



## MMi Dashboard

## Iron Ore Price Indices

Iron Ore Port Stock (FOT Qingdao) IOPI62 62% Fe Fines RMB/t	
	<b>911</b>
	-9 -0.98%
July 5th, 2019	

Iron Ore Port Stock (FOT Qingdao) IOPI65 65% Fe Fines RMB/t	
	<b>959</b>
	-17 -1.74%
July 5th, 2019	

Iron Port Stock (FOT Qingdao) IOPI58 58% Fe Fines RMB/t	
	<b>796</b>
	-4 -0.50%
July 5th, 2019	

Iron Ore Seaborne (CFR Qingdao) IOSI62 62% Fe Fines USD/dmt	
	<b>119.55</b>
	-5.15 -4.13%
July 5th, 2019	

Iron Ore Seaborne (CFR Qingdao) IOSI65 65% Fe Fines USD/dmt	
	<b>131.30</b>
	-2.60 -1.94%
July 5th, 2019	

Iron Ore Port Stock (FOT Qingdao) IOPLI 62.5% Fe Lump RMB/t	
	<b>1051</b>
	11 1.06%
Week Ending July 5th, 2019	

## Exchange Traded Contracts

DCE Iron Ore 62% Fines I1909 (Sept) RMB/t	
	<b>829.50</b>
	-38.50 -4.44%
July 5th, 2019 (3pm close)	

SGX Iron Ore (CFR Qingdao) 62% Fe Fines July'19 USD/dmt	
	<b>116.00</b>
	-5.05 -4.17%
July 5th, 2019 (6.00 pm Print)	

SHFE Rebar RB1910 (Oct) RMB/t	
	<b>3984</b>
	-40.00 -0.99%
July 5th, 2019 (3pm close)	

## Freight Rates

C3, Tubarao - Qingdao USD/t	
	<b>21.95</b>
	1.83 9.11%
July 4th, 2019	

C5, W. Australia - Qingdao USD/t	
	<b>9.19</b>
	0.94 11.41%
July 4th, 2019	

Steel Rebar (China Domestic) RMB/t	
	<b>4010</b>
	120 3.08%
Week Ending June 28th, 2019	

## Inventory Levels

Iron Ore Inventory at Chinese Ports (35) million tonnes	
	<b>105.80</b>
	-0.88 -0.82%
Week Ending July 5th, 2019	

Steel Inventory in China million tonnes	
	<b>12.91</b>
	-0.06 -0.43%
Week Ending June 28th, 2019	

Steel HRC (China Domestic) RMB/t	
	<b>3920</b>
	130 3.43%
Week Ending June 28th, 2019	

## IRON ORE PORT STOCK INDEX (IOPI)

July 5th, 2019		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne <sup>1</sup>						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>	Price	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>
IOPI62	62% Fe Fines	911	-9	-1.0%	917	691	468	928	123.64	-1.24	-1.0%	124.56	92.92	62.21	126.12
IOPI58	58% Fe Fines	796	-4	-0.5%	797	600	328	800	108.72	-0.55	-0.5%	108.96	80.51	42.21	109.44
IOPI65	65% Fe Fines	959	-17	-1.7%	976	771	616	992	130.36	-2.37	-1.8%	132.77	104.03	83.25	135.34

## IRON ORE SEABORNE INDEX (IOSI)

## MARKET COMMENTARY

July 5th, 2019		CFR Qingdao, USD/dry tonne							The DCE Iron ore futures market plummeted once the vice-chairman of CISA stated that a national department will investigate the sharp rise in iron ore prices as well as crack down the price monopoly. An iron ore work group has also been set up, led by the large Chinese steel mills to investigate iron ores. As of July 5, iron ore stocks across 35 Chinese ports shrank 880,000 mt from a week ago and 34.72 million mt from a year ago, and stood at 105.8 million mt, SMM statistics showed. The decline, caused by low arrivals, continued to slow. Daily average deliveries from the 35 ports dropped 27,000 mt from a week ago and 35,500 mt from a year ago, and stood at 2.57 million mt last week. Low in-plant inventories drove steel mills outside Tangshan to restock as needed. Volatile prices of iron ore prompted some steel mills to delay purchases. Daily average deliveries are expected to change little this week as output controls in the north remain in place. Output cuts across steel mills in Tangshan kept daily average deliveries from Caofeidian port and Jingtang port at lows of some 250,000 mt.						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low <sup>3</sup>	High <sup>3</sup>							
IOSI62	62% Fe Fines	119.55	-5.15	-4.13%	123.88	92.70	62.95	127.50							
IOSI65	65% Fe Fines	131.30	-2.60	-1.94%	134.50	106.86	83.20	137.95							

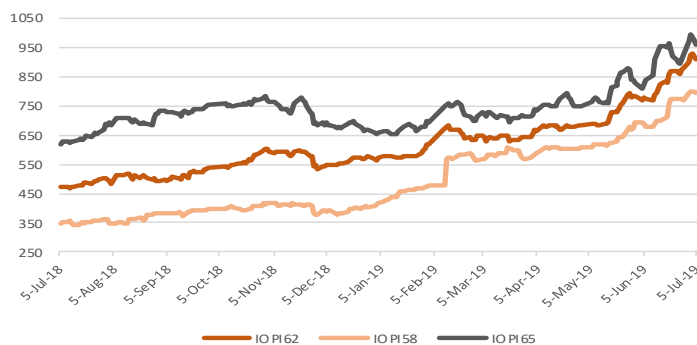
## IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending July 5th, 2019		FOT Qingdao (inc. 16% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne <sup>4</sup>						
Index	Fe Content	Price	W-o-W	Change %	MTD	YTD	Low <sup>3</sup>	High <sup>3</sup>	Price	W-o-W	Change %	MTD	YTD	Low <sup>3</sup>	High <sup>3</sup>
IOPLI62	62.5% Fe Lump	1051	11	1.1%	1051	889	610	1051	133.81	1.46	1.10%	133.81	113.93	77.55	133.81

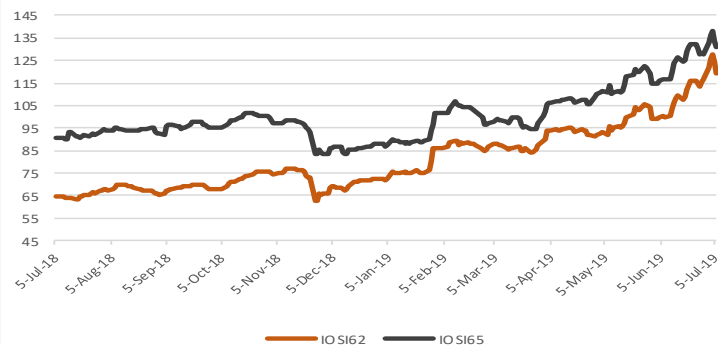
## IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending June 28th, 2019				RMB/tonne (excluding tax) <sup>4</sup>				USD/tonne (excluding tax) <sup>4</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	976	5.2%	597	976	142.15	5.40%	91.97	142.15
Hebei	Qian'an	65% Fe Concentrate	Dry	890	3.5%	655	890	129.62	3.71%	100.26	129.62
Liaoning	Anshan	65% Fe Concentrate	Wet	660	0.0%	465	745	96.12	0.22%	68.21	96.12
Shandong	Zibo	65% Fe Concentrate	Dry	1010	4.7%	660	1010	147.10	4.89%	99.75	147.10
Week Ending June 28th, 2019				This week	Change %	Low <sup>2</sup>	High <sup>2</sup>	<sup>1</sup> Exchange rate applied: RMB/USD = 6.8697 <sup>2</sup> Last 12 months <sup>3</sup> Since June 1 <sup>4</sup> Weekly exchange rate applied: RMB/USD 6.8654			
China Mines Concentrate Composite Index RMB/WT				796.99	6.4%	552.39	811.12				

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



## IRON ORE SEABORNE INDEX, CFR QINGDAO (USD/DMT)



## IRON ORE PORT STOCK INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

July 5th, 2019		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	March	April	May	June	MTD	QTD	YTD	March	April	May	June	MTD	QTD	YTD
IOPI62	62% Fe Fines	639	675	729	825	917	917	691	87.09	85.37	98.40	111.42	124.56	124.56	92.92
IOPI58	58% Fe Fines	583	600	637	726	797	797	600	75.22	77.49	86.39	98.60	108.96	108.96	80.51
IOPI65	65% Fe Fines	714	753	812	901	976	976	771	98.08	95.78	110.00	121.97	132.77	132.77	104.03

## IRON ORE SEABORNE INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

## FREIGHT RATES

July 5th, 2019		CFR Qingdao, USD/dry tonne							FREIGHT RATES - DRY BULK US\$/wet tonne						
Index	Fe Content	March	April	May	June	MTD	QTD	YTD	Route	Designation	Change	Change %	Low <sup>2</sup>	High <sup>2</sup>	
IOSI62	62% Fe Fines	86.18	93.42	98.68	108.57	123.88	123.88	92.70	W. Australia - Qingdao	C5	9.19	0.94	1141%	4.39	10.00
IOSI65	65% Fe Fines	97.22	106.75	115.53	124.49	134.50	134.50	106.86	Tubarao - Qingdao	C3	21.95	1.83	9.11%	11.61	24.76

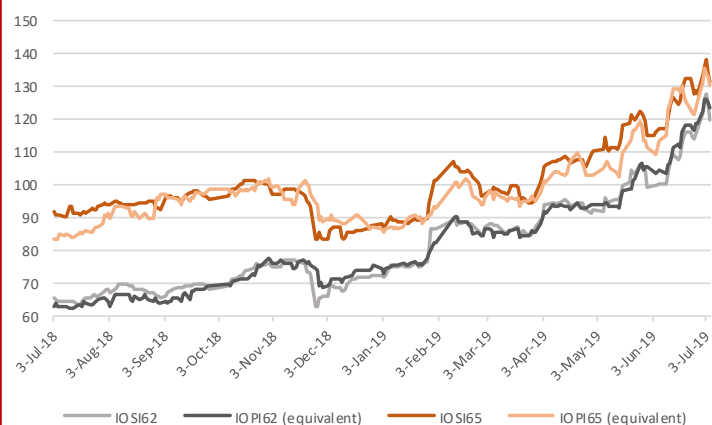
## IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending July 5th, 2019		FOT Qingdao (inc. 16% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne <sup>1</sup>						
Index	Fe Content	March	April	May	June	MTD	QTD	YTD	March	April	May	June	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	858	872	919	1009	1051	1051	889	99.57	111.03	117.12	128.00	133.81	133.81	113.93

## IRON ORE INDEX PREMIUMS/DISCOUNTS

July 5th, 2019		PORT STOCK INDEX (RMB/WT)		July 5th, 2019		SEABORNE INDEX (USD/DMT)	
Index	Fe Content	Spread to IOPI62	% Spread to IOPI62	Index	Fe Content	Spread to IOSI62	% Spread to IOSI62
IOPI58	58% Fe Fines	-115	-12.62%	IOSI65	65% Fe Fines	11.75	9.83%
IOPI65	65% Fe Fines	48	5.27%				

## IRON ORE INDEX COMPARISONS (USD/DMT)



## CHINA DOMESTIC COMPOSITE MINES INDEX (RMB/Wet Tonne, including VAT)



## IRON ORE BRAND SPOT PRICE ASSESSMENTS

July 5th, 2019				July 5th, 2019			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	869	-9	-42	Roy Hill	116.62	-5.14	-2.93
SIMEC Fines	834	-12	-77	SIMEC Fines	115.05	-5.14	-4.50
PB Fines	890	-7	-21	PB Fines	119.55	-5.06	0.00
Newman Fines	918	-12	7	Newman Fines	121.42	-5.17	1.87
MAC Fines	880	-8	-31	MAC Fines	117.30	-5.04	-2.25
Jimblebar Blended Fines	868	-8	-43	Jimblebar Blended Fines	116.30	-4.89	-3.25
Carajas Fines	959	-19	48	Carajas Fines	131.05	-5.34	11.50
Brazilian SSF	877	-22	-34	Brazilian SSF	121.42	-5.47	1.87
Brazilian Blend Fines	910	-16	-1	Brazilian Blend Fines	121.80	-5.34	2.25
RTX Fines	875	-8	-36	RTX Fines	116.30	-4.94	-3.25
West Pilbara Fines	861	-6	-50	West Pilbara Fines	115.27	-5.14	-4.28

July 5th, 2019			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	761	-5	-35
FMG Blended Fines	800	-5	4
Robe River	756	-5	-40
Western Fines	784	-5	-12
Atlas Fines	771	-5	-25
Yandi	838	-5	42

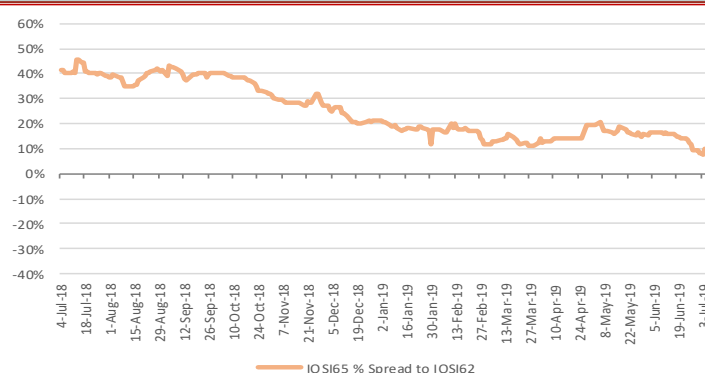
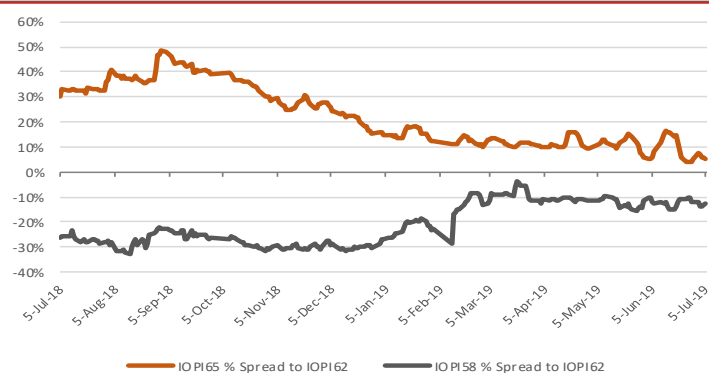
## IRON ORE INDEX NORMALISATION DIFFERENTIALS

Port Stock Index Product Differentials (RMB/wet tonne)				Seaborne Index Product Differentials (USD/dry tonne)			
	Applicable range	Value	Change		Applicable range	Value	Change
1% Fe	High Grade Fe 60 - 63%	13.00	-3.00	1% Fe	High Grade Fe 60 - 63%	2.25	0.00
	High Grade Fe 63 - 64%	7.00	-2.00		High Grade Fe 63 - 64%	2.50	0.00
	High Grade Fe 64 - 65%	7.00	-2.00		High Grade Fe 64 - 65%	2.50	0.00
	High Grade Fe 65 - 65.5%	7.00	-2.00		High Grade Fe 65 - 65.5%	2.50	0.00
1% Alumina	Low Grade Fe	11.00	0.00	1% Alumina	High Fe Grade Al <2.25%	1.50	-0.25
	High Fe Grade Al <2.25%	18.00	-2.00		High Fe Grade Al 2.25-4%	0.00	-0.25
	High Fe Grade Al 2.25-4%	0.00	0.00				
	Low Fe Grade Al <2.25%	65.00	0.00				
1% Silica	Low Fe Grade Al 2.25-4%	27.00	0.00	1% Silica	High Fe Grade Si <4%	1.25	0.00
	High Fe Grade Si <4%	2.00	0.00		High Fe Grade Si 4 - 6.5%	0.00	0.00
	High Fe Grade Si 4-6.5%	30.00	4.00				
	Low Fe Grade	3.00	0.00				
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	1.00	0.00	0.01%	High Fe Grade 0.09%<P<0.115%	0.00	0.00
	High Fe Grade 0.115%<P<0.15%	5.00	0.00	Phosphorus	High Fe Grade 0.115%<P<0.15%	0.50	0.00
	Low Fe Grade 0.09<P<0.1%	6.00	0.00				

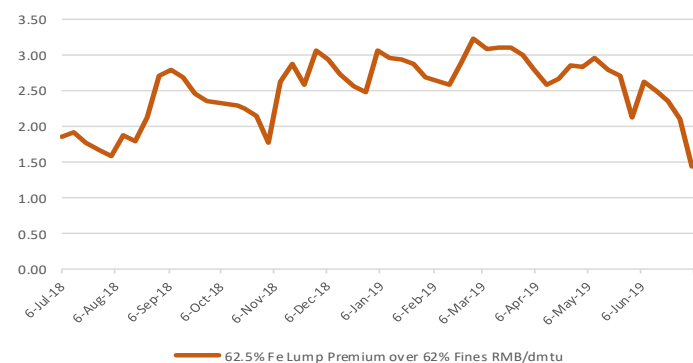
## Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-15.00	0.00	Fangcheng	-5.00	0.00	Lanshan	0.00	0.00	Qingdao	0.00	0.00
Beilun	5.00	0.00	Jiangyin	-15.00	0.00	Lianyungang	-10.00	0.00	Rizhao	0.00	0.00
Caofeidian	-15.00	0.00	Jingtang	-15.00	0.00	Majishan	0.00	0.00	Shekou	0.00	0.00
Dalian	-15.00	0.00	Lanqiao	0.00	0.00	Nantong	-25.00	0.00	Tianjin	0.00	0.00

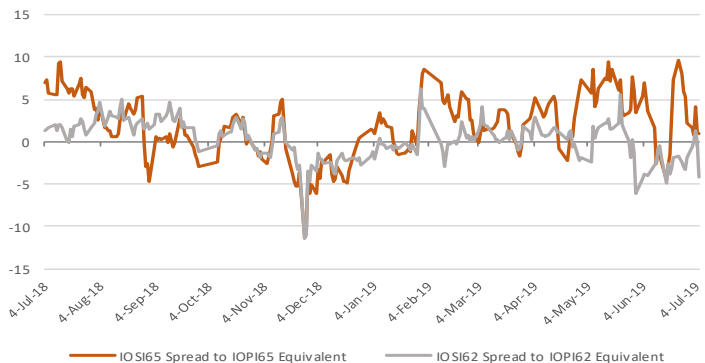
## IRON ORE INDEX PREMIUMS/DISCOUNTS



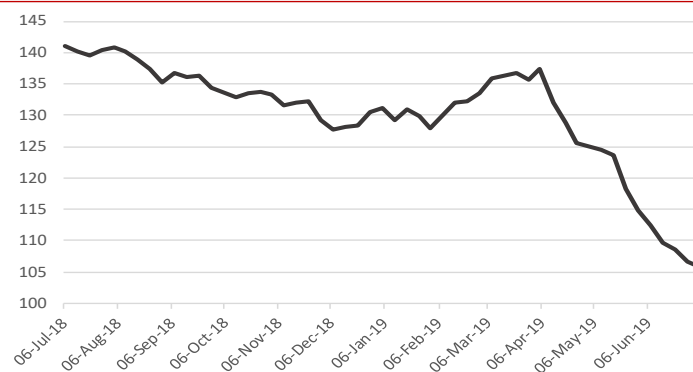
## WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



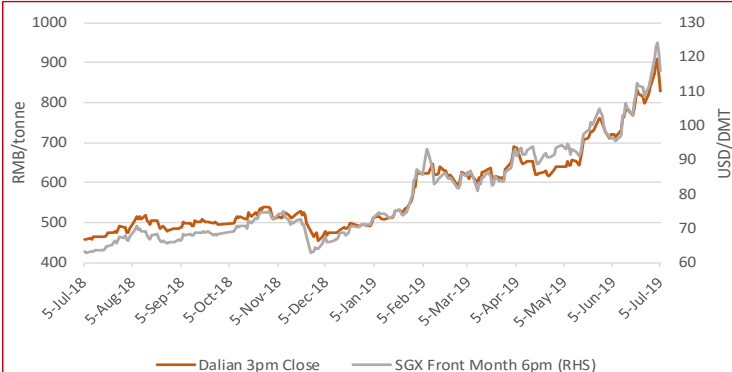
## IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



## TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



## FUTURE TRADING—FRONT MONTH CLOSING PRICE



## IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending July 5th, 2019

Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	10.96	-1.88%	10.96	17.20
Qingdao	13.86	-3.48%	13.37	19.01
Caofeidian	14.48	-2.43%	14.48	20.10
Tianjin	7.27	-1.62%	6.69	10.48
Rizhao	11.65	-1.94%	11.65	18.97
Total (35 Ports)	105.80	-0.82%	105.80	140.96

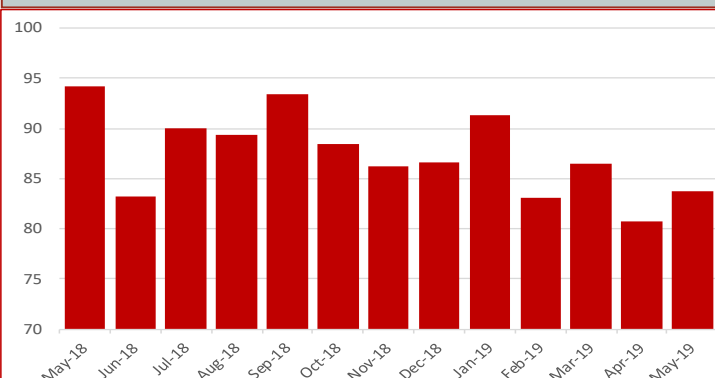
## IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	July 5th 3pm close			July 5th Feb 5.30 pm		
Contract	I1909	Change	Change %	Jul'19	Change	Change %
Closing Price	829.50	-38.5	-4.44%	116.00	-5.05	-4.17%
Vol traded ('000 lots)	380.20	30.0	8.57%	8.92	1.14	14.64%
Open positions ('000 lots)	142.51	-6.2	-4.19%	159.25	1.69	1.07%
Day Low	816.0	-40.0	-4.67%	115.50	-3.80	-3.19%
Day High	875.5	-29.5	-3.26%	120.85	-2.12	-1.72%

## DRY BULK FREIGHT RATES (USD/MT)



## TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



## STEEL SPOT MARKET PRICES—CHINA

## Steel Spot Market RMB/tonne

Product	28/6/2019	Change	Change %
ReBar HRB400 $\phi$ 18mm	4,010.0	120	3.08%
Wirerod Q300 $\phi$ 6.5mm	4,260.0	120	2.90%
HRC Q235/SS400 5.5mm*1500*C	3,920.0	130	3.43%
CRC SPPC/ST12 1.0mm*1250*2500	4,180.0	70	1.70%
Medium & Heavy Plate Q235B 20mm	3,950.0	30	0.77%
GI ST02Z 1.0mm*1000*C	4,590.0	30	0.66%
Colour Coated Plate	6,770.0	-30	-0.44%

## CHINESE STEEL MILL PROFITABILITY

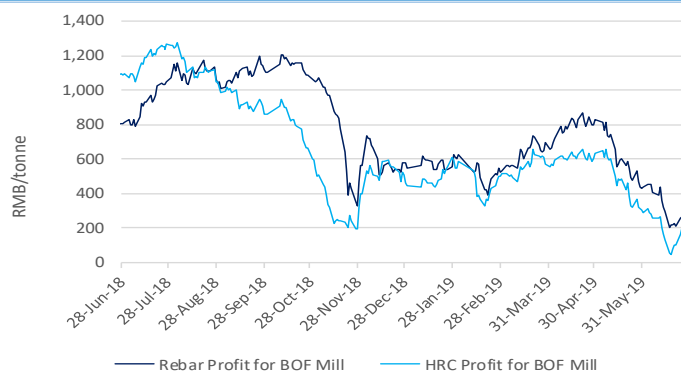
## SMM Tracking of Steel Mill P&amp;L - Rebar and Hot-rolled Coil (RMB/tonne)

Category	Price	Change (WoW)	Note
MMI (Fe 62%), USD/mt excluding tax	115.30	1.00	Mmi CFR Equivalent index for 1st Feb
Coke	2,060	-40	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,260	0	steel scrap (6mm) in Zhangjiagang, exl. tax
Billet Cost	3,384	-106	Q234, incl. tax
Rebar cost - Blast furnace	3,635	-4	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	325	114	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,701	-10	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	239	140	based on Shanghai prices, incl. tax

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

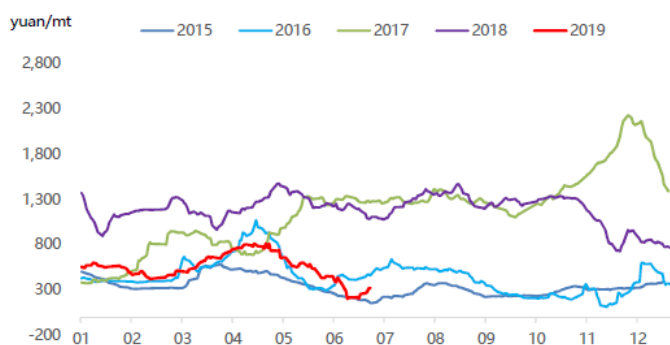
2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

## CHINESE STEEL MILL PROFITABILITY

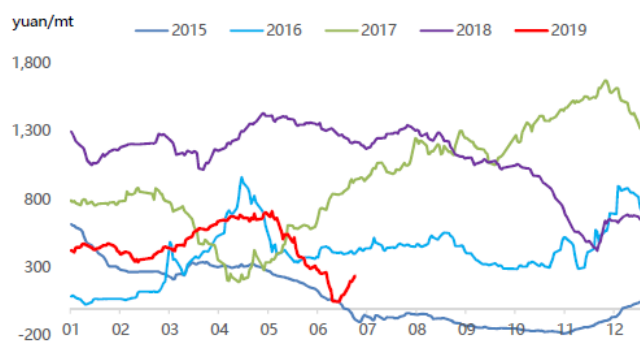


## CHINESE STEEL MILL PROFITABILITY

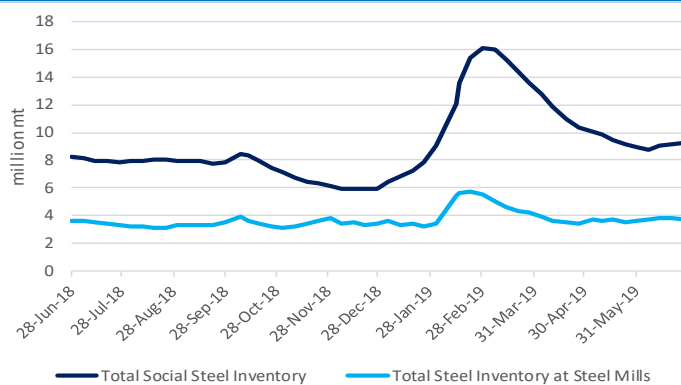
## Rebar profits



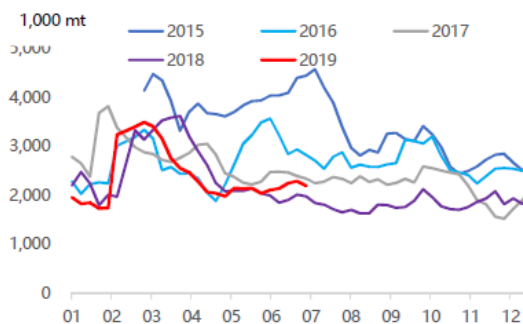
## Hot-rolled coil profits



## CHINESE STEEL INVENTORIES



## In-plant inventory of rebar



IRON ORE INDEX SPECIFICATIONS, COMPILATION RATIONALE AND DATA EXCLUSIONS

Iron Ore Index Specifications (Port and Seaborne)					Iron Ore Index Compilation Rationale and Data Exclusions			
Fe %	65% Fe Fines	62% Fe Fines	58% Fe Fines	62.5% Fe Lump	<p>MMi iron ore 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: <a href="http://www.mmiprices.com">www.mmiprices.com</a></p>			
Alumina %	65.00	62.00	58.00	62.50				
Silica%	1.40	2.25	2.25	1.50				
Phosphorus %	1.50	4.00	5.50	3.50				
Sulphur %	0.06	0.09	0.05	0.08				
Moisture %	0.01	0.02	0.02	0.02				
	8.00	8.00	9.00	4.00				
Sizing	Granular size below 10mm for at least 90% of cargo; maximum of 40% below 150 micron			Size below 6.3mm max 15% Size above 31.15mm max 25%				
Pricing Point	Qingdao Port (FOT and CFR respectively)			FOT Qingdao Port				
Timing (Seaborne)	Loading within 4 weeks, Delivery within 8 weeks			Delivery within 2 weeks				
Payment Terms	L/C at sight			L/C at sight or CAD				

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.

AVERAGE IRON ORE SPECIFICATIONS APPLIED FOR BRAND PRICE ASSESSMENTS

PORT STOCK BRANDS						SEABORNE BRANDS					
July 5th, 2019	Specifications applied for 62% brand assessments						Specifications applied for 62% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture		Fe	Alumina	Silica	Phos	Moisture
Roy Hill	61.16%	2.25%	4.61%	0.052%	9.35%	Roy Hill	60.70%	2.30%	4.90%	0.055%	8.00%
SIMEC Fines	60.00%	2.30%	6.30%	0.060%	6.00%	SIMEC Fines	60.00%	2.30%	6.30%	0.060%	6.00%
PB Fines	61.51%	2.36%	3.86%	0.101%	9.45%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	10.00%
Newman Fines	62.51%	2.27%	4.06%	0.083%	7.72%	Newman Fines	62.80%	2.20%	4.30%	0.080%	6.40%
MAC Fines	60.87%	2.24%	4.70%	0.081%	7.53%	MAC Fines	61.00%	2.70%	4.70%	0.110%	9.30%
Jimblebar Blended Fines	60.85%	3.00%	4.39%	0.113%	7.33%	Jimblebar Blended Fines	61.79%	2.67%	4.08%	0.115%	7.16%
Carajas Fines	65.56%	1.25%	1.42%	0.068%	8.56%	Carajas Fines	65.10%	1.50%	1.70%	0.080%	8.50%
Brazilian SSF	62.00%	1.00%	6.50%	0.040%	6.00%	Brazilian SSF	62.00%	1.00%	6.50%	0.040%	6.00%
Brazilian Blend Fines	62.85%	1.45%	4.81%	0.073%	8.28%	Brazilian Blend Fines	62.50%	1.50%	5.00%	0.070%	7.00%
RTX Fines	61.00%	3.10%	4.50%	0.135%	7.50%	RTX Fines	61.00%	3.10%	4.50%	0.135%	7.50%
West Pilbara Fines	60.10%	2.30%	4.70%	0.075%	8.50%	West Pilbara Fines	60.10%	2.30%	4.70%	0.075%	8.50%
July 5th, 2019	Specifications applied for 58% brand assessments										
	Fe	Alumina	Silica	Phos	Moisture						
SSF	56.72%	3.05%	6.27%	0.057%	8.49%						
FMG Blended Fines	58.16%	2.61%	5.44%	0.061%	7.53%						
Robe River	56.28%	2.91%	5.58%	0.035%	9.29%						
Western Fines	57.88%	2.87%	7.50%	0.062%	7.45%						
Atlas Fines	56.59%	2.55%	7.14%	0.080%	8.46%						
Yandi	57.43%	1.51%	6.36%	0.042%	8.66%						

BLOOMBERG TICKERS

PORT STOCK INDICES		
	FOT Qingdao (RMB/wet tonne)	CFR Qingdao Equivalent (USD/dry tonne)
IOP162	IRCNQ001	IRCNQ004
IOP158	IRCNQ002	IRCNQ005
IOP165	IRCNQ003	IRCNQ006

CONTACT US

**MMi Singapore Office Details:** Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7629 E: [jarek@mmiprices.com](mailto:jarek@mmiprices.com)  
**SMM Singapore Office Details:** Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7630 E: [service.en@smm.cn](mailto:service.en@smm.cn)  
**SMM Shanghai Office Details:** 9th FL, Building 9, Lujiazui Software Park, No.20, Lane 91, Pudong, Shanghai Tel: +86 021 5155 0306 E: [service.en@smm.cn](mailto:service.en@smm.cn)

Visit [www.mmiprices.com](http://www.mmiprices.com) for full index price histories and archive of daily reports

This information has been prepared by Metals Market Index ("MMI"). Use of the information presented here is at your sole risk, and any content, material and/or data presented or otherwise obtained through your use of the information in this document is at your own discretion and risk and you will be solely responsible for any damage to you personally or your company or organisation or business associates whatsoever which in anyway results from the use, reliance or application of such content material and/or information. Certain data has been obtained from various sources and any copyright existing in such data shall remain the property of the source. Except for the foregoing, MMi retains all copyright within this document. The copying or redistribution of any part of this document without the express written authority of MMi is forbidden.