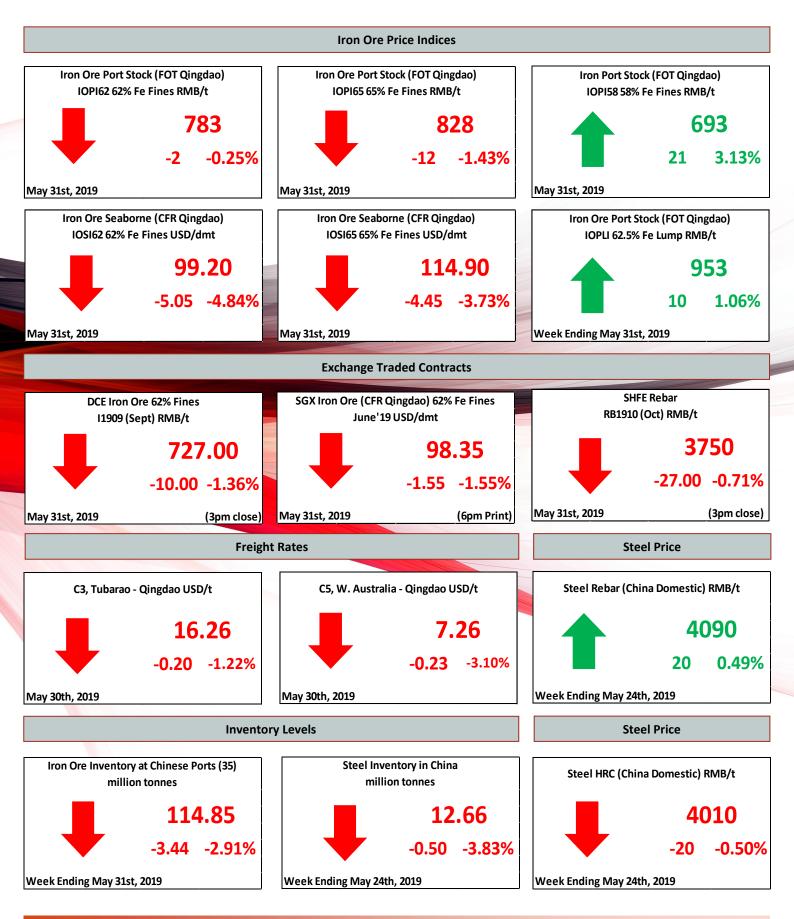


# **MMi Dashboard**



www.mmiprices.com

### MMi Daily Iron Ore Index Report

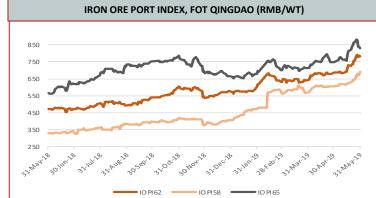
#### IRON ORE PORT STOCK INDEX (IOPI)

#### May 31st, 2019

May 31st,	2019		FOT	Qingdao (i	nc. 13% VAT)	, RMB/wet 1	tonne			CFR Qingd	ao Equivalen	t (exc. 13%	VAT), USD/	dry tonne	1
Index	Fe Content	Price	Change	Change	% May	YTD	Low <sup>2</sup>	High <sup>2</sup>	Price	Change	Change %	May	YTD	Low <sup>2</sup>	High <sup>2</sup>
IOPI62	62% Fe Fines	783	-2	-0.3%	729	654	453	792	105.26	-0.29	-0.3%	98.40	87.77	61.66	106.55
IOPI58	58% Fe Fines	693	21	3.1%	637	565	324	693	93.74	2.96	3.3%	86.39	75.60	41.71	93.74
IOP165	65% Fe Fines	828	-12	-1.4%	812	735	560	881	111.54	-1.67	-1.5%	110.00	99.14	77.70	119.05
IRON ORE SEABORNE INDEX (IOSI)											MARKE	т сомме	INTARY		
May 31st,	2019			CFR Qi	ngdao, USD/o	dry tonne					ong demand lowered				
Index	Fe Content	Price	Change	Change	% May	YTD	Low <sup>3</sup>	High <sup>3</sup>	ago and 32.7 million mt from a year ago, to 114.85 million mt, SMM statistics showed. Lower arrivals reduced stocks ac some ports along the Yangtze River, even as daily deliveries from ports dipped. Daily average deliveries from the 35 por declined 85,000 mt from a week ago, but grew 72,000 mt from a year ago, and stood at 2.65 million mt last week. Majo in the east and north continued to see strong demand. Daily average deliveries from two ports in Tangshan remained al around 30000 mt. SMM expects limited supply and strong demand to prevent port stock from growing this week.			the 35 ports			
IOSI62	62% Fe Fines	99.20	-5.05	-4.84%	98.68	88.26	62.95	105.95				mained at high of			
IOSI65	65% Fe Fines	114.90	-4.45	-3.73%	115.53	102.27	83.20	122.40							
IRON ORE PORT LUMP INDEX (IOPLI)															
Week Endi 2019	ng May 31st,		FOT	Qingdao (i	nc. 16% VAT)	, RMB/wet t	onne		CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne <sup>4</sup>						
Index	Fe Content	Price	W-o-W	Change 9	% MTD	YTD	Low <sup>3</sup>	High <sup>3</sup>	Price	W-oW	Change %	MTD	YTD	Low <sup>3</sup>	High <sup>3</sup>
IOPLI62	62.5% Fe Lump	953	10	1.1%	919	858	575	953	120.43	1.00	0.84%	117.12	110.30	76.66	120.43
			IRO	N ORE D	OMESTIC CC	NCENTRAT	E SPOT PI	RICE ASSES	SMENTS A	ND COMP	OSITE INDE	x			
Week End	ing May 24th,	2019				RMB/to	nne (exclud	ing tax) <sup>4</sup>			l	JSD/tonne	(excluding ta	ах) <sup>4</sup>	
Province	Region	Produ	t	Basis	This week	Change	%	Low <sup>2</sup>	High <sup>2</sup>	This	week	Change %	Low	2	High <sup>2</sup>
Hebei	Hanxin	g 66% Fe	e Concentrate	e Dry	853	0.9%		592	853	12	23.67	0.26%	91.9	7	124.15
Hebei	Qian'aı	65% Fe	e Concentrate	Dry	815	2.5%		640	815	11	8.16	1.82%	100.2	26	118.16
Liaoning	Anshar	65% Fe	Concentrate	Wet	625	3.3%		465	745	9	0.61	2.60%	68.2	1	90.61
Shandong	Zibo	65% Fe	e Concentrate	Dry	860	3.0%		660	860	12	4.68	2.29%	99.7	5	127.11
				, ,					4		-				

 Week Ending May 24th, 2019
 This week
 Change %
 Low <sup>2</sup>
 High <sup>2</sup>
 <sup>1</sup>Exchange rate applied: RMB/USD = 6.8992 <sup>2</sup>Last 12 months <sup>3</sup> Since June 1

 China Mines Concentrate Composite Index RMB/WT
 713.53
 3.3%
 542.92
 713.29
 <sup>4</sup>Weekly exchange rate applied: RMB/USD = 6.8973





													10 5102	10	5.05		
				IRO	N ORE PO	ORT STOCK		ONTHLY, Q	UARTERLY	AND	YEAR-TO-	DATE AV	ERAGE	S			
May 31st,	2019			FOT C	Qingdao (in	c. 13% VAT)	), RMB/wet 1	tonne		CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne							
Index	Fe C	ontent	January	February	March	April	May	QTD	YTD	Jan	uary Feb	oruary I	March	April	May	QTD	YTD
IOPI62	62% I	Fe Fines	580	654	639	675	729	701	654	72	2.55 7	6.16	87.09	85.37	98.40	95.47	87.77
IOPI58	58% I	Fe Fines	448	569	583	600	637	618	565	50	).47 5	7.99	75.22	77.49	86.39	84.20	75.60
IOPI65	65% I	Fe Fines	670	733	714	753	812	782	735	99	9.05 8	8.65	98.08	95.78	110.00	106.88	99.14
IROI	IRON ORE SEABORNE INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES												FI	REIGHT RA	TES		
May 31st,	2019				CFR Qin	gdao, USD/o	dry tonne			May 3	0th, 2019			FREIGHT	RATES - DRY BUL	.K US\$/wet tor	ine
Index	Fe C	ontent	January	February	March	April	May	QTD	YTD	Route	•	Designatio	on	Change	Change %	Low <sup>2</sup>	High <sup>2</sup>
IOSI62	62% I	Fe Fines	76.09	87.39	86.18	93.42	98.68	96.05	88.26	W. Aus	tralia - Qingdao	C5	7.26	-0.23	-3.10%	4.39	10.00
IOSI65	65% I	Fe Fines	89.92	102.56	97.22	106.75	115.53	111.14	102.27	Tubara	o - Qingdao	C3	16.26	i -0.20	-1.22%	11.61	24.76
				IRC	ON ORE PO	ORT LUMP	INDEX MO	NTHLY, Q	UARTERLY	AND	YEAR-TO-I	DATE AVI	ERAGE	5			
Week Endin 2019	g May 3	B1st,		FOT Q	(ingdao (in	c. 16% VAT	), RMB/wet	tonne		CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne <sup>1</sup>							
Index	Fe C	ontent	January	February	March	April	MTD	QTD	YTD	Jan	uary Feb	oruary	March	April	MTD	QTD	YTD
IOPLI62	62.5%	Fe Lump	782	842	858	872	919	891	858	96	5.21 9	4.22	99.57	111.03	117.12	115.22	109.33
						I	RON ORE II	NDEX PRE	MIUMS/DI	scou	NTS						
May 31st, 2	019				PORT STO	CK INDEX (RI	MB/WT)		May 31st, 20	019				SEABO	RNE INDEX (US	D/DMT)	
Index		Fe Co	ntent	Spread t	o IOPI62	9	6 Spread to IC	DPI62	Index		Fe Cont	ent	Spre	ad to IOSI62		% Spread to	IOSI62
IOPI58		58% Fe			90		-11.49%									45.000	
IOPI65		65% Fe	Fines	4	5		5.75%		IOSI65		65% Fe Fi	ines		15.70		15.839	
www.mmiprices.com Page 2/6														May 3	1st, 2019	Ð	

# MMi Daily Iron Ore Index Report

# May 31st, 2019

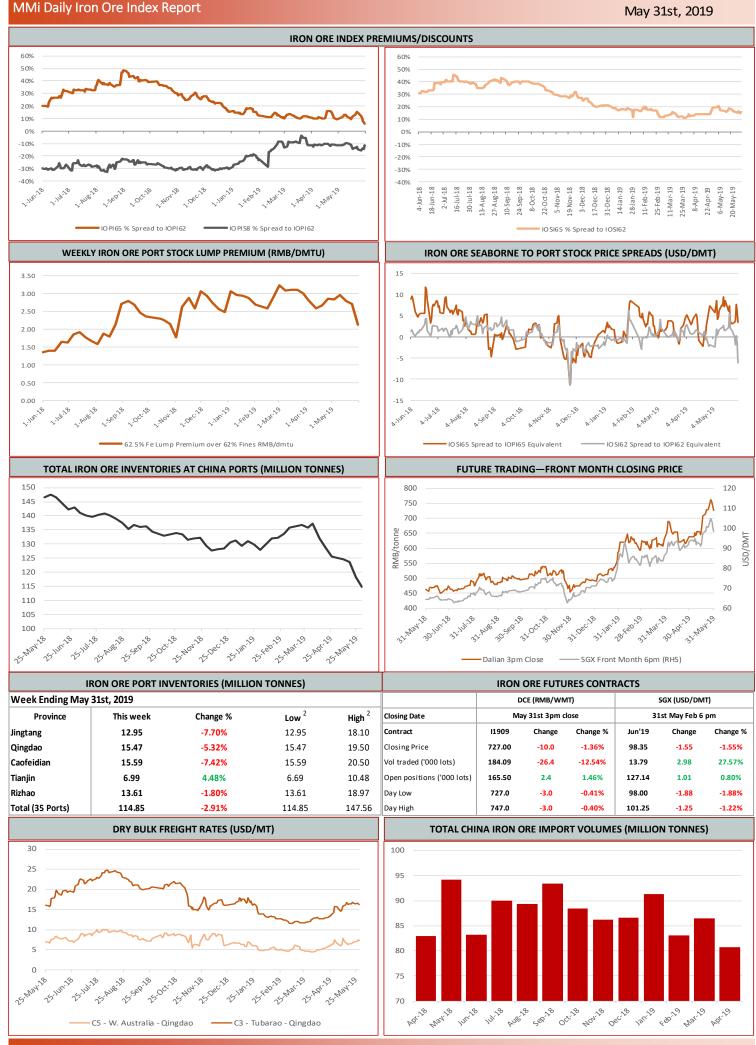


## IRON ORE BRAND SPOT PRICE ASSESMENT

May 31st, 2019	PORT STOCK INDEX (RMB/WT)					
	Price	Change	Diff to IOPI62	F		
Roy Hill	766	1	-17	F		
SIMEC Fines	785	9	2	5		
PB Fines	765	-1	-18	F		
Newman Fines	790	-3	7	ľ		
MAC Fines	781	2	-2	r		
Jimblebar Blended Fines	754	1	-29	J		
Carajas Fines	833	-10	50	0		
Brazilian SSF	817	6	34	E		
Brazilian Blend Fines	797	-1	14	E		
RTX Fines	759	1	-24	ŀ		
West Pilbara Fines	767	3	-16	1		
May 31st, 2019	PORT	STOCK INDEX (R	MB/WT)			
	Price	Change	Diff to IOPI58	1		
SSF	644	21	-49			
FMG Blended Fines	689	20	-4			
Robe River	639	21	-54			
Western Fines	676	21	-17			
Atlas Fines	662	21	-31			
Yandi	721	23	28			

POT PRICE ASSESIVIENTS								
May 31st, 2019	SEABORNE INDEX (USD/DMT)							
	Price	Change	Diff to IOSI62					
Roy Hill	95.31	-5.05	-3.89					
SIMEC Fines	93.04	-5.05	-6.16					
PB Fines	98.51	-5.05	-0.69					
Newman Fines	101.51	-5.04	2.31					
MAC Fines	94.99	-5.05	-4.21					
Jimblebar Blended Fines	92.54	-4.55	-6.66					
Carajas Fines	114.51	-4.86	15.31					
Brazilian SSF	103.26	-4.74	4.06					
Brazilian Blend Fines	103.14	-4.86	3.94					
RTX Fines	93.21	-4.55	-5.99					
West Pilbara Fines	93.71	-5.05	-5.49					

				IRON ORE IN	IDEX NORM	LISATION DIFFER	ENTIALS				
Por	t Stock Index	Product Differ	entials (RN	MB/wet tonne)		Sea	aborne Inde	x Product D	ifferentials (	USD/dry tonne	)
	Ар	plicable range		Value	Change		A	pplicable rai	nge	Value	Change
	High Grade	e Fe 60 - 63%		6.00	-1.00		High Grad	de Fe 60 - 63	\$%	2.75	0.00
	High Grade	e Fe 63 - 64%		12.00	-2.00		High Grad	de Fe 63 - 64	%	3.00	0.00
1% Fe	High Grade	e Fe 64 - 65%		12.00	-2.00	1% Fe	High Grad	de Fe 64 - 65	%	3.00	0.00
	High Grade	e Fe 65 - 65.5%		12.00	-2.00		High Grad	de Fe 65 - 65	5.5%	3.00	0.00
	Low Grade	Fe		15.00	0.00						
	High Fe Gra	ade Al <2.25%		15.00	-2.00		High Fe G	rade Al <2.2	5%	3.75	0.25
	High Fe Gra	ade Al 2.25-4%		0.00	0.00		High Fe G	rade Al 2.25	-4%	1.75	0.00
1% Alumina	Low Fe Gra	de Al <2.25%		85.00	3.00	1% Alumina					
	Low Fe Gra	de Al 2.25-4%		39.00	0.00						
	High Fe Gra	ade Si <4%		1.00	-1.00		High Fe G	rade Si <4%		1.50	0.00
1% Silica	High Fe Gra	ade Si 4-6.5%		1.00	-4.00	1% Silica	High Fe G	rade Si 4 - 6	.5%	0.25	0.00
	Low Fe Gra	de		1.00	0.00						
0.04%	High Fe Gra	ade 0.09% <p<0< td=""><td>.115%</td><td>3.00</td><td>0.00</td><td>0.01%</td><td>High Fe G</td><td>rade 0.09%</td><td><p<0.115%< td=""><td>0.25</td><td>0.00</td></p<0.115%<></td></p<0<>	.115%	3.00	0.00	0.01%	High Fe G	rade 0.09%	<p<0.115%< td=""><td>0.25</td><td>0.00</td></p<0.115%<>	0.25	0.00
0.01%	High Fe Gra	ade 0.115% <p<< td=""><td>0.15%</td><td>7.00</td><td>0.00</td><td>Phosphorus</td><td>High Fe G</td><td>rade 0.115%</td><td>6<p<0.15%< td=""><td>0.50</td><td>-0.25</td></p<0.15%<></td></p<<>	0.15%	7.00	0.00	Phosphorus	High Fe G	rade 0.115%	6 <p<0.15%< td=""><td>0.50</td><td>-0.25</td></p<0.15%<>	0.50	-0.25
Phosphorus	Low Fe Gra	de 0.09 <p<0.1< td=""><td>%</td><td>15.00</td><td>3.00</td><td></td><td></td><td></td><td></td><td></td><td></td></p<0.1<>	%	15.00	3.00						
			Port St	ock Price Differe	ntials to Qingo	ao Port for PB Fine	s (RMB/wet t	onne)			
Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-25.00	0.00	Fangcheng	- <b>5.00</b>	0.00	Lanshan	0.00	0.00	Qingdao	0.00	0.00
Beilun	5.00	0.00	Jiangyin	-35.00	0.00	Lianyungang	-5.00	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	-35.00	0.00	Langiao	0.00	0.00	Nantong	-40.00	0.00	Tianjin	-20.00	0.00



Page 4/6

May 31st, 2019

COPYRIGHT METALS MARKET INDEX, ALL RIGHTS RESERVED

#### MMi Daily Iron Ore Index Report

#### STEEL SPOT MARKET PRICES-CHINA

Steel Spot Market RMB/tonne					
Product		24/5/2	2019 Char	nge Change	
ReBar HRB400		4,09	0.0 20	0.49%	1,000 mt        2015         _2016        2017         1,000 mt        2015         _2016         _2019           4,100        2018         _2019         3,700         .         .
Wirerod Q300 ¢6.5mm		4,30	0.0 30	0.70%	3,600 3,500
HRC Q235/SS400 5.5mm*150	0*C	4,01	0.0 - <mark>2</mark> 0	-0.50%	3,500
CRC SPCC/ST12 1.0mm*1250	*2500	4,25	0.0 <mark>-3</mark> (	-0.70%	2900 2600 2,900
Medium & Heavy Plate Q235B	20mm	4,08	0.0 0	0.00%	2,300 2,700
GI ST02Z 1.0mm*1000*C		4,63	0.0 10	0.22%	2,000 01 02 03 04 05 06 07 08 09 10 11 12 01 02 03 04 05 06 07 08 09 10 11 12
Colour Coated Plate		7,15	0.0 -50	-0.69%	
CHIN	ESE STEEL	MILL PRO	FITABILITY		CHINESE STEEL MILL PROFITABILITY
SMM Tracking of	Steel Mill P&L	- Rebar and Ho	t-rolled Coil (RMB/tonr	e)	1,400
Category	Price (	Change (WoW)	Note		1,200 m 1 1 1 1
MMI (Fe 62%), USD/mt exluding tax	103.30	6.10	Mmi CFR Equivalent ir	ndex for 1st Feb	1,000
Coke	2,210	100	2nd grade met coke,	Tangshan, incl. tax	800 July May
Steel Scrap	2,220	10	steel scrap (6mm) in	Zhangjiagang, exl. tax	E 600
Billet Cost	3,359	138	Q234, incl. tax		au 600 Anger 400
Rebar cost - Blast furnace	3,606	138	calculated based on	theoretical weight, incl. ta	
Dahan maafit Dlaat fumnaaa	474	400	have a day of some had a	Acres for a second	200

Hot-rolled coil cost - Blast furnace 3,683 137 based on actual weight, incl. tax Hot-rolled coil proft - Blast furnace 317 -167 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.

-128

based on Shanghai prices, incl. tax

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

474

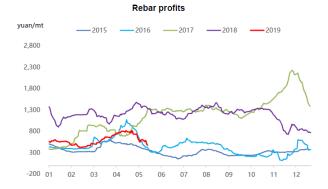
Rebar profit - Blast furnace

CHINESE STEEL MILL PROFITABILITY

0 24,118418

24-1411-18

24-141-28 2<sup>4-AUE-18</sup>





24-0ct-18 24,404-18

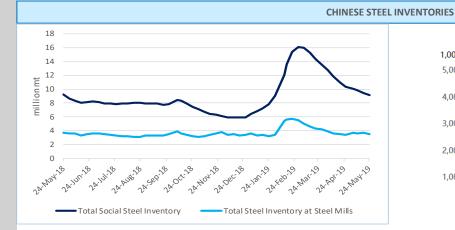
24.Dec.18

24:131

24:5eP:18

Rebar Profit for BOF Mill









May 31st, 2019

24-War-19

24.Feb.19

HRC Profit for BOF Mill

24.1134129

24- 19

#### May 31st, 2019

	Iron Ore	Index Specifications	(Port and Seaborne	2)	Iron Ore Inde	ex Compilation R	Rationale and Da	ta Exclusions		
	65% Fe Fines	62% Fe Fines	58% Fe Fines	62.5% Fe Lump	MMi iron ore indice	s are compiled from	data provided by con	npanies that are		
Fe %	65.00	62.00	58.00	62.50	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					
Alumina %	1.40	2.25	2.25	1.50			d to the appropriate s			
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. For more details on MMI's iron ore methodology please download the guide published on our website at: www.mmiprices.com					
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						
	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		ım of 40% below 150	0,	Size above 31.15mm max 25%	Port Index Seaborne index	0	0	0		
Pricing Point	Qingdao F	Port (FOT and CFR res	pectively)	FOT Qingdao Port	Lump Index 62.5	о				
Timing (Seaborne)	) Loading within 4 weeks, Delivery within 8 weeks			Delivery within 2 weeks	* Number of price submissions for iron ore indices that were excluded from					
Payment Terms		L/C at sight		L/C at sight or CAD	index calculations today as they were anomalous and could not be veri			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.

		AVER	AGE IRON	ORE SPECIF		PPLIED FOR BRAND PRICE A	SSESSMEN	TS					
	PORT	STOCK BRAN	IDS			SEABORNE BRANDS							
May 31st, 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	61.16%	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%	3.89%	0.101%	9.44%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	10.00%		
Newman Fines	62.62%	2.32%	3.86%	0.099%	7.27%	Newman Fines	62.80%	2.20%	4.30%	0.080%	6.40%		
MAC Fines	60.67%	2.27%	4.81%	0.081%	7.15%	MAC Fines	61.00%	2.70%	4.70%	0.110%	9.30%		
Jimblebar Blended Fines	60.77%	3.04%	4.43%	0.115%	7.27%	Jimblebar Blended Fines	61.79%	2.67%	4.08%	0.115%	7.16%		
Carajas Fines	65.64%	1.28%	1.40%	0.075%	8.51%	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	62.70%	1.50%	4.81%	0.070%	8.11%	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%		
May 31st, 2019	Specifi	cations appli	ed for 58%	brand asses	sments								
	Fe	Alumina	Silica	Phos	Moisture								
SSF	56.76%	3.05%	6.09%	0.053%	8.78%								
FMG Blended Fines	58.18%	2.68%	5.53%	0.062%	7.52%								
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%								

DI	20	MD	DC	тіск	EDC
DL	UU.	IVIDI	EKG	TICK	EKS

8.59%

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

1.80%

6.42%

0.047%

57.13%

CONTACT US	
MMI Singapore Office Details: Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7629 E: jarek@mmiprices.com SMM Singapore Office Details: Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7630 E: <u>service.en@smm.cn</u> SMM Shanghai Office Details: 9th FL, Building 9, Lujiazui Software Park, No.20, Lane 91, Pudong, Shanghai Tel: +86 021 5155 0306 E: <u>service.en@smm.cn</u>	Visit <u>www.mmiprices.com</u> 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.

Yandi