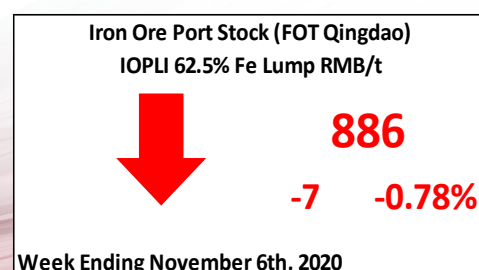
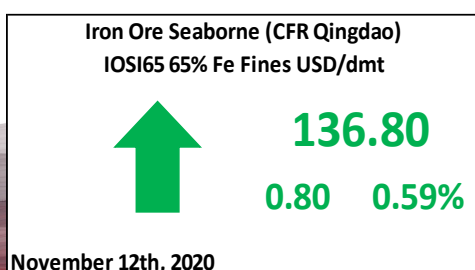
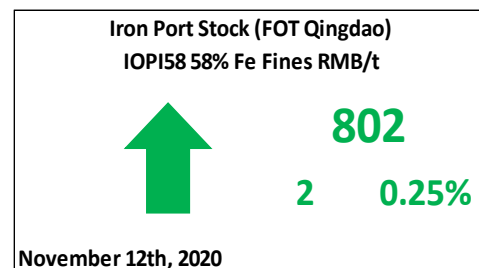
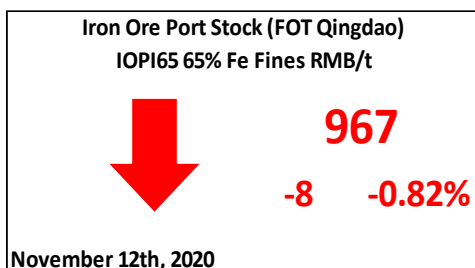
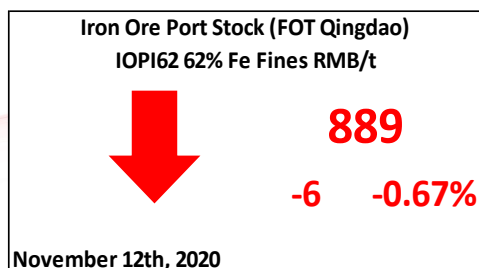


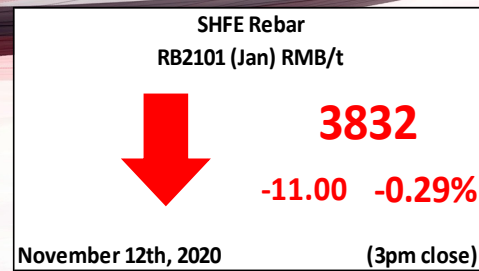
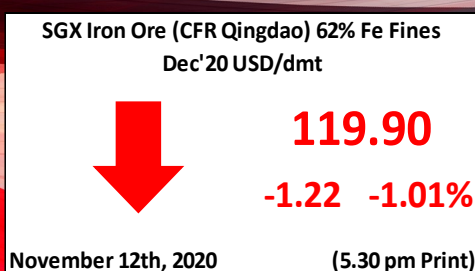
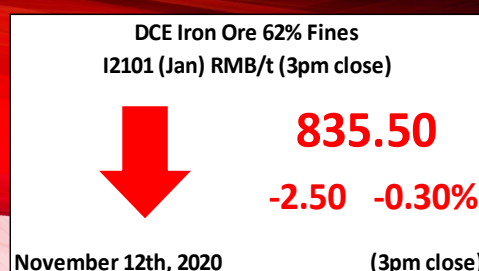


## MMi Dashboard

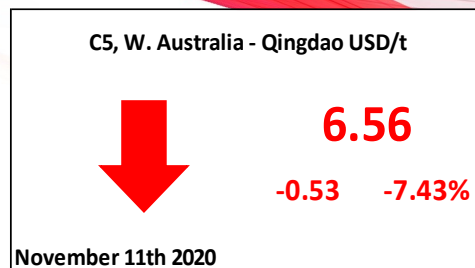
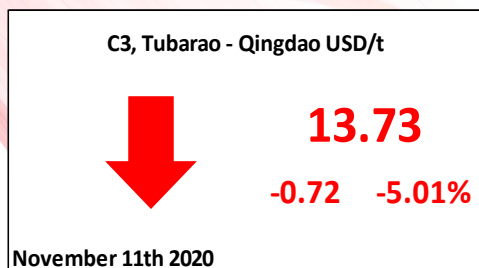
## Iron Ore Price Indices



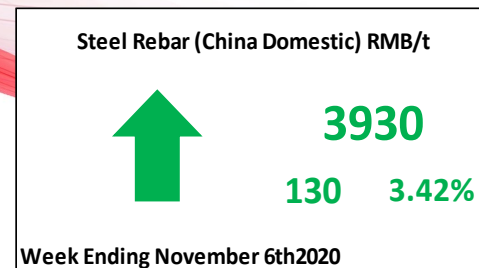
## Exchange Traded Contracts



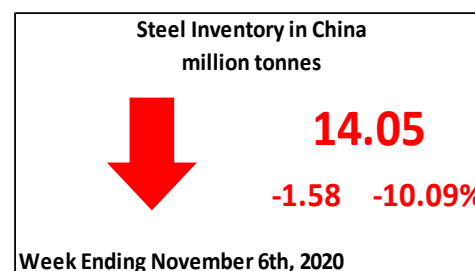
## Freight Rates



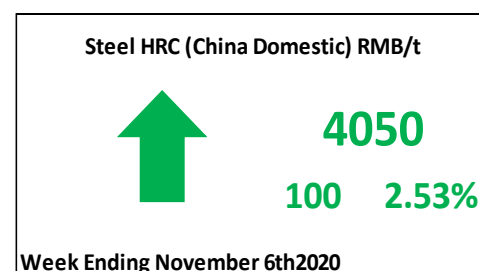
## Steel Price



## Inventory Levels



## Steel Price



## IRON ORE PORT STOCK INDEX (IOPI)

November 12th, 2020		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	889	-6	-0.7%	878	791	619	983	125.04	-1.19	-0.9%	123.00	105.72	81.37	133.69
IOPI58	58% Fe Fines	802	2	0.3%	790	704	531	892	113.64	0.01	0.0%	111.54	94.69	70.02	122.73
IOPI65	65% Fe Fines	967	-8	-0.8%	978	897	696	1031	136.37	-1.50	-1.1%	137.49	120.30	91.81	143.73

## IRON ORE SEABORNE INDEX (IOSI)

November 12th, 2020		CFR Qingdao, USD/dry tonne							MARKET COMMENTARY							
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>	PBF in Shandong market was at 875yuan/dmt and around 880yuan/dmt in Tangshan. Market activity in Tangshan was low as iron ore deliveries from Caofeidian port are still banned, and plant inventory kept creeping higher. Considering the recent decline in iron ore arrivals at Tangshan ports, the inventory at Jingtang and Caofeidian ports are expected to drop. According to SMM, the latest domestic blast furnace operating furnace was 88.29%.							
IOSI62	62% Fe Fines	125.60	0.30	0.24%	122.50	104.09	80.65	132.25								
IOSI65	65% Fe Fines	136.80	0.80	0.59%	133.91	117.95	93.10	144.85								

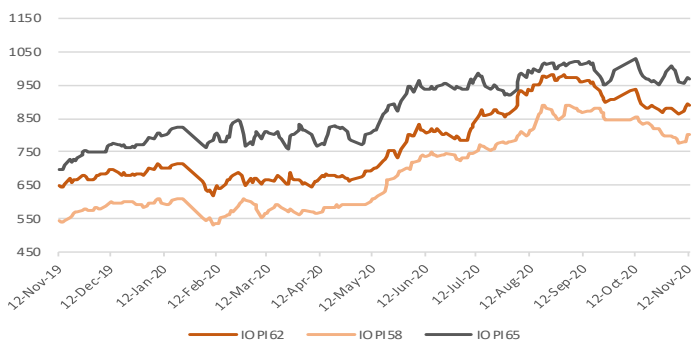
## IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending November 6th, 2020		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% 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	886	-7	-0.8%	886	879	785	969	118.42	-0.45	-0.38%	118.42	112.54	97.02	127.14

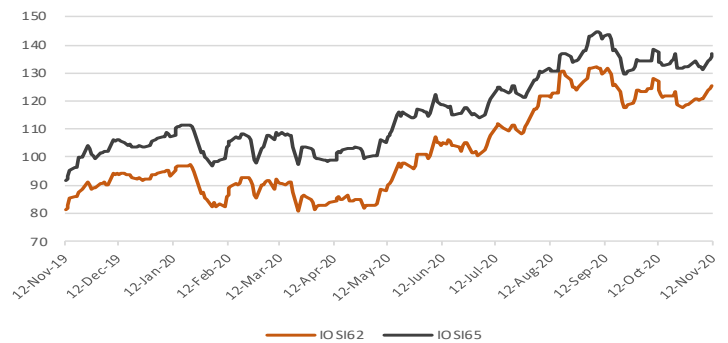
## IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending November 6th 2020				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	975	-1.3%	763	1071	145.97	-0.89%	109.21	157.74
Hebei	Qian'an	65% Fe Concentrate	Dry	960	-0.4%	780	1040	143.73	0.01%	110.51	152.35
Liaoning	Anshan	65% Fe Concentrate	Wet	785	-0.6%	620	805	117.53	-0.21%	87.40	119.58
Shandong	Zibo	65% Fe Concentrate	Dry	1035	0.0%	795	1115	154.96	0.43%	113.34	163.06
Week Ending November 6th 2020				This week	Change %	Low <sup>2</sup>	High <sup>2</sup>	1 Exchange rate applied: RMB/USD = 6.6236 <sup>2</sup> Last 12 months			
China Mines Concentrate Composite Index RMB/WT				873.24	-0.66%	702.47	924.68	<sup>3</sup> Weekly exchange rate applied: RMB/USD 6.6793			

## 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

November 12th, 2020		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	July	August	September	October	MTD	QTD	YTD	July	August	September	October	MTD	QTD	YTD
IOPI62	62% Fe Fines	844	948	946	892	878	887	791	105.69	127.65	129.64	123.88	123.00	123.06	105.72
IOPI58	58% Fe Fines	758	838	870	828	790	815	704	96.40	113.63	120.14	115.94	111.54	112.29	94.69
IOPI65	65% Fe Fines	948	992	998	982	978	980	897	124.25	133.70	136.85	136.68	137.49	133.47	120.30

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

November 12th, 2020		CFR Qingdao, USD/dry tonne							FREIGHT RATES - DRY BULK US\$/wet tonne						
Index	Fe Content	July	August	September	October	MTD	QTD	YTD	Route	Designation	Change	Change %	Low <sup>2</sup>	High <sup>2</sup>	
IOSI62	62% Fe Fines	108.23	124.02	126.26	122.16	122.50	122.26	104.09	W. Australia - Qingdao	C5	6.56	-0.53	-7.43%	3.57	10.80
IOSI65	65% Fe Fines	121.21	132.95	138.39	133.94	133.91	133.93	117.95	Tubarao - Qingdao	C3	13.73	-0.72	-5.01%	6.70	22.78

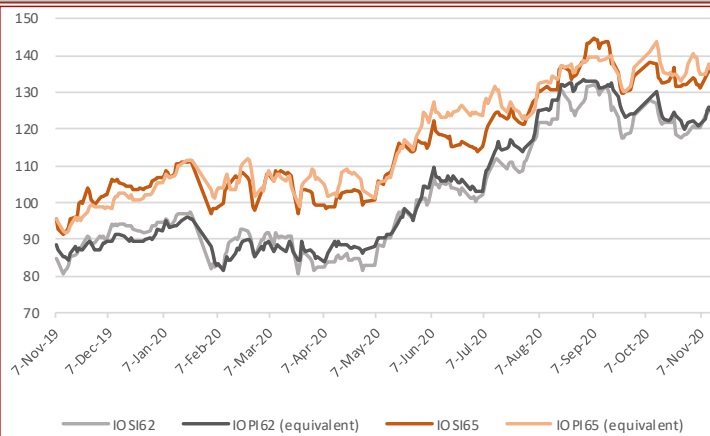
## IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending November 6th, 2020		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne <sup>1</sup>						
Index	Fe Content	July	August	September	October	MTD	QTD	YTD	July	August	September	October	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	875	932	959	919	886	912	879	111.35	120.08	125.87	121.91	118.42	119.27	112.54

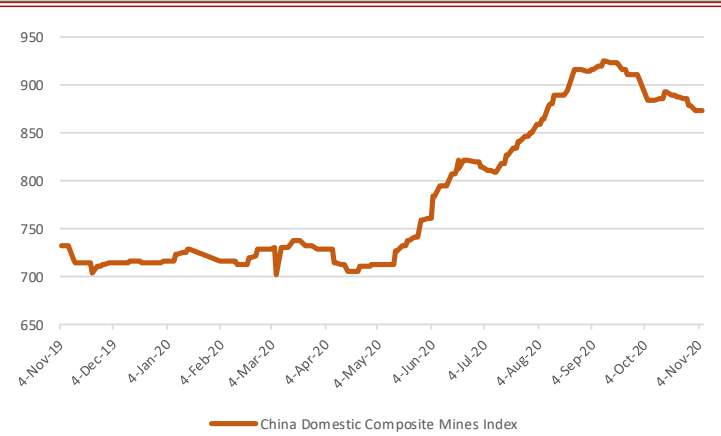
## IRON ORE INDEX PREMIUMS/DISCOUNTS

November 12th, 2020				PORT STOCK INDEX (RMB/WT)				November 12th, 2020				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	-87		-9.79%		IOSI65	65% Fe Fines	11.20		8.92%					
IOPI65	65% Fe Fines	78		8.77%											

## IRON ORE INDEX COMPARISONS (USD/DMT)



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



## IRON ORE BRAND SPOT PRICE ASSESSMENTS

November 12th, 2020				November 12th, 2020			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	868	-6	-21	Roy Hill	117.22	0.00	-8.38
SIMEC Fines	876	-6	-13	SIMEC Fines	107.77	-0.18	-17.83
PB Fines	873	-6	-16	PB Fines	122.72	0.47	-2.88
Newman Fines	891	-6	2	Newman Fines	123.62	0.45	-1.98
MAC Fines	879	-5	-10	MAC Fines	118.40	0.05	-7.20
Jimblebar Blended Fines	862	-3	-27	Jimblebar Blended Fines	116.35	0.30	-9.25
Carajas Fines	968	-6	79	Carajas Fines	136.67	1.12	11.07
Brazilian SSF	897	-6	8	Brazilian SSF	114.97	0.30	-10.63
Brazilian Blend Fines	905	-6	16	Brazilian Blend Fines	124.47	0.55	-1.13
RTX Fines	882	-2	-7	RTX Fines	116.87	0.47	-8.73
West Pilbara Fines	871	-5	-18	West Pilbara Fines	116.82	-0.15	-8.78

November 12th, 2020			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	769	0	-33
FMG Blended Fines	799	0	-3
Robe River	780	0	-22
Western Fines	787	0	-15
Atlas Fines	804	2	2
Yandi	831	2	29

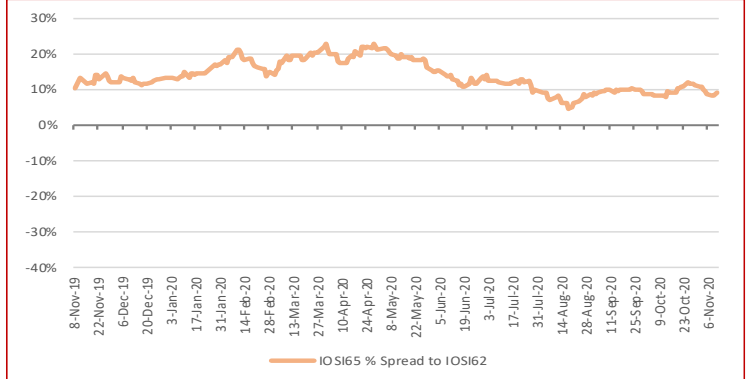
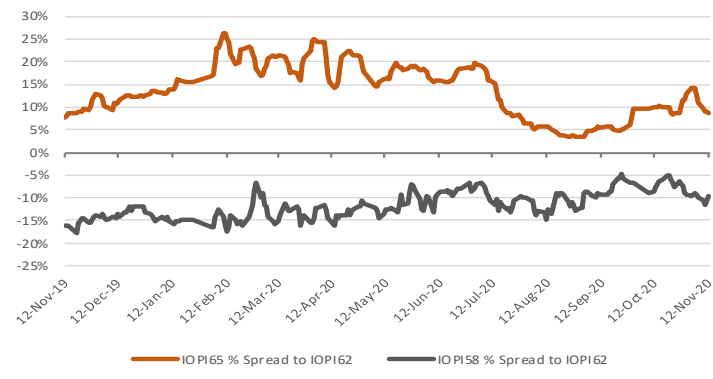
## IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	3.00	0.00	1% Fe	High Grade Fe 60 - 63%	2.50	0.25	
	High Grade Fe 63 - 64%	24.00	0.00		High Grade Fe 63 - 64%	1.00	0.00	
	High Grade Fe 64 - 65%	24.00	0.00		High Grade Fe 64 - 65%	1.00	0.00	
	High Grade Fe 65 - 65.5%	24.00	0.00		High Grade Fe 65 - 65.5%	1.00	0.00	
	Low Grade Fe	0.00	0.00					
1% Alumina	High Fe Grade Al <2.25%	13.00	0.00	1% Alumina	High Fe Grade Al <2.25%	2.50	0.00	
	High Fe Grade Al 2.25-4%	4.00	-5.00		High Fe Grade Al 2.25-4%	3.50	-0.50	
	Low Fe Grade Al <2.25%	59.00	3.00					
	Low Fe Grade Al 2.25-4%	26.00	0.00					
1% Silica	High Fe Grade Si <4%	7.00	0.00	1% Silica	High Fe Grade Si <4%	2.00	0.25	
	High Fe Grade Si 4-6.5%	11.00	0.00		High Fe Grade Si 4 - 6.5%	5.50	0.00	
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.00	0.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.00	0.00	
	High Fe Grade 0.115%<P<0.15%	0.00	0.00		High Fe Grade 0.115%<P<0.15%	0.25	0.00	
	Low Fe Grade 0.09<P<0.1%	3.00	0.00					

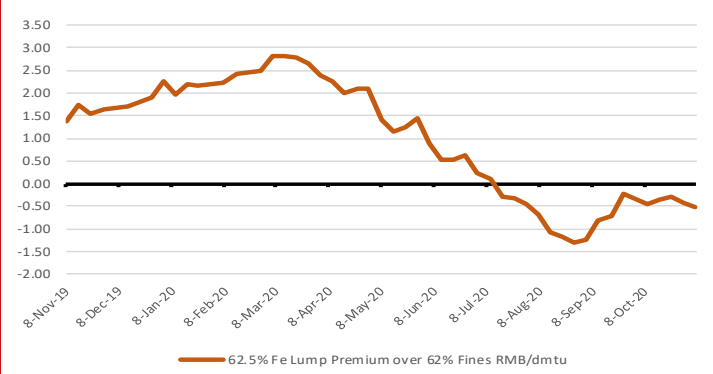
## Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

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	Rizhao	0.00	0.00
Beilun	-5.00	0.00	Jiangyin	-30.00	0.00	Lianyungang	0.00	0.00	Shekou	0.00	0.00
Caofeidian	-5.00	0.00	Jingtang	-5.00	0.00	Majishan	0.00	0.00	Taichang	-30.00	0.00
Dalian	-50.00	0.00	Lanqiao	0.00	0.00	Qingdao	0.00	0.00	Tianjin	-10.00	0.00

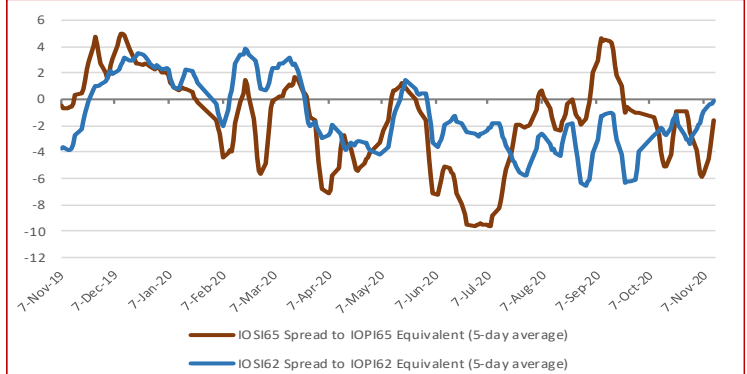
IRON ORE INDEX PREMIUMS/DISCOUNTS



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



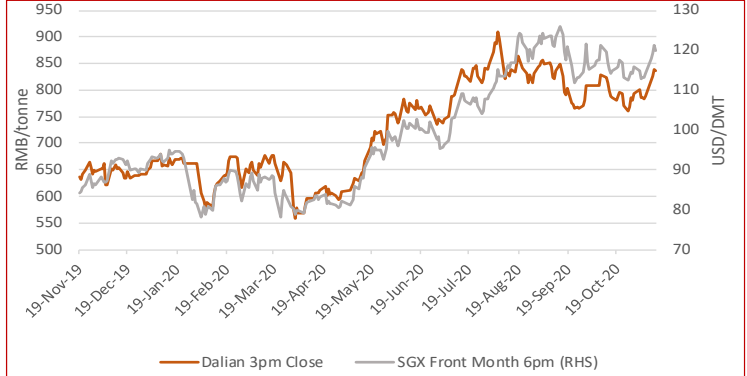
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



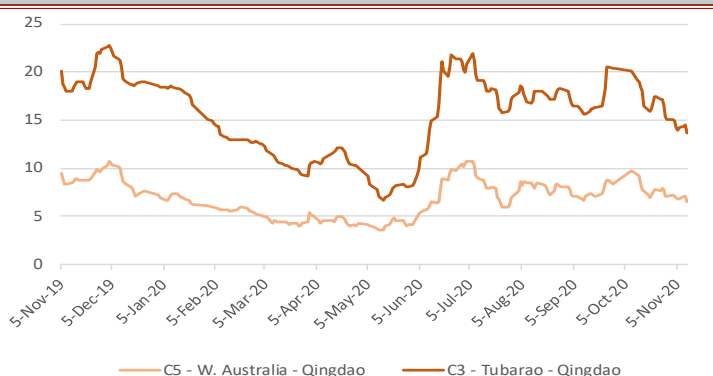
IRON ORE PORT INVENTORIES (MILLION TONNES)

Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	14.65	-6.27%	12.26	16.08
Qingdao	14.85	-1.33%	9.41	15.05
Caofeidian	16.25	0.18%	12.46	16.44
Tianjin	9.48	1.94%	7.04	9.48
Rizhao	14.06	2.55%	9.44	14.06
<b>Total (35 Ports)</b>	<b>121.69</b>	<b>0.48%</b>	<b>98.80</b>	<b>121.69</b>

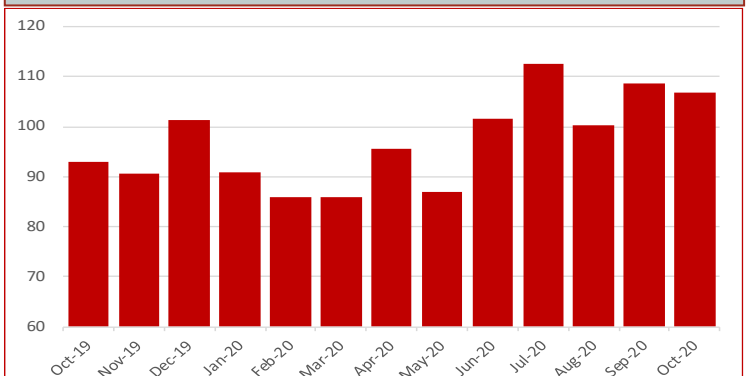
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Nov 12th, 3.00 pm close			Nov 12th, 5.30 pm		
Contract	I2101	Change	Change %	Dec '20	Change	Change %
Closing Price	835.50	-2.5	-0.30%	119.90	-1.22	-1.01%
Vol traded ('000 lots)	78.64	18.41	30.57%	22.28	15.23	215.79%
Open positions ('000 lots)	61.61	-0.22	-0.36%	174.10	0.80	0.46%
Day Low	830.0	5.0	0.61%	119.52	-0.02	-0.02%
Day High	850.0	6.0	0.71%	121.78	0.51	0.42%

DRY BULK FREIGHT RATES (USD/MT)



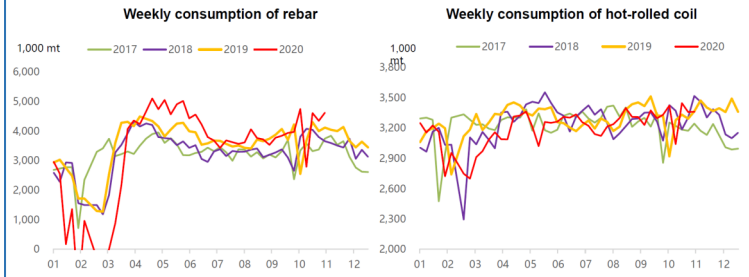
TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne			
Product	06/11//2020	Change	Change %
ReBar HRB400 φ18mm	3,930.0	130	3.42%
Wirerod Q300 φ6.5mm	4,420.0	210	4.99%
HRC Q235/SS400 5.5mm*1500*C	4,050.0	100	2.53%
CRC SPCC/ST12 1.0mm*1250*2500	4,970.0	110	2.26%
Medium & Heavy Plate Q235B 20mm	3,970.0	10	0.25%
GI ST02Z 1.0mm*1000*C	5,410.0	460	9.29%
Colour Coated Plate	7,650.0	0	0.00%

CHINESE STEEL CONSUMPTION



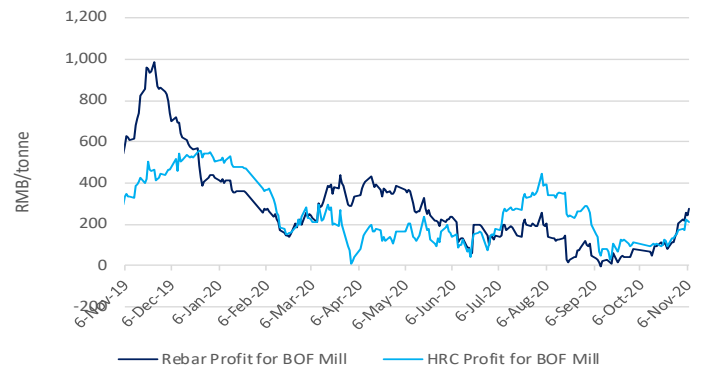
CHINESE STEEL MILL PROFITABILITY

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

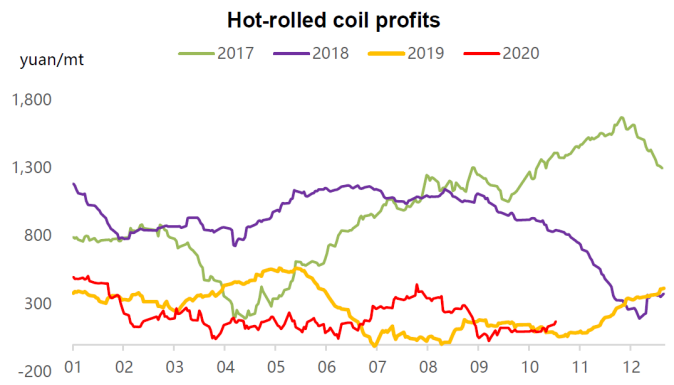
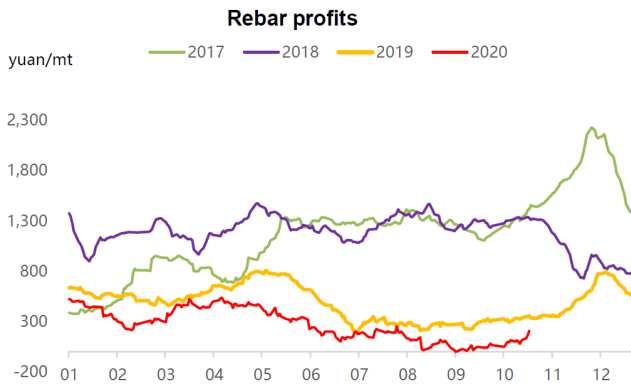
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	120.65	2.15	Mmi CFR Equivalent index for 1st Feb
Coke	2,160	50	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,530	130	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,514	51	Q234, incl. tax
Rebar cost - Blast furnace	3,739	50	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	278	73	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,830	51	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	210	39	based on Shanghai prices, incl. tax

Note: 1. Costs in the table are calculated based on today's market prices and factored 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

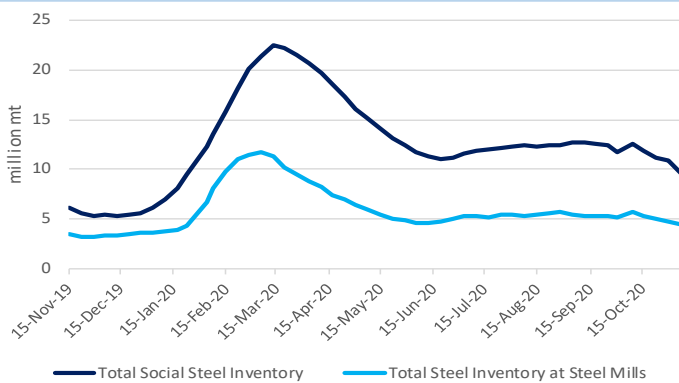
CHINESE STEEL MILL PROFITABILITY



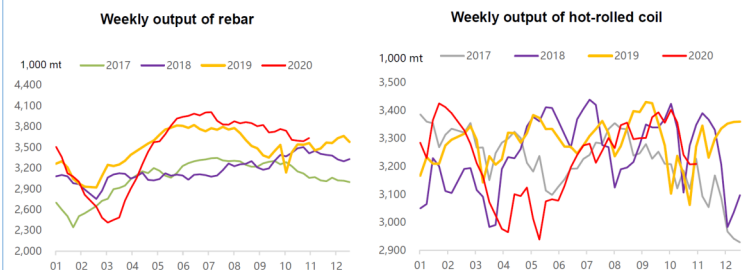
CHINESE STEEL MILL PROFITABILITY



CHINESE STEEL INVENTORIES



CHINESE STEEL PRODUCTION





## IRON ORE INDEX SPECIFICATIONS, COMPILATION RATIONALE AND DATA EXCLUSIONS

Iron Ore Index Specifications (Port and Seaborne)					Iron Ore Index Compilation Rationale and Data Exclusions
	65% Fe Fines	62% Fe Fines	58% Fe Fines	62.5% Fe Lump	
Fe %	65.00	62.00	58.00	62.50	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>
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					
November 12th, 2020	Specifications applied for 62% brand assessments						Specifications applied for 62% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture		Fe	Alumina	Silica	Phos	Moisture
Roy Hill	60.95%	2.40%	4.36%	0.056%	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	61.65%	2.31%	3.91%	0.101%	9.57%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	9.50%
Newman Fines	62.37%	2.32%	4.10%	0.091%	7.74%	Newman Fines	62.30%	2.40%	4.40%	0.090%	8.00%
MAC Fines	60.49%	2.39%	4.56%	0.079%	7.90%	MAC Fines	60.80%	2.35%	4.70%	0.080%	7.80%
Jimblebar Blended Fines	60.87%	2.98%	4.47%	0.113%	7.50%	Jimblebar Blended Fines	60.50%	3.00%	4.50%	0.120%	8.00%
Carajas Fines	65.04%	1.21%	1.85%	0.066%	8.12%	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	63.19%	1.17%	4.78%	0.082%	7.65%	Brazilian Blend Fines	63.00%	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 12th, 2020	Specifications applied for 58% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture
SSF	56.48%	3.15%	6.27%	0.061%	9.39%
FMG Blended Fines	58.21%	2.51%	5.65%	0.054%	8.26%
Robe River	56.44%	3.18%	5.74%	0.041%	8.41%
Western Fines	57.88%	2.87%	7.50%	0.062%	7.45%
Atlas Fines	58.00%	1.85%	5.50%	0.090%	9.00%
Yandi	57.04%	1.58%	6.45%	0.041%	9.36%

## BLOOMBERG TICKERS

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

## 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)

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