

July 25, 2018

IRON ORE PORT STOCK INDEX (IOPI)

July 25 20	18		FOT Qingdao (inc. 16% VAT), RMB/wet tonne					CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne ¹							
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²	Price	Change	Change %	MTD	YTD	Low ²	High ²
IOPI62	62% Fe Fines	493	7	1.4%	478	477	443	559	64.04	0.83	1.3%	63.04	65.41	61.36	77.89
IOPI58	58% Fe Fines	358	2	0.6%	347	331	304	376	45.45	0.18	0.4%	44.66	43.98	40.67	50.97
IOPI65	65% Fe Fines	656	10	1.5%	632	597	541	690	86.49	1.19	1.4%	84.66	82.78	75.83	97.10

IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending July 20, 2018				RMB/tonne (excluding tax)				USD/tonne (excluding tax) ³			
Province	Region	Product	Basis	This week	Change %	Low ²	High ²	This week	Change %	Low ²	High ²
Hebei	Hanxing	66% Fe Concentrate	Dry	601	0.2%	579	682	89.64	-0.7%	86.36	101.72
Hebei	Qian'an	65% Fe Concentrate	Dry	680	2.3%	630	710	101.42	1.4%	93.97	105.90
Liaoning	Anshan	65% Fe Concentrate	Wet	475	0.0%	445	550	70.85	-0.9%	66.37	82.03
Shandong	Zibo	65% Fe Concentrate	Dry	660	0.0%	620	690	98.44	-0.9%	92.47	102.91
Week Ending July 20, 2018				This week	Change %	Low ⁴	High ⁴	¹ Exchange rate applie	d: RMB/USD = 6.804	² Since March 1	
China Mines Concentrate Composite Index RMB/WT			WT	558.71	1.1%	534.50	628.33	3 Weekly exchange rat	e applied: RMB/USD 6.7406	⁴ Last 12 months	

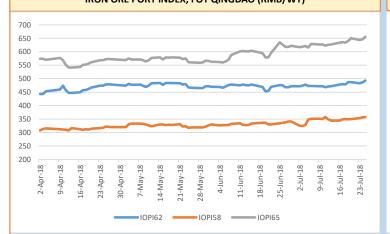
MARKET COMMENTARY

PB fines continued to perform strongly this week due to its recent high costs across blast furnaces. SMM learned that some mills have already planned to increase PB fines in their blend to replace some BRBF. As the production cuts in Tangshan are currently lower than expected, both traders and mills continued to purchase. Prices of PB fines are likely to continue to climb as inventories at ports are likely to extend their declines.

PLATFORM TRADES AND TENDERS

COREX trades PB lump for US\$84.5/mt at 60,000t for 11—20 Aug LAYCAN

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



IRON ORE FUTURES CONTRACTS

		DCE		SGX			
Closing Date	2	5 July 3pm clo	ose	25 July 6pm			
Contract	11809	Change	Change %	Aug'18	Change	Change %	
Closing Price	477.0	2.0	0.42%	66.22	0.45	0.68%	
Vol traded ('000 lots)	64.88	-9.5	-12.75%	7.79	-3.26	-29.53%	
Open positions ('000 lots)	76.22	0.4	0.54%	96.38	2.79	2.98%	
Day Low	475.5	2.0	0.42%	65.80	0.40	0.61%	
Day High	478.0	1.5	0.31%	66.22	0.44	0.67%	

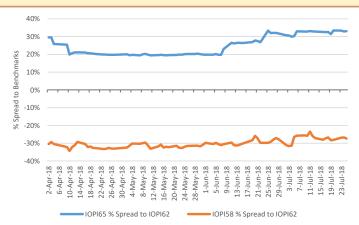
FREIGHT RATES

July 24, 2018			FREIGHT	RATES - DRY BUL	K US\$/wet tonn	e
Route	Designation		Change	Change %	Low ⁴	High ⁴
W. Australia - Qingdao	C5	9.94	0.47	4.99%	5.109	9.98
Tubarao - Qingdao	C3	22.88	0.31	1.37%	12.705	22.882

IRON ORE HIGH/LOW GRADE PREMIUM/DISCOUNT

July 25 2018		PORT STOCK IN	IDEX (KIVIB/ W I)	
Fe Content		Spread to IOPI62	% Spread to IOPI62	
	58% Fe Fines	-135	-27.38%	
	65% Fe Fines	163	33.06%	

IRON ORE HIGH/LOW GRADE PREMIUM/DISCOUNT



IRON ORE PORT INVENTORIES

Week Ending July 20, 2018 (million tonnes)									
Province	This week	Change %	Low ⁴	High ⁴					
Jingtang	17.20	2.14%	14.11	19.00					
Qingdao	18.20	-1.62%	15.60	19.97					
Caofeidian	18.62	-3.97%	16.62	25.30					
Tianjin	9.10	4.60%	8.35	11.00					
Rizhao	18.08	-1.90%	13.10	19.00					
Total (35 Ports)	139.62	-0.38%	123.49	150.04					

BLOOMBERG

	BLOOMBERG TICKERS								
	FOT Qingdao (RMB/wet tonne)	CFR Qingdao Equivalent (USD/dry tonne)							
IOPI62	IRCNQ001	IRCNQ004							
IOPI58	IRCNQ002	IRCNQ005							
IOPI65	IRCNQ003	IRCNQ006							

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CHINA DOMESTIC COMPOSITE MINES INDEX (RMB/Wet Tonne, including VAT)
640 —————
620
600
E 580
₹ 560 -
540
520 ————
500
Training themes I diseased to Certiful Managery of the contractions of the contraction of
China Domestic Composite Mines Index

IRON ORE BRAND SPOT PRICE ASSESMENTS									
July 25 2018	PORT STOCK INDEX (RMB/WT)								
	Price	Change	Diff to IOPI62						
Roy Hill	475	7	-18						
SIMEC Fines	459	7	-34						
PB Fines	477	7	-16						
Newman Fines	497	8	4						
MAC Fines	476	7	-17						
Jimblebar Blended Fines	441	7	-52						
Carajas Fines	671	10	178						
Brazilian SSF	532	11	39						
Brazilian Blend Fines	525	9	32						
RTX Fines	446	7	-47						

RTX FINES	446		-4/			
July 25 2018	PORT STOCK INDEX (RMB/WT)					
	Price Change Diff to IOPI					
SSF	292	2	-66			
FMG Blended Fines	350	3	-8			
Robe River	320	2	-38			
Western Fines	306	2	-52			
Atlas Fines	292	2	-66			
Yandi	352	2	-6			

AVERAGE IRON ORE BRAND SPECIFICATIONS FOR PORT STOCK SALES SPECIFICATIONS APPLIED FOR 62% BRAND ASSESSMENTS July 25 2018 Silica Alumina Phos Moisture Roy Hill 61.00% 2.20% 4.50% 0.055% 8.00% SIMEC Fines 60.00% 2.30% 6.30% 0.060% 6.00% PB Fines 61.65% 2.38% 3.62% 0.100% 8.97% Newman Fines 62.39% 2.47% 4.14% 0.090% 7.58% MAC Fines 60.98% 2.21% 4.75% 0.090% 7.51% Jimblebar Blended Fines 61.05% 2.98% 4.47% 0.120% 6.82% Carajas Fines 1.91% 65.43% 1.30% 0.050% 8.10% Brazilian SSF 1.00% 6.00% 62.00% 6.50% 0.040% Brazilian Blend Fines 62.84% 1.39% 4.89% 0.030% 8.70% RTX Fines 61.00% 3.10% 4.50% 0.135% 7.50%

July 25 2018	SPECIFICATIONS APPLIED FOR 58% BRAND ASSESSMENTS							
	Fe	Alumina	Silica	Phos	Moisture			
SSF	56.51%	3.03%	6.32%	0.050%	9.13%			
FMG Blended Fines	58.31%	2.70%	5.80%	0.070%	7.16%			
Robe River	56.70%	3.10%	5.09%	0.030%	8.74%			
Western Fines	57.61%	2.94%	6.88%	0.070%	7.56%			
Atlas Fines	56.59%	2.55%	7.14%	0.080%	8.46%			
Yandi	57.19%	1.40%	6.39%	0.040%	8.85%			

TOTAL IRON ORE INVENTORIES AT CHINA PORTS



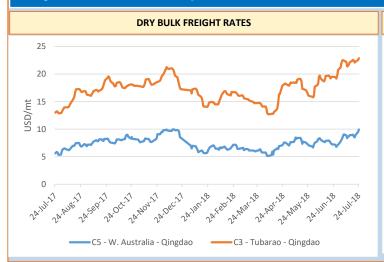
FUTURE TRADING—FRONT MONTH CLOSING PRICE



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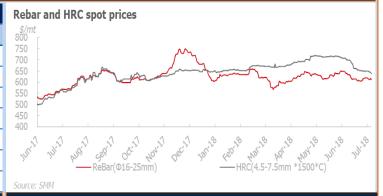
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Steel Spot Market Prices - China

Steel Spot Market RMB/tonne			
Product	7/20/2018	Change	Change %
ReBar HRB400	4,136.0	4.0	0.10%
Wirerod Q300 ¢6.5mm	4,397.0	-10.0	-0.23%
HRC Q235/SS400 5.5mm*1500*C	4,244.0	-25.0	-0.59%
CRC SPCC/ST12 1.0mm*1250*2500	4,676.0	-4.0	-0.09%
Medium & Heavy Plate Q235B 20mm	4,316.0	-17.0	-0.39%
GI ST02Z 1.0mm*1000*C	5,290.0	-5.0	-0.09%
Billet Q235 150*150mm	3,720.0	20.0	0.54%



CHINESE STEEL EXPORT PRICES						
China Export Prices USD/	tonne					
Product	Specification	Export tax (+)/Vate rebate (-)		Change		
			7/20/2018			
Rebar	BS4449 460B 12-25mm, + chrome	-13%	580	-30		
Wire Rod	SAE1008 6.5-10mm +chrome	-9%	575	0		
Hot-rolled coil	SS400/Q235 4.0-10.mm	-9%	585	0		
Cold-rolled coil	SPCC 1.0mm	-13%	620	0		
Medium & Heavy plate	A-level Shipe plate 12-25mm	0%	610	-10		
Galvanised	ST02Z/SGCC 1.0mm	-13%	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*16/(116-0.8); Calculation formula for converting export prices of wire rod and hot-rolled steel into prices in hina's spot market = FOB* exchange rate *16/(116-0.09); Calculation formula for converting export prices of mediumthick plate into prices in China's spot market = FOB* exchange rate

Steel Inventories3 (unit: 1000 tonnes) **Product** 7/20/2018 7/13/2018 Change Change % Rebar 4,584 4,627 -0.93% Wirerod 1,197 1,218 -1.72% Hot-rolled Coil 2,133 2,086 47 2.25% Medium & Thick Plate 914 916 -2 -0.22% Cold-rolled Coil 1,214 1,210 4 0.33% Total 10.042 10,057 -0.15%

CHINESE STEEL INVENTORIES

3 SMM statistics cover inventories of major steel products in China's major markets: hotrolled steel inventories in 33 major cities; rebar and wire inventories in 35 major cities; coldrolled steel and medium-thick plate inventories in 31major cities

CHINESE STEEL MILL PROFITABILITY

SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)						
Category	Price	Change (WoW)	Note			
MMi (Fe 62%), USD/mt exluding tax	63.56	1.21	MMi index for 22nd June			
Coke	1,970	-200	2nd grade met coke, Tangshan, incl. tax			
Steel Scrap	2,040	0	steel scrap (6mm) in Zhangjiagang, exl. tax			
Billet Cost	2,698	-85	Q234, incl. tax			
Rebar cost - Blast furnace	2,960	-85	calculated based on theoretical weight, incl. tax			
Rebar profit - Blast furnace	1,000	95	based on Shanghai prices, incl. tax			
Hot-rolled coil cost - Blast furnace	3,025	-85	based on actual w eight, incl. tax			
Hot-rolled coil proft - Blast furnace	1,215	55	based on Shanghai prices, incl. tax			

Note: 1 Costs in the table are caluclated based on todays market prices and facout 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

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IRON ORE INDEX SPECIFICATIONS, COMPILATION RATIONALE AND DATA EXCLUSIONS

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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	MMi iron ore port stock indices are compiled from data provided by companies that are part		
Alumina %	1.40	2.25	2.25	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		
Silica%	1.50	4.00	5.50	normalised to the appropriate specifications and screened to remove outliers before volume-		
Phosphorus %	0.06	0.09	0.05	weighted average prices are calculated from the remaining core set of data.		
Sulphur %	0.01	0.02	0.02	For more details on MMi's iron ore methodology please download the guide published on our		
Moisture %	8.00	8.00	9.00	website at:		
Sizing	Granular size below 10mm for at least 90% of cargo; maximum of 40% below 150 micron		0 ,	Data Exclusions* Port Index: 0		
Pricing Point	Qingdao Port			* Number of price submissions for iron ore indices that were excluded from index calculations today as they were anomalous and could not be verified		
Timing (Seaborne)	e) Loading within 4 weeks, Delivery within 8 weeks		within 8 weeks	today as they were anomalous and could not be verified		
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						
Product Differentials (RMB/wet tonne)			Differentials to Qingdao Port (RMB/wet tonne)			
	Applicable range	Value	Change	Port	Value	Change
1% Fe	High Grade Fe 60 - 63%	18.00	0.00	Bayuquan	-10.00	0.00
	High Grade Fe 63 - 64%	35.00	0.00	Beilun	5.00	0.00
	High Grade Fe 64 - 65%	65.00	0.00	Caofeidian	-5.00	0.00
	High Grade Fe 65 - 65.5%	65.00	0.00	Dalian	0.00	0.00
	Low Grade Fe	17.00	0.00	Fangcheng	0.00	0.00
1% Alumina	High Fe Grade Al <2.25%	28.00	3.00	Jiangyin	-30.00	0.00
	High Fe Grade Al 2.25-4%	22.00	0.00	Jingtang	-5.00	0.00
	Low Fe Grade	30.00	0.00	Lanshan	0.00	0.00
1% Silica	High Fe Grade Si <4%	3.00	0.00	Lanqiao	0.00	0.00
	High Fe Grade Si <4 - 6.5%	3.00	0.00	Lianyungang	0.00	0.00
	High Fe Grade Si <6.5 - 9%	20.00	0.00	Majishan	0.00	0.00
	Low Fe Grade	21.00	0.00	Nantong	-30.00	0.00
0.01% Phosphorus	High Fe Grade 0.08% <p<0.115%< td=""><td>2.50</td><td>0.00</td><td>Qingdao</td><td>0.00</td><td>0.00</td></p<0.115%<>	2.50	0.00	Qingdao	0.00	0.00
	High Fe grade 0.115% <p<0.15%< td=""><td>4.00</td><td>0.00</td><td>Rizhao</td><td>0.00</td><td>0.00</td></p<0.15%<>	4.00	0.00	Rizhao	0.00	0.00
	Low Fe Grade0.08 < P < 0.15%	0.00	0.00	Tianjin	-25.00	0.00

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