Metals Market Index MMi

MMi Dashboard

Iron Ore Price Indices

Iron Ore Port Stock (FOT Qingdao) IOPI62 62% Fe Fines RMB/t	807	-8	-0.98%	Dec 6th, 2022
Iron Ore Port Stock (FOT Qingdao) IOPI65 65% Fe Fines RMB/t	919	-8.00	-0.86%	Dec 6th, 2022
Iron Port Stock (FOT Qingdao) IOPI58 58% Fe Fines RMB/t	693	27	4.05%	Dec 6th, 2022
Iron Ore Seaborne (CFR Qingdao) IOSI62 62% Fe Fines USD/dmt	106.65	6.55	6.54%	Dec 6th, 2022
Iron Ore Seaborne (CFR Qingdao) IOSI65 65% Fe Fines USD/dmt	119.30	9.70	8.85%	Dec 6th, 2022
Iron Ore Port Stock (FOT Qingdao) IOPLI 62.5% Fe Lump RMB/t	900	58	6.89%	Week Ending Dec 2nd, 2022

Exchange Traded Contracts

DCE Iron Ore 62% Fines I2301 (Jan) RMB/t (3pm close)	795.50	0.00	0.00%	Dec 6th, 2022 (3pm close)
SGX Iron Ore (CFR Qingdao) 62% Fe Fines January 23 USD/dmt	108.30	-0.55	-0.51%	Dec 6th, 2022 (5.30 pm Print)
SHFE Rebar RB2305 (Jan) RMB/t	3808	4	0.11%	Dec 6th, 2022 (3pm close)

Freight Rates

C3, Tubarao - Qingdao USD/t	19.33	-0.24	-1.22%	Dec 5th, 2022
C5, W. Australia - Qingdao USD/t	8.20	0.07	0.92%	Dec 5th, 2022

Steel Price

Steel Rebar (China Domestic) RMB/t	3790	10	0.26%	Week Ending Dec 2nd, 2022

Inventory Levels

Iron Ore Inventory at Chinese Ports (35) million tonnes	129.43	-2.11	-1.60%	Week Ending Dec 2nd, 2022
Steel Inventory in China million tonnes	8.83	-0.05	-0.54%	Week Ending Dec 2nd, 2022

Steel Price

Steel HRC (China Domestic) RMB/t	3940	60	1.55%	Week Ending Dec 2nd, 2022

IRON ORE PORT STOCK INDEX (IOPI)

Dec 6th, 2022		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne [1]						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low [2]	High [2]	Price	Change	Change %	MTD	YTD	Low [2]	High [2]
IOPI62	62% Fe Fines	807	-8	-1.0%	751	865	643	1083	107.44	-0.12	-0.1%	99.46	120.89	82.29	159.06
IOPI58	58% Fe Fines	693	27	4.1%	674	733	533	907	92.72	4.57	5.2%	89.82	102.60	77.29	134.15
IOPI65	65% Fe Fines	919	-8	-0.9%	883	1024	811	1265	122.88	0.02	0.0%	117.48	143.75	108.78	187.25

IRON ORE SEABORNE INDEX (IOSI)

Dec 6th, 2022		CFR Qingdao, USD/dry tonne						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low [2]	High [2]
IOSI62	62% Fe Fines	106.65	6.55	6.54%	100.44	123.20	83.90	159.45
IOSI65	65% Fe Fines	119.30	9.70	8.85%	110.99	141.97	94.45	185.82

MARKET COMMENTARY

DCE iron ore futures rose by 0.06% today, the main contract closed 795.5. The traders' willingness to ship is more .The steel mills are active to purchase.The overall trading sentiment of the market is better. PBF at Shandong port dealt 788-795 yuan/mt,increase 2-7 yuan/mt;
PBF at Tangshan port dealt 795-799 yuan/mt,decrease 11-13 yuan/mt. According to SMM statistics, the impact of blast furnace maintenance this week on molten iron was 186.28 tons, a month on month decrease of 54500 tons. SMM speculates that next week, the maintenance volume of the blast furnace will decrease again, and the demand for iron ore will be supported. However, the current traders and steel mills are under great financial pressure. The current rise in mineral prices may suppress the enthusiasm of winter storage procurement, and the pace of replenishment may slow down. In view of the current optimistic sentiment and the favorable expectation brought by the later economic conference, the iron ore price fluctuates widely in the short term.

IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending Dec 2nd, 2022		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne [3]						
Index	Fe Content	Price	W-o-W	Change %	MTD	YTD	Low [2]	High [2]	Price	W-o-W	Change %	MTD	YTD	Low [2]	High [2]
IOPLI62	62.5% Fe Lump	900	58	6.9%	867	1054	770	1405	112.54	7.37	7.00%	110.61	142.12	94.72	199.13

IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

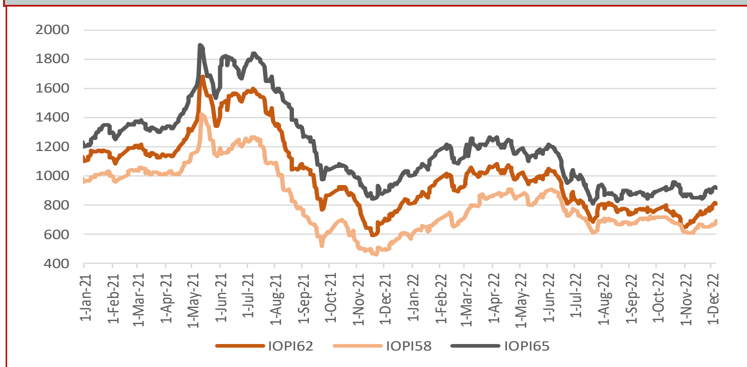
Week Ending Dec 2nd, 2022				RMB/tonne (excluding tax) [3]				USD/tonne (excluding tax) [3]			
Province	Region	Product	Basis	This week	Change %	Low [2]	High [2]	This week	Change %	Low [2]	High [2]
Hebei	Hanxing	66% Fe Concentrate	Dry	911	-0.1%	779	1645	127.54	-0.22%	110.31	255.69
Hebei	Qian'an	65% Fe Concentrate	Dry	960	3.2%	780	1630	134.40	3.11%	110.51	251.57
Liaoning	Anshan	65% Fe Concentrate	Wet	700	0.0%	620	1310	98.00	-0.11%	87.40	202.32
Shandong	Zibo	65% Fe Concentrate	Dry	934	-0.1%	800	1752	130.76	-0.22%	117.19	272.32

Week Ending Dec 2nd, 2022	This week	Change %	Low [2]	High [2]
China Mines Concentrate Composite Index RMB/WT	832.81	1.41%	706.36	1511.22

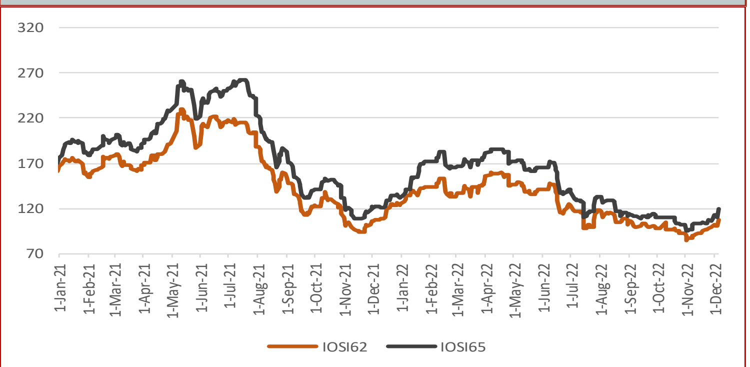
[1] Exchange rate applied: RMB/USD = 6.7522 [2] Last 12 months

[3] Weekly exchange rate applied: RMB/USD =7.13488

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

Dec 6th, 2022		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	August	September	October	November	MTD	QTD	YTD	August	September	October	November	MTD	QTD	YTD
IOPI62	62% Fe Fines	781	759	736	714	751	755	865	106.64	101.14	95.56	92.18	99.46	100.75	120.89
IOPI58	58% Fe Fines	685	697	683	635	674	676	733	94.05	93.56	89.34	82.39	89.82	90.72	102.60
IOPI65	65% Fe Fines	878	875	918	865	883	889	1024	120.31	117.19	120.08	112.37	117.48	119.29	143.75

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

Dec 6th, 2022		CFR Qingdao, USD/dry tonne						
Index	Fe Content	August	September	October	November	MTD	QTD	YTD
IOSI62	62% Fe Fines	110.64	101.12	95.80	93.05	100.44	102.24	123.20
IOSI65	65% Fe Fines	112.53	111.57	106.70	102.40	110.99	113.54	141.97

FREIGHT RATES

Dec 5th, 2022		FREIGHT RATES - DRY BULK US$/wet tonne				
Route	Designation		Change	Change %	Low [2]	High [2]
W. Australia - Qingdao	C5	8.20	0.07	0.92%	3.57	16.77
Tubarao - Qingdao	C3	19.33	-0.24	-1.22%	6.70	36.40

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

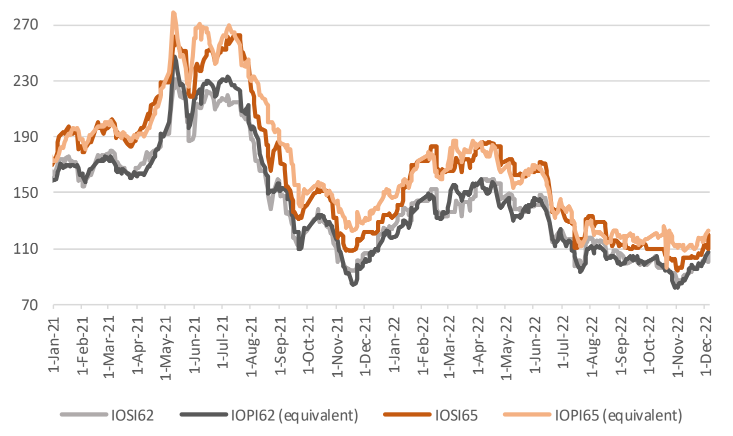
Week Ending Dec 2nd, 2022		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne [1]						
Index	Fe Content	August	September	October	November	MTD	QTD	YTD	September	October	October	November	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	900	873	877	811	867	876	1054	118.50	112.75	109.81	100.83	110.61	112.83	142.12

IRON ORE INDEX PREMIUMS/DISCOUNTS

Dec 6th, 2022		PORT STOCK INDEX (RMB/WT)	
Index	Fe Content	Spread to IOPI62	% Spread to IOPI62
IOPI58	58% Fe Fines	-114	-14.13%
IOPI65	65% Fe Fines	112	13.88%

Dec 6th, 2022		SEABORNE INDEX (USD/DMT)	
Index	Fe Content	Spread to IOSI62	% Spread to IOSI62
IOSI65	65% Fe Fines	12.65	11.86%

IRON ORE INDEX COMPARISONS (USD/DMT)



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

IRON ORE BRAND SPOT PRICE ASSESMENTS

Dec 6th, 2022	PORT STOCK INDEX (RMB/WT)		
	Price	Change	Diff to IOPI62
Roy Hill	750	-8	-57
SIMEC Fines	678	-8	-129
PB Fines	776	-8	-31
Newman Fines	775	-8	-32
MAC Fines	757	-8	-50
Jimblebar Blended Fines	671	-8	-136
Carajas Fines	987	-8	180
Brazilian SSF	770	-8	-37
Brazilian Blend Fines	789	-8	-18
RTX Fines	690	-8	-117
West Pilbara Fines	719	-8	-88

Dec 6th, 2022	SEABORNE INDEX (USD/DMT)		
	Price	Change	Diff to IOSI62
Roy Hill	102.15	6.55	-4.50
SIMEC Fines	98.65	6.55	-8.00
PB Fines	102.90	6.55	-3.75
Newman Fines	105.80	6.55	-0.85
MAC Fines	102.90	6.55	-3.75
Jimblebar Blended Fines	95.30	6.55	-11.35
Carajas Fines	136.20	6.55	29.55
Brazilian SSF	110.40	6.55	3.75
Brazilian Blend Fines	112.05	6.55	5.40
RTX Fines	96.55	6.55	-10.10
West Pilbara Fines	100.90	6.55	-5.75

Dec 6th, 2022	PORT STOCK INDEX (RMB/WT)		
	Price	Change	Diff to IOPI58
SSF	693	27	0
FMG Blended Fines	701	27	8
Robe River	702	27	9
Western Fines	704	27	11
Atlas Fines	699	27	6
Yandi	687	27	-6

IRON ORE INDEX NORMALISATION DIFFERENTIALS

Port Stock Index Product Differentials (RMB/wet tonne)

	Applicable range	Value	Change
1% Fe	High Grade Fe 60 - 63%	11.00	2.00
	High Grade Fe 63 - 64%	5.00	0.00
	High Grade Fe 64 - 65%	5.00	0.00
	High Grade Fe 65 - 65.5%	5.00	0.00
	Low Grade Fe	15.00	0.00
1% Alumina	High Fe Grade Al <2.25%	48.00	0.00
	High Fe Grade Al 2.25-4%	9.00	0.00
	Low Fe Grade Al <2.25%	43.00	0.00
	Low Fe Grade Al 2.25-4%	5.00	0.00
1% Silica	High Fe Grade Si <4%	21.00	3.00
	High Fe Grade Si 4-6.5%	22.00	0.00
	Low Fe Grade	5.00	0.00
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	5.00	0.00
	High Fe Grade 0.115%<P<0.15%	5.00	0.00
	Low Fe Grade 0.09<P<0.1%	7.00	0.00

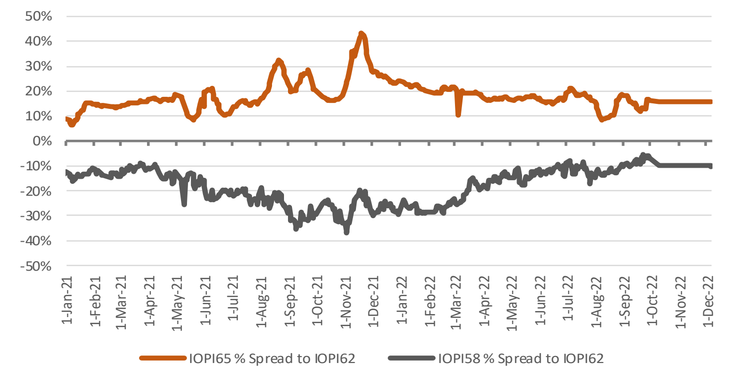
Seaborne Index Product Differentials (USD/dry tonne)

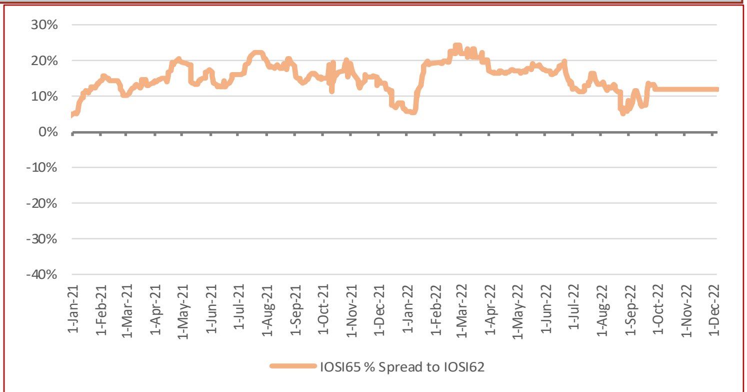
	Applicable range	Value	Change
1% Fe	High Grade Fe 60 - 63%	1.00	0.00
	High Grade Fe 63 - 64%	2.00	-0.50
	High Grade Fe 64 - 65%	2.00	-0.50
	High Grade Fe 65 - 65.5%	2.00	-0.50
1% Alumina	High Fe Grade Al <2.25%	2.50	-0.25
	High Fe Grade Al 2.25-4%	0.25	0.00
1% Silica	High Fe Grade Si <4%	2.25	-0.50
	High Fe Grade Si 4 - 6.5%	0.25	0.00
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	2.25	-0.50
	High Fe Grade 0.115%<P<0.15%	2.00	-0.25

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

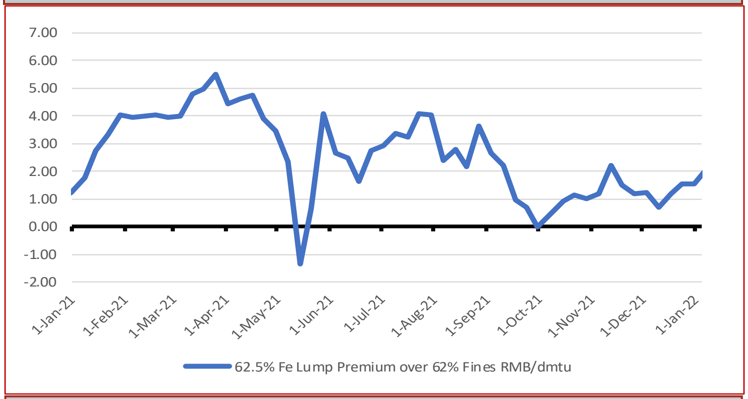
Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-100.00	0.00	Fangcheng	-25.00	0.00	Lanshan	0.00	0.00	Rizhao	0.00	0.00
Beilun	0.00	0.00	Jiangyin	-30.00	0.00	Lianyungang	0.00	0.00	Shekou	0.00	0.00
Caofeidian	-10.00	0.00	Jingtang	-20.00	0.00	Majishan	0.00	0.00	Taicang	-30.00	0.00
Dalian	0.00	0.00	Lanqiao	0.00	0.00	Qingdao	0.00	0.00	Tianjin	-10.00	0.00

IRON ORE INDEX PREMIUMS/DISCOUNTS

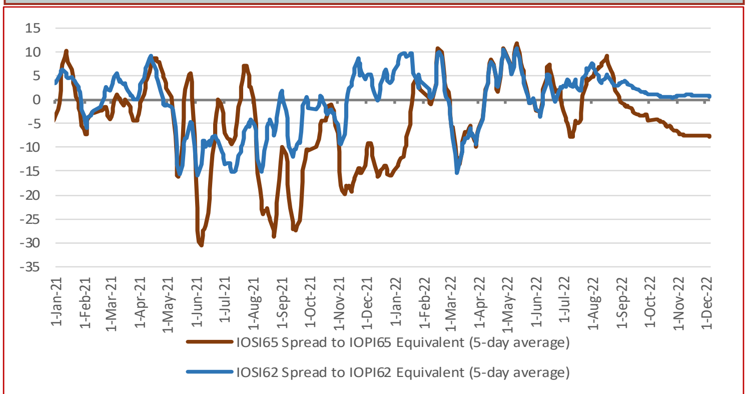




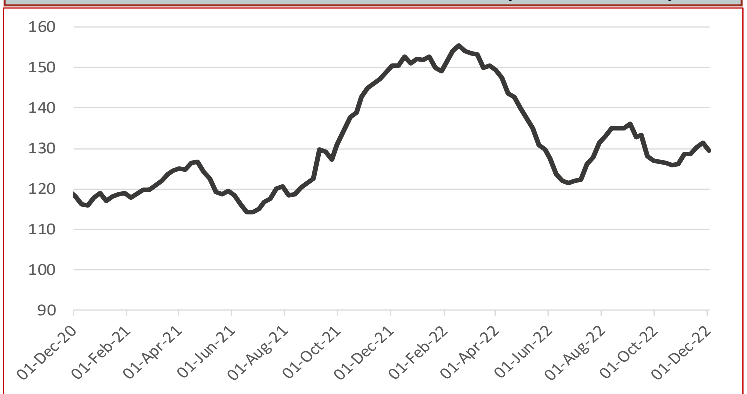
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



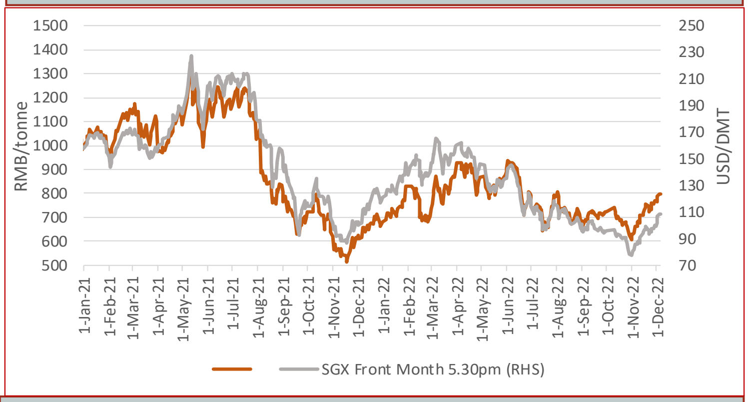
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

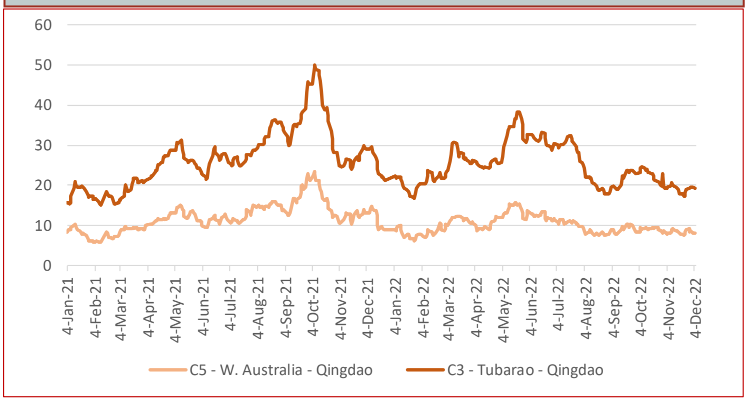
Week Ending Dec 2nd, 2022

Province	This week	Change %	Low [2]	High [2]
Jingtang	13.27	-0.52%	9.84	19.20
Qingdao	25.15	0.40%	9.41	26.24
Caofeidian	11.48	2.04%	9.05	16.29
Tianjin	8.68	-5.45%	7.14	12.97
Rizhao	17.58	-4.30%	9.44	19.26
Total (35 Ports)	129.43	-1.60%	98.80	155.39

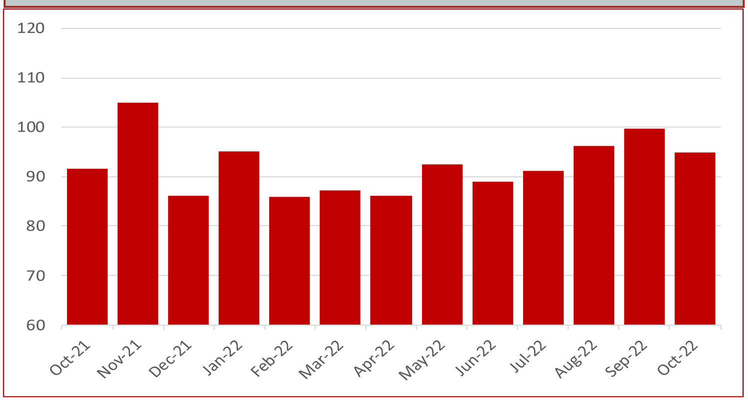
IRON ORE FUTURES CONTRACTS

	DCE (RMB/WMT)			SGX (USD/DMT)		
Closing Date	Dec 6th, 3pm close			Dec 6th, 5:30pm		
Contract	I2301	Change	Change %	Jan. 23	Change	Change %
Closing Price	795.50	0.00	0.00%	108.30	-0.55	-0.51%
Vol traded ('000 lots)	30.75	-22.48	-42.23%	4.45	-3.12	-41.17%
Open positions ('000 lots)	43.22	-5.84	-11.91%	30.26	0.11	0.36%
Day Low	786.5	4.50	0.58%	106.30	0.90	0.85%
Day High	804.5	-3.50	-0.43%	109.20	0.05	0.05%

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	2022/12/2	Change	Change %
ReBar HRB400 ϕ18mm	3,790	10	0.26%
Wirerod Q300 ϕ6.5mm	4,260	-30	-0.70%
HRC Q235/SS400 5.5mm*1500*C	3,940	60	1.55%
CRC SPCC/ST12 1.0mm*1250*2500	4,370	30	0.69%
Medium & Heavy Plate Q235B 20mm	3,920	30	0.77%
GI ST02Z 1.0mm*1000*C	4,640	10	0.22%
Colour Coated Plate	7,450	-50	-0.67%

CHINESE STEEL MILL PROFITABILITY

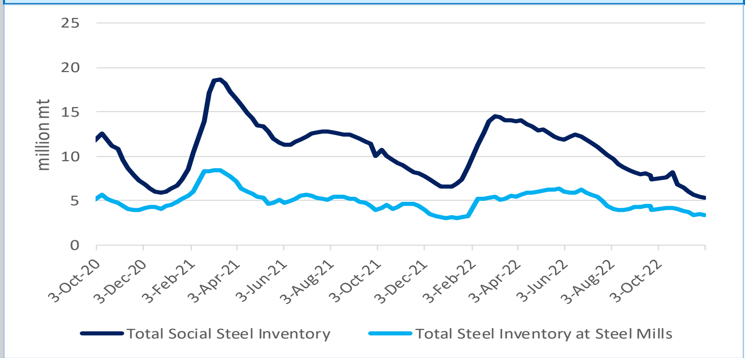
SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)

Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt exluding tax	101.65	5	Mmi CFR Equivalent index for 1st Feb
Coke	2,850	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,910	0	steel scrap (6mm) in Zhangjiagang, exl. tax
Billet Cost	3,562	56	Q234, incl. tax
Rebar cost - Blast furnace	4,059	64	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	-269	-64	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	4,022	62	based on actual weight, incl. tax
Hot-rolled coil proft - Blast furnace	92	181	based on Shanghai prices, incl. tax

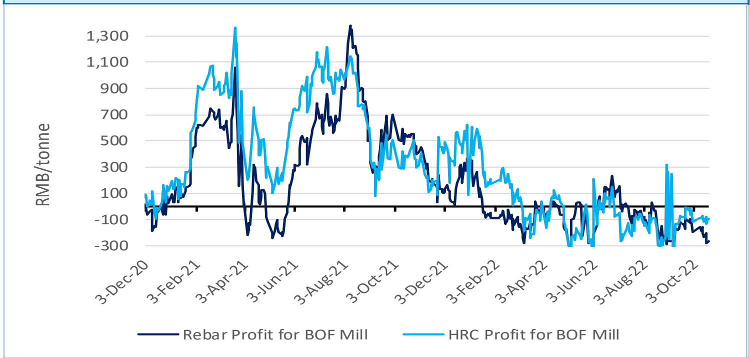
Note: 1. Costs in the table are caluclated based on todays market prices and facout our management, sales, financial and depreciations fe

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

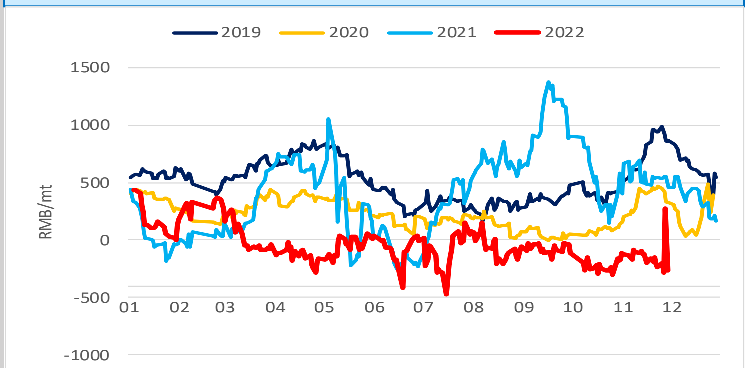
CHINESE STEEL INVENTORIES



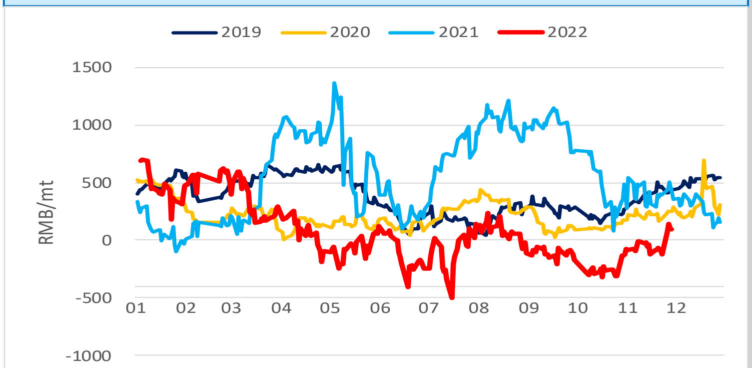
CHINESE STEEL MILL PROFITABILITY



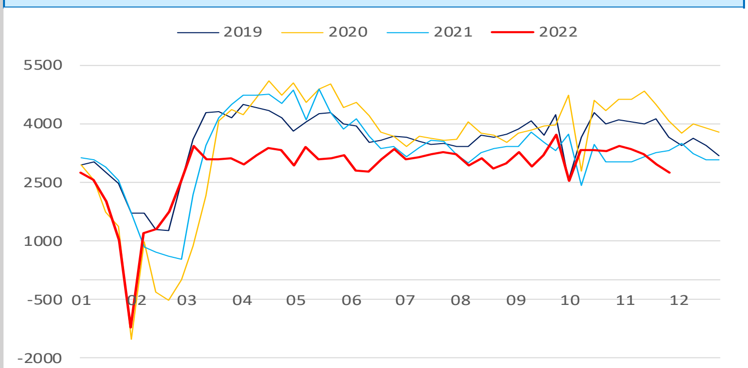
CHINESE STEEL MILL PROFITABILITY—Rebar



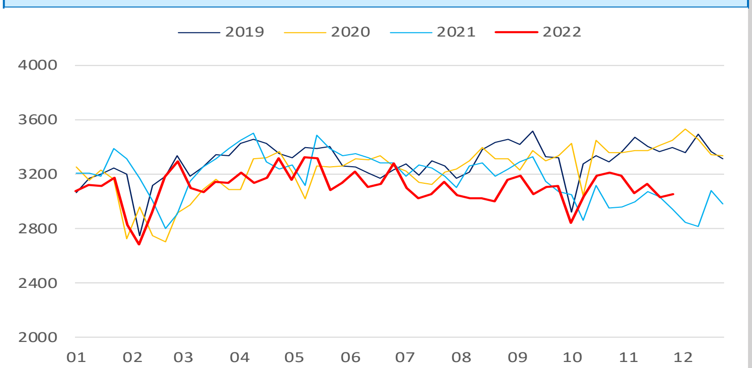
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



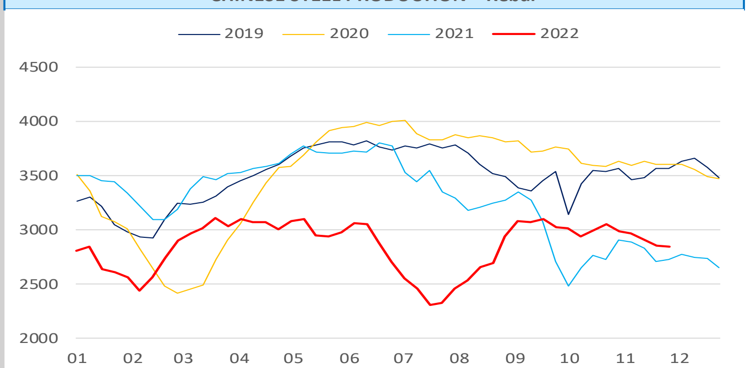
CHINESE STEEL CONSUMPTION—Rebar



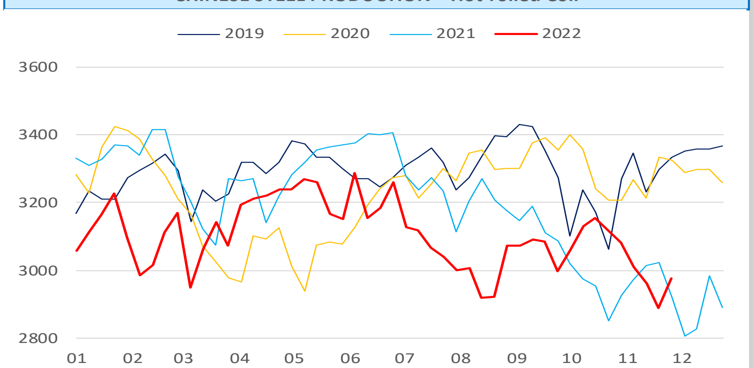
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



CHINESE STEEL PRODUCTION—Rebar



CHINESE STEEL PRODUCTION—Hot-rolled Coil



IRON ORE INDEX SPECIFICATIONS, COMPILATION RATIONALE AND DATA EXCLUSIONS

Iron Ore Index Specifications (Port and Seaborne)

	65% Fe Fines	62% Fe Fines	58% Fe Fines	62.5% Fe Lump
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

Iron Ore Index Compilation Rationale and Data Exclusions

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: www.mmiprices.com

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

Dec 6th, 2022	Specifications applied for 62% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture
Roy Hill	60.88%	2.35%	4.45%	0.055%	9.26%
SIMEC Fines	60.00%	2.30%	6.30%	0.060%	6.00%
PB Fines	61.64%	2.31%	3.87%	0.099%	9.45%
Newman Fines	62.49%	2.31%	3.98%	0.090%	7.72%
MAC Fines	60.43%	2.38%	4.64%	0.078%	7.57%
Jimblebar Blended Fines	60.87%	2.95%	4.53%	0.111%	7.32%
Carajas Fines	64.90%	1.39%	1.82%	0.080%	7.78%
Brazilian SSF	62.00%	1.00%	6.50%	0.040%	6.00%
Brazilian Blend Fines	62.56%	1.58%	4.79%	0.091%	8.72%
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%

Dec 6th, 2022	Specifications applied for 58% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture
SSF	56.49%	3.20%	6.19%	0.065%	9.18%
FMG Blended Fines	58.20%	2.43%	5.54%	0.057%	8.29%
Robe River	56.44%	3.16%	5.73%	0.042%	8.44%
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	56.87%	1.58%	6.41%	0.042%	9.53%

SEABORNE BRANDS

	Specifications applied for 62% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture
Roy Hill	60.70%	2.30%	4.90%	0.055%	8.00%
SIMEC Fines	60.00%	2.30%	6.30%	0.060%	6.00%
PB Fines 62%	62.00%	2.60%	4.30%	0.090%	9.50%
Newman Fines	62.30%	2.40%	4.30%	0.095%	8.00%
MAC Fines	60.80%	2.35%	4.40%	0.075%	7.80%
Jimblebar Blended Fines	60.50%	3.10%	4.80%	0.120%	7.80%
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 Blend Fines	63.00%	1.50%	5.00%	0.070%	7.00%
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%

BLOOMBERG TICKERS

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

	SEABORNE INDICES
	CFR Qingdao (USD/DMT)
IOSI62	IRCN0034
IOSI65	IRCN0035

CONTACT US

MMI Singapore Office Details: Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7629 E: prices@mmiprices.com
SMM Singapore Office Details: Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7630 E: 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

Visit www.mmiprices.com for full index price histories and archive of daily reports