 19 15 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no Chinese origin (Tangshan), yuan per tonne ex Billet	3,840-3,860* 4,180-4,240* 4,570-4,650* wrthem China for commic-works 3,640-3,640* wrthem China for commic	-1.03% 0% -0.11% nercial-quality	▼ carbon	25 Jul 19 19 Jul 19 19 Jul 19 19 Jul 19 steel of 25 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w. tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar Brazil domestic Fastmarkets MB's assessment of prices w. tonne ex-works Hot rolled coil Cold rolled coil	ks vithin Argentina for comm 720-725* 815-820* 1,045-1,125* 850-860* vithin Brazil for commerci 2,517-2,565* 2,700-2,745*	0% 0% 0% 0% al-quality carbon s 0%	12 Jul 19 15 Jul 19 05 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no Chinese origin (Tangshan), yuan per tonne ex Billet Fastmarkets MB's assessment of prices in no Chinese origin, yuan per tonne ex-warehouse Hot rolled coil	3,840-3,860* 4,180-4,240* 4,570-4,650* wrthem China for commic-works 3,640-3,640* wrthem China for commic	-1.03% 0% -0.11% nercial-quality -0.27% nercial-quality 0.13%	▼ carbon	25 Jul 19 19 Jul 19 19 Jul 19 steel of 25 Jul 19 steel of 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w. tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar Brazil domestic Fastmarkets MB's assessment of prices w. tonne ex-works Hot rolled coil Cold rolled coil	ks 720-725* 815-820* 1,045-1,125* 850-860* within Brazil for commercial 2,517-2,565*	0% 0% 0% 0% al-quality carbon s	12 Jul 19 15 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no Chinese origin (Tangshan), yuan per tonne ex Billet Fastmarkets MB's assessment of prices in no Chinese origin, yuan per tonne ex-warehouse	3,840-3,860* 4,180-4,240* 4,570-4,650* withem China for commit-works 3,640-3,640* withem China for commits	-1.03% 0% -0.11% nercial-quality -0.27% nercial-quality	▼ carbon	25 Jul 19 19 Jul 19 19 Jul 19 steel of 25 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w. tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar Brazil domestic Fastmarkets MB's assessment of prices w. tonne ex-works Hot rolled coil Cold rolled coil Hot dip galvanized coil Fastmarkets MB's assessment of prices w.	ks // Argentina for comm // 120-725* // 815-820* // 1,045-1,125* // 850-860* // Within Brazil for commercial // 2,517-2,565* // 2,700-2,745* // 3,112-3,200*	0% 0% 0% 0% al-quality carbon s 0% 0%	12 Jul 19 15 Jul 19 05 Jul 19 05 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no Chinese origin (Tangshan), yuan per tonne ex Billet Fastmarkets MB's assessment of prices in no Chinese origin, yuan per tonne ex-warehouse Hot rolled coil	3,840-3,860* 4,180-4,240* 4,570-4,650* withem China for comm (-works 3,640-3,640* withem China for comm (-yorks) 3,830-3,860*	-1.03% 0% -0.11% nercial-quality -0.27% nercial-quality 0.13%	carbon	25 Jul 19 19 Jul 19 19 Jul 19 steel of 25 Jul 19 steel of 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w. tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar Brazil domestic Fastmarkets MB's assessment of prices w. tonne ex-works Hot rolled coil Cold rolled coil Hot dip galvanized coil Fastmarkets MB's assessment of prices w. tonne delivered	rithin Argentina for comm 720-725* 815-820* 1,045-1,125* 850-860* within Brazil for commerci 2,517-2,565* 2,700-2,745* 3,112-3,200* within Brazil for commerci	0% 0% 0% al-quality carbon s 0% 0% 0% as-quality carbon s	12 Jul 19 15 Jul 19 16 Jul 19 17 Jul 19 18 Jul 19 19 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no Chinese origin (Tangshan), yuan per tonne ex Billet Fastmarkets MB's assessment of prices in no Chinese origin, yuan per tonne ex-warehouse Hot rolled coil Rebar	3,840-3,860* 4,180-4,240* 4,570-4,650* withern China for commic-works 3,640-3,640* withern China for commics 3,830-3,860* 3,870-3,930*	-1.03% 0% -0.11% nercial-quality -0.27% nercial-quality 0.13% -0.26%	carbon carbon	25 Jul 19 19 Jul 19 19 Jul 19 steel of 25 Jul 19 steel of 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w. tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar Brazil domestic Fastmarkets MB's assessment of prices w. tonne ex-works Hot rolled coil Cold rolled coil Hot dip galvanized coil Fastmarkets MB's assessment of prices w. tonne delivered	ks // Argentina for comm // 120-725* // 815-820* // 1,045-1,125* // 850-860* // Within Brazil for commercial // 2,517-2,565* // 2,700-2,745* // 3,112-3,200*	0% 0% 0% al-quality carbon s 0% 0% 0% a-quality carbon s	12 Jul 19 15 Jul 19 05 Jul 19 05 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no Chinese origin (Tangshan), yuan per tonne ex Billet Fastmarkets MB's assessment of prices in no Chinese origin, yuan per tonne ex-warehouse Hot rolled coil Rebar Southern China domestic	3,840-3,860* 4,180-4,240* 4,570-4,650* withern China for commit-works 3,640-3,640* withern China for commits 3,830-3,860* 3,870-3,930*	-1.03% 0% -0.11% nercial-quality -0.27% nercial-quality 0.13% -0.26%	carbon carbon	25 Jul 19 19 Jul 19 19 Jul 19 steel of 25 Jul 19 steel of 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w. tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar Brazil domestic Fastmarkets MB's assessment of prices w. tonne ex-works Hot rolled coil Cold rolled coil Hot dip galvanized coil Fastmarkets MB's assessment of prices w. tonne delivered Rebar	rithin Argentina for comm 720-725* 815-820* 1,045-1,125* 850-860* within Brazil for commerci 2,517-2,565* 2,700-2,745* 3,112-3,200* within Brazil for commerci	0% 0% 0% al-quality carbon s 0% 0% 0% as-quality carbon s	12 Jul 19 15 Jul 19 16 Jul 19 17 Jul 19 18 Jul 19 19 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no Chinese origin (Tangshan), yuan per tonne ex Billet Fastmarkets MB's assessment of prices in no Chinese origin, yuan per tonne ex-warehouse Hot rolled coil Rebar Southern China domestic Fastmarkets MB's assessment of prices in so	3,840-3,860* 4,180-4,240* 4,570-4,650* withern China for commit-works 3,640-3,640* withern China for commits 3,830-3,860* 3,870-3,930*	-1.03% 0% -0.11% nercial-quality -0.27% nercial-quality 0.13% -0.26%	carbon carbon	25 Jul 19 19 Jul 19 19 Jul 19 steel of 25 Jul 19 steel of 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w. tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar Brazil domestic Fastmarkets MB's assessment of prices w. tonne ex-works Hot rolled coil Cold rolled coil Hot dip galvanized coil Fastmarkets MB's assessment of prices w. tonne delivered Rebar	rithin Argentina for comm 720-725* 815-820* 1,045-1,125* 850-860* within Brazil for commerci 2,517-2,565* 2,700-2,745* 3,112-3,200* within Brazil for commerci	0% 0% 0% al-quality carbon s 0% 0% 0% as-quality carbon s	12 Jul 19 15 Jul 19 16 Jul 19 17 Jul 19 18 Jul 19 19 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no Chinese origin (Tangshan), yuan per tonne ex Billet Fastmarkets MB's assessment of prices in no Chinese origin, yuan per tonne ex-warehouse Hot rolled coil Rebar Southern China domestic Fastmarkets MB's assessment of prices in so Chinese origin, yuan per tonne ex-warehouse	3,840-3,860* 4,180-4,240* 4,570-4,650* withern China for commic-works 3,640-3,640* withern China for commics 3,830-3,860* 3,870-3,930* uthern China for commics	-1.03% 0% -0.11% nercial-quality -0.27% nercial-quality 0.13% -0.26%	carbon carbon	25 Jul 19 19 Jul 19 19 Jul 19 steel of 25 Jul 19 19 Jul 19 19 Jul 19 19 Jul 19 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w. tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar Brazil domestic Fastmarkets MB's assessment of prices w. tonne ex-works Hot rolled coil Cold rolled coil Hot dip galvanized coil Fastmarkets MB's assessment of prices w. tonne delivered Rebar	rithin Argentina for comm 720-725* 815-820* 1,045-1,125* 850-860* within Brazil for commerci 2,517-2,565* 2,700-2,745* 3,112-3,200* within Brazil for commerci	0% 0% 0% al-quality carbon s 0% 0% 0% as-quality carbon s	12 Jul 19 15 Jul 19 16 Jul 19 17 Jul 19 18 Jul 19 19 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no Chinese origin (Tangshan), yuan per tonne ex Billet Fastmarkets MB's assessment of prices in no Chinese origin, yuan per tonne ex-warehouse Hot rolled coil Rebar Southern China domestic Fastmarkets MB's assessment of prices in so Chinese origin, yuan per tonne ex-warehouse Rebar	3,840-3,860* 4,180-4,240* 4,570-4,650* withern China for commic-works 3,640-3,640* withern China for commics 3,830-3,860* 3,870-3,930* uthern China for commics 3,900-4,000*	-1.03% 0% -0.11% nercial-quality -0.27% nercial-quality 0.13% -0.26% mercial-quality 0%	carbon carbon	25 Jul 19 19 Jul 19 19 Jul 19 steel of 25 Jul 19 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w. tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar Brazil domestic Fastmarkets MB's assessment of prices w. tonne ex-works Hot rolled coil Cold rolled coil Hot dip galvanized coil Fastmarkets MB's assessment of prices w. tonne delivered Rebar CARBON STEEL - NAFTA	rithin Argentina for comm 720-725* 815-820* 1,045-1,125* 850-860* rithin Brazil for commerci 2,517-2,565* 2,700-2,745* 3,112-3,200* rithin Brazil for commerci 2,370-2,480*	0% 0% 0% 0% al-quality carbon s 0% 0% 0% -3.96%	12 Jul 19 15 Jul 19 05 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no Chinese origin (Tangshan), yuan per tonne ex Billet Fastmarkets MB's assessment of prices in no Chinese origin, yuan per tonne ex-warehouse Hot rolled coil Rebar Southern China domestic Fastmarkets MB's assessment of prices in so Chinese origin, yuan per tonne ex-warehouse Rebar Wire rod (mesh)	3,840-3,860* 4,180-4,240* 4,570-4,650* withem China for commercian commercia	-1.03% 0% -0.11% nercial-quality -0.27% nercial-quality 0.13% -0.26% mercial-quality 0% 0%	carbon carbon	25 Jul 19 19 Jul 19 19 Jul 19 steel of 25 Jul 19 steel of 19 Jul 19 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar Brazil domestic Fastmarkets MB's assessment of prices w tonne ex-works Hot rolled coil	rithin Argentina for comm 720-725* 815-820* 1,045-1,125* 850-860* within Brazil for commerci 2,517-2,565* 2,700-2,745* 3,112-3,200* within Brazil for commerci 2,370-2,480* Price	0% 0% 0% 0% al-quality carbon s 0% 0% 0% -3.96% Change†	12 Jul 19 15 Jul 19 05 Jul 19 05 Jul 19 05 Jul 19 16 Jul 19 17 Jul 19 18 Jul 19 19 Jul 19 18 Jul 19 19 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no Chinese origin (Tangshan), yuan per tonne ex Billet Fastmarkets MB's assessment of prices in no Chinese origin, yuan per tonne ex-warehouse Hot rolled coil Rebar Southern China domestic Fastmarkets MB's assessment of prices in so Chinese origin, yuan per tonne ex-warehouse Rebar Wire rod (mesh) Sections	3,840-3,860* 4,180-4,240* 4,570-4,650* withem China for commicturority 3,640-3,640* 3,830-3,860* 3,870-3,930* uthem China for commicturority 4,150-4,200* 4,050-4,100*	-1.03%	carbon carbon	25 Jul 19 19 Jul 19 19 Jul 19 steel of 25 Jul 19 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar Brazil domestic Fastmarkets MB's assessment of prices w tonne ex-works Hot rolled coil Cold rolled coil Hot dip galvanized coil Fastmarkets MB's assessment of prices w tonne delivered Rebar CARBON STEEL - NAFTA	rithin Argentina for comm 720-725* 815-820* 1,045-1,125* 850-860* within Brazil for commerci 2,517-2,565* 2,700-2,745* 3,112-3,200* within Brazil for commerci 2,370-2,480* Price	0% 0% 0% 0% al-quality carbon s 0% 0% 0% -3.96% Change†	12 Jul 19 15 Jul 19 05 Jul 19 05 Jul 19 05 Jul 19 16 Jul 19 17 Jul 19 18 Jul 19 19 Jul 19 18 Jul 19 19 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no Chinese origin (Tangshan), yuan per tonne ex Billet Fastmarkets MB's assessment of prices in no Chinese origin, yuan per tonne ex-warehouse Hot rolled coil Rebar Southern China domestic Fastmarkets MB's assessment of prices in so Chinese origin, yuan per tonne ex-warehouse Rebar Wire rod (mesh) Sections Plate	3,840-3,860* 4,180-4,240* 4,570-4,650* withern China for comm. (-works 3,640-3,640* withern China for comm. 3,830-3,860* 3,870-3,930* withern China for comm. 4,150-4,200* 4,050-4,100* 3,980-4,050*	-1.03%	carbon carbon	25 Jul 19 19 Jul 19 19 Jul 19 steel of 25 Jul 19 19 Jul 19
Argentina domestic \$ per tonne ex-worl Fastmarkets MB's assessment of prices w tonne Hot rolled coil Cold rolled coil Galvanized coil Rebar Brazil domestic Fastmarkets MB's assessment of prices w tonne ex-works Hot rolled coil Cold rolled coil Hot dip galvanized coil Fastmarkets MB's assessment of prices w tonne delivered Rebar CARBON STEEL - NAFTA US imports Fastmarkets MB's assessment of prices fo	rithin Argentina for comm 720-725* 815-820* 1,045-1,125* 850-860* within Brazil for commerci 2,517-2,565* 2,700-2,745* 3,112-3,200* within Brazil for commerci 2,370-2,480* Price	0% 0% 0% al-quality carbon s 0% 0% 0% -3.96% Change†	12 Jul 19 15 Jul 19 05 Jul 19 05 Jul 19 05 Jul 19 16 Jul 19 17 Jul 19 18 Jul 19 19 Jul 19 18 Jul 19 19 Jul 19	Hot rolled coil (min 2mm) Cold rolled coil (0.5 - 2 mm) Hot-dip galvanized coil Northern China domestic Fastmarkets MB's assessment of prices in no Chinese origin (Tangshan), yuan per tonne ex Billet Fastmarkets MB's assessment of prices in no Chinese origin, yuan per tonne ex-warehouse Hot rolled coil Rebar Southern China domestic Fastmarkets MB's assessment of prices in so Chinese origin, yuan per tonne ex-warehouse Rebar Wire rod (mesh) Sections Plate Hot rolled coil (min 2mm)	3,840-3,860* 4,180-4,240* 4,570-4,650* withern China for commercian China for China for Commercian China for China for Commercian China for Commercian China for Commercian China for China fo	-1.03% 0% -0.11% nercial-quality 0.13% -0.26% mercial-quality 0% 0% 0% -0.12% -0.13%	carbon carbon	25 Jul 19 19 Jul 19 19 Jul 19 steel of 25 Jul 19 steel of 19 Jul 19





Southoast Asia imports	Price	Change		Assessed	IIS domestic	Price	Change		Assessed
Southeast Asia imports Fastmarkets MB's assessment of prices in South	neast Asia for comm	nercial-quality	carhon	steel \$ ner	US domestic Fastmarkets AMM's appraisal of prices within the	e LISA for comme	ercial-quality stair	nless si	eel of US or
tonne cfr	ouotrioid for comm	ioroiai quanty (oarborr	οιοοι φροι	Canadian origin, \$ per hundredweight, fob	o con troi commi	noidi quanty olan	1100000	00/0/000
Billet	455-455*	0.55%	A	25 Jul 19	Grade 304 coiled plate	104-104*	-1.89%	\blacksquare	10 Jul 1
Slab (Asia/East Asia)	430-445*	-0.57%	•	22 Jul 19	Grade 316 coiled plate	148-148*	-3.27%	•	10 Jul 1
Hot rolled coil (Vietnam)	515-525*	1.46%	A	22 Jul 19	Grade 304 cold rolled sheet	117-117*	-4.1%	•	10 Jul 1
Rebar (Singapore)	485-495*	-0.91%	•	22 Jul 19	Grade 316L cold rolled sheet	158-158*	-3.07%	•	10 Jul 1
Wire rod (low carbon)	510-520*	-0.48%	•	22 Jul 19	Raw materials index				
Indian exports					EU domestic stainless steel \$ per tonne				
Fastmarkets MB's assessment of Indian mills' pri	ices for export of co	mmercial-qua	lity carl	on steel \$	304 Europe raw materials index	1,199.02*	3.72%	A	15 Jul 1
per tonne fob main India port		7	,	, 7					
Billet	425-430*	0%		19 Jul 19					
Plate (12-40mm)	510-515*	1.49%	A	19 Jul 19					
Hot rolled coil (commodity)	495-500*	-1%	•	19 Jul 19	IRON ORE				
Hot-dip galvanized coil	640-645*	-3.75%	•	19 Jul 19	MONORE	Price	Changet		A
Indian imports					GEW To Provilian Index CED Grades	Price	Change [†]		Assesse
Fastmarkets MB's assessment of prices for impo	rted non-FU origin	commercial-	auality i	carbon steel	65% Fe Brazilian Index CFR Qingdao (MBIOI-65-BZ-Index) \$/tonne	124.90*	-1.96%	•	25 Jul 1
\$ per tonne cfr main India port	. 10 u, . 10 ii _ 0 o. 19 ii	, commorcian	quamy .	, a. 2011 010 01,	Lump premium CFR Qingdao				
Plate (20-60mm)	540-550*	0%		19 Jul 19	(MBIOI-LP Index) cents per dmtu	21*	-12.5%	•	25 Jul 1
Hot rolled coil (commodity)	535-540*	1.9%	A	19 Jul 19	Iron ore index (62% Fe)	117*	-2.42%	•	25 Jul 1
Hot rolled coil (CR grade)	535-540*	0%		19 Jul 19	Iron ore index (62% LA)	117.28*	-3.32%	•	25 Jul 1
Cold rolled coil	595-600*	0%		19 Jul 19	58% Fe Iron Ore Index (MBIOI-58) CFR				
Indian domestic					Qingdao on a 58% fe basis Daily Price	103.01*	-4.04%	•	25 Jul 1
Fastmarkets MB's assessment of prices within In	udia for commercial	-auality carbor	n etaal	rungas nar	\$/dry metric tonne	103.01	-4.04%	•	25 Jul 1
tonne ex-works	dia idi commerciai	-чианку сагрог	ı sieei,	upees per	High grade Premium (MBIOI-58P) CFR Qingdao on a 58% basis low alumina,				
Billet	27,600-27,800*	-0.36%	•	19 Jul 19	low phosphorous Daily Price \$/dry metric tonne	0.5*	-80%	\blacksquare	25 Jul 1
Heavy plate	38,500-39,000*	0%		19 Jul 19	Iron Ore Implied 58% Fe high				
Hot rolled coil	38,000-38,500*	0%		19 Jul 19	specification price	103.51*	-5.77%	•	25 Jul 1
Cold rolled coil	44,000-44,500*	0%		19 Jul 19	Iron Ore product differential - PBF	0.00*	00/		05 Jul 10
DRI	17,700-17,900*	2.3%	_	19 Jul 19	delivered Qingdao, China CFR \$/tonne Iron ore 62% Fe Pilbara Blend Fines	-0.08*	0%		25 Jul 19
Hot-dip galvanized coil	47,500-48,000*	0%		19 Jul 19	(MBIOI-PBF) \$/tonne	116.92*	-2.42%	•	25 Jul 19
Rebar	30,700-30,900*	-1.28%	•	19 Jul 19	Iron Ore 62% Fe China port price index	865*	-3.57%	▼	25 Jul 19
. 1000	33,. 33 33,333	2070		10 00. 10	Implied 62% Fe China Port Price \$ per tonne	116.32*	-3.78%	•	25 Jul 19
					Iron ore pellet index cfr Qingdao (65% Fe)	143.97*	-1.82%	▼	19 Jul 19
					Iron ore concentrate index cfr				
STAINLESS STEEL					Qingdao (66% Fe)	122.88*	0.85%		19 Jul 19
	Price	Change [†]		Assessed	Iron ore implied pellet premium CFR				
Asia import					Qingdao US\$/tonne	22.67*	-15.19%	•	19 Jul 19
\$/tonne cif East Asian port					Iron ore implied pellet premium over the Fastmarkets MB 65% Fe Brazilian				
Grade 304 2mm CR coil 2B	2,020-2,060*	0.49%	A	24 Jul 19	iron ore index cfr Qingdao US\$/tonne	15.37*	-17.81%	•	19 Jul 19
Grade 304 hot rolled coil	1,920-1,960*	0.52%	A	24 Jul 19	Iron ore DR-grade pellet premium				
China domestic					index Middle East reference, \$/dmt	68*	0%		28 Jun 19
yuan/tonne, in-warehouse					Metal Bulletin Indicator for US\$/%				
Grade 304 2mm CR coil	14,900-15,400*	2.36%	A	24 Jul 19	Al MBIOI Al-VIU cfr Qingdao	-3.83*	0%		22 Jul 19
Grade 430 2mm CR coil	7,750-7,800*	0%		24 Jul 19	Metal Bulletin Indicator for US\$/% Fe in iron ore fines cfr Qingdao	1.94*	1.04%	•	22 Jul 19
EU domestic					Iron Ore Fines 65% Fe, % Fe value in	1.04	1.0470	_	22 001 1
2mm 304 cold rolled stainless sheet, €/tonne					use cfr Qingdao \$/dry metric tonne	2.02*	-0.98%	\blacksquare	22 Jul 19
N.Europe Base price	870-915*	0%		19 Jul 19	Metal Bulletin Indicator for US\$/%				
Alloy surcharge	1,318-1,362*	0%		19 Jul 19	Si MBIOI Si-VIU cfr Qingdao	-1.39*	0%		22 Jul 19
N.Europe transaction	2,175-2,200*	1.16%	A	19 Jul 19	Iron Ore Fines 62% Fe, 0.01%				
2mm 316 cold rolled stainless sheet, €/tonne	-, 7 =,=00		_		Phosphorous value in use MBIOI Phos-VIU cfr Qingdao US cent per dry metric tonne	-1.15*	-4.17%	•	22 Jul 1
Base price	1,215-1,250*	0%		19 Jul 19	amyddo oo dont per ary metrio torine	1.10	- 1 .1//0	*	ZZ JUI I
Alloy surcharge	2,035-2,094*	0%		19 Jul 19					
304 stainless steel bright bar, €/tonne	-,	-,-							
Base price	1,000-1,060*	0%		19 Jul 19					
Alloy surcharge	1,629-1,676*	0%		19 Jul 19					





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COKING COAL				Cif Europe stainless & partages	Price	Change		Assessed
\$ per metric tonne				Cif Europe stainless € per tonne 18/8 solids	1,000-1,075*	5.33%	_	19 Jul 19
	Price	Change [†]	Assessed	18/8 turnings	900-970*	5.35%	_	19 Jul 19
Premium hard coking coal index cfr China	184.16*	-2.23%	▼ 25 Jul 19	316 solids	1,550-1,570*	1.96%	<u> </u>	19 Jul 19
Hard coking coal index cfr China	179.63*		▲ 25 Jul 19	316 turnings	1,395-1,415*	2%	_	19 Jul 19
Premium hard coking coal index fob Australia	174.01*		▼ 25 Jul 19	Rotterdam export	1,000 1,110	270	_	
Hard coking coal index fob Australia	166.51*	-1.33%	▼ 25 Jul 19	Fastmarkets MB's assessment \$/tonnne fob H	Pottordom			
China hard coking coal Shanxi spot market domestic delivered yuan/tonne	1,430-1,810*	0.62%	▲ 19 Jul 19	MB index fob Rotterdam HMS 1&2 (80:20)	266.28*	0.23%	•	19 Jul 19
65% CSR coke \$/tonne fob China	305-320*		▲ 23 Jul 19	HMS 1&2 (75:25 mix)	260-261*	0.58%		19 Jul 19
Low Vol PCI Index \$ per dry metric	000 020	0.0170		Shredded	270-271*	0.56%		19 Jul 19
tonne cfr Jingtang	124.44*	-0.61%	▼ 25 Jul 19	Turkish import	210 211	0.0070	_	1000110
Low Vol PCI Index \$ per dry metric				·	ain Tuuliah nauta			
tonne fob DBCT	109.85*	-1.39%	▼ 25 Jul 19	Fastmarkets MB's assessment \$/tonne cfr ma MB index cfr Turkey HMS 1&2 (80:20)	am rurkish ports			
				(North Europe material)	287.16*	-1.75%	•	25 Jul 19
FERROLIA GORAR				MB index cfr Turkey HMS 1&2 (80:20)				
FERROUS SCRAP				(United States material)	294.34*	-1.71%	•	25 Jul 19
	Price	Change [†]	Assessed	HMS 1&2 (75:25 mix)	279-280*	0.54%	_	19 Jul 19
UK ferrous scrap domestic				Shredded	299-300*	0.5%	A	19 Jul 19
The following is Fastmarket MB's evaluation of				Turkish domestic				
within the month listed. Prices may vary accord	0 0	stination, and sho	ould be read in	Fastmarkets MB's assessment delivered				
conjunction with editorial comment on the Ferro	ous scrap payes.			Melting scrap from shipbreaking (\$/tonne)	295-295*	1.2%	•	22 Jul 19
£/tonne				Auto bundle scrap (Turkish lira/tonne)	1,580-1,810*	0%		22 Jul 19
Cut grades	145 170*	00/	10 1.110	USA export				
OA plate and structural	145-170* 125-150*	0%	12 Jul 19 12 Jul 19	Fastmarket AMM ferrous scrap export index \$	Vtonne East Coast fol	New York		
1&2 old steel 12A/C new production heavy and	125-150	0%	12 Jul 19	HMS 1&2 (80:20)	273*	-1.8%	\blacksquare	24 Jul 19
shovellable steel	170-195*	0%	12 Jul 19	Shredded	278*	-1.77%	•	24 Jul 19
12D new production heavy and				USA domestic				
shovellable steel	175-200*	0%	12 Jul 19	Fastmarkets AMM Midwest index \$/gross ton	delivered mill			
Bales and cuttings				No1 heavy melting scrap	223.68*	-3.5%	•	10 Jul 19
4A new steel bales	175-200*	0%	12 Jul 19	No1 busheling	275.27*	-2.29%	•	10 Jul 19
4C new steel bales	165-190*	0%	12 Jul 19	Shredded	253.67*	-2.08%	•	10 Jul 19
8A new loose light cuttings	160-190*	0%	12 Jul 19	China domestic				
8B new loose light cuttings	145-175*	0%	12 Jul 19	yuan/tonne delivered mill				
Turnings				Heavy scrap	2,710-2,880*	1.64%	•	19 Jul 19
UK inter-merchant 7B heavy steel turnings	105-125*	0%	12 Jul 19	Taiwan import	2,7 10 2,000	1.0170		10 001 10
Castiron				\$/tonne cfr main port				
9A/10 heavy and light cast iron	125-150*	0%	12 Jul 19	HMS 1&2 (80:20 mix) (USA material)	280-283*	-0.88%	•	25 Jul 19
9B/C cylinder block scrap	145-170*	0%	12 Jul 19		200-203	-0.00 /0		25 301 15
11A cast iron borings	70-90*	0%	12 Jul 19	Vietnam import				
Prices relate to new UK scrap specifications				\$/tonne cfr southern Vietnam	245 245*	4.400/		40 1-140
Please see metalbulletin.com for full explanation	on of price changes			HMS 1&2	315-315*	1.12%		19 Jul 19
UK intermerchant weekly price				Germany domestic				
£/tonne				€/tonne composite sales price ex-yard, source			_	
5C loose old light	80-100*	0%	19 Jul 19	No E2/8 (new steel scrap)	248	-2.59%		01 May 19
UK ferrous scrap export				No E1 (old steel scrap)	214	-4.68%	_	01 May 19
Fastmarkets MB's assessment \$ fob main UK p	port			No E3 (old thick steel scrap)	242.40	-4.11%	_	01 May 19
HMS 1&2 (80:20 mix)	271-273*	0.74%	▲ 19 Jul 19	No E40 (shredded steel scrap)	246.60	-4.46%		01 May 19
Shredded	276-278*	0.73%	▲ 19 Jul 19	No E5 (steel turnings)	195.70	-3.02%	•	01 May 19
Indian imports				Fastmarkets MB's assessment €/tonne delive		0.700/	_	40 1 140
Fastmarkets MB's assessment \$/tonnne cfr Nh	ava Sheva			Grade E40 (shredded steel scrap)	255-270	-2.78%		12 Jul 19
MB index cfr India shredded	314.23*	-1.52%	▼ 19 Jul 19	No E8 (thin new production steel scrap)	255-265	-3.7%	<u> </u>	12 Jul 19
HMS 1&2 (80:20 mix)	270-295*		▼ 19 Jul 19	No E3 (old thick scrap)	250-265	-2.83%	▼	12 Jul 19
Alloy steel scrap domestic				Italy domestic				
UK wholesale merchants' stainless (£/tonne)				Fastmarkets MB's assessment €/tonne delive	ered at mill			
18/8 solids	850-900*	3.55%	▲ 19 Jul 19	No E3 (old thick scrap)	240-255	-2.94%	•	12 Jul 19
18/8 turnings	725-765*		▲ 19 Jul 19	No E8 (thin new production steel)	260-265	-2.78%	▼	12 Jul 19
316 solids	1,300-1,350*		▲ 19 Jul 19	No E40 (shredded steel scrap)	260-270	-2.75%	▼	12 Jul 19
316 turnings	1,105-1,150*		▲ 19 Jul 19					
12-13% Cr solids	150-200*	0%	19 Jul 19					
16-17% Cr solids	200-230*	0%	19 Jul 19					
				† week-on-week change			CO	ntinued >





SCRAP SUBSTITUTES			
	Price	Change [†]	Assessed
EU imports \$/tonne			
Pig iron imports cif Italy	358-360*	-0.97%	▼ 25 Jul 19
Hot-briquetted iron cfr Italian ports	270-275*	0%	25 Jul 19
Brazil exports \$/tonne, delivery terms as s	tated		
Hot briquetted iron Venezuela	200-205*	0%	19 Jul 19
Pig iron fob Vitorio/Rio Brazil	315-320*	1.6%	▲ 19 Jul 19
Pig iron fob Ponta da Maderia Brazil	348-353*	0.72%	▲ 19 Jul 19
US imports \$/tonne cfr Gulf of Mexico			
Pig iron	360-365*	0.69%	▲ 19 Jul 19
CIS exports \$/tonne fob main port			
Pig iron Baltic Sea	380-380*	2.01%	▲ 25 Jul 19
Pig iron Black Sea	335-340*	-1.46%	▼ 25 Jul 19
NON-FERROUS SCRAP EUROPE Aluminium	Price	Change [†]	Assessed
European free market Fastmarkets MB as	sessment €/tonne		
Floated frag	960-990*	0%	19 Jul 19
Cast	870-890*	0%	19 Jul 19
Mixed turnings 6%	710-750*	0%	19 Jul 19
France per 1000kg			
Pure cuttings	1,430-1,450	-1.03%	▼ 23 Jul 19
Old rolled	500-550	0%	23 Jul 19
Commercial cast	550-600	0%	23 Jul 19
Source: Lettre d'Information Metaux			
Italy per 1000kg			
Pure cuttings	1,060-1,090	0%	19 Jul 19
Old mixed scrap	1,485-1,515	0.33%	▲ 19 Jul 19
Commercial cast	885-940	0%	19 Jul 19
Source: Assomet			
Copper			
France per 1000kg			
Electro cuttings	4,800-4,860	1.15%	▲ 23 Jul 19
No 1 bright wire	4,600-4,700	0.54%	▲ 23 Jul 19
Mixed (96%)	4,350-4,420	1.15%	▲ 23 Jul 19
Brass plate cuttings 70/30	3,600-3,700	2.82%	23 Jul 19
Brass turnings Mixed brass	3,050-3,100 2,750-2,820	0%	23 Jul 19
Source: Lettre d'Information Metaux	2,130-2,020	0.30%	23 Jul 19
Italy per 1000kg Electrolytic dd EN 12861-S-Cu-2	5,025-5,185	1.29%	▲ 19 Jul 19
	4,903-5,065	1.32%	▲ 19 Jul 19
· · · · · · · · · · · · · · · · · · ·	7,300-0,000	1.02/0	<u> </u>
Enamelled wire EN 12861-S-Cu-3			
· · · · · · · · · · · · · · · · · · ·	4,927-5,155	1.31%	▲ 19 Jul 19
Enamelled wire EN 12861-S-Cu-3 New from tubes, strips etc EN 12861-S-Cu-4 Old from tubes, strips etc			
Enamelled wire EN 12861-S-Cu-3 New from tubes, strips etc EN 12861-S-Cu-4 Old from tubes, strips etc 12861-S-Cu-7	4,755-4,925	1.36%	▲ 19 Jul 19
Enamelled wire EN 12861-S-Cu-3 New from tubes, strips etc EN 12861-S-Cu-4 Old from tubes, strips etc 12861-S-Cu-7 EN12861-S-Cu-Zn-1-A-Cu 63.5%			▲ 19 Jul 19
Enamelled wire EN 12861-S-Cu-3 New from tubes, strips etc EN 12861-S-Cu-4 Old from tubes, strips etc 12861-S-Cu-7	4,755-4,925	1.36%	▲ 19 Jul 19

UK NON-FERROUS SCRAP			
	Price	Change [†]	Assessed
Aluminium - actual price			
£pertonne			
Group 1 pure 99% & Litho	1,260-1,300*	0%	24 Jul 19
Commercial pure cuttings	870-920*	0%	24 Jul 19
Clean HE9 extrusions	1,260-1,300*	0%	24 Jul 19
Loose old rolled cuttings	620-650*	0%	24 Jul 19
Baled old rolled	720-740*	0%	24 Jul 19
Commercial cast	700-750*	0%	24 Jul 19
Cast wheels	1,050-1,080*	0%	24 Jul 19
Commercial turnings	520-550*	0%	24 Jul 19
Group 7 turnings	405-425*	0%	24 Jul 19
Fastmarkets MB and LME aluminium scra	p discounts		
£pertonne			
Group 1 pure 99% & Litho	151-191*	1.18%	▲ 24 Jul 19
Commercial pure cuttings	531-581*	0.36%	▲ 24 Jul 19
Clean HE9 extrusions	151-191*	1.18%	▲ 24 Jul 19
Loose old rolled cuttings	470-500*	1.89%	▲ 24 Jul 19
Baled old rolled	380-400*	12.72%	▲ 24 Jul 19
Commercial cast	370-420*	12.54%	▲ 24 Jul 19
Cast wheels	40-70*	400%	▲ 24 Jul 19
Commercial turnings	570-600*	8.13%	▲ 24 Jul 19
Group 7 turnings	695-715*	6.66%	▲ 24 Jul 19
Titanium			
\$/lb cif			
Turnings, unprocessed type 90/6/4 (0.5% Sn max)	0.90-1*	0%	24 Jul 19
Turnings, unprocessed 90/6/4 (over 0.5% max 2% Sn)	0.80-0.90*	0%	24 Jul 19
Copper scrap discount			
cents/lb			
No 2 copper (birch/cliff) imported into China 94-96% cif China	29-35*	-11.11%	▼ 24 Jun 19

†week-on-week change continued >





NON-FERROUS FOUNDRY INGOTS			
	Price	Change [†]	Assessed
Aluminium UK £/tonne		_	
Fastmarkets MB free market			
LM24 pressure diecasting ingot	1,240-1,280*	0%	24 Jul 19
LM6/LM25 gravity diecasting ingot	1,600-1,660*	0%	24 Jul 19
NB: prices expressed delivered consumer	works, LM series as	s specified in BS1	1490
Aluminium Europe			
Fastmarkets MB free market			
Duty paid delivered works pressure			
diecasting ingot price (DIN226/A380)	4 040 4 000*	00/	40 1 140
- €/tonne	1,310-1,360*	0%	19 Jul 19
Aluminum US \$/lb delivered Midwest			
A380.1 alloy	0.70-0.72*	0%	22 Jul 19
AFFIMET €/tonne			
AS12	3,414	-0.87%	▼ 01 Jul 19
AS12 UN	2,385	-1.24%	▼ 01 Jul 19
AS9 U3	1,760	-1.68%	▼ 01 Jul 19
AS5 U3	2,110	-1.4%	▼ 01 Jul 19
Reflects generally larger traded lots			
Aluminium bronze £/tonne UK			
AB1 ex-works	4,950	1.02%	▲ 23 Jul 19
AB2 ex-works	5,010	1.21%	▲ 23 Jul 19
Source: C.F. Booth Ltd			
Brass UK £/tonne			
SCB3 ex-works	4,210	0.96%	▲ 23 Jul 19
High tensile HTB1 ex-works	4,310	0.94%	▲ 23 Jul 19
Source: C.F. Booth Ltd			
Gunmetal UK £/tonne			
LG2 85/5/5/5 ex-works	4,830	0.84%	▲ 23 Jul 19
LG4 87/7/3/3 ex-works	5,430	0.74%	▲ 23 Jul 19
G1 1.15 PB ex-works	6,280	0.96%	▲ 23 Jul 19
Source: C.F. Booth Ltd			
Phosphor bronze UK £/tonne			
PB1 ex-works	6,730	0.6%	▲ 23 Jul 19
Source: C.F. Booth Ltd			
Phosphor copper £/tonne			
10% P ex-works	6,180	0.98%	▲ 23 Jul 19
15% P ex-works	6,230	0.97%	▲ 23 Jul 19
Source: C.F. Booth Ltd			
Zinc alloys UK £/tonne			
Brock Metal Co contract alloy price (delive	ered UK)		
Brock Metal ZL3	2,537	-3.83%	▼ 01 Jul 19
Brock Metal ZL5	2,566	-3.71%	▼ 01 Jul 19



Monthly averages: June

BASE METALS			
		Low	High
Aluminium			
Aluminium Aluminium P1020A, in-warehouse Rot	tterdam		
premium, duty unpaid, spot \$/tonne		90	100
Aluminium P1020A, in-warehouse Rot duty paid, spot \$/tonne	tterdam	145	153.75
Alumina			
Index fob Australia		341.52	
Copper			
US High-grade cathode premium indic \$/tonne	cator,	163.97	176.37
Nickel			
Free market in warehouse premium			
Europe \$/tonne	Uncut cathodes	200	222.5
	4x4 cathodes	445	485
	Briquettes	200	250
Tin			
European free market			
Spot Premium 99.9%, \$/tonne		402.5	445
Kuala Lumpur (ex-smelter), \$/tonne		19,065.56	
Antimony			
Antimony MB free market Regulus 99.65%,			
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne	÷	6,347.5	6,575
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne)	6,347.5 6,206.25	6,575 6,443.75
MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot		6,206.25	6,443.75
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb			
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium		6,206.25	6,443.75
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market		6,206.25 3.04	6,443.75 3.31
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb		3.04 117.5	6,443.75 3.31
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb min 99.99%, in warehouse cents/lb		6,206.25 3.04	6,443.75 3.31
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb		3.04 117.5	6,443.75 3.31
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb min 99.99%, in warehouse cents/lb Cobalt MB free market		3.04 117.5	6,443.75 3.31
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb min 99.99%, in warehouse cents/lb Cobalt		3.04 117.5 119.38	6,443.75 3.31 127.5 129.25
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb min 99.99%, in warehouse cents/lb Cobalt MB free market Alloy Grade, in warehouse, \$/lb		3.04 117.5 119.38	6,443.75 3.31 127.5 129.25
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb min 99.99%, in warehouse cents/lb Cobalt MB free market Alloy Grade, in warehouse, \$/lb Standard Grade, in warehouse, \$/lb		3.04 117.5 119.38	6,443.75 3.31 127.5 129.25
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb min 99.99%, in warehouse cents/lb Cobalt MB free market Alloy Grade, in warehouse, \$/lb Standard Grade, in warehouse, \$/lb		3.04 117.5 119.38	6,443.75 3.31 127.5 129.25
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb min 99.99%, in warehouse cents/lb Cobalt MB free market Alloy Grade, in warehouse, \$/lb Standard Grade, in warehouse, \$/lb Gallium MB free market MB free market MB free market MB free market		3.04 117.5 119.38 14.98 14.23	6,443.75 3.31 127.5 129.25 15.57 14.86
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb min 99.99%, in warehouse cents/lb Cobalt MB free market Alloy Grade, in warehouse, \$/lb Standard Grade, in warehouse, \$/lb Gallium MB free market	is,	3.04 117.5 119.38 14.98 14.23	6,443.75 3.31 127.5 129.25 15.57 14.86
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb min 99.99%, in warehouse cents/lb Cobalt MB free market Alloy Grade, in warehouse, \$/lb Standard Grade, in warehouse, \$/lb Gallium MB free market	is,	117.5 119.38 14.98 14.23	6,443.75 3.31 127.5 129.25 15.57 14.86
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb min 99.99%, in warehouse cents/lb Cobalt MB free market Alloy Grade, in warehouse, \$/lb Standard Grade, in warehouse, \$/lb Gallium MB free market	is,	117.5 119.38 14.98 14.23	6,443.75 3.31 127.5 129.25 15.57 14.86 160 1,150
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb min 99.99%, in warehouse cents/lb Cobalt MB free market Alloy Grade, in warehouse, \$/lb Standard Grade, in warehouse, \$/lb Gallium MB free market MB free market min 99.99%, \$ Metal, Rotterdam, \$/kg	is,	117.5 119.38 14.98 14.23	6,443.75 3.31 127.5 129.25 15.57 14.86 160 1,150
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb min 99.99%, in warehouse cents/lb Cobalt MB free market Alloy Grade, in warehouse, \$/lb Standard Grade, in warehouse, \$/lb Gallium MB free market MB free market, \$/kg Germanium Dioxide MB free market min 99.99%, \$ Metal, Rotterdam, \$/kg Indium MB free market ingots, min 99.97%, in warehouse, \$/kg	is,	117.5 119.38 14.98 14.23 153 950 1,143.75	127.5 129.25 15.57 14.86 160 1,150 1,293.75
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse, \$/tonne MMTA Standard grade II, \$/tonne Bismuth MB free market min. 99.99%, tonne lot in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb min 99.95%, in warehouse cents/lb Cobalt MB free market Alloy Grade, in warehouse, \$/lb Standard Grade, in warehouse, \$/lb Gallium MB free market MB free market, \$/kg Germanium Dioxide MB free market min 99.99%, \$ Metal, Rotterdam, \$/kg Indium MB free market ingots, min 99.97%,	is,	117.5 119.38 14.98 14.23 153 950 1,143.75	127.5 129.25 15.57 14.86 160 1,150 1,293.75

Maraum		Low	High
Mercury MB free market min 99.99%,			
in warehouse, \$/flask		2,400	2,700
Selenium			
MB free market min 99.5%			
in warehouse, \$/lb		8.5	10.5
Silicon			
Grade 441, min 99% Si in-warehouse Rotterdam, €/tonne)	1,680	1,780
Titanium		<u> </u>	
Ferro-Titanium, 70% (max 4.5% Al),			
d/d Europe, \$/kg		4.98	5.20
ORES & ALLOYS			
		Low	High
Molybdenum		2011	9
Free market in warehouse Europe			
drummed molybdicoxide \$/lb Mo		12.22	12.30
US canned molybdic oxide \$/lb Mo		12.23	12.43
Ferro-molybdenum			
basis 65% min, in-warehouse Rotterdam, \$/kg Mo		28.28	28.65
Tungsten		20.20	20.00
European free market APT, \$/mtu		253.75	261.25
Ferro-tungsten		2000	201.20
basis 75% W min, \$/kg		30	31.44
Vanadium			
min 98%, in-warehouse Rotterdam,			
V2O5, \$/lb		7	7.95
Ferro-vanadium			
basis 78% min, free delivery duty paid consumer plant, 1st grade Weste	ern		
Europe, \$/kg V		34.10	36.35
US Free market 70-80%, \$/lb		17.5	18.25
PRECIOUS METALS			
Gold			
London \$/troy oz	Morning	1,358.49	
	Afternoon	1,359.04	
London £/troy oz	Morning	1,071.63	
	Afternoon	1,072	
\$/troy oz	Handy/Harman	1,359.04	
Palladium		1 420 5	
Morning \$/troy oz Afternoon \$/troy oz		1,439.5 1,443.85	
Platinum: per troy oz		1,440.00	
Morning \$/troy oz		808.60	
Afternoon \$/troy oz		808.20	
Rhodium			
European free market min 99.9%			
in-warehouse, \$/troy oz		3,042.5	3,233.25
Silver			
London		4.400.00	
spot pence/troy oz		1,182.90	
spot cents/troy oz Handy/Harman cents/troy oz		1,499.58	
		.,000.11	
†			oortin, de
† week-on-week change			continued >





FOUNDRY INGOTS		
	Low	High
Aluminium		
LM24, £/tonne	1,292.5	1,335
LM6/LM25, £/tonne	1,617.5	1,670
Aluminium Europe €/tonne	1,305	1,355
Phosphor Bronze		
PB1 ex-works, £/tonne	6,600	
Zinc Alloy		
ZL3, £/tonne	2,638	
EXCHANGE RATES (CLOSING RATES)		
\$/£	1.27	
\$/yen	108.09	
\$/€	1.13	

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LONDON METAL EXCHANGE

High, low and average June (20 days)

LME averages are mean of buyers and sellers except for settlement and 3 months sellers.

settlement and 3 months sellers.			June
	Jan-Jun 201	Jan-Jun 2019	
	Low	High	average
	\$	\$	\$
Aluminium (\$)			
Cash	1,719.25	1,922.5	1,753.71
3 months	1,752	1,944.25	1,781.61
Settlement	1,719.5	1,923	1,754.08
3 months seller	1,753	1,944.5	1,782.05
Copper Grade A (\$)			
Cash	5,755.75	6,571	5,867.96
3 months	5,785.25	6,532.5	5,887.49
Settlement	5,756	6,572	5,868.43
3 months seller	5,785.5	6,533	5,888.08
Copper Grade A (£)			
Settlement	4,508.36	5,000.76	4,630.66
3 months seller	4,506.43	4,980.18	4,626.85
Lead (\$)			
Cash	1,767	2,153.5	1,891.04
3 months	1,787.75	2,164.5	1,886.39
Settlement	1,768	2,154	1,891.5
3 months seller	1,788	2,165	1,887
Lead (£)			
Settlement	1,365.36	1,626.25	1,492.53
3 months seller	1,374.43	1,628.19	1,482.80
Nickel (\$)			
Cash	10,437.5	13,607.5	11,967.25
3 months	10,527.5	13,655	12,028.88
Settlement	10,440	13,610	11,970
3 months seller	10,530	13,660	12,034.25
Tin (\$)			
Cash	18,802.5	21,912.5	19,163.25
3 months	18,687.5	21,700	19,061
Settlement	18,805	21,925	19,176.5
3 months seller	18,700	21,725	19,075.75

	Jan-Jun 2019		June
	Low	High	average
	\$	\$	\$
Zinc (\$)			
Cash	2,461	3,017	2,601.56
3 months	2,395.5	2,948.5	2,483.18
Settlement	2,462	3,018	2,602.13
3 months seller	2,396	2,949	2,483.63
Cobalt (\$)			
Cash	26,600	46,000	28,055
3 months	27,000	50,000	28,112.5
Settlement	27,600	47,000	28,955
3 months seller	28,000	51,000	29,012.5
Aluminium Alloy (\$)			
Cash	1,150	1,517.5	1,227.25
3 months	1,155	1,525	1,198.75
Settlement	1,155	1,520	1,232.05
3 months seller	1,165	1,530	1,210.75
Nasaa (\$)			
Cash	1,061	1,535	1,089.03
3 months	1,085	1,565	1,113.75
Settlement	1,062	1,536	1,090.68
3 months seller	1,090	1,570	1,118.40

LME SETTLEMENT CONVERSION RATES	
\$/£	1.27
\$/yen	108.11
\$/€	1.13