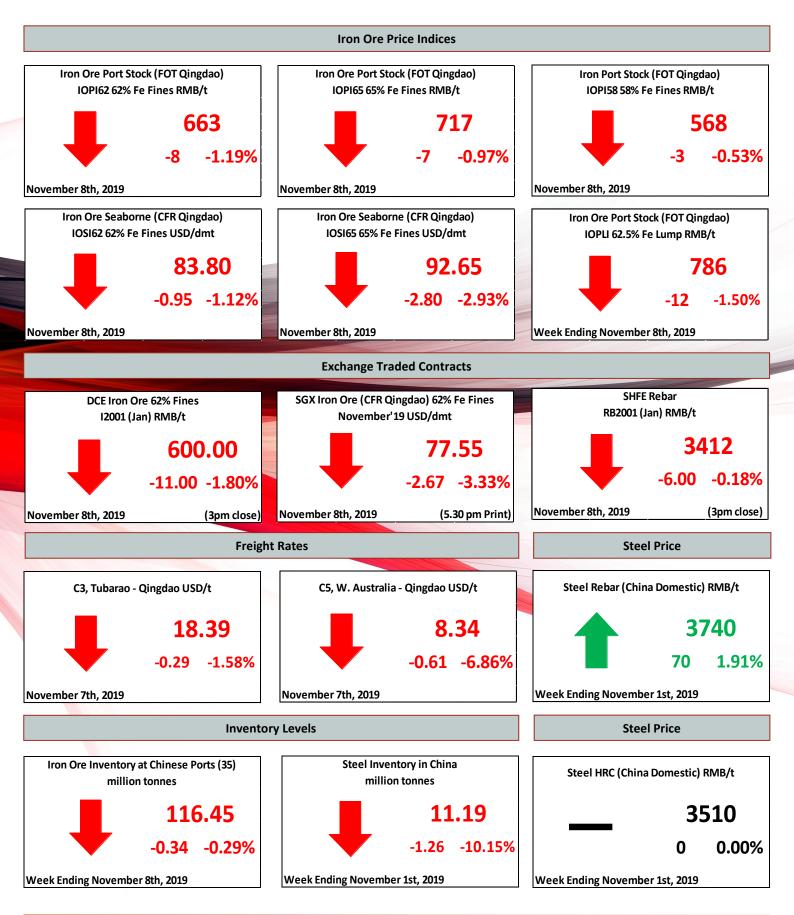


# **MMi Dashboard**



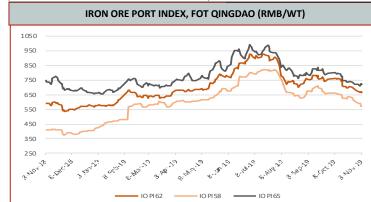
www.mmiprices.com

## MMi Daily Iron Ore Index Report

## IRON ORE PORT STOCK INDEX (IOPI)

						IKON U	KE PUKI S	TOCK INDE							
Novembe	r 8th, 2019		FOT	Qingdao (	inc. 13% V	AT), RMB/we	t tonne			CFR Qingd	ao Equivalen	t (exc. 13%	VAT), USD/	dry tonne	1
Index	Fe Content	Price	Change	Change	% МТІ	O 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 Fine	663	-8	-1.2%	671	726	535	928	87.33	-1.02	-1.2%	88.05	96.88	68.50	126.12
IOPI58	58% Fe Fine	568	-3	-0.5%	585	638	375	823	75.08	-0.35	-0.5%	77.15	85.32	46.88	112.44
IOPI65	65% Fe Fine	717	-7	-1.0%	718	3 792	654	992	94.75	-0.88	- <b>0.9%</b>	94.47	106.14	85.47	135.34
IRON ORE SEABORNE INDEX (IOSI)											MARKE	т соммі	ENTARY		
November 8th, 2019 CFR Qingdao, USD/dry tonne									on ore stocks across				-		
Index	Fe Content	Price	Change	Change	% MTI	о утр	Low <sup>2</sup>	High <sup>2</sup>	ed for the dec	line. Daily averag	ber 8, and were als ge deliveries from t	he 35 ports decr	eased 117,000 m	it on a weekly b	asis to 2.75
IOSI62	62% Fe Fine	83.80	-0.95	-1.129	6 84.3	8 94.66	62.95	127.50			ed declines in price ntenance at some			vinter cut policie	es drove steel
IOSI65	65% Fe Fine	92.65	-2.80	-2.93%	6 93.7	1 106.07	83.20	137.95							
IRON ORE PORT LUMP INDEX (IOPLI)															
Week Endi 8th, 2019	ng November		FOT C	Qingdao (	inc. 16% V	AT), RMB/we	t tonne		CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne <sup>3</sup>						
Index	Fe Content	Price	W-o-W	Change	% MT	D YTD	Low <sup>2</sup>	High <sup>2</sup>	Price	W-oW	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>
IOPLI62	62.5% Fe Lum	786	-12	-1.5%	792	881	743	1051	97.02	-0.94	-0.96%	97.49	111.50	93.24	133.81
			IRO	N ORE D	OMESTIC		ATE SPOT P	RICE ASSES	SMENTS A	ND COMP	OSITE INDE	х			
Week End	ing Novembe	1st, 2019				RMB/t	onne (exclu	ding tax) <sup>3</sup>			ι	USD/tonne	(excluding t	ax) <sup>3</sup>	
Province	Regior	Produc	t	Basis	This wee	ek Chan	ge %	Low <sup>2</sup>	High <sup>2</sup>	This	week	Change %	Low	2	High <sup>2</sup>
Hebei	Hanxin	g 66% Fe	Concentrate	Dry	806	-1.7	7%	644	1032	11	4.19	-1.53%	93.5	58	150.03
Hebei	Qian'a	n 65% Fe	Concentrate	Dry	880	-2.2	2%	690	960	12	24.67	-2.04%	100.	26	139.35
Liaoning	Ansha	65% Fe	Concentrate	Wet	650	0.0	1%	535	745	9	2.09	0.18%	77.3	39	104.66
Shandong	Zibo	65% Fe	Concentrate	Dry	855	0.0	1%	740	1040	12	21.13	0.18%	106.	55	151.33
Week Ending November 1st, 2019 This week Change % Low <sup>2</sup> High <sup>2</sup> 'Exchange									<sup>1</sup> Exchange ra	te applied: RMB	/USD = 7.6995 <sup>2</sup> Las	st 12 months			

China Mines Concentrate Composite Index RMB/WT 742.69 -0.9% 609.04 859.50 <sup>3</sup>Weekly exchange rate applied: RMB/USD 7.0160





			IF	RON ORE PO	RT STOCK	INDEX MO	ONTHLY, C	UARTERLY	AND YEA	R-TO-DA	TE AVE	RAGES	i			
Novembe	r 8th, 2019		FO	T Qingdao (ind	c. 13% VAT),	, RMB/wet t	tonne		CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne							
Index	Fe Conten	July	August	September	October	MTD	QTD	YTD	July	Augus	t Sep	tember	October	MTD	QTD	YTD
IOPI62	62% Fe Fine	s 909	759	758	721	671	708	726	111.42	123.2	9 10	00.18	94.29	88.05	92.73	96.88
IOPI58	58% Fe Fine	s 809	691	674	636	585	623	638	98.60	110.4	7 9	1.86	83.57	77.15	81.96	85.32
IOPI65	65% Fe Fine	s 954	823	803	758	718	748	792	121.97	129.5	3 1	08.92	99.32	94.47	98.10	106.14
IRO	N ORE SEAB	ORNE IND	EX MONTH	LY, QUARTE	RLY AND Y	EAR-TO-D	ATE AVER	AGES				FR	EIGHT RA	TES		
Novembe	r 8th, 2019			CFR Qing	dao, USD/d	ry tonne			November 7th, 2019 FREIGHT RATES - DRY BULK US\$/wet t					LK US\$/wet tor	ine	
Index	Fe Conten	July	August	September	October	MTD	QTD	YTD	Route	D	esignatior		Change	Change %	Low <sup>2</sup>	High <sup>2</sup>
IOSI62	62% Fe Fine	s 120.82	92.61	93.76	90.81	84.38	89.44	94.66	W. Australia	- Qingdao	C5	8.34	-0.61	-6.86%	4.39	11.42
IOSI65	65% Fe Fine	s 129.53	3 101.34	99.42	97.45	93.71	96.65	106.07	Tubarao - Qii	ngdao	C3	18.39	-0.29	-1.58%	11.61	29.10
			IF	RON ORE PO	RT LUMP	INDEX MO	NTHLY, Q	UARTERLY	AND YEA	R-TO-DAT	'E AVE	RAGES				
Week Endir 8th, 2019	ıg November		FOT	Qingdao (inc	. 16% VAT)	, RMB/wet	tonne		CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne <sup>1</sup>						1	
Index	Fe Conten	: July	August	September	r October	MTD	QTD	YTD	May	June		July	October	MTD	QTD	YTD
IOPLI62	62.5% Fe Lun	p 1046	870	803	829	792	814	881	128.00	132.9	91	08.80	98.44	97.49	100.04	111.50
	IRON ORE INDEX PREMIUMS/DISCOUNTS															
November	8th, 2019			PORT STOC	K INDEX (RIV	1B/WT)		November 8	8th, 2019				SEABOR	NE INDEX (US	SD/DMT)	
Index	Fe	Content	Sprea	d to IOPI62	%	Spread to IC	DPI62	Index	F	e Content		Sprea	d to IOSI62		% Spread to	IOSI62
IOPI58		Fe Fines		-95		-14.33%										
IOPI65	65%	Fe Fines		54		8.14%		IOSI65	65	5% Fe Fines			8.85		10.56%	b

## MMi Daily Iron Ore Index Report

## November 8th, 2019



## IRON ORE BRAND SPOT PRICE ASSESMENTS

9

-24

-13

-30 -9

-4

-1

3

4

3

November 8th, 2019	PORT	STOCK INDEX (R	MB/WT)	N
	Price	Change	Diff to IOPI62	
Roy Hill	622	-18	-41	R
SIMEC Fines	592	-38	-71	s
PB Fines	642	-8	-21	Р
Newman Fines	672	-7	9	N
MAC Fines	631	-18	-32	N
Jimblebar Blended Fines	579	-21	-84	Ji
Carajas Fines	720	-7	57	c
Brazilian SSF	645	-34	-18	в
Brazilian Blend Fines	675	-12	12	в
RTX Fines	606	-22	-57	R
West Pilbara Fines	610	-21	-53	v
November 8th, 2019	PORT	STOCK INDEX (F	MB/WT)	
	Price	Change	Diff to IOPI58	
SSF	547	0	-21	

577

544

555

538

559

PU	JI PRICE ASSESIVIEN IS							
	November 8th, 2019	SEABORNE INDEX (USD/DMT)						
		Price	Change	Diff to IOSI62				
	Roy Hill	80.76	-0.95	-3.04				
	SIMEC Fines	77.61	-0.95	-6.19				
	PB Fines	82.14	-0.95	-1.66				
	Newman Fines	84.15	-0.95	0.35				
	MAC Fines	78.11	-0.95	-5.69				
	Jimblebar Blended Fines	67.94	-0.95	-15.86				
	Carajas Fines	94.15	-0.95	10.35				
	Brazilian SSF	81.30	-0.95	-2.50				
	Brazilian Blend Fines	83.67	-0.95	-0.13				
	RTX Fines	73.66	-0.95	-10.14				
	West Pilbara Fines	80.51	-0.95	-3.29				

				IRON ORE IN	NDEX NORMA	LISATION DIFFER	ENTIALS				
Por	t Stock Index	Product Differ	entials (RI	MB/wet tonne	)	Se	aborne Inde	x Product D	ifferentials (	USD/dry tonne	)
	Ар	plicable range		Value	Change		A	pplicable rar	ige	Value	Change
	High Grade	e Fe 60 - 63%		18.00	3.00		High Grad	de Fe 60 - 63	%	1.00	0.00
	High Grade	e Fe 63 - 64%		3.00 -1.00		High Grade Fe 63 - 64%		2.00	0.00		
1% Fe	High Grade	High Grade Fe 64 - 65%			-1.00	1% Fe	High Grad	High Grade Fe 64 - 65% High Grade Fe 65 - 65.5%		2.00	0.00
	High Grade Fe 65 - 65.5%			3.00	-1.00		High Grad			2.00	0.00
	Low Grade	Fe		12.00	-1.00						
	High Fe Gra	ade Al <2.25%		15.00	0.00		High Fe G	rade Al <2.2	5%	1.50	0.00
1% Alumina	High Fe Gra	ade Al 2.25-4%		23.00	3.00	1% Alumina	High Fe G	High Fe Grade Al 2.25-4%		3.25	0.00
1% Alumina	Low Fe Gra	de Al <2.25%		13.00	3.00	1% Alumina					
	Low Fe Gra	Low Fe Grade Al 2.25-4%		1.00	0.00						
	High Fe Gra	ade Si <4%		7.00	0.00		High Fe G	rade Si <4%		1.75	0.00
1% Silica	High Fe Gra	ade Si 4-6.5%		20.00	10.00	1% Silica	High Fe G	rade Si 4 - 6	.5%	1.75	0.00
	Low Fe Gra	de		10.00	-3.00						
0.01%	High Fe Gra	ade 0.09% <p<0< td=""><td>.115%</td><td>2.00</td><td>-1.00</td><td>0.01%</td><td>High Fe G</td><td>rade 0.09%&lt;</td><td>P&lt;0.115%</td><td>1.00</td><td>0.00</td></p<0<>	.115%	2.00	-1.00	0.01%	High Fe G	rade 0.09%<	P<0.115%	1.00	0.00
	High Fe Gra	ade 0.115% <p<< td=""><td>0.15%</td><td>4.00</td><td>3.00</td><td>Phosphorus</td><td>High Fe G</td><td>rade 0.115%</td><td>6<p<0.15%< td=""><td>1.50</td><td>0.00</td></p<0.15%<></td></p<<>	0.15%	4.00	3.00	Phosphorus	High Fe G	rade 0.115%	6 <p<0.15%< td=""><td>1.50</td><td>0.00</td></p<0.15%<>	1.50	0.00
Phosphorus	Low Fe Gra	de 0.09 <p<0.19< td=""><td>%</td><td>1.00</td><td>0.00</td><td></td><td></td><td></td><td></td><td></td><td></td></p<0.19<>	%	1.00	0.00						
			Port St	ock Price Differe	ntials to Qingd	ao Port for PB Fine	s (RMB/wet t	onne)			
Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-55.00	0.00	Fangcheng	g - <b>5.00</b>	0.00	Lanshan	0.00	0.00	Qingdao	0.00	0.00
Beilun	5.00	0.00	Jiangyin	-25.00	0.00	Lianyungang	0.00	0.00	Rizhao	0.00	0.00
Caofeidian	0.00	0.00	Jingtang	0.00	0.00	Majishan	0.00	0.00	Shekou	0.00	0.00
Dalian	-55.00	0.00	Lanqiao	0.00	0.00	Nantong	-10.00	0.00	Tianjin	0.00	0.00

FMG Blended Fines

Robe River

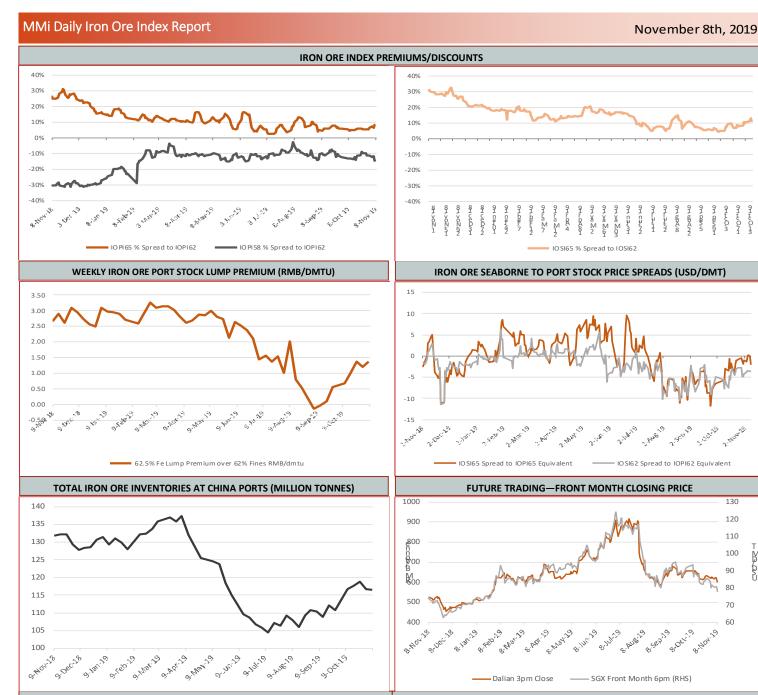
Atlas Fines

Yandi

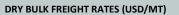
Western Fines

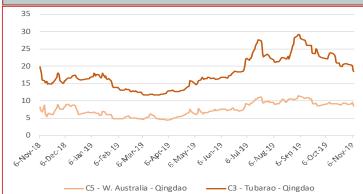
#### November 8th, 2019

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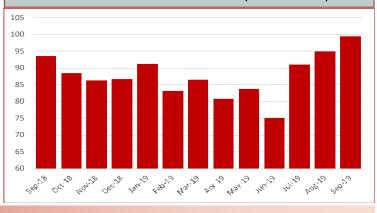


Week Ending November 8th, 2019   Province This week Change % Low 2 High 2   Jingtang 15.75 -1.07% 10.80 17.00   Qingdao 13.75 -0.07% 12.38 19.01   Caofeidian 15.93 -0.25% 14.32 19.40   Tianjin 7.58 3.55% 6.37 10.05   Rizhao 13.58 -2.37% 11.41 17.10   Total (35 Ports) 116.45 -0.29% 104.40 137.30	I	IRON ORE PORT INVENTORIES (MILLION TONNES)											
Jingtang 15.75 -1.07% 10.80 17.00   Qingdao 13.75 -0.07% 12.38 19.01   Caofeidian 15.93 -0.25% 14.32 19.40   Tianjin 7.58 3.55% 6.37 10.05   Rizhao 13.58 -2.37% 11.41 17.10	Week Ending Nove	Week Ending November 8th, 2019											
Qingdao 13.75 -0.07% 12.38 19.01   Caofeidian 15.93 -0.25% 14.32 19.40   Tianjin 7.58 3.55% 6.37 10.05   Rizhao 13.58 -2.37% 11.41 17.10	Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>								
Caofeidian 15.93 -0.25% 14.32 19.40   Tianjin 7.58 3.55% 6.37 10.05   Rizhao 13.58 -2.37% 11.41 17.10	Jingtang	15.75	-1.07%	10.80	17.00								
Tianjin 7.58 3.55% 6.37 10.05   Rizhao 13.58 -2.37% 11.41 17.10	Qingdao	13.75	-0.07%	12.38	19.01								
Rizhao 13.58 -2.37% 11.41 17.10	Caofeidian	15.93	-0.25%	14.32	19.40								
	Tianjin	7.58	3.55%	6.37	10.05								
Total (35 Ports) 116.45 -0.29% 104.40 137.30	Rizhao	13.58	-2.37%	11.41	17.10								
	Total (35 Ports)	116.45	-0.29%	104.40	137.30								





**IRON ORE FUTURES CONTRACTS** DCE (RMB/WMT) SGX (USD/DMT) Nov 8th 3pm close Nov 8th 5.30 pm **Closing Date** Contract 12001 Change Change % Dec'19 Change Change % Closing Price 600.00 -11.0 -1.80% 77.55 -2.67 -3.33% Vol traded ('000 lots) 151.81 -10.0 -6.17% 16.61 1.99 13.62% Open positions ('000 lots) 152.40 -0.6 -0.42% 148.64 4.15 2.87% Day Low 599.5 -11.0 -1.80% 77.24 -2.58 -3.23% Day High 613.5 -11.0 -1.76% 79.95 -1.28 -1.58% TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



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November 8th, 2019

В

8

## MMi Daily Iron Ore Index Report

### STEEL SPOT MARKET PRICES-CHINA

Steel Spot Market RMB/tonne				Weekly output of rebar	Weekly output of hot-rolled coil
Product	1/11/2019	Change	Change %	1,000 mt201520162017	1,000 mt20152016201720182019
ReBar HRB400 ?18mm	3,740.0	70	1.91%	4,100	3,700
Wirerod Q300 ?6.5mm	4,130.0	70	1.72%	3,500	3,300
HRC Q235/SS400 5.5mm*1500*C	3,510.0	0	0.00%	3,200	3,100
CRC SPCC/ST12 1.0mm*1250*2500	4,210.0	-10	-0.24%	2,600	2,900
Medium & Heavy Plate Q235B 20mm	3,680.0	-20	-0.54%	2,000	2,500
GI ST02Z 1.0mm*1000*C	4,350.0	-30	-0.68%	01 02 03 04 03 00 07 00 03 10 11 12	01 02 03 04 05 06 07 08 09 10 11 12
Colour Coated Plate	6,900.0	50	0.73%		
CHINESE STEEL MI		ТҮ		CHINESE STEEL	MILL PROFITABILITY

1,400

1.200

1,000

800

600

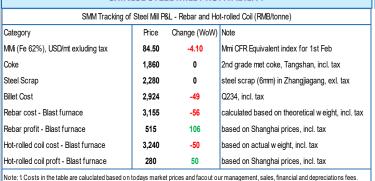
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200

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1.100/18 2.02.U

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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

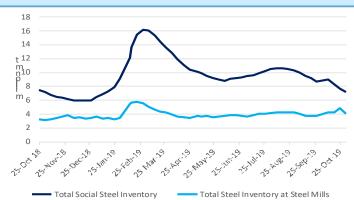
#### Rebar profits



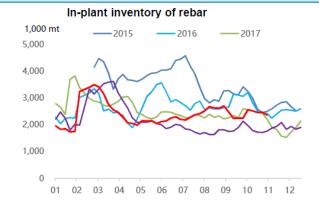
Hot-rolled coil profits

- Rebar Profit for BOF Mill









November 8th, 2019

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HRC Profit for BOF Mill

	Iron Ore	Index Specifications	(Port and Seaborne	2)	Iron Ore Inde	x Compilation R	ationale and Da	ta Exclusions			
	65% Fe Fines	62% Fe Fines	58% Fe Fines	62.5% Fe Lump	MMi iron ore indices are compiled from data provided by companies that are						
Fe %	65.00	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									
Alumina %							to the appropriate				
Silica%	1.50	4.00	5.50	3.50	screened to remove outliers before volume-weighted average prices are calculated from the remaining core set of data.						
Phosphorus %	0.06	0.09	0.05	0.08	For more details on MMi's iron ore methodology please download the guide						
Sulphur %	0.01	0.02	0.02	0.02	published on our we						
Moisture %	8.00	8.00	9.00	4.00							
	Granular size be	elow 10mm for at lea	st 90% of cargo.	Size below 6.3mm max 15%		Data Exc 62%	lusions* 58%	65%			
Sizing		m of 40% below 150		Size above 31.15mm max 25%	Port Index	0	0	0			
					Seaborne index	0		0			
Pricing Point	Qingdao P	ort (FOT and CFR res	spectively)	FOT Qingdao Port	Lump Index 62.5	0					
Timing (Seaborne)	Loading withi	Delivery within 2 weeks	* Number of price submissions for iron ore indices that were excluded from index calculations today as they were anomalous and could not be verified								
Payment Terms		L/C at sight		L/C at sight or CAD	index calculations to	day as they were an	omalous and could n	ot be verified			

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.

		AVEF	RAGE IRON	ORE SPECIF	ICATIONS A	PPLIED FOR BRAND PRICE A	SSESSMEN	TS					
	PORT	STOCK BRAN	NDS			SEABORNE BRANDS							
November 8th, 2019	Specifi	cations appli	ed for 62%	brand asses	sments		Specifications applied for 62% brand assessments						
	Fe	Alumina	Silica	Phos	Moisture		Fe	Alumina	Silica	Phos	Moisture		
Roy Hill	61.01%	2.25%	4.70%	0.054%	9.34%	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	61.56%	2.38%	3.70%	0.098%	9.56%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	10.00%		
Newman Fines	62.50%	2.19%	4.13%	0.092%	7.74%	Newman Fines	62.80%	2.20%	4.30%	0.080%	6.40%		
MAC Fines	60.85%	2.27%	4.63%	0.081%	7.75%	MAC Fines	61.00%	2.70%	4.70%	0.110%	9.30%		
Jimblebar Blended Fines	60.44%	3.06%	4.62%	0.118%	7.73%	Jimblebar Blended Fines	59.50%	3.70%	5.80%	0.135%	8.30%		
Carajas Fines	65.44%	1.27%	1.36%	0.079%	8.17%	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%		
November 8th, 2019	Specifi	cations appli	ed for 58%	brand asses	sments								
	Fe	Alumina	Silica	Phos	Moisture								
SSF	56.59%	3.05%	6.24%	0.051%	8.27%								
FMG Blended Fines	58.18%	2.67%	5.49%	0.058%	7.80%								
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%								

	BLOOMBERG TICKERS												
	PORT STO	CK INDICES		SEABORNE INDICES									
	FOT Qingdao (RMB/wet tonne)	CFR Qingdao Equivalent (USD/dry tonne)		CFR Qingdao (USD/DMT)									
IOPI62	IRCNQ001	IRCNQ004	IOSI62	IRCN0034									
IOPI58	IRCNQ002	IRCNQ005	IOSI65	IRCN0035									
IOPI65	IRCNQ003	IRCNQ006											
IOPLI62	IRCN0036	IRCN0037											

8.98%

CONTACT US	
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Yandi

57.22%

1.57%

6.37%

0.041%