

## IRON ORE PORT STOCK INDEX (IOPI)

May 16, 2018		FOT Qingdao (inc. 16% VAT), RMB/wet tonne						CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne <sup>1</sup>							
Index	Fe Content	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>		
IOPI62	62% Fe Fines	484	7	1.5%	478	480	443	559	67.03	0.76	1.1%	66.27	66.59	61.36	77.89
IOPI58	58% Fe Fines	327	-3	-0.9%	329	325	304	376	43.95	-0.62	-1.4%	44.17	43.8	40.67	50.97
IOPI65	65% Fe Fines	579	8	1.4%	572	592	541	690	81.00	0.86	1.1%	80.18	83.07	75.83	97.10

## IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending May 11, 2018				RMB/tonne (excluding tax)				USD/tonne (excluding tax) <sup>3</sup>			
Province	Region	Product	Basis	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Hebei	Hanxing	66% Fe Concentrate	Dry	603	0.2%	579	682	94.73	-0.4%	90.96	107.14
Hebei	Qian'an	65% Fe Concentrate	Dry	635	0.0%	630	710	99.75	-0.5%	98.97	111.54
Liaoning	Anshan	65% Fe Concentrate	Wet	455	0.0%	450	550	71.48	-0.5%	70.69	86.40
Shandong	Zibo	65% Fe Concentrate	Dry	655	1.6%	620	690	102.90	1.0%	97.40	108.39
Week Ending May 11, 2018				This week	Change %	Low <sup>2</sup>	High <sup>2</sup>				
China Mines Composite Index Price, May 2007 = 100				76.57	0.2%	76.01	89.12				

<sup>1</sup> Exchange rate applied: RMB/USD = 6.3745  
<sup>2</sup> Since March 1  
<sup>3</sup> Weekly exchange rate applied: RMB/USD 6.3657

## MARKET COMMENTARY

Market volatility lead to mills dipping in and out of the market , preferring to keep their purchases to small amounts. Transaction prices early this morning maintained the same level over yesterday, although the DCE market dipped in the afternoon. Traders had a preference for high grade material which saw very good demand, happy to close deals at higher levels in order to conclude deals.

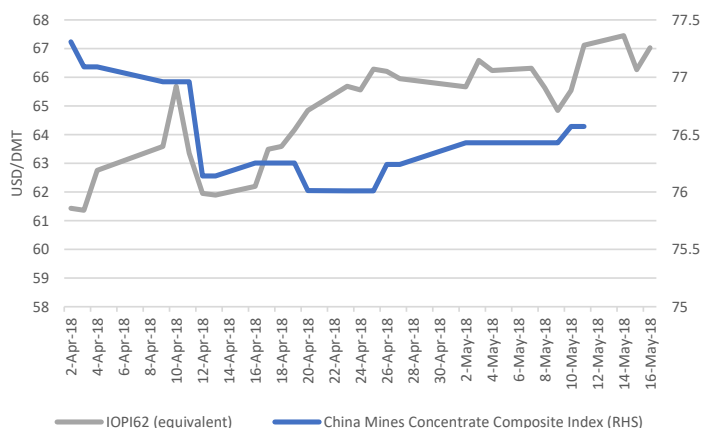
## PLATFORM TRADES AND TENDERS

61% Fines sold at 66.33 USD/dry tonne for 170,000t 31st May—6 June LAYCAN  
 61% Fines sold at 66.05 USD/dry tonne for 170,000t 12 —21 June LAYCAN  
 globalORE BRBF transacted at 69.7 USD/dry tonne for 170,000t 13—22 June LAYCAN  
 61% Fines sold at 66.25 USD/dry tonne for 170,000t 5—14 June LAYCAN

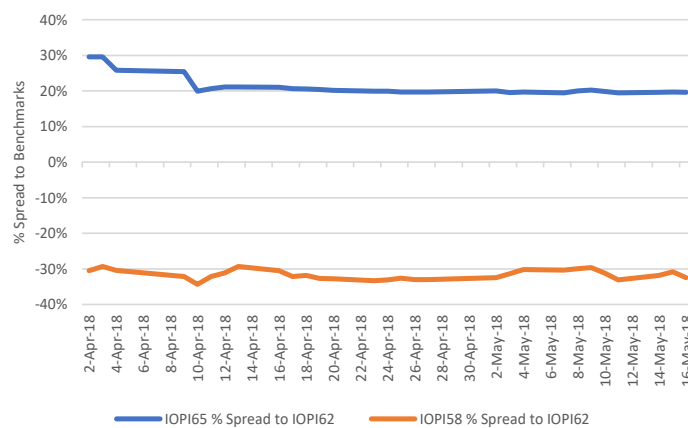
## IRON ORE HIGH/LOW GRADE PREMIUM/DISCOUNT

May 16, 2018	PORT STOCK INDEX (RMB/WT)	
Fe Content	Spread to IOPI62	% Spread to IOPI62
58% Fe Fines	-157	-32.44%
65% Fe Fines	95	19.63%

## MMi BENCHMARK IRON ORE PRICES



## IRON ORE HIGH/LOW GRADE PREMIUM/DISCOUNT



## IRON ORE FUTURES CONTRACTS

Closing Date	DCE			SGX		
	16 May 3pm close			16 May 6pm		
Contract	I1809	Change	Change %	June'18	Change	Change %
Closing Price	482.5	-3.0	-0.62%	67.65	-0.11	-0.16%
Vol traded ('000 lots)	2,866.7	-359.0	-11.13%	9.88	-3.00	-23.31%
Open positions ('000 lots)	1,988.1	-29.2	-1.45%	105.56	2.05	1.98%
Day Low	479.5	-2.0	-0.42%	67.35	0.02	0.03%
Day High	490.0	-0.5	-0.10%	68.12	-0.56	-0.82%

## IRON ORE PORT INVENTORIES

Province	Week Ending May 11, 2018 (million tonnes)			
	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	17.5	0.00%	12.3	19.9
Qingdao	18.7	-2.09%	15.6	20.0
Caofeidian	22.6	-3.00%	16.6	25.3
Tianjin	9.2	-2.13%	8.0	11.3
Rizhao	19	0.00%	13.1	19.0
Total (35 Ports)	145.3	-0.89%	124	150

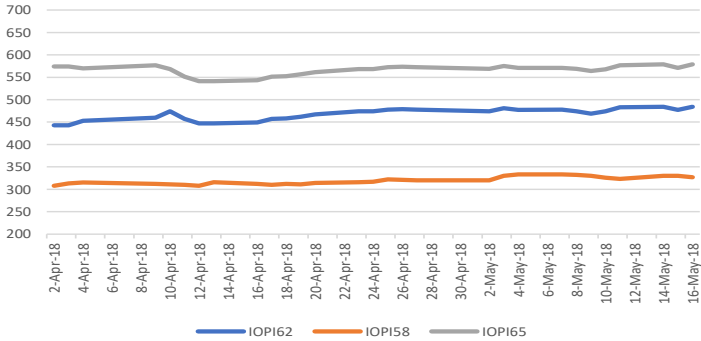
## FREIGHT RATES

May 15, 2018		FREIGHT RATES - DRY BULK US\$/wet tonne				
Route	Designation	Change	Change %	Low <sup>2</sup>	High <sup>2</sup>	
W. Australia - Qingdao	C5	8.42	0.03	0.36%	4.383	9.98
Tubarao - Qingdao	C3	19.06	-0.09	-0.47%	10.796	21.273

Daily Iron Ore Index Report

May 16, 2018

IRON ORE PORT INDEX, FOT QINGDAO (RMB/WT)



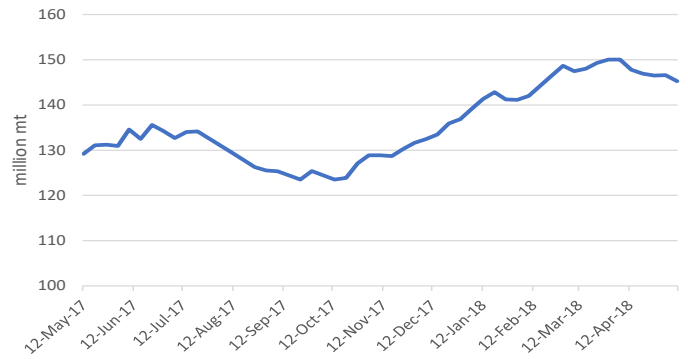
CHINA MINES CONCENTRATE COMPOSITE INDEX, BASIS 2007 = 100



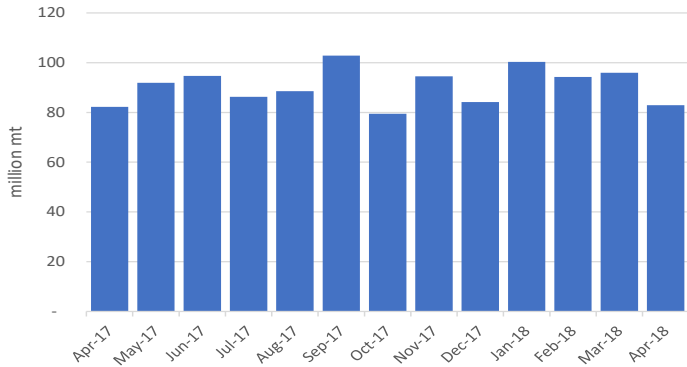
IRON ORE BRAND SPOT PRICE ASSESSMENTS

May 16, 2018	PORT STOCK INDEX (RMB/WT)		
	Price	Diff to IOPI62	Change
Roy Hill	470	-14	7
PB Fines	482	-2	6
Newman Fines	496	12	8
MAC Fines	477	-7	7
Jimblebar Blended Fines	467	-17	7
Carajas Fines	585	101	4
Brazilian SSF	482	-2	7
Brazilian Blend Fines	499	15	7

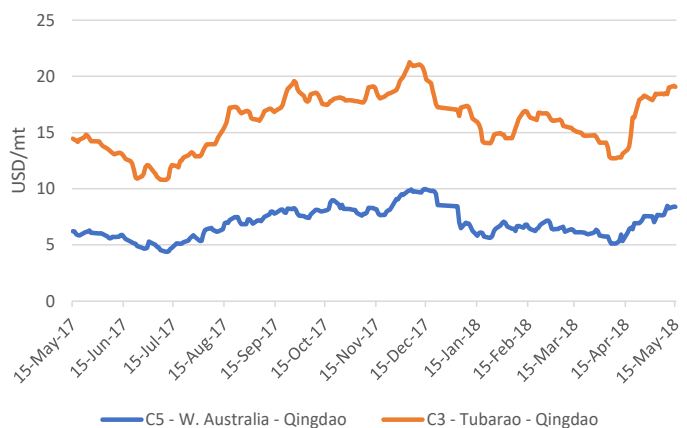
TOTAL IRON ORE INVENTORIES AT CHINA PORTS



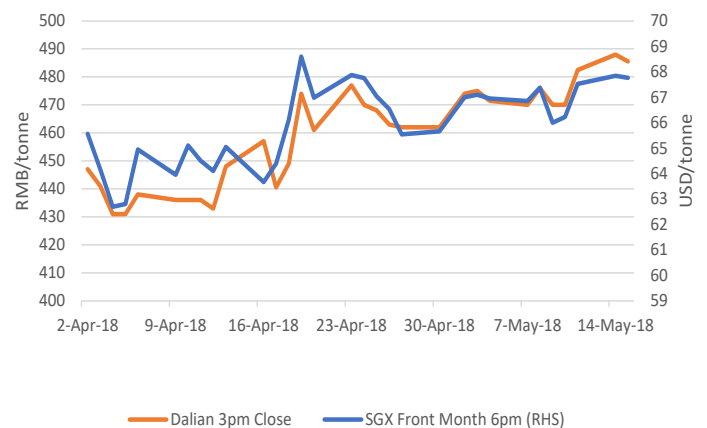
TOTAL CHINA IRON ORE IMPORT VOLUMES



DRY BULK FREIGHT RATES



FUTURE TRADING—FRONT MONTH CLOSING PRICE



## Daily Iron Ore Index Report

May 16, 2018

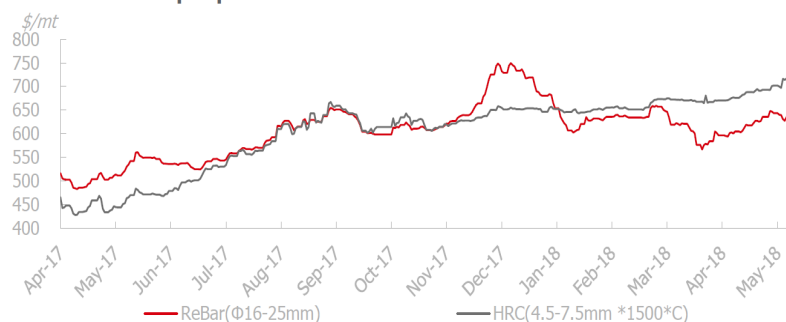
### STEEL SPOT MARKET—CHINA

#### Steel Spot Market RMB/tonne

Product	5/11/2018	Change	Change %	5/4/2018	Change	Change %
ReBar HRB400 φ18mm	4,036	-53.6	-1.31%	4,090	117	2.93%
Wirerod Q300 φ6.5mm	4,300	-100	-2.27%	4,400	151	3.56%
HRC Q235/SS400 5.5mm*1500*C	4,196	3	0.06%	4,194	70	1.70%
CRC SPCC/ST12 1.0mm*1250*2500	4,606	-14	-0.30%	4,620	47	1.03%
Medium & Heavy Plate Q235B 20mm	4,553	93	2.09%	4,460	77	1.76%
GI ST02Z 1.0mm*1000*C	5,305	-20	-0.38%	5,325	25	0.47%
Billet Q235 150*150mm	3,580	-80	-2.19%	3,660	90	2.52%

### CHINESE STEEL SPOT MARKET—REBAR & HRC IN USD/TONNE

#### Rebar and HRC spot prices



### CHINESE STEEL INVENTORIES

#### Steel Inventories<sup>3</sup> (unit: 1000 tonnes)

Product	5/11/2018	5/4/2018	Change	Change %
Rebar	6,317	6,823	-506	-7.42%
Wirerod	1,971	2,101	-130	-6.19%
Hot-rolled Coil	2,232	2,278	-46	-2.02%
Medium & Thick Plate	845	854	-9	-1.05%
Cold-rolled Coil	1,113	1,138	-25	-2.20%
Total	12,478	13,194	-716	-5.43%

<sup>3</sup> SMM statistics cover inventories of major steel products in China's major markets: hot-rolled steel inventories in 33 major cities; rebar and wire inventories in 35 major cities; cold-rolled steel and medium-thick plate inventories in 31 major cities.

### CHINESE STEEL MILL PROFITABILITY

#### SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)

Category	Price	Change (WoW)	Note
Iron ore Port Index FOT Qingdao (inc. 17% VAT), I	483	6	MMI index for 11th May 2018
Coke	1,770	50	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,170	0	steel scrap (6mm) in Zhangjiagang, exl. tax
Billet Cost	2,596	25	Q234, incl. tax
Rebar cost - Blast furnace	2,851	23	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	1,109	-73	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	2,924	25	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	1,306	5	based on Shanghai prices, incl. tax

Note: 1 Costs in the table are calculated based on today's market prices and factored our management, sales, financial and depreciations fees.

2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

### CHINESE STEEL EXPORT PRICES

#### China Export Prices USD/tonne

Product	Specification	Export tax (+)/Vate rebate (-)	Latest transaction prices		Change
			5/11/2018	5/4/2018	
Rebar	BS4449 460B 12-25mm, + chrome	-13%	605	600	5
Wire Rod	SAE1008 6.5-10mm +chrome	-9%	575	565	10
Hot-rolled coil	SS400/Q235 4.0-10.mm	-9%	605	595	10
Cold-rolled coil	SPCC 1.0mm	-13%	625	625	0
Medium & Heavy plate	A-level Shipe plate 12-25mm	0%	620	610	10
Galvanised	ST02Z/SGCC 1.0mm	-13%	690	690	0

Note: Calculation formula for converting export prices of rebar, cold-rolled steel and galvanizing into prices in China's spot market = FOB \* exchange rate \* 1.16 / (1.16 - 0.13); Calculation formula for converting export prices of wire rod and hot-rolled steel into prices in China's spot market = FOB \* exchange rate \* 1.16 / (1.16 - 0.09); Calculation formula for converting export prices of medium-thick plate into prices in China's spot market = FOB \* exchange rate

IRON ORE INDEX SPECIFICATIONS, COMPILATION RATIONALE AND DATA EXCLUSIONS

Iron Ore Index Specifications (Port)				Iron Ore Index Compilation Rationale and Data Exclusions	
	65% Fe Fines	62% Fe Fines	58% Fe Fines		
Fe %	65.00	62.00	58.00	<p>MMi iron ore port stock indices are compiled from data provided by companies that are part of the iron ore supply chain and involved in spot market transactions. The indices are calculated using detailed transaction-level data submitted to MMI by these companies. This data is normalised to the appropriate specifications and screened to remove outliers before volume-weighted average prices are calculated from the remaining core set of data.</p> <p>For more details on MMI's iron ore methodology please download the guide published on our website at:</p> <p><u>Data Exclusions*</u> Port Index: 0 * Number of price submissions for iron ore indices that were excluded from index calculations today as they were anomalous and could not be verified</p>	
Alumina %	1.40	2.25	2.25		
Silica %	1.50	4.00	5.50		
Phosphorus %	0.06	0.09	0.05		
Sulphur %	0.01	0.02	0.02		
Moisture %	8.00	8.00	9.00		
Sizing	Granular size below 10mm for at least 90% of cargo; maximum of 40% below 150 micron				
Location	Qingdao Port				
Timing (Seaborne)	Loading within 4 weeks, Delivery within 8 weeks				
Payment Terms	L/C at sight				

IRON ORE DOMESTIC CONCENTRATE INDEX CALCULATION METHODOLOGY

The compilation method for price index generally refers to the compilation method of CPI price index and other price indices, breakdown the price data and calculate the average value according to a certain method, taking the vertical axis as the regional composite index (average of different grade index) and the horizontal axis as the grade composite index (average of different regional index), a total composite index for domestic ore can be output ultimately. The process system is also adopted in the calculation i.e. each sub-index can be obtained as well.

IRON ORE PORT INDEX NORMALISATION DIFFERENTIALS

Content Differentials (RMB/wet tonne)				Port Differentials to Qingdao Port RMB/wet tonne		
	Applicable range		Change	Port		Change
1% Fe	High Grade Fe 60 - 63%	8.00	0.00	Bayuquan	-10.00	0.00
	High Grade Fe 63 - 64%	32.00	0.00	Beilun	2.00	0.00
	High Grade Fe 64 - 65%	35.00	0.00	Caofeidian	-5.00	0.00
	High Grade Fe 65 - 65.5%	35.00	0.00	Dalian	0.00	0.00
	Low Grade Fe	6.00	0.00	Fangcheng	0.00	0.00
1% Alumina	High Fe Grade Al <2.25%	12.00	0.00	Jiangyin	-30.00	0.00
	High Fe Grade Al 2.25-4%	12.50	0.00	Jingtang	-5.00	0.00
	Low Fe Grade	12.50	0.00	Lanshan	0.00	-3.00
1% Silica	High Fe Grade Si <4%	1.00	0.00	Lanqiao	0.00	0.00
	High Fe Grade Si <4 - 6.5%	10.50	0.00	Lianyungang	0.00	0.00
	High Fe Grade Si <6.5 - 9%	25.00	0.00	Majishan	0.00	0.00
	Low Fe Grade	24.00	0.00	Nantong	-30.00	0.00
0.01% Phosphorus	High Fe Grade 0.08%<P<0.115%	0.00	0.00	Qingdao	0.00	0.00
	High Fe grade 0.115%<P<0.15%	12.50	0.00	Rizhao	0.00	0.00
	Low Fe Grade 0.08 < P < 0.15%	0.00	0.00	Tianjin	-20.00	0.00

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