












# MMi Dashboard



## Iron Ore Price Indices

<b>Iron Ore Port Stock (FOT Qingdao)</b> IOPI62 62% Fe Fines RMB/t  <b>741</b> -1 -0.13% October 16th 2019	<b>Iron Ore Port Stock (FOT Qingdao)</b> IOPI65 65% Fe Fines RMB/t  <b>778</b> 2 0.26% October 16th 2019	<b>Iron Port Stock (FOT Qingdao)</b> IOPI58 58% Fe Fines RMB/t  <b>635</b> -15 -2.31% October 16th 2019
<b>Iron Ore Seaborne (CFR Qingdao)</b> IOSI62 62% Fe Fines USD/dmt  <b>91.35</b> -1.15 -1.24% October 16th 2019	<b>Iron Ore Seaborne (CFR Qingdao)</b> IOSI65 65% Fe Fines USD/dmt  <b>99.10</b> -2.05 -2.03% October 16th 2019	<b>Iron Ore Port Stock (FOT Qingdao)</b> IOPLI 62.5% Fe Lump RMB/t  <b>839</b> 12 1.45% Week Ending October 11th, 2019


## Exchange Traded Contracts

<b>DCE Iron Ore 62% Fines</b> I2001 (Jan) RMB/t  <b>617.00</b> -27.00 -4.19% October 16th 2019 (3pm close)	<b>SGX Iron Ore (CFR Qingdao) 62% Fe Fines</b> November'19 USD/dmt  <b>83.26</b> -4.64 -5.28% October 16th 2019 (5.30 pm Print)	<b>SHFE Rebar</b> RB2001 (Jan) RMB/t  <b>3291</b> -55.00 -1.64% October 16th 2019 (3pm close)
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## Freight Rates

<b>C3, Tubarao - Qingdao USD/t</b>  <b>23.30</b> -0.28 -1.19% October 15th, 2019	<b>C5, W. Australia - Qingdao USD/t</b>  <b>9.04</b> -0.12 -1.34% October 15th, 2019
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## Steel Price

<b>Steel Rebar (China Domestic) RMB/t</b>  <b>3740</b> -20 -0.53% Week Ending October 11th, 2019
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## Inventory Levels

<b>Iron Ore Inventory at Chinese Ports (35 million tonnes)</b>  <b>116.64</b> 5.94 5.37% Week Ending October 11th, 2019	<b>Steel Inventory in China (million tonnes)</b>  <b>13.16</b> 0.86 6.99% Week Ending October 11th, 2019
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## Steel Price

<b>Steel HRC (China Domestic) RMB/t</b>  <b>3570</b> -30 -0.83% Week Ending October 11th, 2019
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## IRON ORE PORT STOCK INDEX (IOPI)

October 16th 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	741	-1	-0.1%	755	729	535	928	96.94	-0.19	-0.2%	98.82	97.47	68.50	126.12
IOPI58	58% Fe Fines	635	-15	-2.3%	653	640	375	823	83.55	-2.00	-2.3%	85.96	85.77	46.88	112.44
IOPI65	65% Fe Fines	778	2	0.3%	790	798	654	992	101.97	0.21	0.2%	103.67	107.06	85.47	135.34

## IRON ORE SEABORNE INDEX (IOSI)

## MARKET COMMENTARY

October 16th 2019		CFR Qingdao, USD/dry tonne							DCE iron ore futures plunged today and hit recent new low of 615yuan/mt. Physical iron ore port stock quotes declined by 10-15yuan/mt, and it was heard that PB Fines at Qingdao port traded at 697yuan/mt, down more than 20yuan/mt over yesterday. Traders in Shandong market say they adjusted their quotes to 715yuan/mt thought it wasn't easy to make a deal. Panic hung over the port stock market, with concluded transactions down sharply over yesterday. Handan city launched an orange alert for heavy pollution from 12 am October 16th and in response to yesterday's production cuts in Tangshan, iron ore deliveries from Jingtang and Caofeidian ports were shutdown, thus there were few inquiries in the Tangshan market.							
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>								
IOSI62	62% Fe Fines	91.35	-1.15	-1.24%	93.33	95.32	62.95	127.50								
IOSI65	65% Fe Fines	99.10	-2.05	-2.03%	99.58	107.01	83.20	137.95								

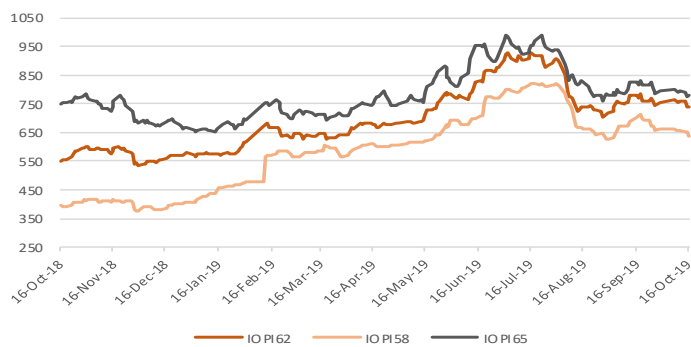
## IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending October 11th, 2019		FOT Qingdao (inc. 16% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne <sup>3</sup>						
Index	Fe Content	Price	W-o-W	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>	Price	W-o-W	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>
IOPLI62	62.5% Fe Lump	839	12	1.5%	839	889	710	1051	102.97	1.53	1.51%	102.97	112.75	88.56	133.81

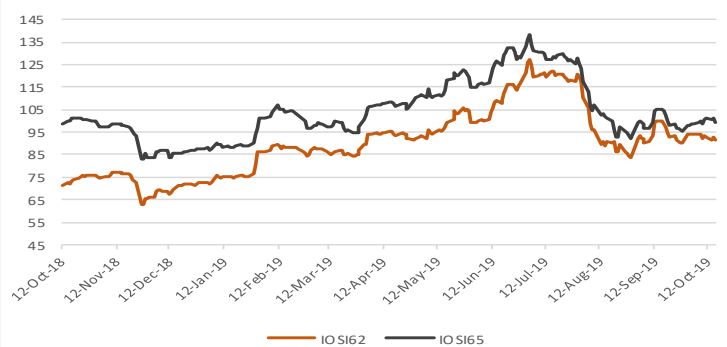
## IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending October 11th, 2019				RMB/tonne (excluding tax) <sup>3</sup>				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	857	-0.8%	644	1032	121.17	-0.81%	93.58	150.03
Hebei	Qian'an	65% Fe Concentrate	Dry	905	-0.5%	690	960	127.95	-0.55%	100.26	139.35
Liaoning	Anshan	65% Fe Concentrate	Wet	650	0.0%	535	745	91.90	0.00%	77.39	104.66
Shandong	Zibo	65% Fe Concentrate	Dry	895	0.0%	740	1040	126.54	0.00%	106.55	151.33
Week Ending October 11th, 2019				This week	Change %	Low <sup>2</sup>	High <sup>2</sup>	Exchange rate applied: RMB/USD = 7.0746 <sup>2</sup> Last 12 months			
China Mines Concentrate Composite Index RMB/WT				754.76	0.0%	609.04	859.50	Weekly exchange rate applied: RMB/USD 7.0728			

## 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

October 16th 2019		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	June	July	August	September	MTD	QTD	YTD	June	July	August	September	MTD	QTD	YTD
IOPI62	62% Fe Fines	825	909	759	758	755	755	729	98.40	111.42	123.29	100.18	98.82	98.82	97.47
IOPI58	58% Fe Fines	726	809	691	674	653	653	640	86.39	98.60	110.47	91.86	85.96	85.96	85.77
IOPI65	65% Fe Fines	901	954	823	803	790	790	798	110.00	121.97	129.53	108.92	103.67	103.67	107.06

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

## FREIGHT RATES

October 16th 2019		CFR Qingdao, USD/dry tonne							October 15th, 2019							
Index	Fe Content	June	July	August	September	MTD	QTD	YTD	Route		Designation	Change	Change %	Low <sup>2</sup>	High <sup>2</sup>	
IOSI62	62% Fe Fines	108.57	120.82	92.61	93.76	93.33	93.33	95.32	W. Australia - Qingdao		C5	9.04	-0.12	-1.34%	4.39	11.42
IOSI65	65% Fe Fines	124.49	129.53	101.34	99.42	99.58	99.58	107.01	Tubarao - Qingdao		C3	23.30	-0.28	-1.19%	11.61	29.10

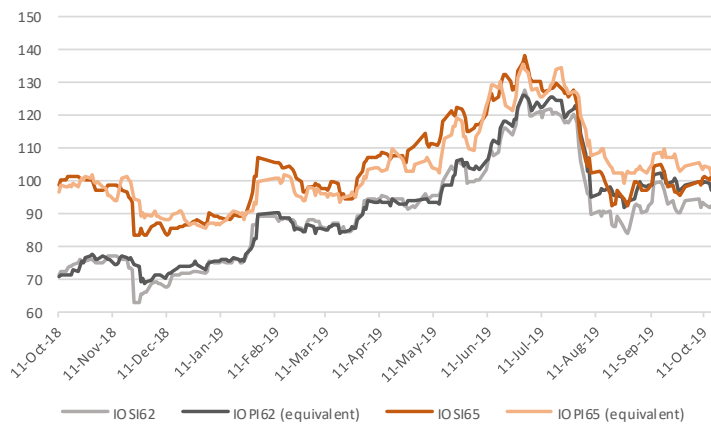
## IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending October 11th, 2019		FOT Qingdao (inc. 16% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne <sup>1</sup>						
Index	Fe Content	June	July	August	September	MTD	QTD	YTD	May	June	July	September	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	1009	1046	870	803	839	839	889	128.00	132.99	108.80	98.44	102.97	102.97	112.75

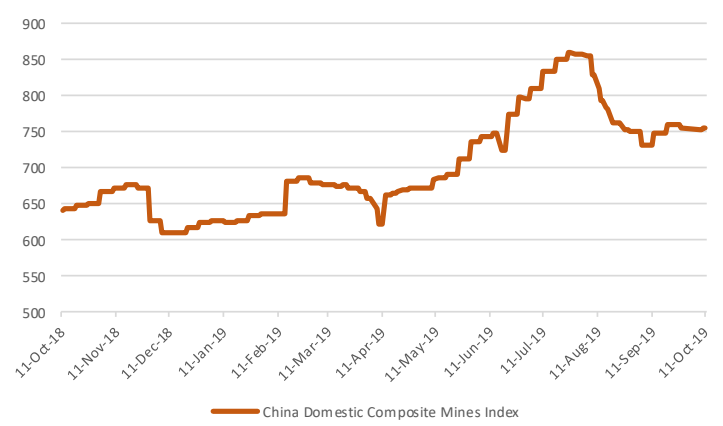
## IRON ORE INDEX PREMIUMS/DISCOUNTS

October 16th 2019				PORT STOCK INDEX (RMB/WT)				October 16th 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	-106		-14.30%		IOSI65	65% Fe Fines	7.75		8.48%					
IOPI65	65% Fe Fines	37		4.99%											

## IRON ORE INDEX COMPARISONS (USD/DMT)



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



## IRON ORE BRAND SPOT PRICE ASSESSMENTS

October 16th 2019				October 16th 2019			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	707	-1	-34	Roy Hill	88.31	-1.40	-3.04
SIMEC Fines	683	2	-58	SIMEC Fines	85.16	-1.75	-6.19
PB Fines	714	-3	-27	PB Fines	89.69	-1.40	-1.66
Newman Fines	747	0	6	Newman Fines	91.65	-1.24	0.30
MAC Fines	717	-1	-24	MAC Fines	87.66	-1.55	-3.69
Jimblebar Blended Fines	651	-6	-90	Jimblebar Blended Fines	76.99	-2.82	-14.36
Carajas Fines	779	2	38	Carajas Fines	98.17	-1.87	6.82
Brazilian SSF	714	7	-27	Brazilian SSF	87.60	-2.09	-3.75
Brazilian Blend Fines	742	2	1	Brazilian Blend Fines	90.47	-1.59	-0.88
RTX Fines	676	-2	-65	RTX Fines	82.71	-2.20	-8.64
West Pilbara Fines	695	-1	-46	West Pilbara Fines	88.06	-1.35	-3.29

October 16th 2019			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	611	-15	-24
FMG Blended Fines	645	-16	10
Robe River	613	-14	-22
Western Fines	608	-15	-27
Atlas Fines	596	-15	-39
Yandi	614	-16	-21

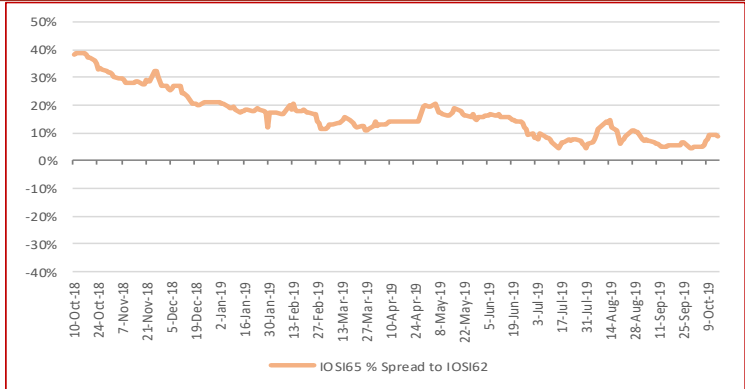
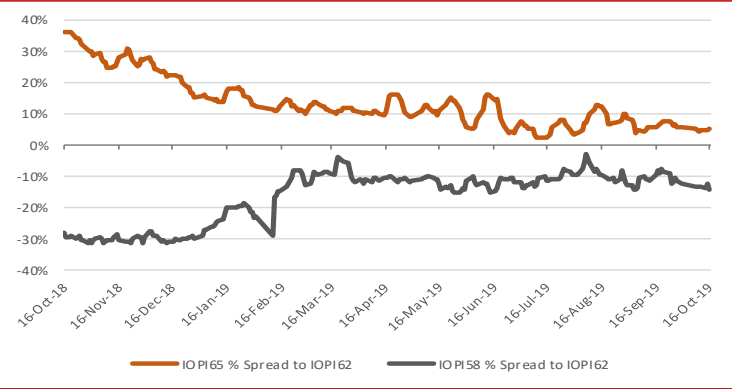
## IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	15.00	1.00	1% Fe	High Grade Fe 60 - 63%	1.00	0.00
	High Grade Fe 63 - 64%	5.00	0.00		High Grade Fe 63 - 64%	1.50	-0.25
	High Grade Fe 64 - 65%	5.00	0.00		High Grade Fe 64 - 65%	1.50	-0.25
	High Grade Fe 65 - 65.5%	5.00	0.00		High Grade Fe 65 - 65.5%	1.50	-0.25
	Low Grade Fe	10.00	0.00				
1% Alumina	High Fe Grade Al <2.25%	2.00	2.00	1% Alumina	High Fe Grade Al <2.25%	0.50	-0.25
	High Fe Grade Al 2.25-4%	30.00	0.00		High Fe Grade Al 2.25-4%	3.25	0.50
	Low Fe Grade Al <2.25%	0.00	-2.00				
	Low Fe Grade Al 2.25-4%	3.00	0.00				
1% Silica	High Fe Grade Si <4%	4.00	0.00	1% Silica	High Fe Grade Si <4%	1.00	0.00
	High Fe Grade Si 4-6.5%	18.00	-2.00		High Fe Grade Si 4 - 6.5%	1.75	0.25
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	7.00	2.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.00	0.00
	High Fe Grade 0.115%<P<0.15%	1.00	-2.00		High Fe Grade 0.115%<P<0.15%	2.00	0.25
	Low Fe Grade 0.09<P<0.1%	0.00	0.00				

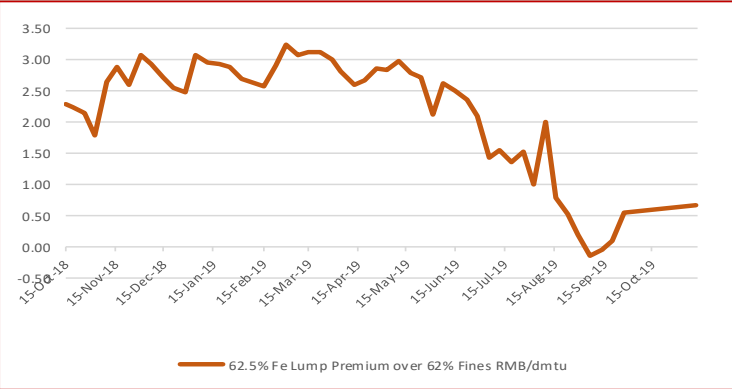
## Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-50.00	0.00	Fangcheng	-5.00	0.00	Lanshan	0.00	0.00	Qingdao	0.00	0.00
Beilun	5.00	0.00	Jiangyin	-20.00	0.00	Lianyungang	0.00	0.00	Rizhao	0.00	0.00
Caofeidian	-10.00	0.00	Jingtang	-10.00	0.00	Majishan	0.00	0.00	Shekou	0.00	0.00
Dalian	-50.00	0.00	Lanqiao	0.00	0.00	Nantong	-10.00	0.00	Tianjin	-25.00	0.00

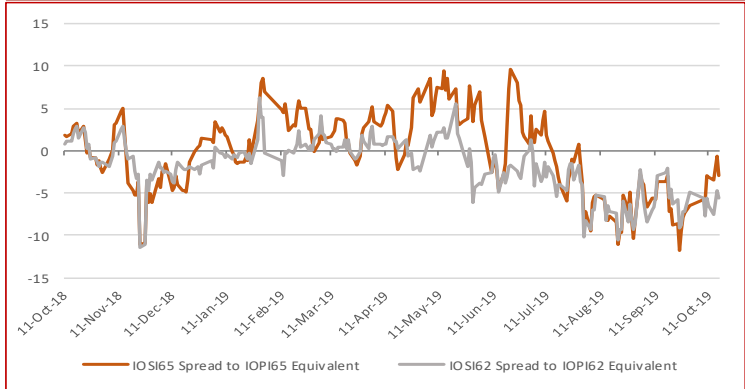
IRON ORE INDEX PREMIUMS/DISCOUNTS



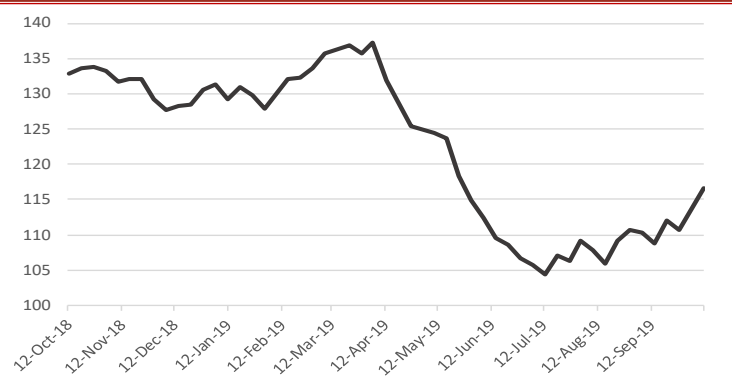
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



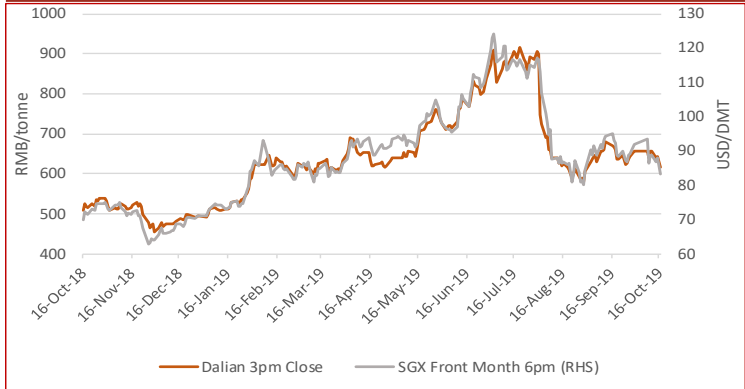
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



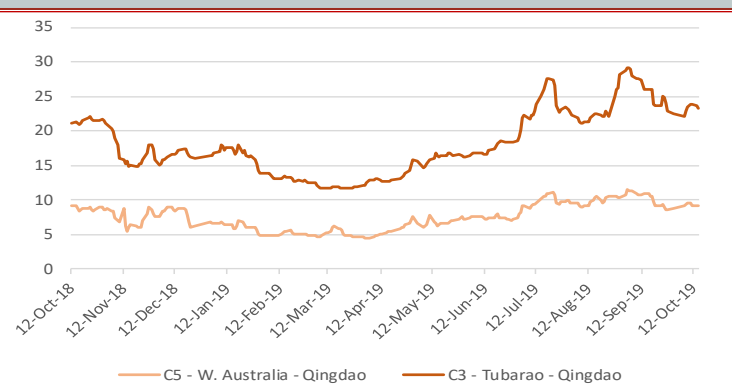
IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending October 11th, 2019				
Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	15.16	14.24%	10.80	16.37
Qingdao	13.96	6.00%	12.38	19.01
Caofeidian	16.72	12.21%	14.32	19.96
Tianjin	7.27	14.13%	6.37	10.05
Rizhao	13.04	14.29%	11.41	17.10
<b>Total (35 Ports)</b>	<b>116.64</b>	<b>5.37%</b>	<b>104.40</b>	<b>137.30</b>

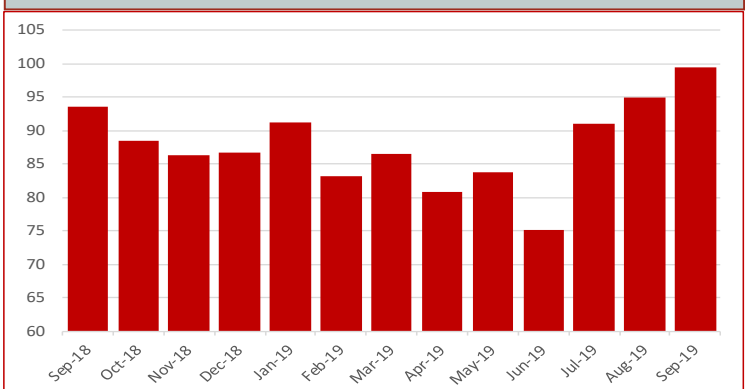
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Oct 16th 3pm close			Oct 16th 5:30 pm		
	Contract	Change	Change %	Nov'19	Change	Change %
Closing Price	617.00	-27.0	-4.19%	83.26	-4.64	-5.28%
Vol traded ('000 lots)	231.51	24.3	11.73%	18.62	7.16	62.41%
Open positions ('000 lots)	176.77	11.7	7.09%	134.04	0.77	0.58%
Day Low	615.0	-15.0	-2.38%	83.02	-2.91	-3.39%
Day High	644.0	-2.0	-0.31%	87.09	-0.83	-0.94%

DRY BULK FREIGHT RATES (USD/MT)



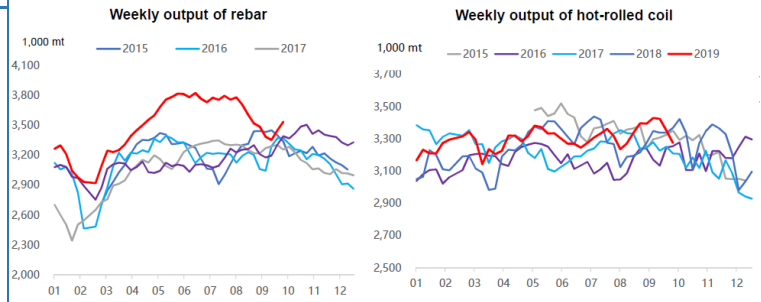
TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne

Product	11/10/2019	Change	Change %
ReBar HRB400 φ18mm	3,740.0	-20	-0.53%
Wirerod Q300 φ6.5mm	4,100.0	30	0.74%
HRC Q235/SS400 5.5mm*1500*C	3,570.0	-30	-0.83%
CRC SPPC/ST12 1.0mm*1250*2500	4,270.0	-10	-0.23%
Medium & Heavy Plate Q235B 20mm	3,760.0	-10	-0.27%
GI ST02Z 1.0mm*1000*C	4,490.0	0	0.00%
Colour Coated Plate	6,850.0	0	0.00%



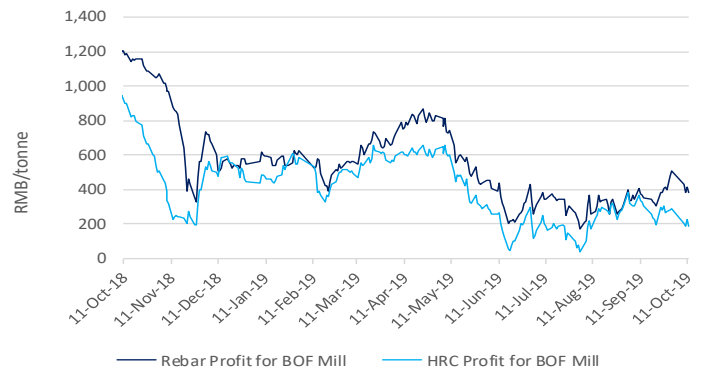
CHINESE STEEL MILL PROFITABILITY

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

Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	93.60	3.50	Mmi CFR Equivalent index for 1st Feb
Coke	1,910	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,380	80	steel scrap (6mm) in Zhangjiagang, exl. tax
Billet Cost	3,083	49	Q234, incl. tax
Rebar cost - Blast furnace	3,323	44	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	387	-14	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,399	48	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	201	-68	based on Shanghai prices, incl. tax

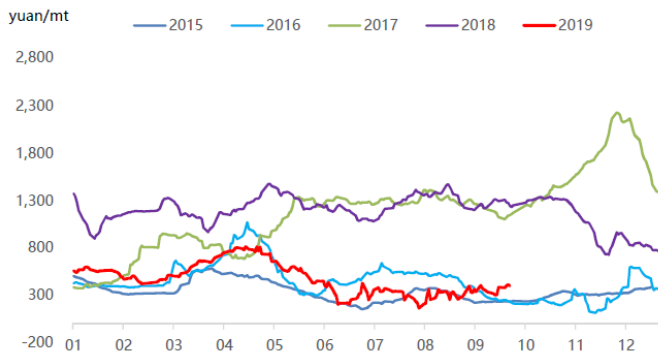
Note: 1.Costs in the table are calculated based on todays market prices and facout our management, sales, financial and depreciations fees.  
2.The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

CHINESE STEEL MILL PROFITABILITY

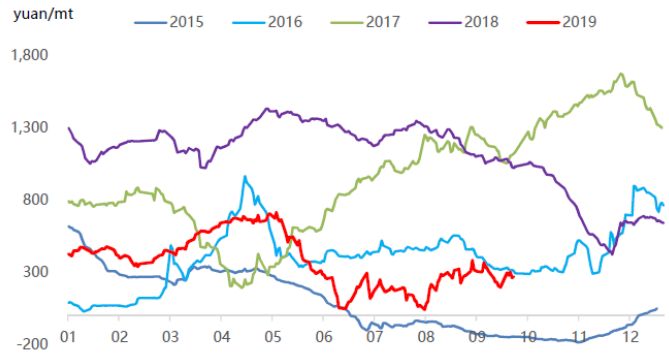


CHINESE STEEL MILL PROFITABILITY

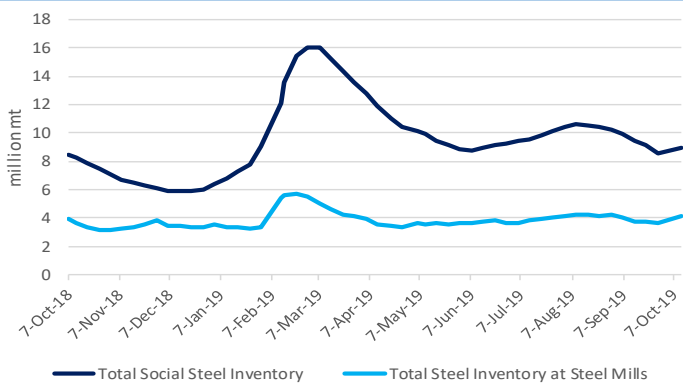
Rebar profits



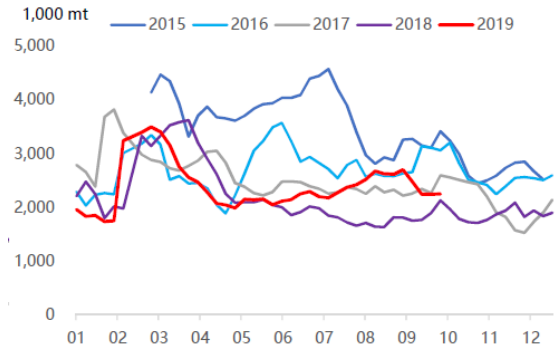
Hot-rolled coil profits



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
	<b>65% Fe Fines</b>	<b>62% Fe Fines</b>	<b>58% Fe Fines</b>	<b>62.5% Fe Lump</b>	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.  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>
Fe %	65.00	62.00	58.00	62.50	
Alumina %	1.40	2.25	2.25	1.50	
Silica%	1.50	4.00	5.50	3.50	
Phosphorus %	0.06	0.09	0.05	0.08	
Sulphur %	0.01	0.02	0.02	0.02	
Moisture %	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	

Data Exclusions*			
	62%	58%	65%
Port Index	0	0	0
Seaborne Index	0		0
Lump Index 62.5	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

## 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					
October 16th 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	61.55%	2.40%	3.66%	0.097%	9.56%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	10.00%
Newman Fines	62.51%	2.18%	4.13%	0.092%	7.75%	Newman Fines	62.80%	2.20%	4.30%	0.080%	6.40%
MAC Fines	60.90%	2.24%	4.60%	0.080%	7.62%	MAC Fines	61.00%	2.70%	4.70%	0.110%	9.30%
Jimblebar Blended Fines	60.55%	3.03%	4.57%	0.118%	7.55%	Jimblebar Blended Fines	59.50%	3.70%	5.80%	0.135%	8.30%
Carajas Fines	65.47%	1.30%	1.34%	0.077%	8.19%	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	62.92%	1.54%	4.60%	0.069%	8.39%	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%

BLOOMBERG TICKERS					
PORT STOCK INDICES			SEABORNE INDICES		
	FOT Qingdao (RMB/wet tonne)	CFR Qingdao Equivalent (USD/dry tonne)		CFR Qingdao (USD/DMT)	
IOPI62	IRCNO001	IRCNO004	IOSI62	IRCNO034	
IOPI58	IRCNO002	IRCNO005	IOSI65	IRCNO035	
IOPI65	IRCNO003	IRCNO006			
IOPLI62	IRCNO036	IRCNO037			

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