

**DAILY** 

Monday 19 August 2019 | Number 9626.1 www.metalbulletin.com

# FOCUS: Oversupply will continue to weigh on Chinese vanadium market in H2, sources say

#### **SHANGHAI**

An oversupply that has been branded the leading cause of the persistent price weakness seen in China's vanadium market during the first half of 2019 will likely continue to act as a headwind for the rest of the year, market sources told Fastmarkets.

Vanadium prices in China were on a general downward trajectory in the first six months of 2019, partly due to higher-than-expected supply and weaker-than-anticipated demand, market sources said.

Fastmarkets' price assessment for ferro-vanadium 78% V min, fob China stood at \$34.50-37 per kg on June 27, the last assessment in that month, marking a 48.4% drop from \$68.50-70 per kg at the start of the year. The price was last assessed at \$37-40 per kg on Thursday August 15, a decline of 6.1% from \$40-42 per kg in the prior week.

Fastmarkets' price assessment for vanadium pentoxide 98% V2O5 min, fob China exhibited similar weakness over January-June; at \$7.90-8.10 per lb on June 27, the price declined by 46.7% from \$14-16 at the beginning of the year. The price was most recently assessed at \$8.40-9.10 per lb on August 15, down by 3.3% from \$8.40-9.70 per lb a week earlier.

#### **GROWTH OF SUPPLY EXCEEDS THAT OF DEMAND**

Both supply and demand for vanadium products in China have seen obvious increases in the first half of 2019, but growth of supply has outpaced that of demand, weighing on Chinese vanadium prices as a result, market participants told Fastmarkets.

China produced around 57,000 tonnes of vanadium pentoxide (V2O5) in January-June of this year, a rise of 29.5% from approximately 44,000 tonnes over the same period of 2018, according to market participants.

On the demand side, China's rebar production totaled 118.76 million tonnes in the first six months of 2019, an increase of 19.3% year on year, according to data from China's National Bureau of Statistics (NBS).

The significant rise in supply was an inevitable result of the widespread production ramp-up among many Chinese V2O5 producers seen so far in 2019. The move was stimulated by handsome profits achieved last year, when vanadium prices hit record highs amid expectations of a substantial increase in demand for the material after China's new rebar policy came into effect on November 1, 2018.

The rebar policy requires domestic Chinese mills to utilize greater volumes of alloys such as ferro-vanadium to meet the revised tensile strength requirements, and therefore was expected to generate greater demand for vanadium products as a result.

"After the new rebar policy took effect, we did notice there was some increase in demand [for vanadium products], but the problem is that a bigger increase has been observed on the supply side," a producer source said.

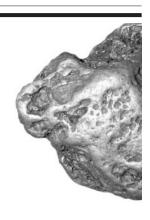
"Despite the continuous decline seen since the final quarter of 2018, the profit margins [for vanadium producers] are still quite appealing, so many producers were lured into either resuming continued >

Base metals 3 Carbon steel: Longs 14 Ferrous raw materials 22
Non-ferrous raw materials 6 Semi-finished 16 Prices 25
Minor & precious metals 7 Stainless & special 18
Carbon steel: Flats 11 Ferrous scrap 20



# We are Fastmarkets







production or ramping up production but the more supply there is, the more pressure the price will face," the producer added.

### REDUCED EXPORTS MEAN MORE SPOT CARGOES ARE AVAILABLE AT HOME

On the other hand, the increase in supply of Chinese vanadium products in the first half of this year has also stemmed from a notable reduction in the country's exports of vanadium products over the period, market sources told Fastmarkets.

China exported 2,807 tonnes of ferro-vanadium (basis 75% vanadium) in January-June 2019, a drop of 17.9% from the 3,419 tonnes shipped in same period of 2018, according to official but unconfirmed data seen by Fastmarkets.

Upstream, China exported 2,780 tonnes of V2O5 in the first six months of this year, a drop of 27% from 3,808 tonnes over the corresponding period of last year, the data showed.

The considerable year-on-year decrease in exports of both ferro-vanadium and V2O5 in the first half of 2019 was partly because Chinese vanadium products exporters showed little interest in shipping their cargoes abroad upon noticing that the domestic price was more favorable than its European counterpart throughout most of that period.

"China's exporting less volumes of vanadium products abroad, to some extent, meaning comparatively more spot cargoes are available in the domestic market," a Chinese market source said.

"It's easy for one to ignore the increased supply [of vanadium products] in this aspect, but when analyzing the supply and demand fundamentals in the domestic market, one needs to take the reduced exports into account to have a comprehensive picture of the whole market. Because the increased availability of domestic spot cargoes makes the competition among suppliers to secure business more fierce and therefore puts downward pressure on the price," he added.

### DEMAND FOR VANADIUM PRODUCTS CHALLENGED BY INCREASED FERRO-NIOBIUM IMPORTS

Demand for vanadium products has also been squeezed somewhat by domestic mills' growing preference for ferro-niobium due to its relative price stability and competitiveness against vanadium products.

China's imports of ferro-niobium soared by 86.9% year on year to 26,550 tonnes in the first half of 2019, from 14,204 tonnes in the corresponding period of 2018.

"A relatively stable price means mills can always know where their costs sit at while a volatile price makes it hard for mills to calculate their costs. In this case, for the sake of risk- aversion, mills will not completely depend on products whose prices change too quickly and significantly," a second Chinese market participant said.

"The price surge seen last year [in vanadium products] was irrational and has dented mills' trust in the utilization of the alloy's products, prompting them to use more alternatives, and in most cases ferro-niobium," he added.

The price of ferro-vanadium in China hit a record high of \$130-140 per kg in October 2018 on expectations that demand would significantly increase due to China's new rebar policy that encourage mills to utilize greater amounts of alloys to achieve the revised tensile strength requirements.

Market participants told Fastmarkets that they expect China to import around 50,000 tonnes of ferro-niobium in the whole of 2019.

### WIDE PRICE GAP BETWEEN CHINESE, EUROPEAN MARKETS ATTRACTS MORE CARGOES TO CHINA

Furthermore, despite the Chinese and European vanadium markets

both experiencing similar degrees of weakness in the first six months of the year, prices in China remained higher than those in Europe, causing some European suppliers to ship their cargoes to China.

And this has become more obvious since June when the Chinese domestic ferro-vanadium price began to gain some upward momentum amid unconfirmed reports circulating the market that Chinese authorities would conduct a round of inspections on rebar quality from July, according to sources.

Since the beginning of the second half of the year, Chinese ferro-vanadium prices have continued to rise amid increased demand both mills and traders stimulated by the ongoing checks on rebar quality, further widening the price gap between China and foreign markets.

"There is almost not any official news about the inspections, but mills and traders know that the inspections are ongoing in some areas, so they all stockpile some volumes of cargoes, though for different purposes," a third Chinese market source said.

The price differential between Chinese and European ferrovanadium, for example, was as wide as \$9-9.85 per kg in the week ended on August 9.

A few Chinese vanadium traders told Fastmarkets they had the thought of importing either ferro-vanadium or vanadium nitrogen from abroad to take advantage of Chinese prices' being much higher than elsewhere.

### SURPLUS IN SUPPLY REMAINS A HEADWIND TO VANADIUM PRICES IN H2 2019

Despite the recent gains seen in July, many Chinese market participants told Fastmarkets they are not optimistic about the vanadium market for the rest of 2019, citing that the surplus in supply will continue to put the domestic vanadium market under downward pressure.

The price of ferro-vanadium, 78% V min, fob China has risen by around 8.5% since the beginning of July, Fastmarkets' price archive showed.

Some market participants had already expressed concerns over a possible downswing risks when seeing the price climbed to as high as \$40-42 per kg in late July, saying that price was being driven partly by speculation surrounding the rebar quality checks.

"I do not deny the fact that the inspections on rebar quality could lend some support to the vanadium market, but I do not think that will result in such a significant rise in the [vanadium products] price, because many mills have already turned to the utilization of alloy products since the new rebar policy was implemented," a fourth market source said.

"Some mills, which had adopted the water-quenching process to produce rebar, were indeed observed to have placed orders for some tonnages of vanadium products since June, but the additional increase in demand is comparatively limited," the source added.

The domestic ferro-vanadium price began to lose upward momentum in August after some traders chose to sell off their cargoes at hand on believing that the price has already hit its ceiling, and the mounting supply simply fueled the price weakness.

Most market participants spoken to by Fastmarkets maintain the belief that prices for vanadium products in China will not be able to reclaim the highs reached in July throughout the rest of the year, because once prices rise above 150,000 yuan (\$21,323) per tonne, stone coal-fed V2O5 suppliers would be motivated to continue expanding their production and this in turn will act as a headwind to prices.

Jessica Zong, in Shanghai, contributed to this article.

AMY LV



### **Base metals**

FASTMARKETS' KEY PRICES			
Daily base metal prices and premiums (\$/t)			
	Price	Change <sup>†</sup>	Assessed
LME copper cash settlement	5,710.00	-0.59%	▼ 16 Aug 19
Weekly copper premium (cif Rotterdam)	40.00-50.00	0%	13 Aug 19
Daily copper premium (cif Shanghai)	58.00-76.00	-2.19%	▼ 16 Aug 19
Daily copper premium (in-whs Shanghai)	60.00-80.00	0%	16 Aug 19
LME aluminium cash settlement	1,755.50	0.54%	▲ 16 Aug 19
Daily aluminium premium DUP (in-whs Rotterdam)	100.00-110.00	5%	▲ 16 Aug 19
Twice weekly aluminium premium DP (in-whs Rotterdam)	6,335.00-6,335.0	00 28.76%	▲ 15 Aug 19
Weekly aluminium premium (cif Shanghai)	95.00-105.00	0%	30 Jul 19
Twice weekly aluminium premium (cif MJP)	85.00-95.00	0%	16 Aug 19
Weekly aluminium premium (cif MKP)	95.00-105.00	0%	13 Aug 19
Twice weekly aluminium premium (dlvd US MW)	0.175-0.180	0%	16 Aug 19
LME zinc cash settlement	2,264.50	0.09%	▲ 16 Aug 19
Weekly zinc premium (fca duty-paid Rotterdam)	90.00-100.00	-2.56%	▼ 13 Aug 19
Weekly zinc premium (in-whs Shanghai)	80.00-90.00	0%	13 Aug 19
LME nickel cash settlement	16,090.00	3.01%	▲ 16 Aug 19
Weekly nickel premium (cif Shanghai)	170.00-190.00	0%	13 Aug 19
LME lead cash settlement	2,050.00	-1.73%	▼ 16 Aug 19
LME tin cash settlement	16,805.00	-0.56%	▼ 16 Aug 19

Group editorial director: Alex Harrison Global ores, alloys, minor metals, industrial minerals editor: Fleur Ritzema Global base metals editor: Perrine Fave

Global steel editor: Andrew Wells Europe ores, alloys and minor metals editor: Charlotte Radford

Europe base metals editor: Archie Hunter EMEA, CIS, Turkey steel editor: Ross Yeo Special correspondents: Andrea Hotter, Janie Davies

UK and Europe correspondents and reporters: Cristina Belda, Carrie Bone, Hassan Butt, Serife Durmus, Amy Hinton, Julian Luk, Ewa Manthey,

Alice Mason, Vlada Novokreshchenova, Marina Shulga, Jon Stibbs, Maria Tanatar, Cem Turken, Justin Yang

Managing editor, The Americas: Thorsten Schier North American non-ferrous editor: Chris Kavanagh North American scrap editor: Sean Barry North American steel editor: Grace Lavigne Asenov US reporters: Rijuta Dey Bera, Michael Cowden Patrick Fitzgerald, Lisa Gordon, James Lawrence, Michael Roh, Orla O'Sullivan, Muyao Shen,

Latin America reporters: Felipe Peroni. Renato Rostás

Asia base metals editor: Ellie Wang Asia ores, alloys and minor metals editor:

Asia steel editor: Paul Lim Asia steelmaking raw materials editor: Deepali Sharma

Senior correspondents (Asia): Ken Kiat Lee,

Analysts (Asia): Huaqing Fu, Hui Li, Violet Li, Amy Lv, Anna Xu, July Zhang, Jessica Zong, Miranda Song

**Prices manager:** Mary Higgins **Database manager:** Mark Owen Production: Raveendra Karanth, Dany Peña Global newsdesk editor: Mark Shaw US newsdesk leader: Sean Mayer Senior sub-editors: Cecil Fung, Sara Kelly,

Wei Jun Lau, Renate Foster Mas, Tony Pettengell, Sub-editors: Francesca Brindle, Hannah Corwin,

Metal Market Magazine: Richard Barrett, editor;

Managing director: Raju Daswani

or index. Actual transaction prices will reflect quantities, grades and qualities, credit terms, and

many other parameters. The prices are in no ser comparable to the quoted prices of commodities in which a formal futures market exists. Evaluations or calculations of prices and price indices by us are based upon certain market

assumptions and evaluation methodologies and may not conform to prices or information available from third parties. There may be errors or defects in such assumptions or methodologies that cause resultant evaluations to be inappropriate for use. Your use or reliance on any prices or other information published by us is at your sole risk. Neither we nor any of our providers of information make any representations or warranties, express

or implied as to the accuracy, completeness o reliability of any advice, opinion, statement or other information forming any part of the published information or its fitness or suitability for a particular purpose or use. Neither we, nor any of our officers, employees or representatives shall be liable to any person for any losses or damages incurred, suffered or arising as a result of use or reliance on the prices or other information contained in this publication, howsoever arising, including but not limited to any direct, indirect, consequential, punitive, incidental, special or similar damage,

Cobalt (high-grade) in-whs Rotterdam (\$/lb)

London: Fastmarkets MB, 8 Bouverie Street, London,

New York: Fastmarkets AMM, 1120 Avenue of the

Tel: +1 (212) 213 6202 Toll free: 1-800-METAL-25,

Singapore: Quadrant at Cecil, 3F, 19 Cecil Street,

Shanghai: Fastmarkets MB, Room 305, 3/F, Azia

200120, Tel: +86 21 5877 0857 Fax: +86 21 5877 0856

Customer services dept: Tel +44 (0) 20 7779 7390

Advertising: Tel: +44 20 7827 5220 Fax: +44 20 7827

Advertising sales team: Arzu Gungor, Eva Cichon

Subscription enquiries: Sales tel: +44 (0)207779

7999 Fax: +44 (0) 20 7246 5200 Email: hello.mb@

fastmarkets.com, US sales tel: +1212224 3570 Sales

fax: +1 (212) 213 6273. Asia Pacific sales tel: +61 3 5222

5206 Email: advertising@metalbulletin.com

6154, Book sales: books@metalbulletin.com

Rooms 106-107, São Paulo, SP, 04538, Sao Paulo, Brazil,

São Paulo: Rua Prof. Atílio Innocenti 165, 7th floor

EC4Y 8AX, UK, Tel: +44 (0) 20 7827 9977

Americas 6th Floor, New York, NY 10036

Singapore 049704, Tel: +65 65 6238 2119

Center, 1233 Lujiazui Ring Road, Shanghai

Fax: +1 (212) 213 6617

Tel: +551131978750

We are not an investment adviser, a financial adviser or a securities broker. The information published has been prepared solely for

12.17% 16 Aug 19 Fastmarkets MB is a part of Euromoney Global Limited:

Directors: Leslie Van de Walle (non-executive chairman), Andrew Rashbass (CEO), Wendy Pallot (CFO), Jan Babiak, Kevin Beatty, Tim Collier, Colin Day, Tristan Hillaarth, Imogen Joss, Lorna Tilbian

Copyright notice: © 2002-2019 Metal Bulletin. All rights reserved. No part of this publication (text, data or graphic) may be reproduced, stored in a data retrieval system, or transmitted, in any form whatsoever or by any means (electronic, mechanical, photocopying, recording or otherwise) without obtaining Metal Bulletin's prior written consent Unauthorised and/or unlicensed copying of any part of this publication is in violation of copyright law. Violators may be subject to legal proceedings and liable for substantial monetary damages for each infringement as well as costs and legal fees. Brief extracts may be used for the purposes of publishing commentary or review only provided that the source is acknowledged. Registered as a Newspaper at the Post Office.

ISSN 0026-0533.

15.50-16.75

FASTMARKETS' KEY PRICES: INDICES			
	Price	Change <sup>†</sup>	Assessed
Alumina index fob Australia (\$/t)	296.06	-0.54%	▼ 16 Aug 19
Charge chrome index 50% Cr cif Shanghai (\$/lb Cr)	0.72	0%	16 Aug 19
Manganese ore index 44% Mn cif Tianjin (\$/dmtu)	5.70	0.71%	▲ 16 Aug 19
Manganese ore index 37% Mn fob Port Elizabeth (\$/dmtu)	4.59	0.22%	▲ 16 Aug 19
Manganese ore index 37% Mn cif Tianjin China (\$/dmtu)	5.31	0.38%	▲ 16 Aug 19
MB Index CFR Turkey HMS 1&2 (80:20) (North Europe material)	277.98	-1.83%	▼ 16 Aug 19
HMS 1&2 ferrous scrap index (80:20) fob Rotterdam (\$/t)	258.98	-2.51%	▼ 16 Aug 19
Copper concentrate Asia-Pacific index TC import \$/dmt	49.60	-0.4%	▼ 16 Aug 19
Copper concentrate Asia-Pacific index RC import US cents/lb	4.96	-0.4%	▼ 16 Aug 19
Zinc concentrate spot treatment charge (TC) cif Asia Pacific, \$/t	265.00-290.00	0.91%	▲ 26 Jul 19
FASTMARKETS' KEY PRICES: ASSESSMEN	NTS		
	Price	Change <sup>†</sup>	Assessed
Ferro-chrome, 6-8% C, basis 60% Cr, del European consumers (\$/lb Cr)	0.71-0.80	-4.43%	▼ 16 Aug 19
Silico-manganese, basis 65-75% Mn, 15-19% Si, del European consumers (€/t)	950-990	0.52%	▲ 16 Aug 19
Ferro-silicon, basis 75% Si, del European consumers (€/t)	920-950	-1.58%	▼ 16 Aug 19
Ferro-titanium, 70% Ti, ddp (\$/kg)	4.70-5.00	0%	14 Aug 19
Ferro-manganese, basis 78% Mn, del European consumers (€/t)	950.00-980.00	0%	16 Aug 19
Ferro-molybdenum, basis 65-70% Mo, in-whs Rotterdam (\$/kg Mo)	27.00-27.50	-0.27%	▼ 16 Aug 19
Molybdic oxide, in-whs Rotterdam (\$/lb Mo)	11.75-11.85	-0.42%	▼ 16 Aug 19
Ferro-tungsten, basis 75% W, in-whs Rotterdam (\$/kg W)	29.00-29.80	2.26%	▲ 16 Aug 19
Cobalt (low-grade) in-whs Rotterdam (\$/lb)	15.50-16.75	17.92%	▲ 16 Aug 19

#### Disclaimer

Mei Ling Toh, Dom Yanchunas

This Disclaimer is in addition to our Terms and Conditions as available on our website and shall not supersede or otherwise affect these Terms and Conditions. Prices and other information contained in this publication have been obtained by us from various sources believed to be reliable. This information has not been independently verified by us. Those prices and price indices that are evaluated or calculated by us represent an approxim evaluation of current levels based upon dealings (if any) that may have been disclosed prior to publication to us. Such prices are collated through regular contact with producers, traders, dealers brokers and purchasers although not all market segments may be contacted prior to the evaluation calculation, or publication of any specific price

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





### **Base metals**

FASTMARKETS' KEY ALUMINIUM PRICES			
	Price	Change <sup>†</sup>	Assessed
Alumina index fob Australia (\$/t)	296.06	-0.54%	▼ 16 Aug 19
Group 1 pure 99% Al & litho scrap, del UK (£/t)	1,280-1,320	0%	14 Aug 19
Cast aluminium wheels, del UK (£/t)	1,060-1,100	0.47%	▲ 14 Aug 19
LME aluminium cash settlement (\$/t)	1,755.50	0.54%	▲ 16 Aug 19
Daily aluminium premium, duty-unpaid (in-whs Rotterdam) (\$/t)	100.00-110.00	5%	▲ 16 Aug 19
Weekly aluminium premium, duty-unpaid (cif Shanghai) (\$/t)	95.00-105.00	0%	30 Jul 19
Twice weekly aluminium premium (cif MJP) (\$/t)	85.00-95.00	0%	16 Aug 19
Weekly aluminium premium, duty-free (cif MKP) (\$/t)	95.00-105.00	0%	13 Aug 19
Twice weekly aluminium premium, dlvd (US MW) (cents/lb)	96.84-97.34	0.52%	▲ 15 Aug 19
Extrusion billet premium, 6063, duty-paid, in-whs Rotterdam (\$/t)	310-330	0%	16 Aug 19
LM24 pressure diecasting ingot (del UK consumers) (£/t)	1,240-1,280	0%	14 Aug 19
LM6/LM25 gravity diecasting ingot (del UK consumers) (£/t)	1,600-1,660	0%	14 Aug 19
DIN226 pressure diecasting ingot (del European consumers) (€/t)	1,350-1,400	0%	16 Aug 19
Aluminium ingot ADC 12 spot (MJP) \$/tonne	1,440-1,500	0%	14 Aug 19

#### LONDON

## Analysts think China's State Grid could release a major boost for copper in H2

The world's biggest copper consumer could be getting ready to start spending, analysts told Fastmarkets.

Analysts expect China's State Grid Corp of China, whose budget comprises 50% of the country's annual copper demand, to come good on promises to increase investment on the nation's electronic grid by 5% this year.

That amounts to 14 billion yuan (\$2 billion) of extra spending, according to estimates which forecast a total investment of 524 billion yuan on expanding China's electronics infrastructure.

So far this year, Chinese state grid spending has underperformed by 19% against 2018 levels, adding to generally weak copper usage, mainly in wires and cables.

But analysts expect the spending to be back-loaded to the second half of the year, bringing with it a surge in consumption for the red metal.

"It's potentially a big plus for copper demand in China, which should affect copper prices positively in the coming months," Fastmarkets senior analyst Boris Mikanikrezai said.

Trading at \$5,750 per tonne on Thursday August 15, the London Metal Exchange three-month copper price is down by 3.6% year to date, falling to a two-year low of \$5,640 per tonne on August 5 following a tit-for-tat escalation of trade war threats between the United States and China.

"It's one area that many people are watching because that will have an impact on copper prices," Xiao Fu, head of commodity markets strategy at Bank of China International (BOCI), told Fastmarkets.

State Grid Corp of China holds a monopoly over the country's electricity provision and is the world's fifth largest company by revenue. Decision making is ultimately dictated by a centralized state body called the National Development and Reform Commission (NDRC).

#### **SLACK DEMAND**

China consumed 12.5 million tonnes of copper in 2018, but signs are that this will be difficult to improve upon this time around.

The nation's industrial output hit a 17-year low in July, growing 4.8% from a year prior, while auto sales are down by 12.4% in the first half of the year.

Given that it is less tied to what is happening in the global macro economy and market forces, state grid spending is being eyed as to how it affects demand for physical copper.

"Auto consumption's down, housing completions are too – with a lot of the end-user sectors, it's not great so you're looking to the energy distribution sector for growth," David Wilson, a metals strategist at physical traders Freepoint Commodities, said.

#### INVENTORIES DRAWDOWN

This may already be happening; Chinese copper cathode inventories have started to draw down and there is usually a three-month lag from a fabricator buying cathodes to turn into wire rod and a processor producing final wire products for the grid.

Fastmarkets' surveys of bonded copper cathode stocks in the port of Shanghai show a 33% decline from May to August 12.

At 382,000-385,000 tonnes, bonded stocks have only been as low once before prior to February 2016.

"Technically if we continue to see a drawdown of exchange inventories in August, this is a sign that power grid investment is already picking up."

Physical premiums, another indicator of demand, are also trending higher, albeit amid an LME price slump which forced open an arbitrage to import units into China.

Fastmarkets' copper grade A cathode ER premium bonded in-whs Shanghai hit a six-month high of \$68-80 per tonne on August 7, where it has remained for six consecutive daily assessments.

#### SEASONAL SPEND

The theory that the second half of the year will bring an influx of grid-related demand is based on prior events: last year spending was also lagging at the start, only to surge later on.

"There's no reason to see why the pattern shouldn't be similar to last year," Freepoint's Wilson said.

And without other means for copper demand to improve for now, all eyes are on whether the Sate Grid keeps to its word on spending.

"The Chinese government has been quite restrained in terms of boosting the property market and that's why we haven't seen many support measures for boosting base metals this year. So grid investment will be closely watched in terms of how much they plan and at what pace the government ramps up in the second half," BOCI's Fu said.

#### ARCHIE HUNTER

#### **SÃO PAULO**

## Codelco starts underground phase at Chuquicamata copper mine

Chilean state-owned copper producer Codelco began operations at Chuquicamata's subterranean phase on Wednesday August 14, with an aim to increase mine life by 40 years and to improve the division's productivity, the company said.

The new venture for the centennial open pit mine has 1.03 million tonnes of copper mineral reserves, at 0.82% content, the miner added. These volumes will result in 320,000 tonnes per year of copper production by 2026.

Productivity at the underground Chuquicamata mine, however, is expected at 61 tonnes per person, increasing from 44 tonnes per



### **Base metals**

person in the current open pit phase, Codelco stated.

Chuquicamata is located near Calama city, in the northern region of Antofagasta. The open pit mine has been operating for 104 years and Codelco plans on maintaining it until 2020, when it will move completely to underground output.

The division produced 84,000 tonnes of refined copper during the first quarter of 2019, growing from 70,000 tonnes a year before, while output across all the other units decreased on an annual basis.

Despite the switch from an open pit to an underground mine potentially denting overall production while subterranean Chuquicamata throughput increases, Codelco is confident it will keep its output at 1.68 million tpy in the next decade, compared with 1.69 million tonnes tpy in the previous 10 years.

Chuquicamata faced hard labor negotiations this year amid the switch, resulting in a workers' strike that cut Chuqui's production by 50% over half a month.

The Chuquicamata flash smelter was also halted for several months from the end of 2018 into 2019 until it began ramping up output in May, during which time construction works were carried out to comply with new Chilean emissions standards.

The supply disruptions at mines and a lack of sufficient projects that will increase global output in the future have been pressuring treatment and refining charges (TC/RC) this year.

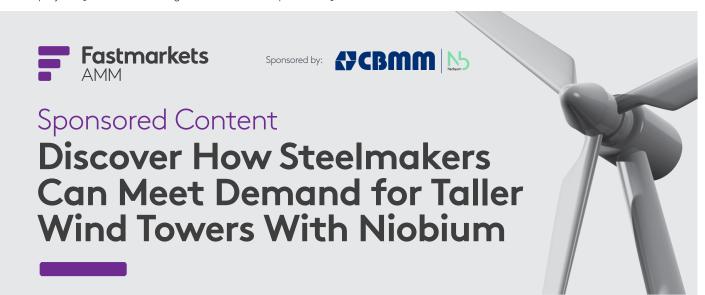
Fastmarkets' copper concentrates TC/RC index, cif Asia Pacific last stood at \$49.80 per tonne/4.98 cents per lb on August 9, the lowest level since its launch in 2013. Comparatively, copper TC/RCs were at \$84.30 per tonne/8.43 cents per lb on December 31, 2018.

"With projects [such as the underground mine at Chuquicamata],

we are committed to reposition Codelco as one of the most competitive, sustainable and profitable copper producers in the world," the company's chairman, Juan Benavides, said.

The state-owned miner spent \$5 billion in total investments for the project and expects to employ up to 2,200 people in the underground operation.

**RENATO ROSTÁS** 



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.

Discover in this white paper from CBMM North America, Inc. ...

- How low carbon structural steel containing niobium can maintain steel's advantage over alternative wind tower materials for taller installations.
- How MicroNiobium gear steels are improving turbine gearbox reliability and design life.



To download visit: news.amm.com/cbmm-niobium-windtowers/





# Non-ferrous raw materials

#### **GUIYANG**

# Weak Chinese fundamentals will cap alumina price uptrend - Huatai Futures

China's domestic alumina market recovered slightly this week after producers raised their offer prices amid production cuts across the country, but the upward momentum will be difficult to sustain over the long term, Huatai Futures aluminium analyst Li Shuheng told Fastmarkets on Thursday August 15.

"Fundamentally, there is no support for the uptrend of [alumina prices in China] over a long period despite some speculation over the recent capacity cuts in Xiaoyi city over August 8-20," Li said during an alumina conference in the Chinese city of Guiyang.

Li was referring to reports that alumina producers in Xiaoyi city, Shanxi province, have been ordered to halve their production rates to comply with government-enforced environmental restrictions that have been put in place due to the 2nd Youth Games of the People's Republic of China, currently taking place in Shanxi.

The cuts in Xiaoyi city as well as concerns that operations at the country's largest aluminium producer, China Hongqiao Group, had been affected by flooding caused by Super Typhoon Lekima, led sellers in the Chinese domestic market to raise their offer prices for alumina this week.

Fastmarkets assessed the price for alumina metallurgical grade, ddp China 2,400-2,520 yuan (\$341-358) per tonne on Thursday, up by 20-70 yuan per tonne or 1.9% from 2,380-2,450 yuan per tonne on August 8. The increase this week is the first since the price began a downtrend on May 23, when it was assessed at 3,050-3,200 yuan per tonne.

"It seems the alumina market gained some strength from production cuts [in eastern and northern China]. And Hongqiao Group suffering from the flood was further encouragement [for producers to raise their offer prices]," a trader told Fastmarkets on the sidelines of the conference on Wednesday.

"Chinese alumina production has increased year after year. In 2013, the country accounted for 10% of total global alumina production, but now the percentage has increased to 55%," Li said.

"Customs data may give us a clearer picture about China's fast development of alumina projects," she added.

"In 2017, when China was still unable to fully supply its own [alumina needs], it imported 2.86 million tonnes of alumina. But this only accounted for 4% of its total consumption of around 72 million tonnes. Now it is bit oversupplied after last year's big expansion [in alumina capacity in China], stimulated by the alumina tightness in ex-China regions due to a supply disruption at Hydro's Alunorte alumina refinery."

China produced 36.5-37 million tonnes of aluminium in 2018 and its estimated aluminium production for this year will also be around this level, market sources told Fastmarkets. Based on this, alumina consumption in the country for 2019 will be around 72 million tonnes given that aluminium smelters require 1.93-2 tonnes of alumina to produce one tonne of aluminium.

An alumina analyst speaking to Fastmarkets on Monday said he estimates total alumina production in China to total 72-85 million tonnes this year.

Participants at the alumina conference in Guiyang shared

similar views, estimating that the Chinese market will run an alumina surplus of roughly 100,000-200,000 tonnes each month throughout 2019 owing to the starting up of new projects in the fourth quarter and no export opportunities due to a persistently closed arbitrage window.

"I heard that China Hongqiao will start another alumina project [with capacity to produce 1 million tonnes of alumina] at the end of August, while some claim they have brought the project online earlier and the production will hit the market soon," an alumina trader told Fastmarkets on the sidelines of the conference.

"If this is true, then the oversupply will be worse. I couldn't find any support for alumina price in the second half of this year," the trader added

Despite the bearishness pervading the conference, some higher offer prices for alumina were reported to Fastmarkets.

Some alumina traders claimed they heard deals done at 2,520 yuan per tonne and some even mentioned higher offers at 2,520-2,550 yuan per tonne in northern regions. But major producers Chalco and China Hongqiao said they had not heard such a high price when approached by Fastmarkets on Thursday.

"[1] heard many higher offers but not many deals this week... as I didn't hear any buying interest. The high deal was done by traders, not consumers," an alumina consumer told Fastmarkets at the conference on Wednesday.

The aluminum price has improved recently and alumina producers want a share in this revenue, the alumina consumer said, adding that aluminium buyers may compromise in the short term, but the alumina price will still be determined by its oversupplied fundamentals in the long run.

The most-traded aluminium contract on the Shanghai Futures Exchange closed at 14,170 yuan (\$2,014) per tonne on Friday, up by 375 yuan per tonne or 2.7% from a closing price of 13,795 yuan per tonne on August 2.

Some 80% of conference delegates polled by Fastmarkets after Li's speech at the conference in Guiyang agreed the alumina price in the second half of this year will continue to rise slightly but will remain below 2,600 yuan per tonne.

HUI LI



# Minor & precious metals

FASTMARKETS' KEY MINOR METAL PRICES				
	Price	Change <sup>†</sup>		Assessed
Antimony, ingots (regulus), in-whs Rotterdam (\$/t)	5,900-6,100	-1.23%	•	16 Aug 19
Antimony, MMTA standard grade II, in-whs Rotterdam (\$/t)	5,750-6,000	-0.42%	•	16 Aug 19
Bismuth, min 99.99% Bi, in-whs Rotterdam (\$/lb)	2.75-2.95	-0.87%	•	16 Aug 19
Cobalt (standard-grade) in-whs Rotterdam (\$/lb)	15.50-16.75	17.92%	<b>A</b>	16 Aug 19
Cobalt (alloy-grade) in-whs Rotterdam (\$/lb)	15.50-16.75	12.17%	<b>A</b>	16 Aug 19
Cobalt sulfate, Co 20.5%, China ex-works (yuan/tonne)	45,000-50,000	0%		16 Aug 19
Indium, min 99.99% In, in-whs Rotterdam (\$/kg)	160-175	-1.47%	•	16 Aug 19
Manganese flake, in-whs Rotterdam (\$/tonne)	1,750-1,830	-3.5%	•	16 Aug 19
Selenium, min 99.5% Se, in-whs Rotterdam (\$/lb)	8.00-9.85	-0.83%	•	16 Aug 19
Tellurium, min 99.9% Te, in-whs (\$/kg)	48.00-60.00	0%		16 Aug 19

#### BEIJING, LONDON

# GLOBAL LITHIUM WRAP: Some buying activity returns to Chinese market; other regions stagnant

Chinese domestic battery-grade lithium compound prices held in low ground in the week to Thursday August 15, but the pace of decline has slowed after some downstream demand returned.

- Battery-grade lithium carbonate price stabilizes on downstream demand.
- Technical and industrial-grade carbonate prices edge down.
- Asian battery-grade lithium prices rangebound but downward pressure persists.

China's domestic battery-grade lithium carbonate market leveled off this week after continuous declines in the past few weeks. This was attributed to a slight improvement in downstream demand after some cathode makers returned to the market to meet increased production needs compared with July and early August.

Fastmarkets assessed the lithium carbonate, 99.5% Li2CO3 min, battery grade, exw domestic China, spot price at 60,000-65,000 yuan (\$8,529-9,240) per tonne on Thursday, unchanged from the previous week.

"Lithium carbonate prices haven't decreased in a large range this week, [although] lower prices were also heard. Our purchasing prices are a little higher at above 63,000 yuan per tonne," a cathode maker told Fastmarkets.

"Lower prices of around 60,000 yuan per tonne are heard, but prices below this level are still rare. Downstream demand has improved a little and I think prices will not fall by a lot," a producer said.

That said, the Chinese technical and industrial grade lithium carbonate price did fall again this week due to a number of deals concluded at around 55,000 yuan per tonne or lower. The technical and industrial grade price fall was a reaction to weaker battery grade prices in the previous week, a supply-side source said.

"Battery grade carbonate prices fell in recent weeks and nearly reached the level of industrial grade, which forced us to lower prices

again as buyers are unwilling to accept higher prices [for industrial grade]," a producer said.

Fasmarkets' Chinese domestic lithium carbonate 99% Li2CO3 min, technical and industrial grade, ex-works, spot price fell to 54,000-58,000 yuan per tonne on Thursday, from 55,000-59,000 yuan per tonne the previous week.

The Chinese battery-grade lithium hydroxide market continued to be sluggish this week and downstream demand was quiet. Although lower offer prices were heard, the assessment was unchanged due to limited transactions with buyers citing no immediate need for material

The lithium hydroxide monohydrate, 56.5% LiOH.H2O min, battery grade, exw spot price has remained at 70,000-75,000 yuan per tonne since the beginning of August when it fell from 75,000-80,000 yuan per tonne.

#### SEABORNE ASIAN LITHIUM PRICES RANGEBOUND

The cif Asia battery-grade lithium spot market was also flat week on week with limited deals heard. Market participants told Fastmarkets lithium compound supply was sufficient, while lower Chinese prices continued to put pressure on the market.

Fastmarkets assessed the lithium carbonate, 99.5% Li2CO3 min, battery-grade spot price cif China, Japan and Korea at \$10-12 per kg, and the lithium hydroxide monohydrate, 56.5% LiOH.H2O min, battery-grade spot price cif China, Japan and Korea at \$12-14 per kg, on Thursday, both unchanged for the third consecutive week.

"China's lithium prices have moved down further in recent weeks which also [weakened] the seaborne Asian market, and I think prices will still be under downward pressure in the short term," a producer said.

#### SUMMER ABSENCES KEEP US, EUROPEAN MARKETS SUBDUED

European and US spot prices were stable in the weekly assessment, with the absence of trading during the summer holidays a major factor.

Fastmarkets assessed the lithium carbonate 99.5% Li2CO3 min, battery grade, spot price ddp Europe and US at \$11-13 per kg, unchanged since May 23.

The lithium hydroxide monohydrate 56.5% LiOH.H2O min, battery grade, spot price ddp Europe and US was also stable week on week at \$13-14 per kg on Thursday.

"We haven't done any battery grade business this week and remain mostly active with technical and industrial grades materials," a lithium producer told Fastmarkets.

BATTERY-GRADE LITHIUM SPOT PRICES					
	New price	Previous price	% Change		
Lithium carbonate 99.5% Li2CO3 min, battery grade, spot price range exw domestic China, yuan/tonne	60,000- 65,000	60,000- 65,000	0		
Lithium hydroxide monohydrate 56.5% LiOH.H2O min, battery grade, spot price range exw domestic China, yuan/tonne	70,000- 75,000	70,000- 75,000	0		
Lithium carbonate 99.5% Li2CO3 min, battery grade, spot prices cif China, Japan & Korea, \$/kg	10-12	10-12	0		
Lithium hydroxide monohydrate 56.5% LiOH.H2O min, battery grade, spot price cif China, Japan & Korea, \$/kg	12-14	12-14	0		
Lithium carbonate 99.5% Li2CO3 min, battery grade, spot price ddp Europe and US, \$/kg	11-13	11-13	0		
Lithium hydroxide monohydrate 56.5% LiOH.H2O min, battery grade, spot price ddp Europe and US, \$/kg	13-14	13-14	0		
Lithium carbonate index, min 99.5% Li2O3, battery grade, exw China, yuan/tonne	63,030	63,317	▼0.45		
Spodumene 5-6% Li2O min, cif China, \$/tonne	585-650	585-650	0		
Source: Fastmarkets					
		conti	inued s		



# Minor & precious metals

"The market remains flat and we have been mostly negotiating long-term contract prices for the time being," a second producer told Fastmarkets. "We don't expect much activity in the coming days due to the summer period."

Fastmarkets' trade log for battery-grade lithium carbonate in China for August includes all trades, bids and offers reported to Fastmarkets

All lithium carbonate, hydroxide and spodumene prices are available in our Battery Raw Materials Market Tracker.

#### MARTIM FACADA, CARRIE SHI

#### **SHANGHAI**

#### Trade log August 2019: Cobalt sulfate

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

#### **FASTMARKETS MB PRICES**

The exchange rate on Friday August 9 was 45,000 yuan to \$6,408.

# WEDNESDAY AUGUST 14 PRICE UNCHANGED AT 45,000-50,000 YUAN PER TONNE (DISCOUNT AT \$0.72-2.12 PER LB)

- Price indicated at 45,000-47,000 yuan per tonne
- Offer at about 50,000 yuan per tonne
- Offer at about 52,000 yuan per tonne
- Offer at about 55,000 yuan per tonne
- Deal heard at about 47,000 yuan per tonne
- Price indicated at 48,000-50,000 yuan per tonne
- Small tonnage sold at about 46,000-48,000 yuan per tonne
- Offer at about 50,000 yuan per tonne
- Offer at about 50,000 yuan per tonne
- Bid at about 46,000-47,000 yuan per tonne
- Deal heard at about 42,000 yuan per tone
- Offer at about 45,000-48,000 yuan per tonne
- Offer at about 50,000 yuan per tonne
- Offer at about 50,000 yuan per tonne
- Offer at about 55,000 yuan per tonne
- Offer at about 50,000 yuan per tonne

#### FRIDAY AUGUST 9

### NEW PRICE AT 45,000-50,000 YUAN PER TONNE (ADJUSTMENT AT -\$0.58 TO 0.81 PER LB)

- Offer at about 55,000 yuan per tonne
- Price indicated at 45,000 yuan per tonne
- Offer at about 40,000 yuan per tonne
- Bid at about 39,000 yuan per tonne
- Bid at about 45,000 yuan per tonne
- Price indicated at 45,000 yuan per tonne
- Price indicated at 45,000 yuan per tonne
- Price indicated at 40,000-45,000 yuan per tonne
- Offer at about 50,000 yuan per tonne
- Price indicated at about 47,000 yuan per tonne

# WEDNESDAY AUGUST 7 NEW PRICE AT 37,500-39,500 YUAN PER TONNE (DISCOUNT AT \$1.3-1.85 PER LB)

- Price indicated at 35,000-36,000 yuan per tonne
- Price indicated at 39,000 yuan per tonne
- Offer at about 40,000 yuan per tonne
- Deal heard at about 37,000-38,000 yuan per tonne
- Price indicated at 38,000 yuan per tonne
- Small tonnages heard to be sold at about 39,500 yuan per tonne
- Deal heard at about 37,000 yuan per tonne
- Offer at about 38,000-39,000 yuan per tonne
- Price indicated at 45,000 yuan per tonne
- Offer at about 37,000 yuan per tonne
- Price indicated at about 37,000 yuan per tonne
- Price indicated at about 37,000-38,500 yuan per tonne
- Offer at about 39,000 yuan per tonne
- Bid at about 37,000 yuan per tonne
- Price indicated at 37,000-38,000 yuan per tonne
- Offer at about 39,000 yuan per tonne

#### **FRIDAY AUGUST 2**

### PRICE UNCHANGED AT 36,000-37,000 YUAN PER TONNE (DISCOUNT AT \$1.78-2.06 PER LB)

- Offer at about 35,000-36,000 yuan per tonne
- Small tonnage sold at about 37,000 yuan per tonne
- Price indicated at 36,000 yuan per tonne
- Large tonnage sold at about 37,000-38,000 yuan per tonne
- Offer for large tonnage at about 35,500-36,000 yuan per tonne
- Offer at about 39,000-40,000 yuan per tonne
- Price indicated at 37,000 yuan per tonne
- Price indicated at 36,000-37,000 yuan per tonne
- Price indicated at 35,000-36,000 yuan per tonne
- Price indicated at 35,000-36,000 yuan per tonne

#### SUSAN ZOU

#### LONDON

# Cobalt hydroxide payables jump on improved demand, Glencore cuts

Concerns over the future availability of material added to the optimistic demand expectations that have allowed sellers to command higher cobalt hydroxide payables in the first half of August, Fastmarkets has learned.

Fastmarkets' cobalt hydroxide payable indicator, min 30% Co, cif China, rose by 5.8% on Thursday August 15 to 62-65% of the low-end of the standard-grade cobalt metal price. This was up from 59-61% at the end of July.

Business was concluded with payables at the low-end of the new range at the beginning of August, when underlying metal prices also showed signs of basing out.

Sellers were holding back from selling larger volumes of hydroxide, in the belief that the outlook for demand along the battery supply chain has improved for the latter part of the year.

"It looks like the fourth quarter is going to be better [for salts consumption]," one market source said. "People are asking for August and September shipment, so there is demand for salts. It's very much linked to improved sentiment; it seems like they have orders for [the fourth quarter of 2019] already."

Metal prices and payables had already started to move up at the beginning of this month, alongside an improved appetite for restocking. That uptick in itself was felt to be better underpinned than was the short-lived rally at the end of the first quarter.

"In March, the Chinese market was going down, and it was very

# 9



# Minor & precious metals

soft. Right now, it is very different," the first source added.

In addition to the reported increase in demand, a recent announcement by Glencore has put sellers in a stronger position to command higher payables. Global miner-trader Glencore will close its Mutanda mine in the Democratic Republic of Congo by the end of 2019, for at least two years, while also revising its forecasts for production at Katanga.

Market participants reported difficulty in obtaining offers for spot hydroxide, but multiple sources indicated that they would have to agree to payables of around 65% to secure units in today's market.

At the same time, market participants were skeptical about the longevity of the recovery, ahead of the market becoming measurably tighter.

"Excessive stocks are still there, and the market is far from being in deficit," one downstream source said, referencing stockpiles and increasing output from sources outside Mutanda, such as Glencore's Katanga and ERG's RTR operation, where production is still ramping up.

Resistance to higher cobalt sulfate prices could also slow the rebound, sources added.

"There is resistance [so], unless the rising offers materialize, sulfate producers will be reluctant to purchase any more raw materials, especially since some of them had already replenished their stocks in the past two or three months," a consumer said.

Fastmarkets' price assessment for cobalt sulfate, 20.5% Co basis, exw China, held steady at 45,000-50,000 yuan (\$6,389-7,099) per tonne on August 14, albeit after a 30% increase the previous week.

A trader commented: "The salts prices are going to be key to [this recovery] sustaining itself."

CHARLOTTE RADFORD, SUSAN ZOU

#### LONDON

#### Trade log August 2019: Selenium

The latest selenium transactions, bids, offers and assessments in Europe reported to Fastmarkets.

Unless otherwise stated, all prices are per lb and on an in-warehouse Rotterdam basis. Delivered prices are netted back.

#### **WEDNESDAY AUGUST 7**

- Prices indicated at \$9-10 per lb
- Prices indicated at \$8.15-9.85 per lb
- Around 3 tonnes sold between \$8.15-9.85 per lb
- Prices indicated at \$8.15-9.85 per lb
- Prices indicated at \$8.15-9.85 per lb
- Prices indicated at \$8.00-9.50 per lb
  - Fastmarkets' selenium price assessment remained stable at \$8.15-9.85 per lb amid limited spot activity and deals reported within the current range.
  - $\bullet$  A supplier sold around 3 tonnes of material at \$8.15-9.85 per lb.
  - One trader and one producer estimated the market as stable and one trader indicated prices at \$9-10 per lb.
  - One producer put the market at \$8.00-9.50 per lb.

#### **FRIDAY AUGUST 9**

- -Prices estimated at \$8.15-9.85
- -Prices estimated at \$8.15-9.85

- -Prices estimated at \$9-10
- -Prices estimated at \$8-10
- -Prices estimated at \$7.50-9.00
  - Fastmarkets' selenium price assessment remained stable at \$8.15-9.85 per lb amid limited spot liquidity.
  - Two traders estimated the market as stable and another trader indicated prices at \$9-10 per lb, while a fourth trader estimated the market at \$8-10 per lb.
  - One producer put the market at \$7.50-9.00 per lb.

#### **WEDNESDAY AUGUST 14**

- -Prices estimated at \$8.15-9.85
- -Prices estimated at \$8.15-9.85
- -Prices estimated at \$8.50-10.00
- -Prices estimated at \$8-10
- -Prices estimated at \$7.50-9.00
- -Around 10 tonnes sold at \$8.50 per lb
- -3 tonnes bought at \$9 per lb
- -3 tonnes offered at \$9.95 per lb
- -19 tonnes offered at \$6.20 per lb
  - Fastmarkets' selenium price assessment remained unchanged at \$8.15-9.85 per lb with deals reported within the current range.
  - A trader bought 3 tonnes of material at \$9 per lb and offered 3 tonnes at \$9.95 per lb.
  - A producer sold 10 tonnes of material at prices around \$8.50 per tonne. Two traders estimated the market to be stable and a third trader indicated the market at \$9-10 per lb.
  - One producer put the market at \$7.50-9.00per lb, and was offered unrequested material at \$6.20 per lb but did not purchase it.

#### EWA MANTHEY, CRISTINA BELDA

#### **BEIJING, LONDON**

#### Trade log August 2019: Lithium

Trade log for battery-grade lithium carbonate in China including trades, bids and offers reported to Fastmarkets.

Unless otherwise stated, all prices are per tonne on an ex-works China basis. Delivered prices are netted back.

#### **FASTMARKETS PRICES**

Fastmarkets lithium trade logs are available on a weekly basis every Friday after the weekly spot market assessments conducted every Thursday at 4pm.

As per our methodology, Fastmarkets takes into account minimum lot sizes of 5 tonnes to capture the price in the Chinese domestic spot market.

In addition to its weekly assessment, Fastmarkets also publishes a lithium index – a tonnage weighted average where the greatest weighting is given to concluded transactions.

The exchange rate on Monday August 12 was 60,000 yuan to \$8,494.

#### THURSDAY AUGUST 15 - 60,000-65,000 YUAN PER TONNE

- Sale reported at 65,000 yuan
- Sale reported at 60,000 yuan
- Purchase reported at 63,000-65,000 yuan
- Offer reported at 65,000-66,000 yuan
- Offer reported at 63,000 yuan
- Deal heard at 65,000 yuan
- Price indicated at 65,000 yuan
- Price indicated at 60,000-65,000 yuan
- Price indicated at 60,000-65,000 yuan



# Minor & precious metals

- Price indicated at 60,000-65,000 yuan
- Price indicated at 62,000-63,000 yuan
- Price indicated at 62,000-63,000 yuan
- Price indicated at 60,000 yuan

#### THURSDAY AUGUST 8 - 60,000-65,000 YUAN PER TONNE

- Sale reported at 65,000 yuan
- Sale of 30 tonnes reported at 65,000-66,000 yuan
- Sale of 10 tonnes reported at 60,000-63,000 yuan
- Offer of 40 tonnes reported at 66,000 yuan
- Offer reported at 65,000 yuan
- Offer reported at 60,000 yuan
- Deal heard at 60,000-65,000 yuan
- Deal heard at 60,000 yuan
- Prices indicated at 60,000-66,000 yuan
- Prices indicated at 62,000-66,000 yuan
- Prices indicated at 60,000-65,000 yuan
- Prices indicated at 60,000-65,000 yuan
- Prices indicated at 62,000-64,000 yuan
- Price indicated at 65,000 yuan

- Prices indicated at 68,000 yuan
- Prices indicated at 65,000-68,000 yuan
- Prices indicated at 65,000-66,000 yuan
- Prices indicated at 65,000-66,000 yuan
- Prices indicated at 64,000-66,000 yuan
- Prices indicated at 64,000-66,000 yuan
- Price indicated at 65,000 yuan
- Prices indicated at 64,000-65,000 yuan
- Sell of 10 tonnes reported at 64,000 yuan
- Prices indicated at 60,000-65,000 yuan
- Deal heard at 61,000-62,000 yuan
- Prices indicated at 60,000 yuan

MARTIM FACADA, CARRIE SHI

#### THURSDAY AUGUST 2 - 64,000-68,000 YUAN PER TONNE

- Prices indicated at 66,000-72,000 yuan
- Price indicated at 69,000 yuan
- Sell of 20 tonnes reported at 68,000 yuan



To download visit: news.amm.com/osisoft-driving-profits/



# Carbon steel flat products

FASTMARKETS' KEY FLAT STEEL PRICE	S		
	Price	Change <sup>†</sup>	Assessed
HRC, EU imports (cfr main EU port, northern Europe) (€/t)	470-480	0.53%	▲ 14 Aug 19
HRC, EU imports (cfr main EU port, southern Europe) ( $\in$ /t)	450-475	0%	14 Aug 19
HRC, CIS exports (fob stowed main Black Sea port) (\$/t)	470-485	0%	12 Aug 19
HRC, UAE imports (cfr Jebel Ali) (\$/t)	495-500	0%	06 Aug 19
HRC, Turkish imports (cfr main Turkish port) (\$/t)	490-505	0%	16 Aug 19
HRC, Latin America exports (fob stowed main Latin American port) (\$/t)	480-490	0%	16 Aug 19
HRC, commodity grade, US imports (cfr Gulf port) (\$/short ton)	560-600	0%	07 Aug 19
HRC, US Midwest index (fob mill) (\$/short ton)	597-597	-0.76%	▼ 15 Aug 19
HRC, China export index (fob main China port) (\$/t)	482-482	-1.57%	▼ 16 Aug 19
HRC, South East Asia imports (cfr Vietnam) (\$/t)	495-497	-2.27%	▼ 13 Aug 19
HRC, Saudi Arabia imports (cfr main port) (\$/t)	510-515	0%	06 Aug 19
CRC, EU imports (cfr main EU port, northern Europe) (€/t)	550-565	0%	14 Aug 19
CRC, EU imports (cfr main EU port, southern Europe) ( $\in$ /t)	515-530	0%	14 Aug 19
CRC, CIS exports (fob stowed main Black Sea port) (\$/t)	540-550	-0.91%	▼ 12 Aug 19
CRC, UAE imports (cfr main Jebel Ali) (\$/t)	560-570	0%	06 Aug 19
CRC, Turkish imports (cfr main Turkish port) (\$/t)	565-570	0%	16 Aug 19
CRC, Latin America exports (fob stowed main Latin American port) (\$/t)	565-580	0%	16 Aug 19
CRC, US imports (cfr Gulf) (\$/short ton)	700-740	0%	07 Aug 19
CRC, US domestic (fob mill) (\$/short ton)	760-760	0%	15 Aug 19
CRC, China export (fob main China port) (\$/t)	525-530	-1.4%	▼ 13 Aug 19

#### **BURSA**

# Rising HRC exports make Turkey a new backyard for EU steelmakers, local producers say

Turkish steel producers believe that their market has become a 'backyard' for European steel firms, they told Fastmarkets on Thursday August 15.

This was demonstrated by trade data which showed that Turkey's flat steel sector has returned to deficit in terms of the trade with EU countries, they said. This unbalanced relationship has long been the traditional market position, they added.

The table below shows the import tonnages from various nations for the first six months of 2018 and 2019, and corresponding figures for the first and second quarters of 2019.

Some signficant increases can be seen. Notably, in the half-year comparisons, Romania more than doubled its shipments to Turkey, while Italy's volumes almost tripled. In the quarterly comparisons, Romania's figure nearly doubled, while the volumes from Italy and Germany surged enormously. In only two of the comparisons did the import volume into Turkey go down.

Overall, exports of HRC by European steel producers to Turkey totalled about 600,000 tonnes in the first half of 2019, increasing by 96% in April-June compared with January-March, Turkish steel producers said.

And the average price of these imports was below Chinese prices for similar material, one Turkish source said.

Europe-origin HRC was offered at  $\leq$ 460-470 ( $\leq$ 513-525) per tonne cfr Turkey last week.

The weekly price assessment for steel HRC, domestic, exw Turkey, was \$495-500 per tonne on August 9, falling from \$520-525 per tonne.

And Fastmarkets's steel HRC index, export, fob main port China, was \$480.50 per tonne fob on August 15. The index began the year at \$480.94 per tonne on January 2 and rose through the first quarter to a year-to-date high of \$538.35 per tonne on March 19, before falling to its current level.

Turkish authorities were considering whether to launch a trade defense case against imports of HRC from the EU in July this year, but no concrete action has yet been taken.

To protect Europe's own markets and manufacturers, the European Commission imposed definitive safeguard measures on 28 steel products in February. These operate through quota allocations and a 25% tariff that is imposed once any quota is exceeded.

The EC initiated a review of its safeguard measures on May 17. The current mechanism increases the level of tariff-free quotas for each product category by 5% year-on-year from July 1, 2019 - the end of the first quota period.

But the EC is also investigating the reasons for the swift exhaustion of certain country-specific quotas, it said, which could include factors such as "substantially increased EU demand for these products... or whether they originate in stockpiling activities or trade diversion resulting from restrictive measures taken abroad."

In June this year, European steelmakers called on the EC to review its decision to increase quota volumes by 5% each year. They also called for the implementation of country-specific quarterly quotas for imports of hot-rolled flat steel products, known as product category one.

When imposing definitive safeguard measures in February, the EC only applied a global quota to this category, with no country-specific allocation, noting that almost 60% of imports were covered by anti-dumping measures.

"The EU pressure on the Turkish market is considerable, especially continued >



# Carbon steel flat products

when HRC products are examined," according to Ugur Dalbeler, chief executive officer of Turkish steelmaker Çolakoglu Metalurji, and a member of the board of directors of the Turkish Iron & Steel Producers' Association (TÇÜD).

"In the second quarter of 2019, the monthly average of Turkey's exports to the EU decreased by 40% compared with the first quarter of 2019, whereas Europe increased its exports to Turkey by 96% in the second quarter compared with the first quarter," he added.

"European producers are trying to compensate for a contraction in consumption by increasing their exports to Turkey. But the Turkish market is also experiencing a consumption contraction," Dalbeler said.

"The EU prices have gone down to the level of Chinese prices, and that is \$30 per tonne below the Turkish price. This puts downward pressure on Turkish prices at the current level of exports," he added, noting that Turkish mills are not able to compete with low-priced HRC imported from Europe.

SERIFE DURMUS

#### BURSA

## TURKEY FLAT STEEL: Most prices steady over eid holiday but HRC export price falls

Turkish export prices for hot-rolled coil (HRC) decreased over the week ended Friday August 16 while the prices for other flat-steel products were stable because of the Eid al-Adha religious holiday, sources told Fastmarkets.

Turkey was on eid holiday on August 12-14, and the market remained steady over the other working days of the week.

Some market participants believed that prices could fall in the next few weeks, however, because of softening iron ore prices.

Fastmarkets' index for iron ore 62% Fe fines, cfr Qingdao, was \$89.57 per tonne cfr on August 16, falling from \$94.12 on August 8.

#### **HRC EXPORTS**

Turkey's export price for HRC decreased with lower offers, sources said. Fastmarkets' weekly price assessment for steel HRC, export, fob main port Turkey, was \$480-490 per tonne on August 16, falling from \$490-495 per tonne on August 9.

Turkish HRC was on offer for export at \$490 per tonne fob. But offers were also heard at \$510 per tonne cfr to Brazil, which would be equivalent to \$480 per tonne fob Turkey.

#### **DOMESTIC PRICES**

Fastmarkets' weekly price assessment for steel HRC, domestic, exw Turkey, was \$495-500 per tonne on Friday, unchanged week-on-week.

Turkish mills have been offering HRC at \$500-510 per tonne ex-works, but deals have been heard at \$495-500 per tonne ex-works for September production.

Cold-rolled coil (CRC), meanwhile, was on offer at \$580-590 per tonne ex-works in Turkey, but no significant deals were heard.

Fastmarkets' weekly price assessment for steel CRC, domestic, exw Turkey, was unchanged at \$580-590 per tonne on August 16.

#### **IMPORT PRICES**

No new prices were heard in the import market for flat steel in Turkey this week.

Fastmarkets' weekly price assessment for steel HRC, import, cfr main port Turkey, was stable at \$490-505 per tonne on August 16.

And Fastmarkets' weekly price assessment for steel CRC, import, cfr main port Turkey, was \$565-570 per tonne on Friday, also unchanged week-on-week.

#### SERIFE DURMUS

#### **SHANGHAI**

### CHINA HRC: Mills resist low bids amid domestic rebound

China's hot-rolled coil prices recovered some losses on Friday August 16 after trading activity returned to moderate levels, which led mills to turn down low bids in the export market.

#### **DOMESTIC**

- Eastern China (Shanghai): 3,720-3,730 yuan (\$529-530) per tonne, up 10 yuan per tonne
- Northern China (Tangshan): 3,720 yuan per tonne, unchanged HRC futures largely trended upward during the day, which led to trading activity in Shanghai's spot market rising to moderate levels after falling over the last few days, a trader in the city said.

Spot prices ended the week higher - those in Shanghai are up 80 yuan per tonne week on week while Tangshan's are 20 yuan per tonne higher - but concerns have emerged in some segments of the market that prices would retreat next week due to the subdued trading over the past five days.

A Tianjin-based trader still thinks prices will gain some short-term strength as long as sellers in Shanghai continue to draw down their inventories consuming rather than placing new orders with mills in the northern region, but noted that the support had yet to emerge because they still have quite a bit of stock.

Prices will likely fall due to the subdued trading activity before they bounce back again, he said.

#### EXPORT

• Fastmarkets' steel hot-rolled coil index export, fob main port China: \$482.17 per tonne fob, up \$1.67 per tonne While traders were able to secure some materials from mills at \$480 per tonne fob on Wednesday and Thursday, this was no longer the case on Friday amid the day's slight rebound in domestic prices.

A second Shanghai-based trader said that he had bought HRC from a steelmaker in northern China this week at \$485-486 per tonne fob, albeit in small quantities.

Mills that urgently need to secure orders might be willing to sell close to \$480 per tonne fob, but others will likely only sell at a minimum price of around \$485 per tonne fob, he said.

Overseas buyers continued to bids at \$470-475 per tonne fob. A few traders with a pessimistic outlook for prices appeared to be willing to trade with these buyers.

#### MARKET CHATTER

"Most market participants believe prices would drop in the long term, but in the short term, they expect a fair bit of fluctuation to occur. Those who choose to capitalize at the right time will profit," a trader in Zhejiang province said.

#### SHANGHAI FUTURES EXCHANGE

The most-traded October HRC futures contract closed at 3,730 yuan per tonne on Friday, up 8 yuan per tonne from Thursday.

MIRANDA SONG



# Carbon steel flat products

#### LONDON

#### Flat Steel Products Trade Log, August 16, 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 3,720-3,730 yuan (\$529-530) per tonne, including VAT.
- North China, domestic, commercial-grade HRC (4.5-12mm), traded at 3,720 yuan per tonne, including VAT.

#### DNFPR

### EUROPE HRC: Prices stable in seasonally weak market

Domestic prices for hot-rolled coil in Europe have been stable over the week to August 14 due to a seasonally weak market in August, sources told Fastmarkets.

In the meantime, the market outlook for HRC later in August into early September is mixed. European steelmakers are expected to increase official offers for coil, supported by the seasonal demand recovery. But market sources also believe that the demand increase might be short-lived while demand from end users remains weak.

Fastmarkets' weekly price assessment for steel HRC, domestic, exw Northern Europe was €465-480 (\$519-536) per tonne on August 14, unchanged over the week.

The assessment reflected "workable" prices and the latest deals heard in the market.

Fastmarkets' weekly price assessment for steel HRC, domestic, exw Southern Europe was also stable over the week at  $\leq$ 435-460 per tonne on August 14, with the upper end of the assessment reflecting prices in Spain.

One Italian steelmaker was reported to be trading material at €435-450 per tonne ex-works, while another integrated mill has been targeting a price rise and refusing to give discounts.

Official offers for steel HRC in Southern Europe have been reported at about €480 per tonne ex-works, according to market sources

#### **MARIA TANATAR**

Access our Daily US Midwest

# **HRC Index**

# A new era for the hot-rolled coil market

Providing an effective risk management tool for an increasingly volatile market



Access this price for free each week



www.fastmarkets.com/hot-rolled-coil



# Carbon steel long products

FASTMARKETS' KEY LONG STEEL PRICES			
	Price	Change <sup>†</sup>	Assessed
Rebar, China export index (fob main China port) (\$/t)	478-478	-3.63%	▼ 16 Aug 19
Rebar, EU import (cfr main EU port, northern Europe) (€/t)	460-480	0%	14 Aug 19
Rebar, EU import (cfr main EU port, southern Europe) (€/t)	460-480	0%	14 Aug 19
Rebar, CIS exports (fob stowed main Black Sea port) (\$/t)	440-445	-2.75%	▼ 12 Aug 19
Rebar, Turkish exports (fob main Turkish port) (\$/t)	445-450	-0.56%	▼ 15 Aug 19
Rebar, UAE imports (cfr Jebel Ali) (\$/t)	515-523	-0.67%	▼ 06 Aug 19
Rebar, US imports (cfr Gulf) (\$/short ton)	590-610	-5.51%	▼ 07 Aug 19
Rebar, US domestic (fob mill) (\$/short ton)	630-650	0%	07 Aug 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)	480-485	-1.03%	▼ 13 Aug 19
Rebar, Southern Europe exports (fob main port) (€/t)	445-460	0%	14 Aug 19

#### **BURSA**

# Turkey's OYAK reaches provisional agreement to buy British Steel

Turkey's military pension fund, OYAK, has reached a provisional agreement to buy steelmaker British Steel, OYAK said on Friday August 16.

OYAK is the biggest shareholder of Turkey's largest steel producer, Erdemir Group, and this agreement is a step toward in its goal to become a regional leader in steel sector, OYAK said.

British Steel entered into compulsory liquidation in May 2019 and received several bids for sale. Ataer Holding, owned by OYAK, is now the only company that has exclusivity to make detailed financial, legal, and operational investigations in British Steel.

The investigation is planned to be finalized in October 2019 and if it is successful, acquisition will be within 2019, OYAK said.

There were rumors that Erdemir was bidding for British Steel, but the company denied these reports in July.

150-year-old British Steel has capacity to produce 4.5 million tonnes per year of crude steel. It has facilities to roll long steel products in England, France and the Netherlands with a product range including rails and wire rod.

"Today's announcement is enormously positive news for British Steel, its workers, and UK manufacturing as a whole. British Steel's production facilities in Scunthorpe and elsewhere in the North East represent one third of the UK's steel production and are a major strategic asset to our country; their loss would leave our manufacturing, construction and infrastructure capability in a considerably poorer state," Gareth Stace, UK Steel director general, said.

Should investigations be concluded successfully, attention will turn to which type of steelmaking operation the Turkish company would look to run at British Steel's Scunthorpe plant.

"There are three possible options that we can see," Fastmarkets metals analyst Lee Allen said in an interview with BBC Radio on

Thursday September 15.

One option would be to follow the model that some previous investors in British steel industries have done in the past, such as by Thailand's SSI in Redcar, Teeside, and by Saudi Arabia's Al Tuwairqi in Sheerness, southern England, which is to produce semi-finished material in the UK and ship it back to the parent company for further processing, Allen said.

A second possibility would be to establish a new electric arc furnace in Scunthorpe using local British scrap, but Allen said this may be unfavorable due to high capital costs and the wishes of British Steel's administrator to sell the entire business – including the firm's blast furnaces

A third option, according to Allen, would be to keep the blast furnaces in operation and focus on exporting finished steel using the weak British pound as an advantage in the export markets and for Ataer Holding to use its knowledge of blast furnace steelmaking to both make the Scunthorpe operation more efficient and upgrade its existing facilities.

Erdemir Group, owned by OYAK, reported earnings before interest, taxes, depreciation and amortization (Ebitda) of 3.49 billion Turkish lira (\$623 million) for January-June 2019, down by 7.1% from 3.76 billion lira for January-June 2018.

**SERIFE DURMUS** 

#### SHANGHAI

## CHINA REBAR: Trading picks up slightly amid stagnant domestic prices

China's domestic rebar prices were flat on Friday August 16, though trading activity increased slightly.

#### **DOMESTIC**

- Eastern China (Shanghai): 3,670-3,700 yuan (\$521-525) per tonne, unchanged
- Northern China (Beijing): 3,610-3,630 yuan per tonne, unchanged Rebar futures picked up earlier in the day, which stimulated buying interest in the spot market. The benchmark rebar contract on the Shanghai Futures Exchange went on to end the day at the same level as Thursday's closing price, however.

Sellers kept their prices flat in an attempt to secure more sales.

Rebar prices in eastern China are up 20 yuan per tonne from last
Friday, but those in the northern region are 30 yuan per tonne lower
week on week.

#### **EXPORT**

• Fastmarkets' steel reinforcing bar (rebar) index export, fob China main port: \$478.25 per tonne, down \$0.50 per tonne Rebar offers were flat at \$475-490 per tonne fob, which kept market participants' estimate of mills' lowest acceptable prices unchanged, at \$475-480 per tonne fob.

Suppliers in other regions were heard to be offering the product at prices equivalent to around \$470-475 per tonne fob.

Buyers have the option of either buying from China or from other suppliers since there is some overlap in prices.

But they do not have much demand at the moment, so deals are still very hard to come by, an export trader in eastern China said.

#### MARKET CHATTER

"More steel mills are performing maintenance and cutting production due to weak demand resulting in low profits or even losses. Before rebar prices start to strengthen or iron ore prices weaken further, supply will continue to decrease," an industry analyst in Shanghai said.



# Carbon steel long products

#### RILLET

As at 3pm, billet was being traded at 3,470 yuan per tonne including value-added tax in Tangshan, down 20 yuan per tonne from a day earlier

#### SHANGHAI FUTURES EXCHANGE

The most-traded October rebar futures contract closed at 3,715 yuan per tonne on Friday, unchanged from a day earlier.

JESSICA ZONG

#### LONDON

#### Long Steel Products Trade Log, August 16, 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 3,670-3,700 yuan (\$521-525) per tonne, including value-added tax.
- North China, domestic, grade III 16-25mm rebar, traded at 3,610-3,630 yuan per tonne, including VAT.

#### **SÃO PAULO**

## Votorantim's Q2 earnings for long steel business up 52%

The steel business of Brazil-based commodities group Votorantim posted higher earnings in the second quarter of 2019 on a year-on-year basis amid higher prices in Argentina and more volumes sold Colombia.

Votorantim reported 120 million Reais (\$29.77 million) in adjusted earnings before interest, taxes, depreciation and amortization (Ebitda) for its steel division in the second quarter, up by 52% from 79 million Reais a year earlier.

The increase is mainly due to "higher prices in Argentina and the higher sales volume in Colombia combined with stable costs," the group said on Thursday August 15.

Votorantim controls Argentinian long steel producer Acerbrag and owns a 72.4% stake in Colombian steelmaker Acerías Paz del Río.

The Fastmarkets steel reinforcing bar (rebar), domestic monthly assessment, exw Argentina was \$850-860 per tonne on July 12, up \$35-40 per tonne compared with \$815-820 per tonne on July 6, 2018.

The price assessment on August 9 was still \$850-860 per tonne, a level it has been since November last year.

Votorantim's net revenues in Argentina and Colombia totaled 520 million Reais during the second quarter, up 5% from 496 million Reais a year earlier.

The revenue growth was mainly due to the increase in prices in Argentina and in volumes in Colombia, but the company added that these were offset by the depreciation of the Argentinian peso and Colombian peso against the Brazilian real."

Votorantim's sale of its long steel assets in Brazil to ArcelorMittal was approved by the country's competition regulator early last year. Felipe Peroni

#### **MUGLA**

# TURKEY LONG STEEL EXPORTS: Mills reduce prices on soft demand

The Turkish long steel export markets have been largely quiet over the past seven days, and were closed earlier this week for an Islamic religious holiday, sources said on Thursday August 15.

The Turkish market and those in other Middle Eastern territories were closed until August 15 for the Eid al-Adha celebration.

Turkish steel mills were heard offering rebar around \$450-455 per tonne fob on an actual-weight basis on Thursday, which was about \$5 per tonne lower than last week.

But they failed to sell any material at this price. Only one rebar sale was heard late last week, at \$445 per tonne fob, actual weight, for a 50,000-tonnes cargo to Singapore.

Fastmarkets' weekly price assessment for steel reinforcing bar (rebar), export, fob main port Turkey, was \$445-450 per tonne on August 15, narrowing downward from \$445-455 per tonne fob.

"The export markets are very quiet. Mills are offering rebar for exports at \$450 per tonne fob, but I think sales could only be achieved at \$440-445 per tonne," a Turkish source said.

Meanwhile, the wire rod export market was also quiet due to the holiday.

Fastmarkets' weekly price assessment for steel wire rod (mesh quality), export, fob main port Turkey, was flat week on week at \$500-505 per tonne.

#### **CEM TURKEN**

#### **MUGLA**

# TURKEY LONG STEEL: Domestic prices flat on religious holiday

The Turkish domestic long steel markets have been silent over the past week with trading limited by a religious holiday in the country, sources said on Thursday August 15.

The Turkish market and those in other Middle Eastern territories were closed until August 15 for the Eid al-Adha holiday.

As a consequence, the price assessments for rebar and wire rod remained flat this week.

Fastmarkets' weekly price assessment for steel reinforcing bar (rebar), domestic, exw Turkey, was TRY2,920-2,970 (\$522-531) per tonne including 18% VAT on Thursday, unchanged week on week.

And Fastmarkets' weekly price assessment for steel wire rod (mesh quality), domestic, exw Turkey, was TRY3,250-3,350 per tonne, also flat compared with August 8.

#### **CEM TURKEN**



# Carbon steel semifinished products

FASTMARKETS' KEY SEMI-FINISHED STEEL PRICES				
	Price	Change <sup>†</sup>	Assessed	
Slab, CIS exports (fob stowed main Black Sea port) (\$/t)	415-420	0%	12 Aug 19	
Slab, Brazil export (fob main port) (\$/t)	425-435	0%	16 Aug 19	
Slab, South East/East Asia (cfr main port) (\$/t)	440-455	0%	13 Aug 19	
Billet, CIS exports index (fob Black Sea port) (\$/t)	404	-1.7%	▼ 16 Aug 19	
Billet, Turkish exports (fob main Turkish port) (\$/t)	425-430	0%	15 Aug 19	
Billet, Turkish imports (cfr main Turkish port) (\$/t)	420-425	0%	15 Aug 19	
Billet, UAE imports (cfr Jebel Ali) (\$/t)	455-460	0%	06 Aug 19	
Billet, Latin American exports (fob stowed main Latin America port) (\$/t)	410-430	-3.45%	▼ 16 Aug 19	
Billet, Indian exports (fob main India port) (\$/t)	420-425	0%	16 Aug 19	
Billet, South East Asia imports (cfr main port) (\$/t)	440-445	-0.56%	▼ 16 Aug 19	
Billet, Iran export (fob Iranian ports) (\$/t)	385-388	0%	14 Aug 19	
Billet, Egypt imports (cfr main port) (\$/t)	425-435	0%	15 Aug 19	

#### **SINGAPORE**

# Bearish sentiment weighs on Southeast Asian billet import prices

Southeast Asia's steel billet prices moved downward over the week to August 16 amid the bearish sentiment adopted by buyers in the region's main market of the Philippines.

The recent flare-up in trade tensions between China and the United States has caused uncertainty in the steel markets, a trader in the Philippines said.

"As a result, my customers are hesitant to make any bookings because they expect prices to fall further," the same trader said.

China had intended to counter the US' plans to impose 10% tariffs on \$300 billion of Chinese imports on September 1, although the US administration has since said that tariffs on approximately half of the goods targeted would be delayed to December 15.

The good availability of competitively priced billet from producers in India also continued to pressure suppliers from other regions to reduce their asking prices, market sources said.

Billet produced in India using blast furnaces was heard offered at \$445-450 per tonne cfr Manila and \$440-445 per tonne cfr Indonesia, while materials from Russia were available at \$445 per tonne cfr Manila.

Buyers in the Philippines had indicated their interest at \$440 per tonne cfr Manila, while market participants estimated that the workable price was \$440-445 per tonne cfr Southeast Asia.

One cargo of billet from a producer that exports from the Black Sea port was reportedly booked at \$445 per tonne cfr Southeast Asia. Although, this information was received after the end of today's assessment period and could not be verified at the time of publication, which meant it was excluded from Fastmarkets' price assessment.

Two shipments of Malaysian billet were booked at \$445-450 per tonne cfr Indonesia, while 100mm billet from a producer in the Commonwealth of Independent States was available at \$440 per tonne cfr Manila. Both prices were excluded from the price assessment, however, because they fell outside the specifications listed in Fastmarkets' methodology.

Billet produced in India using induction furnaces (IF) was heard offered at \$435-445 per tonne cfr Indonesia and Manila, while Vietnamese IF-produced billet was available at \$440-450 per tonne cfr Manila

Fastmarkets MB does not assess prices for IF billet because they tend to be lower than mainstream levels due to the product's inferior quality.

Iranian materials were offered at \$425 per tonne cfr Southeast Asia. Iranian prices are excluded from Fastmarkets' price assessment because they fall below mainstream levels due to the United States' sanctions against Iran.

Fastmarkets' price assessment for steel billet imports, cfr Southeast Asia was \$440-445 per tonne on Friday August 16, unchanged from the previous day.

Despite the assessment remaining unchanged on Tuesday at \$455 per tonne, the lower end of the range widened over Wednesday and Thursday.

"It remains unclear whether prices have bottomed out, even though they have already fallen quite a bit," a trader in East Asia said.

#### LEE KEN KIAT

# LONDON Semi-finished Steel Products Trade Log, August 16, 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 3,470 yuan (\$493) per tonne, including value-added tax, at 3pm.

#### **BURSA**

# EGYPT STEEL REBAR, BILLET: Prices steady, no market activity due to Eid al-Adha holiday

Steel billet and rebar prices in Egypt remained stable in the week to Thursday August 15, largely due to the Eid al-Adha holiday.

Egypt's working week runs from Sunday to Thursday, with Eid observed on August 11-14 and no market activity was apparent on August 15.

Continuing uncertainty over safeguard duties on steel billet and rebar also had an impact, sources said.

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.

But 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.

A final session on the safeguard duties is due to be held at a higher court on August 17.

Due to the lack of activity, Fastmarkets' weekly price assessment



# Carbon steel semifinished products

for steel billet, import, cfr main port Egypt, was unchanged at \$425-435 per tonne on August 15.

And Fastmarkets' weekly price assessment for steel reinforcing bar (rebar), domestic, exw Egypt, remained at E£11,580-11,980 (\$697-721) per tonne including 14% VAT on August 15, unchanged since May 16.

**SERIFE DURMUS** 

#### MUGLA

# TURKEY STEEL BILLET: Market goes quiet for eid holiday

The Turkish billet markets have been quiet over the past week with trading activity restricted by absences for a religious holiday, sources said on Thursday August 15.

The Turkish market and those in other Middle Eastern territories were closed until August 15 to celebrate the Islamic Eid al-Adha.

Only one steel mill was heard bidding for local billet at \$415 per tonne ex-works, but the lowest offer it received was \$420 per tonne, Fastmarkets was told.

Fastmarkets' weekly price assessment for steel billet, domestic, exw Turkey, was \$420-425 per tonne on August 15, down from last week's \$425-430 per tonne ex-works.

The billet import and export prices have remained stable since August 8.

Fastmarkets' weekly price assessment for steel billet, import, cfr

main port Turkey, was unchanged week on week at \$420-425 per tonne on August 15.

And the weekly price assessment for steel billet, export, fob main port Turkey, was also flat week on week on the same day, at \$425-430 per tonne fob.

**CEM TURKEN** 



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.



Download the whitepaper today: content.comms.euromoneyplc.com/IndustryLeading.html



# Stainless & special steels

FASTMARKETS' KEY STAINLESS STEEL PRICES				
	Price	Change <sup>†</sup>		Assessed
Grade 304 HRC, Asia import (cif East Asian port) (\$/t)	1,900-1,920	-1.29%	•	14 Aug 19
Grade 304 2mm CRC, 2B Asia import (cif East Asian port) (\$/t)	1,990-2,010	-1.72%	•	14 Aug 19

#### **SINGAPORE**

## FOCUS: EU's anti-dumping probe likely to affect Tsingshan Indonesia most [UPDATED]

Market participants in Asia expect PT Indonesia Tsingshan Stainless Steel to be the most significantly affected should the European Union decide to impose anti-dumping duties on imports of stainless hot-rolled coil and sheet from the region.

The EU earlier this week initiated an anti-dumping investigation into imports of such products from China, Indonesia and Taiwan.

The EU probe could further limit the number of markets available for Tsingshan Indonesia and comes after China imposed anti-dumping duties in July on stainless steel billet, slab, and hot-rolled plate and coil produced in Indonesia, Japan, South Korea and the EU

"Tsingshan Indonesia will do its best to fight the EU case although it could be pressured to reduce its prices to boost sales if the tariffs are ultimately imposed," a source in Southeast Asia said.

The mill, a subsidiary of China's Tsingshan Holding Group, is the Southeast Asian country's largest producer of stainless steel by volume. It has a 3-million-tonnes-per-year facility in Central Sulawesi province that is able to supply competitively priced cargoes because of lower production costs at its integrated complex that feeds liquid chrome and NPI directly from its smelters to its furnaces.

Indonesia exported 43,148 tonnes of stainless hot-rolled flat products to countries in the EU in the first five months of this year, compared with 44,865 tonnes in the whole of last year, according to statistics from the European steel association Eurofer.

The European Commission started its anti-dumping investigation on August 12 and is expected to decide on any provisional measures within seven months and conclude the probe no later than 14 months, according to a notice published in the Official Journal of the EU.

The EU is also scrutinizing imports of Indonesian stainless cold-rolled steel after they exceeded 3% of total EU imports. This disqualifies the Southeast Asian country from an exemption from EU safeguard measures due to its developing nation status in the World Trade Organization.

Indonesian stainless CRC was heard offered at \$2,010-2,020 per tonne fob this week, or about \$2,030-2,040 per tonne cif, while stainless HRC from the same country was available at \$1,910-\$1,920 per tonne fob, equivalent to about \$1,930-1,940 per tonne cif.

The exact impact of any EU anti-dumping duties on stainless hot-rolled flat steel can only be determined after the tariff rate is announced, a trader in Taiwan said.

The trader cited a 6.8% anti-dumping duty set by the EC in 2015 on imports of stainless cold-rolled flat steel from Taiwan as an example of how a measure might not hinder trading activity if the rate is not very prohibitive.

Countries in the EU imported 229,798 tonnes of stainless cold-rolled sheet from Taiwan in 2018, compared with 75,433 tonnes in 2015, according to Eurofer data.

In contrast, the EU had levied higher import tariffs of 24.4-25.3% levied on Chinese exporters.

EU countries imported 321,702 tonnes of Chinese CRC in 2014 and 42,282 tonnes in 2015. In 2018, these imports totaled 8,260 tonnes.

Stainless cold-rolled flat steel produced in Taiwan is also more competitively priced in the export market because producers on the island used cheaper Indonesian stainless slab and HRC substrate.

"Nonetheless, any anti-dumping duties imposed are likely to provide some support for prices in Europe," the same trader said.

A European trader said the effect of the anti-dumping investigation on European imports would be almost immediate because of the fact that provisional duties could be applied at any time, potentially catching out any importers with vessels en route to Europe.

"[The EU] can introduce provisional duties at any time, then you're trapped as an importer. We're pretty reluctant [to purchase the relevant products in China, Taiwan or Indonesia] at the moment," the trader said. "It's difficult that the case takes in three countries, there aren't so many other options. Luckily we have sufficient stocks."

The trader added that provisional duties could be set at any level, an extra level of uncertainty increasing the potential risks for importers.

#### **LESS AFFECTED**

While any potential duties would not bode well for stainless steel producers in China or Taiwan either, their effects on them are likely to be less pronounced, market sources said.

An industry analyst in Shanghai estimated that China produced over 20 million tonnes of stainless hot-rolled flat steel last year, of which at least 6 million tonnes were sold in the spot market.

Eurofer data showed that China exported 261,277 tonnes of stainless hot-rolled flat steel to the EU last year - this figure suggests that Chinese exports to the EU accounted for approximately 4% of the total volume sold in China's spot market.

As such, these volumes are unlikely to have much of an influence on China's domestic supply and prices.

"The EU anti-dumping probe should not cause supply pressure in China's domestic market although domestic prices might take a slight hit if Chinese export prices drop due to the investigations," a trader in Wuxi said.

Market sources told Fastmarkets that 3-6mm grade 304 stainless hot-rolled coil, which is covered under the EU anti-dumping probe, was sold at 14,400-14,700 yuan (\$2,049-2,092) per tonne during the week ended Wednesday, up 100-200 yuan per tonne from 14,200-14,600 yuan per tonne in the preceding week.

The impact of any tariffs on China's export market for hot-rolled flat steel products is expected to be minor, but not insignificant, according to industry sources Fastmarkets spoke to.

This is because Chinese exports of products listed under the HS codes under investigation by the EU amounted to 428,472 tonnes in the first half of 2019. Of these, some 21.2% - or 90,765 tonnes - were sold to countries in the EU, according to Chinese customs data compiled by Fastmarkets.

But a trader in northeastern China believes that concerns over a potential resultant supply glut exerting downward pressure on export prices may be overblown.

"I believe mills would prefer to slash production if necessary rather than engage in a destructive price war," the trader said.

The imposition of any anti-dumping duties should not hurt



# Stainless & special steels

Taiwanese suppliers too badly either because exports of stainless hot-rolled flat products to the EU have begun to slow down this year, a second trader on the island said.

In the first five months of 2019, Taiwan exported 11,730 tonnes of stainless hot-rolled flat steel to countries in the EU, compared with 23,734 tonnes during January-May 2018, according to Eurofer data.

#### **BLUNTED NICKEL RALLY**

Despite higher nickel prices, Chinese producers have decided to reduce their asking prices slightly or keep them unchanged because demand in the export markets remain soft, a trader in eastern China said.

The three-month nickel contract on the London Metal Exchange has averaged \$15,275 per tonne so far this month, compared with July's average of \$13,515 per tonne.

The weekly Fastmarkets export price assessment for stainless hot-rolled coil grade 304, fob China was \$1,890-1,910 per tonne on Wednesday August 14, down \$10-20 per tonne from a week earlier.

Stainless HRC from China was offered over the week at \$1,910-1,940 per tonne fob, which is equivalent to about \$1,930-1,960 per tonne cif East Asia, while suppliers in Taiwan were asking for \$1,990-2,080 per tonne fob, or about \$2,010-2,100 per tonne cif.

Fastmarkets' weekly import price assessment for stainless steel hot-rolled coil Asia grade 304, cif East Asia was \$1,900-1,920 per tonne on Wednesday, down \$20-30 per tonne week on week.

Market participants believe that the nickel price surge on the London Metal Exchange had come about because of uncertainties over Indonesia's ore export policy, rather than strong market fundamentals.

A depreciation of the Chinese currency also enabled suppliers in the country to lower their dollar prices to attract buyers, market sources in China said.

The exchange rate was 7.03 yuan to \$1 on Friday August 16, compared with 6.87 yuan to \$1 a month earlier.

The Chinese currency breached the 7-yuan-per-\$1 threshold earlier this month after United States President Donald Trump threatened to impose yet another new tariff on Chinese imports.

In the stainless CRC segment, offers for Chinese products were heard at \$2,000-2,050 per tonne fob during the week to Wednesday August 14, which is equivalent to about \$2,020-2,070 per tonne cif, while materials from Taiwan were available at \$2,090-2,180 per tonne fob, equivalent to about \$2,110-2,200 per tonne cif.

"Taiwanese producers intended to raise their asking prices in response to increasing nickel prices but were unable to do so because of competitive offers from other mills in China and Southeast Asia," a second trader in Taiwan said.

The weekly Fastmarkets price assessment for stainless steel CRC 2mm grade 304 export, fob China was \$1,980-2,000 per tonne on Wednesday, down \$20-30 per tonne from a week earlier.

Fastmarkets' weekly import price assessment for stainless steel cold-rolled coil, Asia grade 304 (2mm 2B), cif East Asian port was \$1,990-2,010 per tonne on Wednesday August 14, down \$30-40 per tonne from a week earlier.

JESSICA ZONG, ROSS YEO, LEE KEN KIAT



# Ferrous scrap

FASTMARKETS' KEY FERROUS SCRAP PRICES				
	Price	Change <sup>†</sup>	Assessed	
MB Index CFR Turkey HMS 1&2 (80:20) (North Europe material)	277.98	-1.83%	▼ 16 Aug 19	
MB Index CFR Turkey HMS 1&2 (80:20) (USA material)	285.16	-1.79%	▼ 16 Aug 19	
MB Index Shredded India import cfr (\$/t)	300.67	-1.47%	▼ 16 Aug 19	
HMS 1&2 ferrous scrap index (80:20) fob Rotterdam (\$/t)	258.98	-2.51%	▼ 16 Aug 19	
HMS 1&2 (80:20) UK export fob main port (\$/t)	266-267	0%	16 Aug 19	
HMS 1&2 (80:20) Taiwan import cfr (\$/t)	272-275	-2.32%	▼ 16 Aug 19	
US Index domestic Midwest No1 busheling (\$/gross ton)	297.25	7.98%	12 Aug 19	
US Index domestic Midwest shredded (\$/gross ton)	277.85	9.53%	12 Aug 19	
Vietnam ferrous scrap (\$/t)	310-315	0%	16 Aug 19	

#### SINGAPORE

# ASIA FERROUS SCRAP: Local holiday absences keep trading near standstill

Holiday absences in the key markets of South Korea and Japan have limited spot trading in ferrous scrap in the week ended Friday August 16, with only a limited number of transactions heard concluded to Taiwan.

Japanese exporters were not offering much material because most market participants were on vacation.

"Sellers in both the United States and Japan will probably lower their offers next week, when the market re-opens," a buyer source in Asia told Fastmarkets. "Look at the state of the entire ferrous industry - prices are heading downhill very quickly."

#### VIETNAM

Fastmarkets' price assessment for bulk shipments of steel scrap HMS 1&2 (80:20), cfr Vietnam, was \$310-315 per tonne cfr on August 16, unchanged from a week earlier.

Bulk cargoes of HMS-grade material from the US West Coast were offered around \$315 per tonne cfr Vietnam during the week, and so too were materials from Singapore.

But there were no transactions for imported HMS 1&2 (80:20) heard this week. Market sources said that prices were unchanged due to the limited spot trading.

"The spot market has been very quiet after a transaction for Japanese H2 scrap was concluded at \$298 per tonne cfr Vietnam last week," a trader in Vietnam told Fastmarkets. The transaction was said to be for 10,000 tonnes of H2 material.

Market sources said that prices for US-origin materials were also too high compared with the cheaper Japanese scrap.

Offers for Japanese H2 scrap were heard at \$302 per tonne cfr Vietnam, with buyer sources saying that sellers of Japanese scrap were willing to give discounts of \$4-5 per tonne.

Bids for Japanese H2 materials were made around \$290-295 per tonne cfr Vietnam.

Market participants expected offers for Japanese scrap to fall further after the Kanto Tetsugen auction closed at an average price of ¥27,714 (\$261) per tonne on August 9, down by ¥346 per tonne from the July auction. Two Japanese trading companies bought a

total of 25,000 tonnes of H2 scrap.

Hong Kong-origin HMS 1&2 (50:50) was offered at \$297-300 per tonne cfr Vietnam.

Bids for containerized HMS 1&2 (80:20) were heard at \$280 per tonne cfr Vietnam, while offers were heard at \$285 per tonne cfr Vietnam.

Domestic prices for HMS in Vietnam were unchanged at around 6,700 Dong per kg (\$287 per tonne) in the Phu My ward of Ho Chi Minh City this week, while those in the Tan Dinh ward of the same city were around 7,200 Dong per kg (\$308 per tonne).

#### **TAIWAN**

Import prices for containerized scrap in Taiwan continued on a downward trend this week on soft demand and bearish sentiment in the downstream steel markets.

Fastmarkets' daily price assessment for containerized cargoes of steel scrap HMS 1&2 (80:20 mix), US material import, cfr main port Taiwan, was \$272-275 per tonne cfr on Friday, down by \$3 per tonne from a day earlier but \$5-8 per tonne lower compared with Thursday of last week.

Offers for containerized cargoes of HMS 1&2 (80:20) dipped to \$275-280 per tonne cfr Taiwan this week, on thin demand from end-users, which have not purchased much material because they expected prices to continue to fall.

Transactions involving such materials were concluded at \$275-278 per tonne cfr Taiwan in the earlier part of the week but fell toward \$272-275 per tonne cfr Taiwan on Friday.

A major buyer bought 2,000-3,000 tonnes of imports.

"US sellers were trying to maintain offers at \$280 per tonne cfr Taiwan but had to lower their offers to secure sales," a Taiwanese trader said.

Bids were heard at \$270-272 per tonne cfr Taiwan.

Bulk cargoes of Japan-origin HMS 1&2 (50:50) were offered at \$295-300 per tonne cfr Taiwan this week, but no transactions were heard.

Major buyer Feng Hsin Steel kept its domestic scrap purchase price unchanged at NT\$9,000-9,200 (\$287-293) per tonne. It also kept its selling prices for rebar and sections unchanged, at NT\$15,850-16,000 per tonne exw and NT\$19,200-19,300 per tonne exw.

#### **OTHER REGIONS**

Japan

• Bulk cargo of Japanese H2 scrap offered at ¥28,000 per tonne.

#### South Korea

 Transaction for bulk Russian A3 scrap concluded at \$287 per tonne cfr South Korea.

#### Indonesia

 Bulk cargo of Singapore-origin HMS 1&2 (80:20) offered at \$315 per tonne cfr Indonesia.

#### Thailand

- Containerized cargo of Caribbean or African HMS 1&2 (80:20 or 90:10) heard offered at \$270-275 per tonne cfr.
- Domestic ferrous scrap estimated to trade at 9.30-9.80 baht per kg (\$301-317 per tonne).

#### PAUL LIM



# Ferrous scrap

#### **MUGLA**

## DAILY SCRAP REPORT: Market quiet during holiday absences

Turkish steel producers have remained quiet in the deep-sea scrap markets so far this week because of the religious holiday in the country, sources said on Thursday August 15.

The Turkish market and those in other Middle Eastern territories were closed until August 15 for the Islamic Eid al-Adha celebrations.

As a result of the lack of trading activity, the daily scrap indices remained stable on Thursday.

Fastmarkets' daily index for steel scrap, HMS 1&2 (80:20 mix), North Europe origin, cfr Turkey, was \$277.98 per tonne on August 15, unchanged day on day.

The daily index for steel scrap, HMS 1&2 (80:20 mix), US origin, cfr Turkey, was also flat day on day at \$285.16 per tonne on Thursday.

This left the premium for US-origin material over Northern European HMS 1&2 (80:20) material stable at \$7.18 per tonne cfr on August 15.

**CEM TURKEN** 

#### LONDON

# INDIA IMPORT SCRAP: Offer prices decline in search for buyers

The price of shredded ferrous scrap imported into India has fallen to fresh annual lows this week while offer prices continue to fall in the hope of securing a buyer, sources told Fastmarkets on Friday August 16.

Fastmarkets' weekly price assessment for steel scrap, shredded, index, import, cfr Nhava Sheva, India was \$300.67 per tonne on August 16, down from \$305.17 per tonne on August 9.

Although some traders refused to lower their offers and wanted to wait it out, others were trying to entice trades by lowering their offer prices further this week.

Offer prices for shredded scrap moved down below \$300 per tonne at \$290-310 per tonne, declining from \$300-310 per tonne one week previously, with no deals heard in the market this week.

"There are very few buyers. The volume of imports [into India] has dropped massively. The economic situation is just not good," a trader said.

The market was subdued this week due to the Eid al-Adha religious holiday in Turkey and Middle Eastern countries, the latter of which ships material into India.

"The market is dragging its heels but it should come back. We found no buyer this week and the Middle Eastern markets have been closed for Eid," a seller said.

"We are offering material but there is nothing. It's a dead market and Pakistan is also not buying this week due to the Eid holiday," a second trader said

The monsoon season, which will last through to September, has been worse than average in recent weeks, exacerbating the already seasonally low steel scrap demand over that period.

India received 45% more rainfall than the 50-year average in the week to August 14, data from the India Meteorological Department (IMD) showed this week.

One Indian source told Fastmarkets that he was not trading this week due to the market conditions but did expect the market to move up next week when he would resume offering material.

Fastmarkets' weekly price assessment for steel scrap, HMS 1&2 (80:20 mix), import, cfr Nhava Sheva, India was \$255-270 per tonne on August 16, unchanged week on week, with no new deals heard.

"Anything above \$270 [per tonne] is not viable in India. Indians want material because they have low stocks but they would prefer to cut production over lowering prices. The Indian market will be [at this pricing level] for a couple more weeks," a second seller said.

**CARRIE BONE** 



# Ferrous raw materials

FASTMARKETS KEY IRON ORE PRICES				
cfr main China port \$ per dry metric tonne				
	Price	Change <sup>†</sup>		Assessed
Iron ore index (62% fe)	89.57-89.57	-4.83%	$\blacksquare$	16 Aug 19
Iron ore pellet index cfr Qingdao				
(65% fe)	123.86-123.86	-8.18%	•	16 Aug 19

#### **DNEPR**

# CIS PIG IRON: Market seasonally inactive on pessimistic sentiment, falling iron ore values

A lack of activity combined with pessimism and weak iron ore prices to leave export prices for pig iron from the Commonwealth of Independent States (CIS) unchanged in the week to Thursday August 15.

Fastmarkets' weekly price assessment for high-manganese pig iron export, fob main port Black Sea, CIS, stayed at at \$335-343 per tonne on Thursday.

"Italy is [at the height of the] vacation season, Turkey is on holiday [and] buyers in the United States are in wait-and-see mode, so nothing is going on in the market this week," one source said.

Market participants said the current workable level for CIS-origin pig iron in the US was \$365-368 per tonne cfr - equivalent to \$340-343 per tonne fob Black Sea. In Italy, meanwhile, the workable level was said to be \$360-362 per tonne cfr, equivalent to close to \$335-337 per tonne fob.

Fastmarkets' weekly price assessment for pig iron, import, cfr ltaly, was also unchanged week on week on August 15 at \$360-362 per tonne.

"Market activity normally rebounds at the end of August, when buyers start to restock," one European source said. "Although it is unclear where the market will turn: on one hand, demand will appear; on the other, weak scrap [the relative pig iron substitute in steelmaking] and iron ore [the feedstock for pig iron production] prices will [put] pressure [on] metallics' prices."

Fastmarkets' monthly price assessment for steel scrap No E8, domestic, delivered mill Italy, was €250-260 (\$280-291 per tonne) on August 14, down from €260-265 per tonne in July.

And Fastmarkets' daily index for iron ore 62% Fe fines, cfr Qingdao, was \$88.14 per tonne on August 15, falling from \$115.68 on August 1, mainly due to the weaker Chinese yuan.

Meanwhile, Fastmarkets' price assessment for hot-briquetted iron, cfr Italian ports, was stable at \$260-275 per tonne on August 15.

And Fastmarkets' price assessment for low-manganese pig iron export, fob main port Baltic Sea, CIS, was \$355-370 per tonne on August 15, down from \$380 per tonne a week before.

Pig iron was on offer from Russia's Tulachermet to Western Europe at \$375 per tonne fob Baltic Sea this week, compared with \$380-385 per tonne a week ago, but "if we want to but we can easily get \$370 [per tonne fob]," one trader said. No new deals were heard, however, with bids no higher than \$350-355 per tonne fob.

"The falling iron ore price will reduce pig iron [production] costs in September," the trader said, "so we can wait until [pig iron] offers drop even lower."

#### **MARINA SHULGA**

#### LONDON

#### Steelmaking Raw Materials Trade Log, August 16, 2019

The latest bids, offers and deals in the global markets for iron ore, pig iron, direct-reduced iron and other steelmaking raw materials.

#### LATEST TRANSACTIONS: IRON ORE

- Vale, Beijing Iron Ore Trading Center (Corex), 170,000 tonnes of 65% Fe Iron Ore Carajas, sold at the September average of Fastmarkets' index for iron ore 65% Fe Brazil-origin fines, cfr Qingdao, at a premium of \$0.45 per tonne, bill of lading dated July 27.
- Vale, Global Ore, 170,000 tonnes of 62% Fe Brazilian Blend fines, sold at \$89.50 per tonne cfr China, laycan September 5-14.
- Rio Tinto, Corex, 190,000 tonnes of 61% Fe Pilbara Blend fines, sold at \$88.50 per tonne cfr, laycan September 8-17.
- Rio Tinto, Corex, 170,000 tonnes of 61% Fe Pilbara Blend fines, sold at the September average of a 62% Fe index at a premium of \$2.85 per tonne, laycan September 3-12.
- BHP, Global Ore, 90,000 tonnes of 62% Fe Newman fines, sold at the September average of a 62% Fe index at a premium of \$1.85 per tonne, laycan September 1-10 (also offered at \$88.80 per tonne cfr before the deal, while a bid was made at \$85.00 per tonne cfr).

#### SHANGHAI

# IRON ORE DAILY: Seaborne prices rise on increased trading

Seaborne iron ore prices increased on Friday August 16 with more deals concluded.

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

\$89.57 per tonne, up by \$1.13 per tonne.

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

\$89.95 per tonne, up by \$3.01 per tonne.

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

\$89.50 per tonne, up by \$1.28 per tonne.

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

\$78.49 per tonne, up by \$1.32 per tonne.

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

\$97.10 per tonne, down by \$0.50 per tonne.

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

726 yuan per wet metric tonne (implied 62% Fe China Port Price \$94.87 per dry tonne), up by 3 yuan per wmt.

#### **KEY DRIVERS**

China's steel and iron ore futures largely recorded gains for the day, while the 62% Fe derivative contracts on the Singapore Exchange also traded higher.

An index-linked Capesize cargo of Pilbara Blend fines to be loaded in the first half of September changed hands at a premium of \$2.85 per tonne, higher than some market participants' expectation of



# Ferrous raw materials

\$2.50 per tonne.

Later a similar shipment of the product also traded at a fixed price equivalent to just under \$90 per tonne cfr on 62% Fe basis. This is the first fixed-price seaborne deal for the brand reported this month.

An early-September-loading cargo of Brazilian Blend fines also traded just below \$90 per tonne cfr late in the afternoon, and slightly lower than the price fetched by Pilbara Blend fines on the same basis.

The pricing weakness of low-alumina Brazilian fines has lingered amid limited improvement in Chinese mills' margins and ample supply of domestic and imported concentrate, a trader in east China said.

But low-alumina materials may have already been undervalued, and at Chinese ports buying has increased for such products, he

Fastmarkets' index for iron ore 62% Fe fines rose by \$1.13 per tonne, while the daily index for iron ore 65% Fe Brazil-origin fines fell by \$0.50 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.

For the calculation of 65% Fe index, judgment was applied to carry over data in today's index due to low liquidity in the 24-hour pricing window, corresponding with published fallback measures.

No data was discarded in the calculation of these indices. Any data received under Data Submitter Agreements or subject to a confidentiality request will not be published.

#### QUOTE OF THE DAY

"In the short term iron ore prices look unlikely to rise much, but in the medium term we will keep watching the effects of mill production cuts in China – voluntary or compulsory – and there could be new chances [for price rises]," a trading source in Shanghai told Fastmarkets.

#### TRADES/OFFERS HEARD IN THE MARKET

- Vale, Beijing Iron Ore Trading Center (Corex), 170,000 tonnes of 65% Fe Iron Ore Carajas, sold at the September average of Fastmarkets' index for iron ore 65% Fe Brazil-origin fines, cfr Qingdao at a premium of \$0.45 per tonne, bill of lading dated July 27.
- Vale, Global Ore, 170,000 tonnes of 62% Fe Brazilian Blend fines, sold at \$89.50 per tonne cfr China, laycan September 5-14.
- Rio Tinto, Corex, 190,000 tonnes of 61% Fe Pilbara Blend fines, sold at \$88.50 per tonne cfr, laycan September 8-17.
- Rio Tinto, Corex, 170,000 tonnes of 61% Fe Pilbara Blend fines, sold at the September average of a 62% Fe index at a premium of \$2.85 per tonne, laycan September 3-12.
- BHP, Global Ore, 90,000 tonnes of 62% Fe Newman fines, sold at the September average of a 62% Fe index at a premium of \$1.85 per tonne, laycan September 1-10 (also offered at \$88.80 per tonne cfr before the deal, while a bid was made at \$85 per tonne cfr).
- Vale, Corex, 80,000 tonnes of 65% Fe Iron Ore Carajas, offered at \$98.90 per tonne cfr, bill of lading dated July 29.
- Vale, tender, 177,626 tonnes of 68.13% Fe Pellet Feed Fines Tubarao, bill of lading dated July 27.

#### **PORT PRICES**

Pilbara Blend fines were traded around 725-735 yuan per tonne in

Shandong province and Tangshan city during the day, compared with 700-735 yuan per tonne a day earlier.

The latest price range was equivalent to \$96.10-97.50 per tonne cfr China in the seaborne market.

#### **DALIAN COMMODITY EXCHANGE**

The most-traded January iron ore futures contract closed at 626.50 yuan per tonne on Friday, up by 8.50 yuan per tonne from Thursday's closing price.

JULY ZHANG

#### **DNEPR**

## ITALY FERROUS SCRAP: Domestic prices slide on poor demand

Domestic prices for ferrous scrap in Italy have declined over the past month due to seasonally weak demand, sources told Fastmarkets.

Fastmarkets' monthly price assessment for steel scrap, No E3 (old thick scrap), domestic, delivered mill Italy was €230-245 (\$257-273) per tonne on August 14, compared with €240-255 per tonne in the middle of July.

Demand for ferrous scrap has been weak recently due to the scheduled maintenance at steel mills in Europe over the second half of summer.

Additionally, the decline in international scrap prices has also negatively impacted prices in Italy.

Fastmarkets' daily index for steel scrap, HMS 1&2 (80:20 mix), North Europe origin, cfr Turkey was \$277.98 per tonne on August 14, down by 1.45% month on month.

"Prices [in Italy] are weaker and the forecast for September is negative," an Italian source said.

Fastmarkets' monthly price assessment for steel scrap, No E8 (thin new production steel scrap), domestic, delivered mill Italy was €250-260 per tonne in mid-August, down from €260-265 per tonne a month earlier on July 12.

Fastmarkets' monthly price assessment for steel scrap, E40 shredded, delivered to mill Italy was €250-260 per tonne on August 14, down from €260-270 per tonne a month earlier.

MARIA TANATAR

#### **SINGAPORE**

# COKING COAL DAILY: Prices for premium products fall below \$165 per tonne cfr China

The seaborne coking coal market resumed its downtrend on Friday August 16, with a widening price gap between low-vol and mid-vol cargoes reflecting relatively stronger demand for higher-quality products.

A cargo of premium mid-vol hard coking coal traded at \$160 per tonne cfr China, sources told Fastmarkets during the day. The transaction price is about \$10 per tonne lower than that for a low-vol cargo that changed hands earlier this week.

Typically, the price difference between low-vol and mid-vol materials is around \$6 per tonne, though it can fluctuate depending on supply and demand factors as is evident recently.

Buyer sources in China said seaborne coking coal, particularly top-quality materials, remained attractive to buyers, given the resilient domestic prices for the steelmaking raw material in the country.

"If you are a buyer who can manage to get around the logistical hurdles at [Chinese] ports, then you will definitely look to buy seaborne materials now as prices have corrected sharply," one of them said.



# Ferrous raw materials

Another Chinese buyer source said that the \$160-per-tonne-cfr transaction price heard during the day was slightly below his expectations, though the price movement was in line with his outlook for the market.

The Dalian Commodity Exchange's most-traded January coking coal futures contract closed at 1,328.50 yuan per tonne on Friday, up 0.50 yuan per tonne from a day earlier.

The most-traded January coke futures contract closed at 1,977.50 yuan per tonne, down 4 yuan per tonne for the day.

Fastmarkets' index for premium hard coking coal, cfr Jingtang tumbled \$5.76 per tonne to \$163.32 per tonne while the fob DBCT index shed \$0.82 per tonne to \$154.32 per tonne.

Fastmarkets' index for hard coking coal, cfr Jingtang dropped \$4.71 per tonne to \$153.79 per tonne while the fob DBCT index fell \$5.13 per tonne to \$141.51 per tonne.

The cfr Jingtang index for low-vol pulverized coal injection fell \$5.73 per tonne to \$111.77 per tonne while the fob DBCT index was flat, at \$105 per tonne.

**DEEPALI SHARMA** 



Download our Timeline to Compliance today to find out the impact to your company's balance sheet.



To download visit: news.amm.com/timeline-to-compliance/



# **Prices**

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

	Price	Change <sup>†</sup>	Assesse
0	FIICE	Glialige.	ASSESSE
Comex: Copper high grade cents/lb Settlement	258.95	-0.48%	▼ 15 Aug 19
Open interest	290,073	******	▼ 13 Aug 19
'	41,552		14 Aug 1  ▲ 14 Aug 1
Stocks (short ton)	41,002	1.75%	14 Aug 1
Comex: Gold \$/troy oz	4 540 00	4.400/	. 45 4
Settlement	1,519.60		▲ 15 Aug 1 ▼ 14 Aug 1
Open interest	598,906	0.1070	117.091
Stocks (troy oz)	7,850,468	0.88%	▲ 14 Aug 1
Nymex: Palladium \$/troy oz			
Settlement	1,438.60	1.78%	▲ 15 Aug 1
Stocks (troy oz)	64,637	-0.15%	▼ 14 Aug 1
Nymex: Platinum \$/troy oz			
Settlement	839.30	-2.95%	▼ 15 Aug 1
Stocks (troy oz)	172,650	-0.45%	▼ 14 Aug 1
Comex: Silver cents/troy oz			
Settlement	1,718.80	1.7%	▲ 15 Aug 1
Open interest	233,095	-4.54%	▼ 14 Aug 1
SHANGHAI FUTURES			
ONANONAN OTORES	Price	Changet	Assesse
Aluminium vuon la ma		Change†	
Aluminium yuan/tonne	14,160 46.490	1.98% A	▲ 16 Aug 1
Copper yuan/tonne	-,	******	1071091
Nickel cathode yuan/tonne	125,980	0.0170	07.09.
Tin ingot yuan/tonne	133,010	******	▲ 16 Aug 1
Zinc yuan/tonne	18,710	0.0270	▲ 16 Aug 1
Steel rebar month 1 yuan/tonne	3,785	0.1.170	▼ 16 Aug 1
Steel rebar month 2 yuan/tonne	3,714	******	▼ 16 Aug 1
Steel rebar month 3 yuan/tonne	3,561	-1.58%	▼ 16 Aug 1
Weekly stocks deliverable	207.000	0.070/	<b>7</b> 40 4
Aluminium (tonnes)	387,663	0.01 /0	▼ 16 Aug 1
Copper (tonnes)	162,830		▲ 16 Aug 1
Nickel cathode (tonnes)	29,009	0,0	▲ 16 Aug 1
Tin ingot (tonnes)	5,729	-5.52%	▼ 16 Aug 1
Zinc (tonnes)	73,857	1.0070	▼ 16 Aug 1
Steel rebar (tonnes)	1,781	20.01%	▲ 16 Aug 1

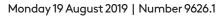
#### DAILY METAL AND STEEL

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 <sup>†</sup>		Assessed
Aluminium high grade \$				
Cash official	1,755-1,755.5	0.54%		16 Aug 19
Cash unofficial	1,749.5-1,751.5	0.66%	<b>A</b>	15 Aug 19
3 months official	1,783.5-1,784	0.42%		16 Aug 19
3 months unofficial	1,779-1,781	0.71%		15 Aug 19
LME Tapo notional average price (NAP)	1,741.36	-0.03%	•	15 Aug 19
LME stocks (tonnes)	969,250	-2.91%	•	15 Aug 19
Aluminium alloy (A380.1/DIN/D12S) \$				
LME cash official	1,190-1,200	-5.16%	$\blacksquare$	16 Aug 19
LME cash unofficial	1,197-1,207	-5.13%	•	15 Aug 19
LME 3 months official	1,190-1,200	-5.16%	•	16 Aug 19
LME 3 months unofficial	1,195-1,205	-5.14%	•	15 Aug 19
LME stocks (tonnes)	6,720	2.75%	<b>A</b>	15 Aug 19

	Price	Change	Assessed
N. American special aluminium alloy			
LME cash official	1,000-1,010	-3.83%	▼ 16 Aug 19
LME cash unofficial	1,050-1,060	-5.08%	▼ 15 Aug 19
LME 3 months official	1,020-1,040	-5.07%	▼ 16 Aug 19
LME 3 months unofficial	1,065-1,075	-4.89%	▼ 15 Aug 19
LME stocks (tonnes)	81,340	-1.88%	▼ 15 Aug 19
Copper grade A \$			
LME cash official	5,708-5,710	-0.6%	▼ 16 Aug 19
LME cash unofficial	5,732-5,734	-0.62%	▼ 15 Aug 19
LME 3 months official	5,733-5,735	-0.56%	▼ 16 Aug 19
LME 3 months unofficial	5,757-5,759	-0.55%	▼ 15 Aug 19
LME Tapo notional average price (NAP)	5,722.68	-0.06%	▼ 15 Aug 19
LME stocks (tonnes)	331,975	22.17%	▲ 15 Aug 19
Lead \$			
LME cash official	2,048-2,050	-1.75%	▼ 16 Aug 19
LME cash unofficial	2,059.5-2,061.5	-1.53%	▼ 15 Aug 19
LME 3 months official	2,045-2,047	-1.1%	▼ 16 Aug 19
LME 3 months unofficial	2,054-2,056	-0.68%	▼ 15 Aug 19
LME stocks (tonnes)	81,325	-2.34%	▼ 15 Aug 19
Nickel\$			
LME cash official	16,080-16,090	3.01%	▲ 16 Aug 19
LME cash unofficial	16,340-16,365	2.09%	▲ 15 Aug 19
LME 3 months official	16,050-16,055	2.39%	▲ 16 Aug 19
LME 3 months unofficial	16,300-16,325	1.71%	▲ 15 Aug 19
LME stocks (tonnes)	145,134	0.68%	▲ 15 Aug 19
Tin \$	110,101	0.0070	
LME cash official	16,800-16,805	-0.5%	▼ 16 Aug 19
LME cash unofficial	17,190-17,240	1.68%	
LME 3 months official		0%	
LME 3 months unofficial	16,800-16,850		16 Aug 19 15 Aug 19
	17,125-17,175	1.48%	
LME stocks (tonnes)	6,335	28.76%	▲ 15 Aug 19
Zinc special high grade \$	0.000 = 0.004 =	0.000/	
LME cash official	2,263.5-2,264.5	0.08%	▲ 16 Aug 19
LME cash unofficial	2,267.5-2,269.5	-0.68%	▼ 15 Aug 19
LME 3 months official	2,272-2,273	0.09%	▲ 16 Aug 19
LME 3 months unofficial	2,273-2,275	-0.66%	▼ 15 Aug 19
LME stocks (tonnes)	73,300	-4.53%	▼ 15 Aug 19
Cobalt min 99.3%			
LME cash official	30,500-31,500	10.71%	▲ 16 Aug 19
LME 3 months official	32,100-33,100	14.39%	▲ 16 Aug 19
LME stocks (tonnes)	836	-0.48%	▼ 15 Aug 19
Gold \$/troy oz			
London morning	1,517.65	1.35%	▲ 15 Aug 19
London afternoon	1,515.65	1.33%	▲ 15 Aug 19
Handy/Harman	1,515.65	1.33%	▲ 15 Aug 19
Silver per troy oz			
London spot pence	1,430	2.07%	▲ 15 Aug 19
London spot cents	1,729	1.59%	▲ 15 Aug 19
Handy/Harman	1,724	1.61%	▲ 15 Aug 19
Palladium \$/troy oz			
London morning	1,431	1.06%	▲ 15 Aug 19
London afternoon	1,443	1.62%	▲ 15 Aug 19
Platinum \$/troy oz			
London morning	840	-1.98%	▼ 15 Aug 19
London afternoon	837	-1.53%	▼ 15 Aug 19
LONGON ARCHIOON	001	-1.00//	▼ 15 Aug 19

†week-on-week change continued >





	Price	Change		Assessed	MB BASE METAL PREMIUMS				
Kuala Lumpur tin market					All prices \$/tonne unless otherwise stated				
Tin \$/tonne	16,950	0.53%	<b>A</b>	16 Aug 19	*MB Copyright				
ICDX					,, ,	Price	Change <sup>†</sup>		Assessed
Tin PB300 settlement price \$/tonne	16,750	-5.66%	▼	16 Aug 19	Copper				
Tin PB300 volume, tonnes	51	-35.44%	•	16 Aug 19	Annual premium 8mm wire rod, cif				
					Nhava Sheva, \$/tonne	130-175*	-12.86%	▼	07 Sep 18
RAND FIXING PRICES  Rand fixing prices per tonne for London Metal E	Evohango trado				Rotterdam, Grade A, cathode, cif, \$/tonne	40.0-50.0*	0%		13 Aug 19
Rand lixing prices per torine for London wetar L	•	Obt		A	Germany, Grade A, cathode, delivered,				
0	Price	Change <sup>†</sup>		Assessed	\$/tonne	80.0-90.0*	0%		13 Aug 19
Copper	86,954.74	0.77%		16 Aug 19	North European warrants, Grade A				
Aluminium	26,733.63	1.92%	_	16 Aug 19	cathode, in-warehouse, \$/tonne	5.0-15.0*	33.33%	<u> </u>	14 Aug 19
Lead	31,218.43	-0.38%	<b>▼</b>	16 Aug 19	South European warrants, Grade A cathode, in-warehouse, \$/tonne	5.0-15.0*	33.33%	<b>A</b>	14 Aug 19
Zinc	34,484.94	1.46%	<u> </u>	16 Aug 19	Leghorn, copper low-high premium,	3.0-13.0	33.33 /0		14 Aug 13
Nickel	245,026.57	4.42%	<u> </u>	16 Aug 19	Grade A, cathode, cif, \$/tonne	45.0-55.0*	0%		13 Aug 19
Tin	255,914.94	0.8%		16 Aug 19	Japan, copper, Grade A, cathode,				
					cif, \$/tonne	60.0-70.0*	0%		30 Jul 19
EXCHANGE RATES					South Korea, copper low-high				
	Price	Change <sup>†</sup>		Assessed	premium, Grade A, cathode, cif, \$/tonne	40.0-60.0*	0%		13 Aug 19
LME settlement conversion rates					Southeast Asian warrants, Grade A cathode, in-warehouse, \$/tonne	5.0-15.0*	33.33%	<b>A</b>	14 Aug 19
\$/£	1.2167	0.77%	•	16 Aug 19	East Asian warrants. Grade A	5.0-15.0	33.33 //	_	14 Aug 19
\$/¥	106.2800	0.47%	<b>A</b>	16 Aug 19	cathode, in-warehouse, \$ per tonne	5.0-15.0*	33.33%	<b>A</b>	14 Aug 19
\$/€	1.1081	-1.09%	•	16 Aug 19	Southeast Asia, Grade A cathode,				
Closing rates, midpoint					cif, \$ per tonne	60.0-66.0*	0%		13 Aug 19
\$/£	1.2113	-0.17%	•	15 Aug 19	Shanghai, copper low-high premium,				
\$/¥	106.1450	-0.07%	·	15 Aug 19	Grade A, cathode, in-warehouse, \$/tonne	60.0-80.0*	0%		16 Aug 19
\$/€	1.1109	-0.81%	<u> </u>	15 Aug 19	Shanghai, copper low-high premium, Grade A, cathode, cif, \$/tonne	58.0-76.0*	-2.19%	•	16 Aug 10
£/€	1.0904	0.66%	<u> </u>	15 Aug 19		36.0-76.0	-2.1970	•	16 Aug 19
\$/CNY	7.0301	-0.21%	<del>-</del>	15 Aug 19	Shanghai, copper cif ER, premium, Grade A, cathode, \$/tonne	65.0-76.0*	-3.42%	▼	16 Aug 19
,,,,,,,		0.2.770		10710910	Shanghai, copper cif SX-EW, premium,				
					Grade A, cathode, \$/tonne	58.0-65.0*	-3.15%	▼	16 Aug 19
BASE METALS ARBITRAGE					Shanghai, copper bonded in-warehouse,				
	Price	Change <sup>†</sup>		Assessed	SX-EW, premium, Grade A, cathode, \$/tonne	60.0-68.0*	0%		16 Aug 19
Aluminium					Shanghai, copper bonded in-warehouse, ER, premium, Grade A, cathode, \$/tonne	68.0-80.0*	0%		16 Aug 19
Import arbitrage, \$/tonne	-146.66*	-20.75%	•	16 Aug 19	Taiwan, Grade A cathode, cif, \$ per tonne	60.0-68.0*	0%		13 Aug 19
Import arbitrage, yuan/tonne	-1,035.39*	-20.82%	•	16 Aug 19	United States warrants, Grade A cathode,	00.0-00.0	070		13 Aug 13
Import arbitrage, cfr Owensboro -	0.40.00*	0.050/	_	07.4 40	\$/tonne	5.0-15.0*	0%		14 Aug 19
origin LME Warehouses, Busan, \$/tonne	246.03*	-2.85%		07 Aug 19	Copper Cathode, Grade 1 premium,				
Import arbitrage, cfr Owensboro - origin LME Warehouses, Johor, \$/tonne	252.36*	-2.99%	•	07 Aug 19	Delivered Domestic US, US cents/pound	7.0-8.0*	0%		13 Aug 19
Import arbitrage, cfr Owensboro -	202.00	2.5570		017tug 15	Copper Cathode, Grade 1 premium,		***		
origin LME Warehouses, Port Klang, \$/tonne	252.36*	-2.99%	$\blacksquare$	07 Aug 19	Delivered Domestic US, \$/tonne	154.3-176.4*	0%		13 Aug 19
Import arbitrage, cfr Owensboro -					Aluminium				
origin LME Warehouses, Singapore, \$/tonne	237.51*	-3.08%	•	07 Aug 19	Aluminium P1020A, in-warehouse				
Copper					Rotterdam duty-unpaid, spot low-high, \$/tonne	100.0-110.0*	5%	<b>A</b>	16 Aug 19
Import arbitrage, \$/tonne	-25.91*	-41.96%	$\blacksquare$	16 Aug 19	Aluminium P1020A, cif main Korea				
Import arbitrage, yuan/tonne	-182.94*	-42.01%	•	16 Aug 19	ports, spot low-high, \$/tonne	95-105*	0%		13 Aug 19
Nickel					Aluminium P1020A, Southeast Asian				
Import arbitrage, \$/tonne	-1,014.46*	40.34%		16 Aug 19	warrants, in-warehouse, \$/tonne	10.0-20.0*	0%		14 Aug 19
Import arbitrage, yuan/tonne	-7,161.65*	40.22%	<b>A</b>	16 Aug 19	Aluminium P1020A, East Asian	10 0 15 0*	00/		14 Aug 10
Zinc					warrants, in-warehouse, \$/tonne	10.0-15.0*	0%		14 Aug 19
Import arbitrage, \$/tonne	-48.53*	-23.45%	•	16 Aug 19	Aluminium P1020A, cif Shanghai, spot low-high, \$/tonne	95.0-105.0*	0%		30 Jul 19
Import arbitrage, yuan/tonne	-342.58*	-23.52%	<b>T</b>	16 Aug 19	Aluminium P1020A, South Korea, fca,				
	V.L.00	20.0270		.07.09 10	\$/tonne	110.0-120.0*	0%		13 Aug 19
					Aluminium P1020A, Shanghai,				
					in-warehouse, \$/tonne	95.0-105.0*	0%		30 Jul 19
					Aluminium P1020A, Taiwan, cif,	100 0 440 0*	00/		12 4 10
					\$/tonne	100.0-110.0*	0%		13 Aug 19
					Aluminium P1020A, Italy, fca duty-paid, spot, \$/tonne	175.0-185.0*	0%		13 Aug 19
					Aluminium P1020A. Spain. fca		.,.		

Aluminium P1020A, Spain, fca

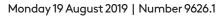
† week-on-week change

duty-paid, \$/tonne

175.0-185.0\*

2.86%

13 Aug 19





Aluminium P1020A, Turkey, cif	Price	Change	Assessed	India, 99.97% purity, cif, \$/tonne	Price 60.0-130.0*	Change 5.56% ▲	Assessed 13 Aug 19
duty-unpaid, \$/tonne	90.0-100.0*	0%	13 Aug 19	India, 99.99% purity, cif, \$/tonne	130.0-150.0*	0%	13 Aug 19
Aluminium ingot ADC 12 ex-works China, duty-paid, yuan/tonne	13,000-13,300*	0.38%	▲ 14 Aug 19	South European warrants, 99.97% purity, in-warehouse, \$/tonne	10.0-15.0*	0%	14 Aug 19
Aluminium ingot ADC 12 spot, main Japanese ports, \$/tonne	1,440-1,500*	0%	14 Aug 19	US warrants, 99.97% purity, in-warehouse, \$/tonne	20.0-30.0*	0%	14 Aug 19
Aluminium P1020A, cif main Japanese ports, spot low-high, \$/tonne	85.0-95.0*	0%	16 Aug 19	US lead premium 99.97%, delivered	0.44*	00/	12 10 - 10
Aluminium P1020A, cif main Japanese ports, quarterly, \$/tonne	108.0-108.0*	2.86%	▲ 24 Jun 19	domestic, cents/lb  US lead premium 99.99%, delivered domestic, cents/lb	9-11*	0%	13 Aug 19 13 Aug 19
Aluminium P1020A, in-warehouse	450.0.400.0#	4.040/		Nickel	11-13	0 /0	13 Aug 19
Rotterdam duty-paid, spot \$/tonne Aluminium 6063 extrusion billet,	150.0-160.0*	1.64%	▲ 16 Aug 19	Shanghai, nickel low-high premium, 99.8% purity in-warehouse, \$/tonne	180.0-200.0*	0%	13 Aug 19
in-warehouse Rotterdam duty-paid, spot, \$/tonne	310.0-330.0*	0%	16 Aug 19	Shanghai, nickel low-high premium, 99.8% purity, full plate, cif, \$/tonne	170.0-190.0*	0%	13 Aug 19
Aluminium P1020A, free market delivered, cents per pound	96.84-97.34*	0.52%	▲ 15 Aug 19	Shanghai, nickel premium, 99.80%			
Aluminium P1020A, duty paid premium, delivered Midwest, cents per pound	17.5-18*	0%	16 Aug 19	purity, briquette, duty-free, cif, \$/tonne Southeast Asian warrants, min 99.80%	240.0-290.0*	0%	30 Jul 19
Aluminium P1020A, cif Baltimore premium, US cents/lb	5.25-5.5*	0%	13 Aug 19	full plates, in-warehouse, \$/tonne Southeast Asian warrants, min 99.80%	150-200*	0%	14 Aug 19
Aluminium P1020A, US warrants, in-warehouse, \$/tonne	115.0-125.0*	0%	14 Aug 19	briquettes, in-warehouse, \$/tonne  East Asian warrants, min 99.80% full	10-15*	0%	14 Aug 19
Aluminium P1020A, delivered Sao				plates, in-warehouse, \$/tonne  East Asian warrants. min 99.80%	150-200*	0%	14 Aug 19
Paulo region, spot, \$/tonne Aluminium P1020A, cif Brazilian main	230.0-250.0*	4.35%	▲ 13 Aug 19	briquettes, in-warehouse, \$/tonne	10-15*	0%	14 Aug 19
ports duty-unpaid, spot, \$/tonne  Aluminium 6063 + 6060 extrusion	155.0-165.0*	0%	13 Aug 19	North European warrants, min 99.80%, in-warehouse, \$/tonne	90-140*	0%	14 Aug 19
billet, cif Brazilian main ports, spot	240.0.220.0*	0.40/	A 40 A 40	uncut cathodes premium indicator	200.0-230.0*	0%	13 Aug 19
(premium over LME cash), \$/tonne  Aluminium billet, delivered	310.0-330.0*	2.4%	▲ 16 Aug 19	4x4 cathodes premium indicator	460.0-500.0*	0%	13 Aug 19
duty-paid North Germany (Ruhr region) over		•••		Nickel 4x4 cathode premium, delivered	200.0-250.0*	0%	13 Aug 19
LME 30-day pay, \$/gross tonne Aluminium billet, delivered	350.0-370.0*	0%	16 Aug 19	consumer works US, US cents per pound  Nickel briquette premium, delivered	37-43*	-2.44% ▼	13 Aug 19
duty-paid Italy (Brescia area) over LME 60-day pay, \$/gross tonne	330.0-350.0*	0%	16 Aug 19	consumer works US, US cents per pound	18-26*	0%	13 Aug 19
Aluminium billet, delivered duty-paid Spain over LME 60-day pay, \$/gross tonne	340.0-350.0*	0%	16 Aug 19	Tin Rotterdam spot premium, 99.9% low			
Aluminium billet, cif Thailand duty-unpaid over LME cash pay, \$/gross tonne	190.0-210.0*	0%	02 Aug 19	Rotterdam spot premium 99.9% ingot,	475-530*	0%	13 Aug 19
Aluminium billet, cif Japan duty-unpaid over MJP and LME cash pay, \$/gross tonne	140.0-155.0*	0%	19 Jul 19	in-warehouse \$/tonne  South East Asian warrants, min	380-430*	0%	13 Aug 19
Aluminium billet, cif Turkey (Marmara region) duty-unpaid over LME cash pay, \$/gross tonne	270.0-300.0*	0%	16 Aug 19	99.85% ingots, in-warehouse \$/tonne Shanghai spot premium, 99.9% ingots,	30-80*	0%	14 Aug 19
Aluminium foundry alloy premium,				cif, \$/tonne	230-250*	0%	13 Aug 19
delivered duty-paid, Germany, \$/tonne Aluminium foundry alloy premium,	335.0-355.0*	-0.72%	▼ 09 Aug 19	Shanghai spot premium, 99.9% low lead ingots, cif, \$/tonne	320-350*	0%	13 Aug 19
Aluminium foundry alloy premium,	360.0-375.0*	0%	09 Aug 19	Taiwan spot premium, 99.9% ingots, cif, \$/tonne	200-220*	0%	13 Aug 19
delivered duty-unpaid, US midwest, \$/tonne Aluminium foundry alloy premium,	8.0-12.0*	-4.76%	▼ 09 Aug 19	Baltimore premium, 99.85% ASTM grade A ingots, in-warehouse \$/tonne	350-550*	5.88%	. 13 Aug 19
delivered duty-paid cif Turkey, \$/tonne Annual aluminium wheel alloy silicon	170.0-180.0*	0%	09 Aug 19	US midwest premium, 99.85% ASTM grade A ingots, delivered \$/tonne	470-575*	3.47%	. 13 Aug 19
7 ingot cif main Japanese ports				Zinc		0,	
(Yokohama, Osaka, Nagoya) \$/tonne  Annual aluminium wheel alloy silicon	120.0-140.0*	15.56%	▲ 11 Jan 19	North European warrants, min 99.995% SHG ingots, \$/tonne	30.0-50.0*	0%	14 Aug 19
7 ingot cif main South Korean ports	05.0.405.0*	00.000/	A 44 I== 40	MB EU: Special high grade, fca	30.0-30.0	0 /0	14 Aug 19
(Busan, Gwangyang, Incheon) \$/tonne	95.0-125.0*	22.22%	▲ 11 Jan 19	Rotterdam, \$/tonne	90.0-100.0*	-2.56% <b>▼</b>	
North European warrants, min 99.97%				Malaysia fca, 99.995%, \$/tonne	110.0-120.0*	0%	13 Aug 19
ingots, in-warehouse, \$/tonne	10.0-15.0*	0%	14 Aug 19	Southeast Asia cif, 99.995%, \$/tonne Singapore, zinc premium, 99.995%	140.0-150.0*	0%	13 Aug 19
Southeast Asian warrants, min 99.97% ingots, in-warehouse, \$/tonne	10.0-20.0*	0%	14 Aug 19	purity, fca \$/tonne	110.0-120.0*	0%	13 Aug 19
East Asian warrants, min 99.97% ingots, in-warehouse, \$/tonne	10.0-20.0*	0%	14 Aug 19	Shanghai, zinc low-high premium, 99.995% purity, in-warehouse, \$/tonne	80.0-90.0*	0%	13 Aug 19
Southeast Asia, min 99.97% cif,				Shanghai 99.995% purity, cif \$/tonne	70.0-90.0*	0%	13 Aug 19
\$/tonne	75.0-85.0*	3.23%	▲ 13 Aug 19	Taiwan 99.995% purity SHG ingots, cif \$/tonne	140.0-150.0*	0%	13 Aug 19
Southeast Asia, 99.99% cif, \$/tonne Taiwan, 99.97% purity, cif, \$/tonne	120.0-140.0* 70.0-90.0*	0%	13 Aug 19 13 Aug 19	India 99.995% purity, cif duty-unpaid	400 0 440 00	00/	
Taiwan, 99.99% purity, cif, \$/tonne	135.0-145.0*	0%	13 Aug 19	\$/tonne	120.0-140.0*	0%	13 Aug 19
				† week-on-week change		C	ontinued >

#### Monday 19 August 2019 | Number 9626.1



	Price	Change	Assessed
India 99.995% purity, cif duty-paid \$/tonne	230.0-250.0*	0%	13 Aug 19
Antwerp 99.995% purity, duty-paid fca \$/tonne	90.0-100.0*	-2.56%	▼ 13 Aug 19
Italy 99.995% purity, duty-paid fca \$/tonne	140.0-150.0*	0%	13 Aug 19
Italy 99.995% purity, delivered duty-paid \$/tonne	175.0-185.0*	0%	13 Aug 19
US warrants 99.995% purity, in-warehouse \$/tonne	5.0-10.0*	0%	14 Aug 10
MB US: Special high grade, cents/lb	80-90*	0%	14 Aug 19 13 Aug 19
BASE METALS			
	Price	Change <sup>†</sup>	Assessed
Alumina			
MB Chinese free market, metallurgical			
grade, delivered duty-paid, yuan/tonne	2,400.0-2,520.0*	1.86%	▲ 15 Aug 19
Alumina Index fob Australia	296.06*	-0.54%	▼ 16 Aug 19
Alumina Index fob Brazil	-13.26*		15 Aug 19
Alumina Index fob Brazil, inferred Brazil price \$ per dry metric ton	282.80*		16 Aug 19
Aluminium			
Shanghai bonded aluminium stocks, tonnes	9,500-10,500*	33.33%	▲ 01 Aug 19
Calcined petroleum coke, aluminium anode grade, fob US Gulf Coast, \$/tonne	270-290*	-6.67%	▼ 01 Aug 19
Calcined petroleum coke, aluminium anode grade, fob China, \$/tonne	330-340*	0%	01 Aug 19
Aluminium 6063 extrusion conversion margin, exw Germany, \$/tonne	695-700*	0%	01 Aug 19
Aluminium 6063 extrusion conversion margin, exw US Midwest, cents/lb	65-75*	0%	01 Aug 19
Aluminium FRP 1050 sheet conversion margin, exw Germany, \$/tonne	660-665*	0%	01 Aug 19
Aluminium FRP 5052 sheet conversion margin, exw US cents/lb	65-70*	-20.59%	▼ 01 Aug 19
Aluminium FRP 5000 sheet conversion margin, exw China, \$/tonne	620-630*	-0.79%	▼ 01 Aug 19
Bauxite			
fob Kamsar, Guinea \$/tonne per dmtu	35*	0%	15 Aug 19
fob Trombetas, Brazil \$/tonne per dmtu	37*	0%	15 Aug 19
Copper & Brass			
Producer premium			
Aurubis European Grade A cathode			
ex-works \$/tonne	96.0	11.63%	▲ 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	96,013.760	-2.36%	▼ 31 Jul 19
Blister copper 98-99% spot RC cif			
China \$ per tonne	145-155*	-3.23%	▼ 31 Jul 19
Blister copper 98-99% annual benchmark RC cif China \$ per tonne	165-180*	0%	28 Feb 18
Copper concentrate Asia-Pacific Index RC import, US cents/lb	4.96*	-0.4%	▼ 16 Aug 19
Copper concentrate Asia-Pacific Index TC import, \$/dmt	49.60*	-0.4%	▼ 16 Aug 19
Shanghai bonded copper stocks,	383 000 382 000*	-2 /120/-	▼ 12 Aug 10
tonnes	382,000-385,000*	-2.42%	▼ 12 Aug 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	1,080-1,100*	0%	16 Aug 19
Nickel pig iron high grade NPI content 10-15% spot price China yuan per nickel unit price	1,090-1,110*	0%	16 Aug 19
Shanghai bonded nickel stocks, tonnes	14,000-22,000*	20%	01 Aug 19
Nickel ore			
Laterite ore with 1.5% nickel content cif China, \$/tonne	31-32*	0%	16 Aug 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	57-59*	3.57%	16 Aug 19
Nickel sulfate min 21%, max: 22.5%; cobalt 10ppm max, China ex-works, yuan/tonne	25,500-26,000*	6.19%	16 Aug 19
Lead			
Lead concentrate spot treatment charge (TC) high silver CIF China, \$/tonne	50-75*	25%	26 Jul 19
Lead concentrate spot treatment charge (TC) low silver CIF China, \$/tonne	30-50*	60%	26 Jul 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	2,138*	-3.35% ▼	7 01 Aug 19
Zinc concentrate spot treatment charge (TC) CIF Asia-Pacific \$/tonne	265-290*	0.91%	26 Jul 19
Zinc concentrate spot treatment charge (TC) deliverd North China yuan/tonne	6,600-6,900*	0%	26 Jul 19
Zinc concentrate spot treatment charge (TC) deliverd South China yuan/tonne	6,300-6,500*	-1.54% <b>▼</b>	7 26 Jul 19
Shanghai bonded zinc stocks, tonnes	84,500-91,500*	-8.33% ▼	7 01 Aug 19

†week-on-week change continued >





Assessed

16 Aug 19

16 Aug 19

16 Aug 19 14 Aug 19

16 Aug 19

16 Aug 19

14 Aug 19

16 Aug 19

16 Aug 19

14 Aug 19

16 Aug 19

09 Aug 19

16 Aug 19

16 Aug 19

16 Aug 19

14 Aug 19

15 Aug 19

15 Aug 19

15 Aug 19

continued >

PRECIOUS METALS					Price	Change
Iridium	Price	Change <sup>†</sup>	Assessed	Cobalt hydroxide payable indicator, min 30% Co, cif China, % payable of Fastmarkets' standard-grade cobalt price (low-end)	62-65*	5.83%
MB free market: min 99.9%, \$/troy oz				Cobalt tetroxide min 72.6% Co	02-00	5.03%
in-warehouse Johnson Matthey base price: (unfab)	1,410-1,510*	0%	16 Aug 19	delivered China yuan/tonne  Cobalt sulfate, Co 20.5% basis,	167,000-177,000*	1.18%
\$/troy oz (08 hrs)	1,480	0%	16 Aug 19	China ex-works, yuan/tonne	45,000-50,000*	0%
Englehard base price: \$/troy oz  Palladium	1,485	0%	16 Aug 19	Cobalt sulfate, Co 20.5% basis, adjustment to standard-grade cobalt		
Fanadium European free market: min 99.9%,				low-end price, exw China, \$/Ib	-3.021.63* -2	2121.74%
\$/troy oz in-warehouse	1,443-1,460*	1.54%	▲ 16 Aug 19	Gallium	455 470*	00/
Englehard base price: \$/troy oz	1,457	1.25%	▲ 16 Aug 19	MB free market \$/kg MB China domestic, min 99.99%,	155-170*	0%
Johnson Matthey base price: (unfab) \$/troy oz (08 hrs)	1,460	1.81%	▲ 16 Aug 19	yuan/kg	1,000-1,020*	0%
Platinum				Germanium		
European free market: min 99.9%, \$/troy oz in-warehouse	834-842*	-2.61%	▼ 16 Aug 19	Germanium dioxide MB free market \$/kg	950-1,150*	0%
Englehard base price: \$/troy oz	842	-3.33%	▼ 16 Aug 19	Germanium metal \$/kg Rotterdam Germanium metal MB China domestic,	1,100-1,250*	0%
Johnson Matthey base price: (unfab)				min 99.999%, yuan/kg	7,550-8,100*	0%
\$/troy oz (08 hrs)	841	-2.89%	▼ 16 Aug 19	Hafnium		
Rhodium  Furancen free market: min 00.0%				Hafnium 1% Zr max, in-warehouse global locations, \$/kg	900-1,050*	0%
European free market: min 99.9%, \$/troy oz in-warehouse	3,815-3,965*	4.43%	▲ 16 Aug 19	Indium	300 1,000	070
Englehard base price: \$/troy oz	3,950	6.04%	▲ 16 Aug 19	MB free market \$/kg	160-175*	-1.47%
Johnson Matthey base price: (unfab) \$/troy oz (08 hrs)	3,885	4.44%	▲ 16 Aug 19	MB China domestic, min 99.99% yuan/kg	1,070-1,120*	0.92%
Ruthenium	0,000	4.4470	<b>—</b> 10/109 10	Magnesium		
European free market: min 99.9%,				European free market \$ per tonne	2,350-2,450*	0%
\$/troy oz in-warehouse	200-255*	0%	16 Aug 19	China free market min 99.8% Mg, fob China main ports, \$ per tonne	2,320-2,340*	0%
Englehard base price: \$/troy oz  Johnson Matthey base price: (unfab)	255	0%	16 Aug 19	MB Chinese free market min 99% Mg,		
\$/troy oz (08 hrs)	250	0%	16 Aug 19	ex-works yuan/tonne	15,650-15,700*	1.29%
				Manganese flake MB free market 99.7%, \$/tonne	1,750-1,830*	-3.5%
MINOR METALS				Electrolytic manganese flake basis	1,700 1,000	0.070
Autimoni	Price	Change <sup>†</sup>	Assessed	99.7%, fob China \$/tonne	1,600-1,650*	-10.22%
Antimony MB free market Regulus, min 99.65%,				Mercury	0.400.0.700*	00/
max Se 50 ppm, max 100 ppm Bi, \$/tonne in-warehouse Rotterdam	5,900-6,100*	-1.23%	▼ 16 Aug 19	MB free market \$ per flask  Rhenium in-warehouse Rotterdam duty paid	2,400-2,700*	0%
MMTA Standard Grade II. \$/tonne	5,900-0,100	-1.2370	▼ 16 Aug 19	Metal pellets, min 99.9% \$/lb	650-715*	0%
in-warehouse Rotterdam	5,750-6,000*	-0.42%	▼ 16 Aug 19	APR catalytic grade \$/kg Re	1,300-1,500*	0%
MB Chinese free market MMTA Standard Grade II, delivered duty-paid yuan/tonne	36,500-38,000*	-1.32%	▼ 14 Aug 19	Selenium		
Arsenic	00,000 00,000	1.0270	11710910	MB free market \$/Ib	8-9.85*	-0.83%
MB free market \$/lb	1.20-1.5*	0%	16 Aug 19	MB China domestic, min 99.9%, yuan/kg	115-140*	-7.27%
Bismuth				Silicon Grade 441, min 99% Si in-warehouse		
MB free market \$/lb	2.75-2.95*	-0.87%	▼ 16 Aug 19	Rotterdam, €/tonne	1,625-1,675*	0%
MB China domestic, min 99.99%, yuan/tonne	41,000-42,500*	-1.76%	▼ 16 Aug 19	Grade 553, min 98.5% Si in-warehouse Rotterdam, €/tonne	1,500-1,600*	-0.96%
Cadmium				US free market cents/lb	101-107*	-3.26%
				E		
MB free market min 99.95% cents/lb	105-115*	0%	16 Aug 19	Export from mainland China min		
	105-115* 110-120*	0%	16 Aug 19 16 Aug 19	98.5%, \$/tonne fob	1,360-1,410*	0%
MB free market min 99.99% cents/lb  Chromium				98.5%, \$/tonne fob  Tellurium	<u> </u>	
MB free market min 99.99% cents/lb  Chromium  MB free market alumino-thermic min				98.5%, \$/tonne fob  Tellurium  MB free market 99.9-99.99%, \$/kg	1,360-1,410* 48-60*	0%
MB free market min 99.99% cents/lb  Chromium  MB free market alumino-thermic min 99% \$/tonne	110-120*	0%	16 Aug 19	98.5%, \$/tonne fob  Tellurium	<u> </u>	
MB free market min 99.99% cents/lb  Chromium  MB free market alumino-thermic min 99% \$/tonne  Cobalt	110-120*	0%	16 Aug 19	98.5%, \$/tonne fob  Tellurium  MB free market 99.9-99.99%, \$/kg  MB China domestic, min 99.99%, yuan/kg  Titanium	48-60*	0%
MB free market min 99.99% cents/lb  Chromium  MB free market alumino-thermic min 99% \$/tonne  Cobalt  MB free market alloy-grade \$/lb  MB free market standard-grade \$/lb	110-120* 7,150-7,450*	0%	16 Aug 19	98.5%, \$/tonne fob  Tellurium  MB free market 99.9-99.99%, \$/kg  MB China domestic, min 99.99%, yuan/kg  Titanium  MB free market ferro-titanium 70%	48-60*	0%
MB free market min 99.99% cents/lb  Chromium  MB free market alumino-thermic min 99% \$/tonne  Cobalt  MB free market alloy-grade \$/lb  MB free market standard-grade \$/lb  MB alloy-grade, weighted average of	110-120* 7,150-7,450* 15.5-16.75*	0% 0% 12.17%	16 Aug 19  16 Aug 19	98.5%, \$/tonne fob  Tellurium  MB free market 99.9-99.99%, \$/kg  MB China domestic, min 99.99%, yuan/kg  Titanium	48-60* 390-410*	0%
MB free market min 99.99% cents/lb  Chromium  MB free market alumino-thermic min 99% \$/tonne  Cobalt  MB free market alloy-grade \$/lb  MB free market standard-grade \$/lb  MB alloy-grade, weighted average of all confirmed international trades, \$/lb  MB standard-grade, weighted average	7,150-7,450*  15.5-16.75*  15.5-16.75*	0% 0% 12.17% 17.92%	16 Aug 19	98.5%, \$/tonne fob  Tellurium  MB free market 99.9-99.99%, \$/kg  MB China domestic, min 99.99%, yuan/kg  Titanium  MB free market ferro-titanium 70% (max 4.5% Al) \$/kg Ti d/d Europe  Titanium ores \$/tonne  Rutile conc min 95% Tio2 bagged,	48-60* 390-410* 4.70-5*	0%
MB free market min 99.99% cents/lb  Chromium  MB free market alumino-thermic min 99% \$/tonne  Cobalt  MB free market alloy-grade \$/lb  MB free market standard-grade \$/lb  MB alloy-grade, weighted average of all confirmed international trades, \$/lb  MB standard-grade, weighted average of all confirmed international trades, \$/lb	7,150-7,450* 15.5-16.75* 15.5-16.75*	0% 0% 12.17% 17.92%	16 Aug 19  16 Aug 19  16 Aug 19  16 Aug 19	98.5%, \$/tonne fob  Tellurium  MB free market 99.9-99.99%, \$/kg  MB China domestic, min 99.99%, yuan/kg  Titanium  MB free market ferro-titanium 70% (max 4.5% Al) \$/kg Ti d/d Europe  Titanium ores \$/tonne  Rutile conc min 95% Tio2 bagged, fob/Aus	48-60* 390-410*	0%
MB free market min 99.95% cents/lb  MB free market min 99.99% cents/lb  Chromium  MB free market alumino-thermic min 99% \$/tonne  Cobalt  MB free market alloy-grade \$/lb  MB free market standard-grade \$/lb  MB alloy-grade, weighted average of all confirmed international trades, \$/lb  MB standard-grade, weighted average of all confirmed international trades, \$/lb  MB China domestic, min 99.8% yuan/tonne	7,150-7,450*  15.5-16.75*  15.5-16.75*	0%  0%  12.17%  17.92%  6.29%  15.75%	16 Aug 19	98.5%, \$/tonne fob  Tellurium  MB free market 99.9-99.99%, \$/kg  MB China domestic, min 99.99%, yuan/kg  Titanium  MB free market ferro-titanium 70% (max 4.5% Al) \$/kg Ti d/d Europe  Titanium ores \$/tonne  Rutile conc min 95% Tio2 bagged,	48-60* 390-410* 4.70-5*	0%
MB free market min 99.99% cents/lb  Chromium  MB free market alumino-thermic min 99% \$/tonne  Cobalt  MB free market alloy-grade \$/lb  MB free market standard-grade \$/lb  MB alloy-grade, weighted average of all confirmed international trades, \$/lb  MB standard-grade, weighted average of all confirmed international trades, \$/lb  MB China domestic, min 99.8%	110-120*  7,150-7,450*  15.5-16.75*  15.5-16.75*  15.71*	0%  0%  12.17%  17.92%  6.29%  15.75%	16 Aug 19  16 Aug 19	98.5%, \$/tonne fob  Tellurium  MB free market 99.9-99.99%, \$/kg  MB China domestic, min 99.99%, yuan/kg  Titanium  MB free market ferro-titanium 70% (max 4.5% Al) \$/kg Ti d/d Europe  Titanium ores \$/tonne  Rutile conc min 95% Tio2 bagged, fob/Aus  Rutile bulk conc min 95% Tio2	48-60* 390-410* 4.70-5* 1,250-1,350	0%

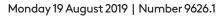
#### Monday 19 August 2019 | Number 9626.1



NOBLE ALLOYS & ORES			
	Price	Change <sup>†</sup>	Assessed
Molybdenum molybdic oxide			
Europe drummed molybdic oxide \$/lb Mo	11.75-11.85*	-0.42%	▼ 16 Aug 19
Molybdenum MB drummed molybdic oxide Mo, in-whs Busan, \$/Ib	11.75-11.85*	-0.42%	▼ 16 Aug 19
US canned molybdic oxide \$/lb Mo	11.85-12.10*	0%	15 Aug 19
Ferro-molybdenum			·
Basis 65% min, in-warehouse Rotterdam			
\$/kg Mo	27-27.5*	-0.27%	▼ 16 Aug 19
US free market 65-70% Mo \$/lb in-warehouse Pittsburgh	12.75-13.20*	0%	15 Aug 19
Tungsten			
European free market APT \$/mtu	200-210*	0%	16 Aug 19
Export from mainland China APT Chinese	400.005*	0.00/	_
No1 grade, min 88.5% W03, S/mtu fob  MB Chinese free market concentrate	196-205*	-2.2%	▼ 14 Aug 19
65% Wo3 in-warehouse China yuan/tonne	73,000-75,000*	0%	14 Aug 19
Ferro-tungsten			
Basis 75% W min \$/kg W in-warehouse	00.00.00	0.000	
Rotterdam duty-unpaid	29-29.80*	2.26%	▲ 16 Aug 19
Vanadium			
Ferro-vanadium basis 78% min, fob, China \$/kg V	37-40*	-6.1%	▼ 15 Aug 19
Ferro-vanadium basis 78% min, free			
delivery duty paid consumer plant, 1st grade, Western Europe \$/kg V	31-32.15*	0%	16 Aug 19
US free market ferro-vanadium \$/lb	01 02.10	070	Tortug To
in-warehouse Pittsburgh	14.75-15.25*	0.33%	▲ 15 Aug 19
Vanadium pentoxide 98% min, fob, China \$/lb V205	8.40-9.10*	-3.31%	▼ 15 Aug 19
Vanadium pentoxide min 98%, in-warehouse Rotterdam \$/Ib V205	6.80-7.5*	-1.38%	▼ 16 Aug 19
m warehouse Notterdam who v200	0.00 7.0	1.0070	+ 10/lug 15
BULKALLOYS			
	Price	Change <sup>†</sup>	Assessed
Ferro-chrome \$/Ib Cr			
China import charge chrome 50% Cr			
index, cif Shanghai, duty-unpaid	0.72*	0%	16 Aug 19
Ferro-Chrome European Benchmark Indicator, Lumpy Cr charge basis 52% (and high carbon), \$ per Ib	0.97*	-1.02%	▼ 16 Aug 19
Spot 6-8% C basis 50% Cr delivered			
duty paid China yuan/tonne	6,300-6,500*	0%	16 Aug 19
Contract 6-8% C basis 50% Cr			
	6.050-6.300*	0%	16 Aug 19
delivered duty paid China yuan/tonne	6,050-6,300*	0%	16 Aug 19
delivered duty paid China yuan/tonne Lumpy Cr charge basis 52% Cr (and high carbon) quarterly	6,050-6,300* 1.04*	-13.33%	
delivered duty paid China yuan/fonne  Lumpy Cr charge basis 52% Cr (and high carbon) quarterly  High carbon 6-8.5% C basis 60-70% Cr	1.04*	-13.33%	▼ 01 Jul 19
delivered duty paid China yuan/tonne  Lumpy Cr charge basis 52% Cr (and high carbon) quarterly  High carbon 6-8.5% C basis 60-70% Cr max 1.5% Si, major European destinations	1.04*		▼ 01 Jul 19 ▼ 16 Aug 19
delivered duty paid China yuan/tonne  Lumpy Cr charge basis 52% Cr (and high carbon) quarterly  High carbon 6-8.5% C basis 60-70% Cr max 1.5% Si, major European destinations  0.10% C average 65-70% Cr	1.04*	-13.33% · ·	▼ 01 Jul 19 ▼ 16 Aug 19
delivered duty paid China yuan/fonne  Lumpy Cr charge basis 52% Cr (and high carbon) quarterly  High carbon 6-8.5% C basis 60-70% Cr max 1.5% Si, major European destinations  0.10% C average 65-70% Cr  European low carbon in-warehouse  0.06% C max - 65% Cr	1.04*	-13.33% · ·	▼ 01 Jul 19 ▼ 16 Aug 19 09 Aug 19
delivered duty paid China yuan/tonne  Lumpy Cr charge basis 52% Cr (and high carbon) quarterly  High carbon 6-8.5% C basis 60-70% Cr max 1.5% Si, major European destinations  0.10% C average 65-70% Cr  European low carbon in-warehouse  0.06% C max - 65% Cr  Low phosphorous Cr min 65% C max 7%	1.04* 0.71-0.80* 1.65-1.75*	-13.33% · · · · · · · · · · · · · · · · · ·	▼ 01 Jul 19 ▼ 16 Aug 19 09 Aug 19
delivered duty paid China yuan/tonne  Lumpy Cr charge basis 52% Cr (and high carbon) quarterly  High carbon 6-8.5% C basis 60-70% Cr max 1.5% Si, major European destinations  0.10% C average 65-70% Cr  European low carbon in-warehouse  0.06% C max - 65% Cr  Low phosphorous Cr min 65% C max 7%  Si max 1% p max 0.015% Ti max 0.05%  High-carbon ferro-chrome 57-65% Cr,	1.04* 0.71-0.80* 1.65-1.75* 1.78-1.83* 0.79-0.89*	-13.33%	▼ 01 Jul 19 ▼ 16 Aug 19 09 Aug 19 09 Aug 19
delivered duty paid China yuan/tonne  Lumpy Cr charge basis 52% Cr (and high carbon) quarterly  High carbon 6-8.5% C basis 60-70% Cr max 1.5% Si, major European destinations  0.10% C average 65-70% Cr  European low carbon in-warehouse  0.06% C max -65% Cr  Low phosphorous Cr min 65% C max 7%  Si max 1% p max 0.015% Ti max 0.05%  High-carbon ferro-chrome 57-65% Cr, cif duty-updaid Japan, \$/lb	1.04* 0.71-0.80* 1.65-1.75* 1.78-1.83*	-13.33% · · · · · · · · · · · · · · · · · ·	▼ 01 Jul 19 ▼ 16 Aug 19 09 Aug 19 09 Aug 19
delivered duty paid China yuan/tonne  Lumpy Cr charge basis 52% Cr (and high carbon) quarterly  High carbon 6-8.5% C basis 60-70% Cr max 1.5% Si, major European destinations  0.10% C average 65-70% Cr  European low carbon in-warehouse  0.06% C max - 65% Cr  Low phosphorous Cr min 65% C max 7% Si max 1% p max 0.015% Ti max 0.05%  High-carbon ferro-chrome 57-65% Cr, cif duty-updaid Japan, \$/lb  High carbon ferro-chrome 57-65% Cr,	1.04* 0.71-0.80* 1.65-1.75* 1.78-1.83* 0.79-0.89*	-13.33%	▼ 01 Jul 19 ▼ 16 Aug 19 09 Aug 19 09 Aug 19 09 Aug 19
delivered duty paid China yuan/tonne Lumpy Cr charge basis 52% Cr (and high carbon) quarterly High carbon 6-8.5% C basis 60-70% Cr max 1.5% Si, major European destinations 0.10% C average 65-70% Cr European low carbon in-warehouse 0.06% C max - 65% Cr Low phosphorous Cr min 65% C max 7% Si max 1% p max 0.015% Ti max 0.05% High-carbon ferro-chrome 57-65% Cr, cif duty-updaid Japan, \$/lb High carbon ferro-chrome 57-65% Cr, cif duty-unpaid South Korea, \$/lb	1.04*  0.71-0.80* 1.65-1.75*  1.78-1.83*  0.79-0.89*  0.72-0.75*	-13.33%	▼ 01 Jul 19 ▼ 16 Aug 19 09 Aug 19 09 Aug 19 09 Aug 19
delivered duty paid China yuan/tonne  Lumpy Cr charge basis 52% Cr (and high carbon) quarterly  High carbon 6-8.5% C basis 60-70% Cr max 1.5% Si, major European destinations  0.10% C average 65-70% Cr  European low carbon in-warehouse  0.06% C max - 65% Cr  Low phosphorous Cr min 65% C max 7% Si max 1% p max 0.015% Ti max 0.05%  High-carbon ferro-chrome 57-65% Cr, cif duty-updaid Japan, \$/lb  High carbon ferro-chrome 57-65% Cr, cif duty-unpaid South Korea, \$/lb  US free market low carbon duty-paid fob Pit  US free market in-warehouse Pittsburgh	1.04*  0.71-0.80* 1.65-1.75*  1.78-1.83*  0.79-0.89*  0.72-0.75*  0.71-0.74*  tsburgh	-13.33%	▼ 01 Jul 19 ▼ 16 Aug 19 09 Aug 19 09 Aug 19 09 Aug 19 15 Aug 19
delivered duty paid China yuan/tonne  Lumpy Cr charge basis 52% Cr (and high carbon) quarterly  High carbon 6-8.5% C basis 60-70% Cr max 1.5% Si, major European destinations  0.10% C average 65-70% Cr  European low carbon in-warehouse  0.06% C max - 65% Cr  Low phosphorous Cr min 65% C max 7% Si max 1% p max 0.015% Ti max 0.05%  High-carbon ferro-chrome 57-65% Cr, cif duty-updaid Japan, \$/lb  High carbon ferro-chrome 57-65% Cr, cif duty-unpaid South Korea, \$/lb  US free market in-warehouse Pittsburgh 6-8% C basis 60-65% Cr max 2% Si	1.04*  0.71-0.80* 1.65-1.75*  1.78-1.83*  0.79-0.89*  0.72-0.75*  0.71-0.74*  tsburgh  0.87-1*	-13.33%	▼ 01 Jul 19 ▼ 16 Aug 19 09 Aug 19 09 Aug 19 09 Aug 19 15 Aug 19
Contract o-0% C basis 50% Cr delivered duty paid China yuan/tonne Lumpy Cr charge basis 52% Cr (and high carbon) quarterly High carbon 6-8.5% C basis 60-70% Cr max 1.5% Si, major European destinations 0.10% C average 65-70% Cr European low carbon in-warehouse 0.06% C max - 65% Cr Low phosphorous Cr min 65% C max 7% Si max 1% p max 0.015% Ti max 0.05% High-carbon ferro-chrome 57-65% Cr, cif duty-updaid Japan, \$/lb High carbon ferro-chrome 57-65% Cr, cif duty-unpaid South Korea, \$/lb US free market low carbon duty-paid fob Pit US free market in-warehouse Pittsburgh 6-8% C basis 60-65% Cr max 2% Si 0.05%C - 65% min Cr 0.10% C - 62% min Cr	1.04*  0.71-0.80* 1.65-1.75*  1.78-1.83*  0.79-0.89*  0.72-0.75*  0.71-0.74*  tsburgh	-13.33%	16 Aug 19  ▼ 01 Jul 19  ▼ 16 Aug 19  09 Aug 19  09 Aug 19  15 Aug 19  15 Aug 19  15 Aug 19  15 Aug 19

Oh	Price	Change	Assessed
Chrome ore \$/tonne			
Chrome ore cif main Chinese ports			
South African UG2 chrome ore concs, index basis 42%	154*	-0.65%	▼ 16 Aug 19
Turkish lumpy 40-42% cfr main Chinese ports	200-210*	0%	16 Aug 19
Chrome Ore inventories at the main ports of Tianjin, Qinzhou, Lianyungang and Shanghai, million tonnes	2.61-2.63*	1.24%	▲ 12 Aug 19
Ferro-manganese			
basis 78% Mn (scale pro rata) standard 7.5% C €/tonne	950-980*	0%	16 Aug 19
US free market 78% Mn standard 7.5% C \$/long ton in-warehouse Pittsburgh	1,350-1,450*	0%	15 Aug 19
US free market medium carbon duty-paid fob Pittsburgh, 80% min Mn 1.5% max C \$/lb	1.13-1.15*	0%	15 Aug 19
MB Chinese free market min 65% Mn max 7.0% C in-warehouse China yuan/tonne	6,800-6,900*	0%	16 Aug 19
Manganese ore			
44% Mn index, cif Tianjin \$/dmtu of metal contained	5.70*	0.71%	▲ 16 Aug 19
37% Mn index, fob Port Elizabeth \$/dmtu of metal contained	4.59*	0.22%	▲ 16 Aug 19
37% Mn index, cif Tianjin \$/dmtu of metal contained	5.31*	0.38%	▲ 16 Aug 19
base 37% Mn port index, range 35-39%, fot Tianjin yuan/dmtu	45.10*	-0.44%	▼ 16 Aug 19
base 44% Mn port index, range 42-48%, fot Tianjin yuan/dmtu	46.5*	-2.52%	▼ 16 Aug 19
Inventories at the main ports of Tianjin and Qinzhou, million tonnes	3.56-3.64*	0.7%	▲ 12 Aug 19
Ferro-nickel			
China premium, 26-32% nickel contained, cif China, \$/tonne	-300200*	0%	29 Jul 19
Ferro-silicon			
Lumpy basis 75% Si (scale pro rata), major European destinations, €/tonne	920-950*	-1.58%	▼ 16 Aug 19
US free market \$/lb in-warehouse Pittsburgh lumpy basis 75% Si - imported	0.74-0.80*	0%	15 Aug 19
Export from mainland China, min 75% Si, 7.5% C, \$/tonne, fob	1,130-1,200*	0%	14 Aug 19
MB Chinese free market min 75% Si, in-warehouse China, yuan/tonne	6,100-6,400*	-0.79%	▼ 14 Aug 19
Silico-manganese			
Lumpy basis 65-75% Mn basis 15-19% Si (scale pro rata), major European			
destinations, €/tonne	950-990*	0.52%	▲ 16 Aug 19
US free market \$/Ib in-warehouse Pittsburgh	0.61-0.64*	0%	15 Aug 19
MB Chinese free market min 65% Mn max 17% Si in-warehouse duty-paid			
China yuan/tonne	7,300-7,400*	-0.34%	▼ 16 Aug 19
65% min Mn 16% min Si \$/tonne fob India	1,020-1,040*	-0.48%	▼ 16 Aug 19

†week-on-week change continued >





CARBON STEEL - EUROPE				CARBON STEEL - CIS				
	Price	Change <sup>†</sup>	Assessed		Price	Change <sup>†</sup>		Assesse
Northern Europe imports				CIS exports (Black Sea)				
Fastmarkets MB's assessment of cfr prices t steel, € per tonne cfr main EU port	for imported, non-EU o	rigin, commercial-qu	ality carbon	Fastmarkets MB's assessment of CIS recarbon steel, \$ per tonne fob stowed ma		the CIS of co	mmerci	ial-quality
Rebar	460-480*	0%	14 Aug 19	Billet index	404*	-1.7%	$\blacksquare$	16 Aug 1
Wire rod (mesh quality)	490-500*	0%	14 Aug 19	Slab	415-420*	0%		12 Aug 1
Plate (8-40mm)	540-550*	0%	14 Aug 19	Rebar	440-445*	-2.75%	•	12 Aug 1
Hot rolled coil	470-480*	0.53%	14 Aug 19	Wire rod (mesh)	480-490*	-0.51%	•	12 Aug 1
Cold rolled coil	550-565*	0%	14 Aug 19	Heavy plate (8-50mm)	560-590*	-1.71%	•	12 Aug 1
Hot-dip galvanized coil	600-610*	0%	14 Aug 19	Hot rolled coil	470-485*	0%		12 Aug 1
Southern Europe imports				Cold rolled coil	540-550*	-0.91%	•	12 Aug 1
Fastmarkets MB's assessment of cfr prices t steel, € per tonne cfr main EU port	for imported, non-EU o	rigin, commercial-qu	ality carbon	Russia domestic Fastmarkets MB's assessment of price.	s within Pussia for commerci	al-quality carl	on sta	al ruhlas na
Rebar	460-480*	0%	14 Aug 19	tonne, carriage paid to (cpt) inc VAT	s within Nussia for commerci	ar-quality cari	0113166	ei, rubies pi
Wire rod (mesh quality)	480-490*	0%	14 Aug 19	Rebar	39,000-40,000*	-1.25%	•	12 Aug 1
Plate (8-40mm)	515-530*	0%	14 Aug 19	Hot rolled sheet	45,100-45,500*	0.78%	_	12 Aug 1
Hot rolled coil	450-475*	0%	14 Aug 19	Cold rolled sheet	51,200-51,600*	0%		12 Aug 1
Cold rolled coil	515-530*	0%	14 Aug 19	Plate	44,600-45,000*	0%		12 Aug 1
Hot-dip galvanized coil	565-590*	0%	14 Aug 19	Tide	44,000 40,000	070		127109 1
	303-330	070	14 Aug 13	CARBON STEEL - MIDDLE EAST				
Southern Europe exports  Fastmarkets MB's assessment of Southern Office of Southern Southern Office of South		•	nern Europe of	Turkish exports	Price	Change <sup>†</sup>		Assesse
Rebar	445-460*	0%	14 Aug 19	Fastmarkets MB's assessment of Turki	sh mills' prices for export of c	ommercial-au	ality ca	rhon steel
Wire rod (mesh quality)	450-470*	0%	14 Aug 19	per tonne fob main Turkish port	orrining priocetor expert or e	ommoroiai qu	unty ou	1001101001,
Northern Europe domestic				Billet	425-430*	0%		15 Aug
·	in the FII (evaluating t	a a LIV) for a smm a rai	al avality	Rebar	445-450*	-0.56%	▼	15 Aug 1
Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver		ie UK) for commercia	ai-quality	Wire rod (mesh quality)	500-505*	0%		15 Aug 1
our borrotoor or 20 origin, e por torino donvor		00/	444 40			0%		15 Aug 1
Pehar	500-520*		1/1 Aug 10		500-5301			
	500-520* 485-510*	0%	14 Aug 19	Merchant bars Structural pine	500-530* 560-580*			10.Jul 1
	485-510*	0%	14 Aug 19	Structural pipe	560-580*	0%	•	
Wire rod (mesh quality) Sections (medium)	485-510* 615-630*	0% 0%	14 Aug 19 14 Aug 19	Structural pipe Hot rolled coil	560-580* 480-490*	0% -1.52%	•	10 Jul 1 16 Aug 1
Wire rod (mesh quality) Sections (medium) Beams	485-510*	0%	14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized	560-580*	0%	▼	
Wire rod (mesh quality) Sections (medium)	485-510* 615-630* 570-600* nin the EU (excluding to	0% 0% 0%	14 Aug 19 14 Aug 19 14 Aug 19	Structural pipe Hot rolled coil	560-580* 480-490* 635-650*	0% -1.52% 0%		16 Aug 1
Wire rod (mesh quality) Sections (medium) Beams Southern Europe domestic Fastmarkets MB's assessment of prices with	485-510* 615-630* 570-600* nin the EU (excluding to	0% 0% 0%	14 Aug 19 14 Aug 19 14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized Turkish domestic Fastmarkets MB's assessment of price.	560-580* 480-490* 635-650*	0% -1.52% 0%		16 Aug 1
Wire rod (mesh quality) Sections (medium) Beams Southern Europe domestic Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver	485-510* 615-630* 570-600* nin the EU (excluding the dasis point	0% 0% 0% ne UK) for commercia	14 Aug 19 14 Aug 19 14 Aug 19 14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized Turkish domestic Fastmarkets MB's assessment of price origin, \$ per tonne ex-works	560-580* 480-490* 635-650* s within Turkey for commerci	0% -1.52% 0% al-quality carb	oon stee	16 Aug 1 16 Aug 1 el of Turkish
Wire rod (mesh quality) Sections (medium) Beams Southern Europe domestic Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver	485-510* 615-630* 570-600* inin the EU (excluding tired basis point 470-485*	0% 0% 0% ne UK) for commercia	14 Aug 19 14 Aug 19 14 Aug 19 14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized Turkish domestic Fastmarkets MB's assessment of price origin, \$ per tonne ex-works Billet	560-580* 480-490* 635-650* s within Turkey for commerci 420-425*	0% -1.52% 0% al-quality carb	oon stee	16 Aug 1 16 Aug 1 el of Turkish 15 Aug 1
Wire rod (mesh quality) Sections (medium) Beams Southern Europe domestic Fastmarkets MB's assessment of prices witt carbon steel of EU origin, € per tonne deliver Rebar Wire rod (mesh quality)	485-510* 615-630* 570-600*  min the EU (excluding to the dead basis point 470-485* 480-500*	0% 0% 0% me UK) for commercia 0%	14 Aug 19 14 Aug 19 14 Aug 19 14 Aug 19 14 Aug 19 14 Aug 19 14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized  Turkish domestic  Fastmarkets MB's assessment of price origin, \$ per tonne ex-works  Billet Hot rolled coil	560-580* 480-490* 635-650* s within Turkey for commerci 420-425* 495-500*	0% -1.52% 0% al-quality cart -1.17% 0%	oon stee	16 Aug 1 16 Aug 1 el of Turkish 15 Aug 1 16 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver Rebar  Wire rod (mesh quality)  Sections (medium)  Beams	485-510* 615-630* 570-600*  nin the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*	0% 0% 0% ine UK) for commercia 0% 0%	14 Aug 19 14 Aug 19 14 Aug 19 14 Aug 19 14 Aug 19 14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized  Turkish domestic  Fastmarkets MB's assessment of price origin, \$ per tonne ex-works  Billet Hot rolled coil  Cold rolled coil	560-580* 480-490* 635-650* s within Turkey for commerci 420-425* 495-500* 580-590*	0% -1.52% 0% al-quality cart -1.17% 0% 0%	oon stee	16 Aug 1 16 Aug 1 el of Turkish 15 Aug 1 16 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver  Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-velocities and the collections of the collections o	485-510* 615-630* 570-600*  inin the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*  works 450-465*	0% 0% 0% ine UK) for commercia 0% 0%	14 Aug 19 14 Aug 19 14 Aug 19 14 Aug 19 14 Aug 19 14 Aug 19 14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized  Turkish domestic  Fastmarkets MB's assessment of price origin, \$ per tonne ex-works  Billet Hot rolled coil Cold rolled coil Hot dip galvanized	560-580* 480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci	0% -1.52% 0% al-quality carb -1.17% 0% 0% 0%	von stee	16 Aug 1 16 Aug 1 16 Aug 1 15 Aug 1 16 Aug 1 16 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver  Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-velto rolled coil	485-510* 615-630* 570-600*  min the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*  works 450-465*	0% 0% 0% 0% ne UK) for commercia 0% 0% 0% 0%	14 Aug 19 14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized  Turkish domestic Fastmarkets MB's assessment of price origin, \$ per tonne ex-works Billet Hot rolled coil Cold rolled coil Hot dip galvanized Prepainted galvanized Fastmarkets MB's assessment of price	560-580* 480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci	0% -1.52% 0% al-quality carb -1.17% 0% 0% 0%	von stee	16 Aug 1 16 Aug 1 15 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver  Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-v  Hot rolled coil	485-510* 615-630* 570-600*  inin the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*  works 450-465*	0% 0% 0% ne UK) for commercia 0% 0% 0% 0%	14 Aug 19 14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized  Turkish domestic  Fastmarkets MB's assessment of price origin, \$ per tonne ex-works  Billet Hot rolled coil Cold rolled coil Hot dip galvanized  Prepainted galvanized  Fastmarkets MB's assessment of price origin, TRY per tonne ex-works 18% VA	560-580* 480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci	0% -1.52% 0% al-quality cart -1.17% 0% 0% 0% 0% al-quality cart	von stee	16 Aug 1 16 Aug 1 16 Aug 1 15 Aug 1 16 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver  Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-v  Hot rolled coil  Poland domestic zloty per tonne ex-works  Rebar  Northern Europe € per tonne ex-works	485-510* 615-630* 570-600*  nin the EU (excluding to deal basis point 470-485* 480-500* 610-650* 610-615*  works 450-465*  \$ 2,150-2,200*	0% 0% 0% ne UK) for commercia 0% 0% 0% 0% 0%	14 Aug 19 16 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized Turkish domestic Fastmarkets MB's assessment of price origin, \$ per tonne ex-works Billet Hot rolled coil Cold rolled coil Hot dip galvanized Prepainted galvanized Fastmarkets MB's assessment of price origin, TRY per tonne ex-works 18% VA Rebar Wire rod (mesh quality)	560-580* 480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci IT included 2,920-2,970*	0% -1.52% 0% al-quality cart -1.17% 0% 0% 0% al-quality cart	von stee	16 Aug 1 16 Aug 1 16 Aug 1 15 Aug 1 16 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-valued to tolled coil  Poland domestic zloty per tonne ex-works  Rebar  Northern Europe € per tonne ex-works  Plate (8-40mm)	485-510* 615-630* 570-600*  nin the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*  works 450-465*  \$ 2,150-2,200*	0% 0% 0% ne UK) for commercia 0% 0% 0% 0%	14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized  Turkish domestic  Fastmarkets MB's assessment of price origin, \$ per tonne ex-works  Billet Hot rolled coil Cold rolled coil Hot dip galvanized  Prepainted galvanized  Fastmarkets MB's assessment of price origin, TRY per tonne ex-works 18% VA Rebar  Wire rod (mesh quality)  Turkish imports	560-580* 480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci IT included 2,920-2,970* 3,250-3,350*	0% -1.52% 0% al-quality cart -1.17% 0% 0% 0% 0% 0% al-quality cart	▼  woon stee	16 Aug 1 16 Aug 1 15 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1 15 Aug 1 15 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver  Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-valued to tolled coil  Poland domestic zloty per tonne ex-works  Rebar  Northern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil	485-510* 615-630* 570-600*  min the EU (excluding to de basis point 470-485* 480-500* 610-650* 610-615*  vorks 450-465*  \$ 2,150-2,200*	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized Turkish domestic Fastmarkets MB's assessment of price origin, \$ per tonne ex-works Billet Hot rolled coil Cold rolled coil Hot dip galvanized Prepainted galvanized Fastmarkets MB's assessment of price origin, TRY per tonne ex-works 18% VA Rebar Wire rod (mesh quality) Turkish imports Fastmarkets MB's assessment of prices	560-580* 480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci IT included 2,920-2,970* 3,250-3,350*	0% -1.52% 0% al-quality cart -1.17% 0% 0% 0% 0% 0% al-quality cart	▼  woon stee	16 Aug 1 16 Aug 1 15 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1 15 Aug 1 15 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-ventral Europe domestic zloty per tonne ex-ventral Europe € per tonne e	485-510* 615-630* 570-600*  min the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*  works 450-465*  \$ 2,150-2,200*  560-575* 465-480* 560-570*	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized  Turkish domestic  Fastmarkets MB's assessment of price. origin, \$per tonne ex-works Billet Hot rolled coil Cold rolled coil Hot dip galvanized Prepainted galvanized Fastmarkets MB's assessment of price. origin, TRY per tonne ex-works 18% VA Rebar Wire rod (mesh quality)  Turkish imports  Fastmarkets MB's assessment of price. main Turkish port	560-580* 480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci VT included 2,920-2,970* 3,250-3,350*  s for imported commercial-qu	0% -1.52% 0% al-quality cart -1.17% 0% 0% 0% 0% 0% al-quality cart 0% 0%	▼  woon stee	16 Aug 1 16 Aug 1 16 Aug 1 15 Aug 1 16 Aug 1 15 Aug 1 15 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver  Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-v Hot rolled coil  Poland domestic zloty per tonne ex-work  Rebar  Northern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Cold rolled coil  Hot-dip galvanized coil	485-510* 615-630* 570-600*  min the EU (excluding to de basis point 470-485* 480-500* 610-650* 610-615*  vorks 450-465*  \$ 2,150-2,200*	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized  Turkish domestic  Fastmarkets MB's assessment of price. origin, \$per tonne ex-works Billet Hot rolled coil Cold rolled coil Hot dip galvanized Prepainted galvanized Fastmarkets MB's assessment of price. origin, TRY per tonne ex-works 18% VA Rebar Wire rod (mesh quality)  Turkish imports  Fastmarkets MB's assessment of price. main Turkish port Billet	560-580* 480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci IT included 2,920-2,970* 3,250-3,350*	0% -1.52% 0% al-quality carb -1.17% 0% 0% 0% 0% al-quality carb 0% 0% 0%	▼  woon stee	16 Aug 1 16 Aug 1 16 Aug 1 15 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1 15 Aug 1 15 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver  Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-ventor rolled coil  Poland domestic zloty per tonne ex-work  Rebar  Northern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Cold rolled coil  Hot-dip galvanized coil	485-510* 615-630* 570-600*  min the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*  works 450-465*  \$ 2,150-2,200*  560-575* 465-480* 560-570*	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized  Turkish domestic  Fastmarkets MB's assessment of price origin, \$ per tonne ex-works  Billet Hot rolled coil Cold rolled coil Hot dip galvanized Prepainted galvanized Fastmarkets MB's assessment of price origin, TRY per tonne ex-works 18% VA Rebar Wire rod (mesh quality)  Turkish imports  Fastmarkets MB's assessment of price main Turkish port  Billet Hot rolled coil	560-580* 480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci VT included 2,920-2,970* 3,250-3,350*  s for imported commercial-qu 420-425* 490-505*	0% -1.52% 0% al-quality carb -1.17% 0% 0% 0% 0% al-quality carb 0% 0% uality carbon s 0% 0%	▼  woon stee	16 Aug 1 16 Aug 1 16 Aug 1 15 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1 15 Aug 1 15 Aug 1 15 Aug 1 15 Aug 1 16 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver  Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-velto rolled coil  Poland domestic zloty per tonne ex-works  Rebar  Northern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Cold rolled coil  Cold rolled coil  Hot-dip galvanized coil  Southern Europe € per tonne ex-works	485-510* 615-630* 570-600*  min the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*  works 450-465*  \$ 2,150-2,200*  560-575* 465-480* 560-570*	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized  Turkish domestic  Fastmarkets MB's assessment of price origin, \$per tonne ex-works Billet Hot rolled coil Cold rolled coil Hot dip galvanized Prepainted galvanized Fastmarkets MB's assessment of price origin, TRY per tonne ex-works 18% VARebar Wire rod (mesh quality)  Turkish imports Fastmarkets MB's assessment of price main Turkish port Billet Hot rolled coil Cold rolled coil	560-580* 480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci IT included 2,920-2,970* 3,250-3,350*  s for imported commercial-qu 420-425*	0% -1.52% 0% al-quality carb -1.17% 0% 0% 0% 0% al-quality carb 0% 0% 0%	▼  woon stee	16 Aug 1 16 Aug 1 15 Aug 1 16 Aug 1 15 Aug 1 15 Aug 1 15 Aug 1 15 Aug 1 16 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver  Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-velto rolled coil  Poland domestic zloty per tonne ex-works  Rebar  Northern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Cold rolled coil  Hot-dip galvanized coil  Southern Europe € per tonne ex-works  Plate (8-40mm)	485-510* 615-630* 570-600*  min the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*  vorks 450-465*  \$ 2,150-2,200*  560-575* 465-480* 560-570* 560-590*	0% 0% 0% 0% 00% 00% 00% 00% 00% 00% 00%	14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized Turkish domestic Fastmarkets MB's assessment of price origin, \$per tonne ex-works Billet Hot rolled coil Cold rolled coil Hot dip galvanized Prepainted galvanized Prepainted galvanized Fastmarkets MB's assessment of price origin, TRY per tonne ex-works 18% VARebar Wire rod (mesh quality) Turkish imports Fastmarkets MB's assessment of price main Turkish port Billet Hot rolled coil Cold rolled coil UAE imports	560-580*  480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci IT included 2,920-2,970* 3,250-3,350*  s for imported commercial-qu 420-425* 490-505* 565-570*	0% -1.52% 0% al-quality cart -1.17% 0% 0% 0% 0% al-quality cart 0% 0% 0% uality carbon s 0% 0%	▼  in the state of the state o	16 Aug 1 16 Aug 1 15 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1 15 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver  Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-value rolled coil  Poland domestic zloty per tonne ex-works  Rebar  Northern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Southern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Southern Europe € per tonne ex-works  Plate (8-40mm)	485-510* 615-630* 570-600*  min the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*  works 450-465*  \$ 2,150-2,200*  560-575* 465-480* 560-570* 560-590*	0% 0% 0% 0% 00% 0% 0% 0% 0% 0% 0% 0% 0%	14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized  Turkish domestic  Fastmarkets MB's assessment of prices origin, \$per tonne ex-works Billet Hot rolled coil Cold rolled coil Hot dip galvanized Prepainted galvanized Fastmarkets MB's assessment of prices origin, TRY per tonne ex-works 18% VARebar Wire rod (mesh quality)  Turkish imports Fastmarkets MB's assessment of prices main Turkish port Billet Hot rolled coil Cold rolled coil UAE imports Fastmarkets MB's assessment of prices	560-580*  480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci IT included 2,920-2,970* 3,250-3,350*  s for imported commercial-qu 420-425* 490-505* 565-570*	0% -1.52% 0% al-quality cart -1.17% 0% 0% 0% 0% al-quality cart 0% 0% 0% uality carbon s 0% 0%	▼  in the state of the state o	16 Aug 1 15 Aug 1 15 Aug 1 15 Aug 1 15 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver  Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-value rolled coil  Poland domestic zloty per tonne ex-works  Rebar  Northern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Southern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Southern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Cold rolled coil  Cold rolled coil	485-510* 615-630* 570-600*  min the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*  works 2,150-2,200*  560-575* 465-480* 560-590*  490-505* 435-460*	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized Turkish domestic Fastmarkets MB's assessment of price origin, \$per tonne ex-works Billet Hot rolled coil Cold rolled coil Hot dip galvanized Prepainted galvanized Fastmarkets MB's assessment of price origin, TRY per tonne ex-works 18% VARebar Wire rod (mesh quality) Turkish imports Fastmarkets MB's assessment of price main Turkish port Billet Hot rolled coil Cold rolled coil UAE imports Fastmarkets MB's assessment of price delayed to the price of the price	560-580*  480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci IT included 2,920-2,970* 3,250-3,350*  s for imported commercial-qu 420-425* 490-505* 565-570*	0% -1.52% 0% al-quality cart -1.17% 0% 0% 0% 0% al-quality cart 0% 0% uality carbon s 0% 0%	▼  in the state of the state o	16 Aug 1 15 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver  Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-value coil  Poland domestic zloty per tonne ex-works  Rebar  Northern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Southern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Cold rolled coil	485-510* 615-630* 570-600*  min the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*  works 2,150-2,200*  560-575* 465-480* 560-570* 560-590*  490-505* 435-460* 510-550*	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized Turkish domestic Fastmarkets MB's assessment of pricesorigin, \$ per tonne ex-works Billet Hot rolled coil Cold rolled coil Hot dip galvanized Prepainted galvanized Prepainted galvanized Fastmarkets MB's assessment of pricesorigin, TRY per tonne ex-works 18% VARebar Wire rod (mesh quality) Turkish imports Fastmarkets MB's assessment of pricesomin Turkish port Billet Hot rolled coil Cold rolled coil UAE imports Fastmarkets MB's assessment of pricesorial pricesory assessment of pri	560-580*  480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci IT included 2,920-2,970* 3,250-3,350*  s for imported commercial-qu 420-425* 490-505* 565-570* s for imported commercial-qu 455-460*	0% -1.52% 0% al-quality cart1.17% 0% 0% 0% 0% al-quality cart. 0% 0% uality carbon s 0% 0%	▼  in the state of the state o	16 Aug 1 15 Aug 1 15 Aug 1 15 Aug 1 15 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver  Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-value coil  Poland domestic zloty per tonne ex-works  Rebar  Northern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Southern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Cold rolled coil	485-510* 615-630* 570-600*  min the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*  works 2,150-2,200*  560-575* 465-480* 560-570* 560-590*  490-505* 435-460* 510-550*	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized  Turkish domestic  Fastmarkets MB's assessment of prices origin, \$ per tonne ex-works Billet Hot rolled coil Cold rolled coil Hot dip galvanized Prepainted galvanized Prepainted galvanized Fastmarkets MB's assessment of prices origin, TRY per tonne ex-works 18% VARebar Wire rod (mesh quality)  Turkish imports Fastmarkets MB's assessment of prices main Turkish port Billet Hot rolled coil Cold rolled coil  UAE imports Fastmarkets MB's assessment of prices debel Ali Billet Rebar	560-580*  480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci VI included 2,920-2,970* 3,250-3,350*  s for imported commercial-qu 420-425* 490-505* 565-570* s for imported commercial-qu 455-460* 515-523*	0% -1.52% 0% al-quality cart -1.17% 0% 0% 0% 0% al-quality cart 0% 0% 0% uality carbon s 0% 0% -0.67%	▼  in the state of the state o	16 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver  Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-value rolled coil  Poland domestic zloty per tonne ex-works  Rebar  Northern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Southern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Southern Europe € per tonne ex-works  Plate (8-40mm)  Hot rolled coil  Cold rolled coil  Cold rolled coil	485-510* 615-630* 570-600*  min the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*  works 2,150-2,200*  560-575* 465-480* 560-570* 560-590*  490-505* 435-460* 510-550*	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized  Turkish domestic  Fastmarkets MB's assessment of price origin, \$ per tonne ex-works Billet Hot rolled coil Cold rolled coil Hot dip galvanized Prepainted galvanized Prepainted galvanized Fastmarkets MB's assessment of price origin, TRY per tonne ex-works 18% VARebar Wire rod (mesh quality)  Turkish imports Fastmarkets MB's assessment of price main Turkish port Billet Hot rolled coil Cold rolled coil  UAE imports Fastmarkets MB's assessment of price delated to be a session	560-580*  480-490* 635-650*  s within Turkey for commercial-quality of the commercial-quality of	0% -1.52% 0% al-quality cart -1.17% 0% 0% 0% 0% al-quality cart 0% 0% 0% uality carbon s 0% 0% 0% 0% 0% 0%	▼  in the state of the state o	16 Aug 1
Wire rod (mesh quality)  Sections (medium)  Beams  Southern Europe domestic  Fastmarkets MB's assessment of prices with carbon steel of EU origin, € per tonne deliver Rebar  Wire rod (mesh quality)  Sections (medium)  Beams  Central Europe domestic € per tonne ex-ventral Europe domestic zloty per tonne ex-ventral Europe € per tonne e	485-510* 615-630* 570-600*  min the EU (excluding the basis point 470-485* 480-500* 610-650* 610-615*  works 2,150-2,200*  560-575* 465-480* 560-570* 560-590*  490-505* 435-460* 510-550*	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	14 Aug 19	Structural pipe Hot rolled coil Hot dip galvanized  Turkish domestic  Fastmarkets MB's assessment of prices origin, \$ per tonne ex-works Billet Hot rolled coil Cold rolled coil Hot dip galvanized Prepainted galvanized Prepainted galvanized Fastmarkets MB's assessment of prices origin, TRY per tonne ex-works 18% VARebar Wire rod (mesh quality)  Turkish imports Fastmarkets MB's assessment of prices main Turkish port Billet Hot rolled coil Cold rolled coil  UAE imports Fastmarkets MB's assessment of prices debel Ali Billet Rebar	560-580*  480-490* 635-650*  s within Turkey for commerci 420-425* 495-500* 580-590* 635-650* 720-740* s within Turkey for commerci VI included 2,920-2,970* 3,250-3,350*  s for imported commercial-qu 420-425* 490-505* 565-570* s for imported commercial-qu 455-460* 515-523*	0% -1.52% 0% al-quality cart -1.17% 0% 0% 0% 0% al-quality cart 0% 0% 0% uality carbon s 0% 0% -0.67%	▼  in the state of the state o	16 Aug 1 16 Aug 1 15 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1 15 Aug 1 16 Aug 1 16 Aug 1 16 Aug 1

Hot rolled coil

† week-on-week change

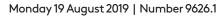
510-515\*

06 Aug 19





IIAE damaatic	Price	Change	Assessed	Mine and illering to	Price	Change		ssessed
UAE domestic				Wire rod (low carbon)	645-680*	0%		16 Jul 19
Fastmarkets MB's assessment of prices dirhams per tonne ex-works	within UAE for commercia	l-quality carbon s	teel of UAE origin,	Medium sections	690-720*	-1.4%		25 Jul 1
Rebar	1,950-1,953*	0%	06 Aug 19	Medium plate	740-800*	-2.53%		07 Aug 1
	1,930-1,933	0 /0	00 Aug 19	Hot rolled coil (commodity)	560-600*	0%		07 Aug 19
Iran exports				Cold rolled coil	700-740*	0%		07 Aug 19
Fastmarkets MB's assessment of prices steel to overseas buyers, \$ per tonne fol		s for commercial-	quality carbon	Hot dipped galvanized 0.012-0.015, G30	960-980* 880-965*	-10.87%		07 Aug 19 30 Jul 19
Billet	385-388*	0%	14 Aug 19	ERW linepipe (X42) OCTG API5CT - casing J55	850-895*	-5.16%		30 Jul 1
Slab	380-385*		▲ 14 Aug 19	<u> </u>	030-033	-3.10 /0	<b>V</b> 3	30 Jul 13
Egyptian domestic	000 000	0.0070	147tug 13	US domestic				
•	within Equat for commoral	al quality aarban	otaal of Equation	Fastmarket AMM's assessment of prices with Canadian origin, \$ per short ton, delivery term		ercial-quality can	on steel o	of US or
Fastmarkets MB's assessment of prices origin, E£ per tonne ex-works	within Egypt for commerci	ar-quality carbon	steer or Egyptian	Rebar (fob mill)	630-650*	0%	0-	07 Aug 1
Rebar	11,580-11,980*	0%	15 Aug 19	Plate (fob mill)	710-710*	0%		09 Aug 19
Egyptian import	11,000 11,000	070	107.449 10	Hot rolled sheet Midwest index (fob mill)	597-597*	-0.76%		15 Aug 1
	fii		-1 C t t	Cold rolled sheet (fob mill)	760-760*	0%		15 Aug 1
Fastmarkets MB's assessment of prices main port	tor imported commercial-o	juality carbon ste	ei, \$ per tonne ctr	Hot-dip galvanized (base) Midwest	700-700	0 70	10	J Aug 18
Billet	425-435*	0%	15 Aug 10	(fob mill)	770-770*	0%	1!	15 Aug 1
Dillet	420-430	0 76	15 Aug 19	OCTG API5CT - casing J55 (fob mill)	980-1,050*	-3.33%		30 Jul 1
CADDON STEEL   ATIN AMEDICA				Fastmarket AMM's assessment of prices with	in the USA for comme	ercial-quality can	hon steel c	of US or
CARBON STEEL - LATIN AMERICA				Canadian origin, \$ per hundredweight, deliver		Jiai quality call	.511 510010	J, JJ 01
	Price	Change <sup>†</sup>	Assessed	Merchant bar 3 x 3 1/4 angle (fob mill)	34.25-34.25*	0%	2	26 Jul 19
Latin American exports								
Fastmarkets MB's assessment of Latin A	•	•	America of	CARBON STEEL - ASIA				
commercial-quality carbon steel, \$ per to		•			Price	Change <sup>†</sup>	As	ssesse
Billet	410-430*		▼ 16 Aug 19	China exports				
Slab, Brazil	425-435*	0%	16 Aug 19	Fastmarkets MB's assessment of Chinese mi	lls prices for export of	commercial-qua	ality carboi	on steel,
Wire rod mesh quality	500-510*	-3.81%	▼ 16 Aug 19	per tonne fob main China port				
Heavy plate over 10mm	550-565*	0%	16 Aug 19	Rebarindex	478-478*	-3.63%	<b>▼</b> 16	16 Aug 1
Hot rolled coil (dry)	480-490*	0%	16 Aug 19	Wire rod (mesh quality)	495-500*	-2.93%	<b>▼</b> 13	13 Aug 1
Cold rolled coil	565-580*	0%	16 Aug 19	Heavy plate	495-500*	-1.97%	<b>▼</b> 13	13 Aug 19
South America imports				Hot rolled coil index	482-482*	-1.57%	<b>▼</b> 16	16 Aug 1
Fastmarkets MB's assessment of cfr pri	ces for imported, commerci	ial-quality carbon	steel,	Cold rolled coil	525-530*	-1.4%	<b>▼</b> 13	13 Aug 19
\$ per tonne cfr main ports				Galvanized coil 1mm	575-590*	-0.43%	<b>▼</b> 13	13 Aug 19
Plate	550-560*	0%	16 Aug 19	Eastern China domestic				
Hot rolled coil	520-535*	-1.4%	▼ 16 Aug 19	Fastmarkets MB's assessment of prices in ea	stern China for comm	nercial-quality ca	rbon steel	el of
Cold rolled coil	560-570*	0%	16 Aug 19	Chinese origin, yuan per tonne ex-warehouse		7		
Galvanized coil	625-640*	-1.17%	▼ 16 Aug 19	Rebar	3,670-3,700*	0.55%	<b>1</b> 6	16 Aug 1
Galvalume coil	700-720*	-2.41%	▼ 16 Aug 19	Wire rod (mesh)	3,870-3,930*	1.56%	<b>▲</b> 16	16 Aug 1
Argentina domestic \$ per tonne ex-w	orks			Sections	3,830-3,930*	-0.64%		16 Aug 1
Fastmarkets MB's assessment of prices	within Argentina for comm	ercial-quality cart	oon steel, \$ per	Plate	3,750-3,850*	1.06%		16 Aug 19
tonne	· ·	, ,	, . ,	Hot rolled coil (min 2mm)	3,720-3,730*	2.19%		16 Aug 19
Hot rolled coil	720-725*	0%	09 Aug 19	Cold rolled coil (0.5 - 2 mm)	4,200-4,260*	0.24%		16 Aug 1
Cold rolled coil	815-820*	0%	09 Aug 19	Hot-dip galvanized coil	4,540-4,610*	0.44%		16 Aug 1
Galvanized coil	1,045-1,125*	0%	09 Aug 19	Northern China domestic	, , , , , ,			
Rebar	850-860*	0%	09 Aug 19	Fastmarkets MB's assessment of prices in no	rthorn China for com	moroial quality o	arbon etac	olof
Brazil domestic			-	Chinese origin (Tangshan), yuan per tonne ex		nercial-quality c	ilboli stee	ei oi
Fastmarkets MB's assessment of prices	within Brazil for commerci	al-quality carbon	steel Reais ner	Billet	3,470-3,470*	-2.8%	<b>V</b> 16	16 Aug 1
tonne ex-works	Within Brazinor commerci	ar quality carbon	stoci, ricuis poi					
Hot rolled coil	2,470-2,517*	-1.87%	▼ 02 Aug 19	Fastmarkets MB's assessment of prices in no Chinese origin, yuan per tonne ex-warehouse		nercial-quality c	IIDON SIEE	ei oi
Cold rolled coil	2,655-2,745*		▼ 02 Aug 19	Hot rolled coil	3,720-3,730*	0%	10	16 Aug 1
Hot dip galvanized coil	3,115-3,230*		▲ 02 Aug 19	Rebar	3,600-3,650*	-2.03%		16 Aug 1
Fastmarkets MB's assessment of prices				Southern China domestic	0,000 0,000	2.00/0	, 10	37 tug 11
tonne delivered	ami Brazilioi commerci	ar quality carbott	που, ποαιό μοι					-1.
Rebar	2,300-2,400*	-3.09%	▼ 02 Aug 19	Fastmarkets MB's assessment of prices in so Chinese origin, yuan per tonne ex-warehouse		mercial-quality c	arbon stee	erof
	_,,		.==9 .0			_0.510/	<b>▼</b> 41	16 Aug 1
CARBON STEEL - NAFTA				Rebar Wire red (mesh)	3,830-3,930*	-0.51%		16 Aug 19
	Price	Change <sup>†</sup>	Assessed	Wire rod (mesh)	3,930-4,020*	-0.62%		16 Aug 1
IIC immorto	TILE	onange.	Assesseu	Sections	4,030-4,050*	-0.62%		16 Aug 1
US imports				Plate	3,920-3,980*	-0.25%		16 Aug 1
Fastmarkets MB's assessment of prices	tor imported, non-Nafta or	ıgın, commercial-	quality carbon	Hot rolled coil (min 2mm)	3,800-3,820*	0%		16 Aug 1
steel, \$ per short ton cfr port Houston				Cold rolled coil (0.5 - 2 mm)	4,250-4,270*	-0.58%		16 Aug 1
	E00 040+	E E 40/						
Rebar Merchant bars	590-610* 620-640*		▼ 07 Aug 19 ▼ 26 Jul 19	Hot-dip galvanized coil	4,560-4,590*	0.11%	<b>▲</b> 16	16 Aug 1



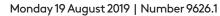


Southeast Asia imports	Price	Change		Assessed	US domestic	Price	Change		Assessed
Fastmarkets MB's assessment of prices in South	heast Asia for comm	nercial-quality	carbon	steel \$ per	Fastmarkets AMM's appraisal of prices within the	USA for comm	ercial-quality stail	nless st	eel of US or
tonne cfr	440 445*	0.560/	_	16 10 10	Canadian origin, \$ per hundredweight, fob	100 100*	2.050/		10 10 10 10
Billet	440-445*	-0.56%	_	16 Aug 19	Grade 304 coiled plate	108-108*	3.85%		12 Aug 1
Slab (Asia/East Asia)	440-455*	0%	_	13 Aug 19	Grade 316 coiled plate	152-152*	2.7%	<u> </u>	12 Aug 1
Hot rolled coil (Vietnam)	495-497*	-2.27%	_	13 Aug 19	Grade 304 cold rolled sheet	121-121*	3.42%		12 Aug 1
Rebar (Singapore)	480-485* 490-490*	-1.03% -2.49%	<b>▼</b>	13 Aug 19	Grade 316L cold rolled sheet	162-162*	2.53%		12 Aug 1
Wire rod (low carbon)  Indian exports	490-490	-2.49%		13 Aug 19					
Fastmarkets MB's assessment of Indian mills' pr per tonne fob main India port	rices for export of co	mmercial-qua	lity carb	on steel, \$					
Billet	420-425*	0%		16 Aug 19					
Plate (12-40mm)	500-505*	0%		16 Aug 19					
Hot rolled coil (commodity)	470-475*	-3.08%	•	16 Aug 19	IRON ORE				
Hot-dip galvanized coil	655-660*	3.95%	<u> </u>	16 Aug 19	IRON ORE		•		
Indian imports					05% 5 D I 05D 0:	Price	Change <sup>†</sup>		Assesse
Fastmarkets MB's assessment of prices for impo	orted, non-EU origin	, commercial-	quality (	carbon steel,	65% Fe Brazilian Index CFR Qingdao (MBIOI-65-BZ-Index) \$/tonne	97.10*	-4.43%	•	16 Aug 1
\$ per tonne cfr main India port	540 550±	00/		40.4 40	Lump premium CFR Qingdao (MBIOI-LP Index) cents per dmtu	21*	0%		16 Aug 1
Plate (20-60mm)	540-550*	0%		16 Aug 19	Iron ore index (62% Fe)	89.57*	-4.83%	▼	16 Aug 1
Hot rolled coil (commodity)	535-540*	0%		16 Aug 19	Iron ore index (62% LA)	89.5*	-4.63%	<u> </u>	16 Aug 1
Hot rolled coil (CR grade)	535-540*	0%		16 Aug 19	58% Fe Iron Ore Index (MBIOI-58) CFR	03.3	-0.01 /0		TO Aug 1
Cold rolled coil Indian domestic	595-600*	0%		16 Aug 19	Qingdao on a 58% fe basis Daily Price \$/dry metric tonne	76.49*	-7.97%	•	16 Aug 1
Fastmarkets MB's assessment of prices within Intonne ex-works	ndia for commercial	-quality carbor	n steel, i	rupees per	High grade Premium (MBIOI-58P) CFR Qingdao on a 58% basis low alumina,	70.10			.07.09
Billet	25,700-25,900*	0.39%	•	16 Aug 19	low phosphorous Daily Price \$/dry metric tonne	2*	100%		16 Aug 1
Heavy plate	36,500-37,000*	0%		16 Aug 19	Iron Ore Implied 58% Fe high				
Hot rolled coil	36,000-36,500*	0%		16 Aug 19	specification price	78.49*	-6.68%	•	16 Aug 1
Cold rolled coil	42,000-42,500*	0%		16 Aug 19	Iron Ore product differential - PBF	0.20*	405 220/	_	10 41
DRI	17,000-17,200*	3.64%	_	16 Aug 19	delivered Qingdao, China CFR \$/tonne	0.38*	-125.33%	•	16 Aug 1
Hot-dip galvanized coil	45,500-46,000*	0%	_	16 Aug 19	Iron ore 62% Fe Pilbara Blend Fines (MBIOI-PBF) \$/tonne	89.95*	-2.88%	•	16 Aug 1
Rebar	29,800-30,000*	5.28%	<b>A</b>	16 Aug 19	Iron Ore 62% Fe China port price index	726*	-6.08%	<b>T</b>	16 Aug 19
TODA	23,000 00,000	0.2070	_	107/49/13	Implied 62% Fe China Port Price \$ per tonne	94.87*	-6.12%	▼	16 Aug 19
					Iron ore pellet index cfr Qingdao (65% Fe)	123.86*	-8.18%	▼	16 Aug 1
STAINLESS STEEL					Iron ore concentrate index cfr Qingdao (66% Fe)	96.28*	-7.22%	<b>V</b>	16 Aug 1
	Price	Change <sup>†</sup>		Assessed	Iron ore implied pellet premium CFR				
Asia import		•g•		7.000000	Qingdao US\$/tonne  Iron ore implied pellet premium over	34.36*	-10.75%	▼	16 Aug 1
\$/tonne cif East Asian port					the Fastmarkets MB 65% Fe Brazilian				
Grade 304 2mm CR coil 2B	1,990-2,010*	-1.72%	▼	14 Aug 19	iron ore index cfr Qingdao US\$/tonne	25.81*	-14.22%	$\blacksquare$	16 Aug 19
Grade 304 hot rolled coil	1,900-1,920*	-1.29%	•	14 Aug 19	Iron ore DR-grade pellet premium				
China domestic					index Middle East reference, \$/dmt	65*	-4.41%	•	31 Jul 1
yuan/tonne, in-warehouse					Metal Bulletin Indicator for US\$/% AI MBIOI AI-VIU cfr Qingdao	-2.68*	-8.84%	•	13 Aug 1
Grade 304 2mm CR coil	15,100-15,500*	0.66%	<b>A</b>	14 Aug 19	Metal Bulletin Indicator for US\$/%	-2.00	-0.04 /0		13 Aug 1
Grade 430 2mm CR coil	7,750-7,800*	0%		14 Aug 19	Fe in iron ore fines cfr Qingdao	1.63*	-10.93%	$\blacksquare$	13 Aug 1
EU domestic 2mm 304 cold rolled stainless sheet, €/tonne					Iron Ore Fines 65% Fe, % Fe value in use cfr Qingdao \$/dry metric tonne	1.73*	-13.93%	•	13 Aug 1
N.Europe Base price	870-915*	0%		16 Aug 19	Metal Bulletin Indicator for US\$/%				5 .
Alloy surcharge	1,337-1,382*	0%		16 Aug 19	Si MBIOI Si-VIU cfr Qingdao	-1.34*	-16.77%	▼	13 Aug 1
N.Europe transaction	2,230-2,250*	0.9%	<b>A</b>	16 Aug 19	Iron Ore Fines 62% Fe, 0.01%				
2mm 316 cold rolled stainless sheet, €/tonne		0.070	_	107 tug 10	Phosphorous value in use MBIOI Phos-VIU cfr	1 21*	0.83%		12 1, 4
Base price	1,215-1,250*	0%		16 Aug 19	Qingdao US cent per dry metric tonne	-1.21*	0.03%		13 Aug 1
Alloy surcharge	2,055-2,123*	0%		16 Aug 19					
304 stainless steel bright bar, €/tonne	2,000 2,120	J /0		107 tug 10					
Base price	1,000-1,060*	0%		16 Aug 19					
Alloy surcharge	1,651-1,697*	0%		16 Aug 19					
and outside general and a second general and general and a second general and general and general and general and general and general a	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Tortag to					





COKING COAL						Price	Change		Assessed
\$ per metric tonne					Cif Europe stainless € per tonne				
	Price	Change <sup>†</sup>		Assessed	18/8 solids	1,120-1,150*	0%		16 Aug 19
Premium hard coking coal index cfr China	163.32*	-4.03%	•	16 Aug 19	18/8 turnings	1,010-1,035*	0%		16 Aug 19
Hard coking coal index cfr China	153.79*	-2.97%	▼	16 Aug 19	316 solids	1,620-1,650*	1.55%	<b>A</b>	16 Aug 1
Premium hard coking coal index fob Australia	154.32*	-2.06%	▼	16 Aug 19	316 turnings	1,460-1,485*	1.55%	<b>A</b>	16 Aug 1
Hard coking coal index fob Australia	141.51*	-3.5%	▼	16 Aug 19	Rotterdam export				
China hard coking coal Shanxi spot				- U	Fastmarkets MB's assessment \$/tonnne fob F	Rotterdam			
market domestic delivered yuan/tonne	1,430-1,810*	0%		16 Aug 19	MB index fob Rotterdam HMS 1&2 (80:20)	258.98*	-2.51%	$\blacksquare$	16 Aug 1
65% CSR coke \$/tonne fob China	309-315*	0%		13 Aug 19	HMS 1&2 (75:25 mix)	255-256*	0%		16 Aug 1
_ow Vol PCI Index \$ per dry metric onne cfr Jingtang	111.77*	-4.88%	•	16 Aug 19	Shredded Turkish import	265-266*	0%		16 Aug 1
Low Vol PCI Index \$ per dry metric	4054	00/		40.4 40	Fastmarkets MB's assessment \$/tonne cfr ma	in Turkish ports			
onne fob DBCT	105*	0%		16 Aug 19	MB index cfr Turkey HMS 1&2 (80:20) (North Europe material)	277.98*	-1.83%	•	16 Aug 19
FERROLIO GORAR					MB index cfr Turkey HMS 1&2 (80:20)				
FERROUS SCRAP					(United States material)	285.16*	-1.79%	•	16 Aug 19
	Price	Change <sup>†</sup>		Assessed	HMS 1&2 (75:25 mix)	274-275*	0%		16 Aug 19
UK ferrous scrap domestic					Shredded	294-295*	0%		16 Aug 19
The following is Fastmarket MB's evaluation of U		,			Turkish domestic				
within the month listed. Prices may vary according		stination, and	should	be read in	Fastmarkets MB's assessment delivered				
conjunction with editorial comment on the Ferrou	is scrap pages.				Melting scrap from shipbreaking (\$/tonne)	293-293*	-0.68%	$\blacksquare$	05 Aug 19
£/tonne					Auto bundle scrap (Turkish lira/tonne)	1,560-1,810*	-0.59%	•	05 Aug 19
Cut grades	445 470*	00/		10.1 10	USA export				
OA plate and structural	145-170*	0%		13 Aug 19	Fastmarket AMM ferrous scrap export index \$.	tonne East Coast fol	New York		
1&2 old steel	125-150*	0%		13 Aug 19	HMS 1&2 (80:20)	269*	0%		14 Aug 1
12A/C new production heavy and shovellable steel	170-195*	0%		13 Aug 19	Shredded	274*	0%		14 Aug 1
12D new production heavy and	170-133	0 70		13 Aug 13	USA domestic				- 3
shovellable steel	175-200*	0%		13 Aug 19	Fastmarkets AMM Midwest index \$/gross ton	daliyarad mill			
Bales and cuttings					· ·	242.08*	8.23%	•	12 Aug 10
4A new steel bales	175-200*	0%		13 Aug 19	No1 heavy melting scrap  No1 busheling	297.25*	7.98%		12 Aug 19
4C new steel bales	165-190*	0%		13 Aug 19	Shredded	277.85*	9.53%	_	12 Aug 19
8A new loose light cuttings	160-190*	0%		13 Aug 19		211.00	3.3370		12 Aug 13
8B new loose light cuttings	145-175*	0%		13 Aug 19	China domestic				
Turnings					yuan/tonne delivered mill	0.050.0.750+	0.570/	_	10.1
UK inter-merchant 7B heavy steel turnings	105-125*	0%		13 Aug 19	Heavy scrap	2,650-2,750*	-3.57%		16 Aug 19
Castiron					Taiwan import				
9A/10 heavy and light cast iron	125-150*	0%		13 Aug 19	\$/tonne cfr main port				
9B/C cylinder block scrap	145-170*	0%		13 Aug 19	HMS 1&2 (80:20 mix) (USA material)	272-275*	-2.32%		16 Aug 19
11A cast iron borings	70-90*	0%		13 Aug 19	Vietnam import				
Prices relate to new UK scrap specifications					\$/tonne cfr southern Vietnam				
Please see metalbulletin.com for full explanation	of price changes				HMS 1&2	310-315*	0%		16 Aug 19
UK intermerchant weekly price					Germany domestic				
£/tonne					€/tonne composite sales price ex-yard, source	:BDSV			
5C loose old light	80-100*	0%		16 Aug 19	No E2/8 (new steel scrap)	232.5	-3%	•	01 Jul 19
UK ferrous scrap export					No E1 (old steel scrap)	205.10	-2.24%	•	01 Jul 19
Fastmarkets MB's assessment \$ fob main UK po	ort				No E3 (old thick steel scrap)	231.10	-2.08%	•	01 Jul 19
า สระเทศเหยเราพับ ราสรรยรรภายาณ จากมาการแก้ คือ HMS 1&2 (80:20 mix)	266-267*	0%		16 Aug 19	No E40 (shredded steel scrap)	234.70	-2.69%	•	01 Jul 19
Shredded	271-272*	0%		16 Aug 19	No E5 (steel turnings)	183.60	-3.27%	•	01 Jul 19
	211212	070		107/109/10	Fastmarkets MB's assessment €/tonne delive	red at mill			
Indian imports	vo Chora				Grade E40 (shredded steel scrap)	250-260	-2.86%	•	14 Aug 19
Fastmarkets MB's assessment \$/tonnne cfr Nha		4.470/	_	16 4 10	No E8 (thin new production steel scrap)	255-260	-0.96%	•	14 Aug 19
MB index cfr India shredded	300.67*	-1.47%		16 Aug 19	No E3 (old thick scrap)	245-260	-1.94%	•	14 Aug 19
HMS 1&2 (80:20 mix)  Alloy steel scrap domestic	255-270*	0%		16 Aug 19	Italy domestic				
UK wholesale merchants' stainless (£/tonne)					Fastmarkets MB's assessment €/tonne delive				
18/8 solids	950-980*	0%		16 Aug 19	No E3 (old thick scrap)	230-245	-4.04%	•	14 Aug 19
18/8 turnings	810-835*	0%		16 Aug 19	No E8 (thin new production steel)	250-260	-2.86%	•	14 Aug 19
316 solids	1,450-1,480*	0%		16 Aug 19	No E40 (shredded steel scrap)	250-260	-3.77%	•	14 Aug 19
316 turnings	1,235-1,260*	0%		16 Aug 19					
o ro tariningo		0%		16 Aug 19					
12-13% Cr solids	150-200*								

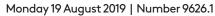




SCRAP SUBSTITUTES	Price	Change <sup>†</sup>	Assessed
EU imports \$/tonne	FIICE	Gilalige	ASSESSED
Pig iron imports cif Italy	360-362*	0%	15 Aug 19
Hot-briquetted iron cfr Italian	000 002		.07.09.10
ports	260-275*	0%	15 Aug 19
Brazil exports \$/tonne, delivery terms as s	stated		
Hot briquetted iron Venezuela	215-215*	0%	16 Aug 19
Pig iron fob Vitorio/Rio Brazil	325-325*	0%	16 Aug 19
Pig iron fob Ponta da Maderia Brazil	352-352*	0%	16 Aug 19
US imports \$/tonne cfr Gulf of Mexico			
Pig iron	365-368*	0%	16 Aug 19
CIS exports \$/tonne fob main port			
Pig iron Baltic Sea	355-370*	-4.61%	▼ 15 Aug 19
Pig iron Black Sea	335-343*	0%	15 Aug 19
NON-FERROUS SCRAP EUROPE			
	Price	Change <sup>†</sup>	Assessed
Aluminium			
European free market Fastmarkets MB as		00/	16 1 10
Floated frag  Cast	980-1,000*	0%	16 Aug 19
	880-900* 720-760*	0%	16 Aug 19
Mixed turnings 6% France per 1000kg	120-100	U 7/0	16 Aug 19
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		•	2000.10
Italy per 1000kg			
Pure cuttings	1,060-1,090	0%	26 Jul 19
Old mixed scrap	1,485-1,515	0%	26 Jul 19
Commercial cast	885-940	0%	26 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	3,050-3,100	0%	23 Jul 19
Mixed brass	2,750-2,820	0.36%	▲ 23 Jul 19
Source: Lettre d'Information Metaux			
Italy per 1000kg			
Electrolytic dd EN 12861-S-Cu-2	5,020-5,180		▼ 26 Jul 19
Enamelled wire EN 12861-S-Cu-3	4,898-5,060	-0.1%	▼ 26 Jul 19
New from tubes, strips etc EN 12861-S-Cu-4	4,922-5,150	-0.1%	▼ 26 Jul 19
Old from tubes, strips etc 12861-S-Cu-7	4,750-4,920	-0.1%	▼ 26 Jul 19
EN12861-S-Cu-Zn-1-A-Cu 63.5%	3,925-4,040	0.13%	▲ 26 Jul 19
Mixed from valves/taps EN	0 100 0 111		
Mixed from valves/taps EN 12861-S-Cu-Zn-6 Several 95% m/m 12861-S-Cu-Zn-7	3,160-3,490 3,210-3,290	0.15%	▲ 26 Jul 19 ▲ 26 Jul 19

UK NON-FERROUS SCRAP			
	Price	Change <sup>†</sup>	Assessed
Aluminium - actual price			
£pertonne			
Group 1 pure 99% & Litho	1,280-1,320*	0%	14 Aug 19
Commercial pure cuttings	870-920*	0%	14 Aug 19
Clean HE9 extrusions	1,285-1,325*	0.38%	▲ 14 Aug 19
Loose old rolled cuttings	610-640*	0%	14 Aug 19
Baled old rolled	720-740*	0%	14 Aug 19
Commercial cast	700-750*	0%	14 Aug 19
Cast wheels	1,060-1,100*	0.47%	▲ 14 Aug 19
Commercial turnings	500-540*	0%	14 Aug 19
Group 7 turnings	400-420*	0%	14 Aug 19
Fastmarkets MB and LME aluminium scrap	discounts		
£pertonne			
Group 1 pure 99% & Litho	119-159*	2.96%	▲ 14 Aug 19
Commercial pure cuttings	519-569*	0.74%	▲ 14 Aug 19
Clean HE9 extrusions	114-154*	-0.74%	▼ 14 Aug 19
Loose old rolled cuttings	459-489*	-8.67%	▼ 14 Aug 19
Baled old rolled	359-379*	-10.87%	▼ 14 Aug 19
Commercial cast	349-399*	-10.74%	▼ 14 Aug 19
Cast wheels	-1-39*	-72.46%	▼ 14 Aug 19
Commercial turnings	559-599*	-7.21%	▼ 14 Aug 19
Group 7 turnings	679-699*	-6.13%	▼ 14 Aug 19
Titanium			
\$/Ib cif			
Turnings, unprocessed type 90/6/4 (0.5% Sn max)	0.90-1*	0%	14 Aug 19
Turnings, unprocessed 90/6/4 (over 0.5% max 2% Sn)	0.80-0.90*	0%	14 Aug 19
Copper scrap discount			
cents/lb			
No 2 copper (birch/cliff) imported into China 94-96% cif China	32-36*	6.25%	▲ 29 Jul 19

†week-on-week change continued >





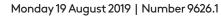
NON-FERROUS FOUNDRY INGOTS			
	Price	Change <sup>†</sup>	Assessed
Aluminium UK £/tonne			
Fastmarkets MB free market			
LM24 pressure diecasting ingot	1,240-1,280*	0%	14 Aug 19
LM6/LM25 gravity diecasting ingot	1,600-1,660*	0%	14 Aug 19
NB: prices expressed delivered consume	r works, LM series as	s specified in BS	1490
Aluminium Europe			
Fastmarkets MB free market			
Duty paid delivered works pressure diecasting ingot price (DIN226/A380) - €/tonne	1,350-1,400*	0%	16 Aug 19
Aluminum US \$/lb delivered Midwest			
A380.1 alloy	0.66-0.69*	1.5%	▲ 15 Aug 19
AFFIMET €/tonne			-
AS12	3,464	1.46%	▲ 01 Aug 19
AS12 UN	2,395	0.42%	▲ 01 Aug 19
AS9 U3	1,770	0.57%	▲ 01 Aug 19
AS5 U3	2,120	0.47%	▲ 01 Aug 19
Reflects generally larger traded lots			
Aluminium bronze £/tonne UK			
AB1 ex-works	4,950	1.02%	▲ 13 Aug 19
AB2 ex-works	5,000	1.01%	▲ 13 Aug 19
Source: C.F. Booth Ltd			
Brass UK £/tonne			
SCB3 ex-works	4,230	0.71%	▲ 13 Aug 19
High tensile HTB1 ex-works	4,180	0.72%	▲ 13 Aug 19
Source: C.F. Booth Ltd			
Gunmetal UK £/tonne			
LG2 85/5/5/5 ex-works	4,830	1.05%	▲ 13 Aug 19
LG4 87/7/3/3 ex-works	5,430	0.93%	▲ 13 Aug 19
G1 1.15 PB ex-works	6,280	0.8%	▲ 13 Aug 19
Source: C.F. Booth Ltd			
Phosphor bronze UK £/tonne			
PB1 ex-works	6,730	0.75%	▲ 13 Aug 19
Source: C.F. Booth Ltd			
Phosphor copper £/tonne			
10% P ex-works	6,200	0.65%	▲ 13 Aug 19
15% P ex-works	6,250	0.64%	▲ 13 Aug 19
Source: C.F. Booth Ltd			
Zinc alloys UK £/tonne			
Brock Metal Co contract alloy price (delive	ered UK)		
Brock Metal ZL3	2,489	-1.89%	▼ 01 Aug 19
Brock Metal ZL5	2,518	-1.87%	▼ 01 Aug 19



# Monthly averages: July

BASE METALS			
DAGE MILIALO		Low	High
A1		LOW	riigii
Aluminium Aluminium P1020A, in-warehouse Ro	ttordam		
premium, duty unpaid, spot \$/tonne	llerdam	91.52	101.52
Aluminium P1020A, in-warehouse Ro duty paid, spot \$/tonne	tterdam	145.56	155
Alumina			
Index fob Australia		306.68	
Copper			
US High-grade cathode premium indic \$/tonne	cator,	157.63	176.37
Nickel			
Free market in warehouse premium			
Europe \$/tonne	Uncut cathodes	200	230
	4x4 cathodes	460	500
	Briquettes	200	250
Tin			
European free market			
Spot Premium 99.9%, \$/tonne		380	430
Kuala Lumpur (ex-smelter), \$/tonne		18,068.18	
MINOR METALS  Antimony MB free market Regulus 99.65%,		5 083 33	6 194 44
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse,\$/tonne	3	5,983.33 5.872.22	6,194.44 6.077.78
Antimony MB free market Regulus 99.65%,	)	5,983.33 5,872.22	6,194.44 6,077.78
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 lo		5,872.22	6,077.78
Antimony MB free market Regulus 99.65%, max Se 50ppm, in warehouse,\$/tonne MMTA Standard grade II,\$/tonne Bismuth			
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 lo in warehouse, \$/lb		5,872.22	6,077.78
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 lo in warehouse, \$/lb Cadmium MB free market		5,872.22	6,077.78
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 lo in warehouse, \$/lb		5,872.22 2.83	6,077.78 2.98
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 lo in warehouse, \$/lb  Cadmium  MB free market min 99.95%, in warehouse, cents/lb		5,872.22 2.83	6,077.78 2.98 117.67
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 lo in warehouse, \$/lb  Cadmium  MB free market min 99.95%, in warehouse, cents/lb min 99.99%, in warehouse cents/lb		5,872.22 2.83	6,077.78 2.98 117.67
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 lo in warehouse, \$/lb Cadmium MB free market min 99.95%, in warehouse, cents/lb min 99.99%, in warehouse cents/lb Cobalt		5,872.22 2.83	6,077.78 2.98 117.67
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 lo 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		2.83 107.67 111.44	2.98 117.67 121.33
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 lo 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		2.83 107.67 111.44	6,077.78 2.98 117.67 121.33
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 lo 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		2.83 107.67 111.44	6,077.78 2.98 117.67 121.33
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 lo 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		2.83 107.67 111.44	6,077.78 2.98 117.67 121.33
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 lo 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		2.83 107.67 111.44 12.98 12.61	6,077.78  2.98  117.67 121.33  13.63 13.09
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 lo 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	ts,	2.83 107.67 111.44 12.98 12.61	6,077.78  2.98  117.67 121.33  13.63 13.09
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 lo 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	ts,	2.83 107.67 111.44 12.98 12.61	6,077.78  2.98  117.67  121.33  13.63  13.09
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 lo 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	ts,	2.83 107.67 111.44 12.98 12.61 153 950	6,077.78  2.98  117.67  121.33  13.63  13.09  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 lo 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	ts,	2.83 107.67 111.44 12.98 12.61 153 950	6,077.78  2.98  117.67  121.33  13.63  13.09  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 lo 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	ts,	2.83  107.67  111.44  12.98  12.61  153  950  1,100	6,077.78  2.98  117.67 121.33  13.63 13.09  160  1,150 1,250
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 lo 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, \$/lkg Germanium Dioxide MB free market min 99.99%, \$ Metal, Rotterdam, \$/lkg Indium MB free market ingots, min 99.97%,	ts,	2.83  107.67  111.44  12.98  12.61  153  950  1,100	6,077.78  2.98  117.67 121.33  13.63 13.09  160  1,150 1,250

Maraum		Low	High
Mercury MB free market min 99.99%,			
in warehouse, \$/flask		2,400	2,700
Selenium			
MB free marketmin 99.5%			
in warehouse, \$/lb		8.32	9.93
Silicon			
Grade 441, min 99% Si in-warehouse Rotterdam, €/tonne	<del>)</del>	1,637.5	1,687.5
Titanium			· · · · · · · · · · · · · · · · · · ·
Ferro-Titanium, 70% (max 4.5% AI),			
d/d Europe, \$/kg		4.70	4.97
ORES & ALLOYS			
		Low	High
Molybdenum			Ü
Free market in warehouse Europe			
drummed molybdicoxide \$/lb Mo		11.71	11.86
US canned molybdic oxide \$/lb Mo		11.93	12.23
Ferro-molybdenum			
basis 65% min, in-warehouse Rotterdam, \$/kg Mo		27.27	27.62
Tungsten			
European free market APT, \$/mtu		215	229.25
Ferro-tungsten			
basis 75% W min, \$/kg		27.81	28.67
Vanadium			
min 98%, in-warehouse Rotterdam,		0.00	7.04
V2O5, \$/lb		6.28	7.01
Ferro-vanadium basis 78% min, free delivery duty			
paid consumer plant, 1st grade Wester	ern		
Europe, \$/kg V		30.23	31.62
US Free market 70-80%, \$/lb		16	16.5
PRECIOUS METALS			
Gold			
London \$/troy oz	Morning	1,414.61	
0/1	Afternoon	1,412.98	
London £/troy oz	Morning Afternoon	1,134.35 1,133.06	
\$/troy oz	Handy/Harman	1,412.89	
Palladium	. ianayi ianian	1,112.00	
Morning \$/troy oz		1,544.91	
Afternoon \$/troy oz		1,545.39	
Platinum: per troy oz			
Morning \$/troy oz		843.43	
Afternoon \$/troy oz		843.61	
Rhodium			
European free market min 99.9% in-warehouse, \$/troy oz		3,407.61	3,588.04
Silver		3,407.01	3,300.04
London			
spot pence/troy oz		1,262.48	
spot cents/troy oz		1,574.52	
Handy/Harman cents/troy oz		1,579.11	
†week-on-week change			continued >





FOUNDRYINGOTS		
	Low	High
Aluminium		
LM24, £/tonne	1,240	1,280
LM6/LM25, £/tonne	1,600	1,660
Aluminium Europe €/tonne	1,315	1,365
Phosphor Bronze		
PB1 ex-works, £/tonne	6,688	
Zinc Alloy		
ZL3, £/tonne	2,537	
EXCHANGE RATES (CLOSING RATES)		
\$/£	1.25	
\$/yen	108.26	
\$/€	1.12	

#### Copyright © 2002-2019 Fastmarkets

 $Fast markets \, MB \, monthly \, average \, prices \, are \, calculated \, on \, those \, price \, quotations \, formulated \, during \, and \, price \, quotations \, formulated \, during \, price \, quotation \, price \, quotation \, price \, quotation \,$ the month.

#### LONDON METAL EXCHANGE

High, low and average July (23 days) LME averages are mean of buyers and sellers except for

settlement and 3 months sellers.				
	Jan-July 2019		July	
	Low	High	average	
	\$	\$	\$	
Aluminium (\$)				
Cash	1,719.25	1,922.5	1,792.51	
3 months	1,752	1,944.25	1,815.82	
Settlement	1,719.5	1,923	1,792.83	
3 months seller	1,753	1,944.5	1,816.33	
Copper Grade A (\$)				
Cash	5,755.75	6,571	5,939.20	
3 months	5,785.25	6,532.5	5,956.11	

Cash	1,719.25	1,922.5	1,792.51
3 months	1,752	1,944.25	1,815.82
Settlement	1,719.5	1,923	1,792.83
3 months seller	1,753	1,944.5	1,816.33
Copper Grade A (\$)			
Cash	5,755.75	6,571	5,939.20
3 months	5,785.25	6,532.5	5,956.11
Settlement	5,756	6,572	5,939.85
3 months seller	5,785.5	6,533	5,956.98
Copper Grade A (£)			
Settlement	4,508.36	5,000.76	4,762.15
3 months seller	4,506.43	4,980.18	4,756.15
Lead (\$)			
Cash	1,767	2,153.5	1,973.5
3 months	1,787.75	2,164.5	1,978.54
Settlement	1,768	2,154	1,974.02
3 months seller	1,788	2,165	1,979.15
Lead (£)			
Settlement	1,365.36	1,700.84	1,582.84
3 months seller	1,374.43	1,683.82	1,580.38
Nickel (\$)			
Cash	10,437.5	14,680	13,458.59
3 months	10,527.5	14,727.5	13,514.57
Settlement	10,440	14,685	13,462.39
3 months seller	10,530	14,730	13,521.96
Tin (\$)			
Cash	17,262.5	21,912.5	17,981.20
3 months	17,257.5	21,700	17,974.89
Settlement	17,275	21,925	17,991.30
3 months seller	17,260	21,725	17,982.83

	Jan-July 2019 Low	High	July average
	\$	\$	\$
Zinc (\$)	*	•	•
Cash	2,371.5	3,017	2,440.96
3 months	2,368.5	2,948.5	2,431.16
Settlement	2,372	3,018	2,441.48
3 months seller	2,370	2,949	2,431.70
Cobalt (\$)			
Cash	25,500	46,000	27,282.61
3 months	26,000	50,000	27,782.61
Settlement	26,000	47,000	28,195.65
3 months seller	26,500	51,000	28,695.65
Aluminium Alloy (\$)			
Cash	1,150	1,517.5	1,258.70
3 months	1,155	1,525	1,256.41
Settlement	1,155	1,520	1,263.96
3 months seller	1,165	1,530	1,262.17
Nasaa (\$)			
Cash	1,052.5	1,535	1,125.21
3 months	1,085	1,565	1,147.15
Settlement	1,055	1,536	1,128.20
3 months seller	1,090	1,570	1,152.91

LME SETTLEMENT CONVERSION RATES	
\$/£	1.25
\$/yen	108.23
\$/€	1.12