Metals Market Index MMi

MMi Dashboard

Iron Ore Price Indices

Iron Ore Port Stock (FOT Qingdao) IOPI62 62% Fe Fines RMB/t	901	9	1.01%	Feb 17th, 2023
Iron Ore Port Stock (FOT Qingdao) IOPI65 65% Fe Fines RMB/t	1012	8.00	0.80%	Feb 17th, 2023
Iron Port Stock (FOT Qingdao) IOPI58 58% Fe Fines RMB/t	791	1	0.13%	Feb 17th, 2023
Iron Ore Seaborne (CFR Qingdao) IOSI62 62% Fe Fines USD/dmt	126.42	0.00	0.00%	Feb 17th, 2023
Iron Ore Seaborne (CFR Qingdao) IOSI65 65% Fe Fines USD/dmt	137.35	0.00	0.00%	Feb 17th, 2023
Iron Ore Port Stock (FOT Qingdao) IOPLI 62.5% Fe Lump RMB/t	990	-8	-0.80%	Week Ending Feb 17th, 2023

Exchange Traded Contracts

DCE Iron Ore 62% Fines I2305 (Jan) RMB/t (3pm close)	889.50	24.00	2.77%	Feb 17th, 2023 (3pm close)
SGX Iron Ore (CFR Qingdao) 62% Fe Fines March 23 USD/dmt	125.30	2.10	1.70%	Feb 17th, 2023 (5.30 pm Print)
SHFE Rebar RB2305 (Jan) RMB/t	4167	21	0.51%	Feb 17th, 2023 (3pm close)

Freight Rates

C3, Tubarao - Qingdao USD/t	16.17	-0.13	-0.79%	Feb 16th, 2023
C5, W. Australia - Qingdao USD/t	6.08	-0.09	-1.43%	Feb 16th, 2023

Steel Price

Steel Rebar (China Domestic) RMB/t	4180	40	0.97%	Week Ending Feb 17th, 2023

Inventory Levels

Iron Ore Inventory at Chinese Ports (35) million tonnes	137.11	1.02	0.75%	Week Ending Feb 17th, 2023
Steel Inventory in China million tonnes	19.88	0.46	2.36%	Week Ending Feb 17th, 2023

Steel Price

Steel HRC (China Domestic) RMB/t	4240	80	1.92%	Week Ending Feb 17th, 2023

IRON ORE PORT STOCK INDEX (IOPI)

Feb 17th, 2023		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	**901**	9	1.0%	869	880	858	892	**122.47**	1.17	1.0%	120.06	120.58	117.93	122.93
IOPI58	58% Fe Fines	**791**	1	0.1%	813	798	761	793	**108.21**	0.06	0.1%	113.29	110.17	105.29	110.04
IOPI65	65% Fe Fines	**1012**	8	0.8%	981	992	970	1003	**138.04**	1.02	0.7%	136.05	136.43	133.84	138.73

IRON ORE SEABORNE INDEX (IOSI)

Feb 17th, 2023		CFR Qingdao, USD/dry tonne						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low [2]	High [2]
IOSI62	62% Fe Fines	**126.42**	0.00	0.00%	107.14	122.30	83.90	159.45
IOSI65	65% Fe Fines	**137.35**	0.00	0.00%	117.49	139.46	94.45	185.82

MARKET COMMENTARY

DCE DCE iron ore futures rose by 2.01 % today, the main contract closed 889.5.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 deal 885-895 yuan/mt, increase 3-15yuan/mt.PBF at Tangshan port deal 897 yuan/mt,increase 14yuan/mt. As of February 17, the inventory of 35 ports tracked by SMM totaled 137.11 million tons, 1.02 million tons more than last week, 16.53 million tons less than the same period last year. The average daily port dredging volume of imported mines in this period increased by 79000 tons to 3028000 tons on a weekly basis. The port dredging volume has increased for three consecutive periods and is now returning to a relatively high level. The main reason for the accumulation was the increase in the arrival of iron ore at the port last week. In fact, the production of molten iron from blast furnace at the demand end continued to rise this week, and it is expected that the subsequent resumption of blast furnace production will still increase. Therefore, although the number of arrivals increases, the contradiction between supply and demand has not expanded. In addition, the current terminal demand shows signs of

IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending Feb 17th, 2023		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	**990**	-8	-0.8%	899	1036	770	1405	**129.74**	-1.99	-1.51%	115.69	138.89	94.72	199.13

IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

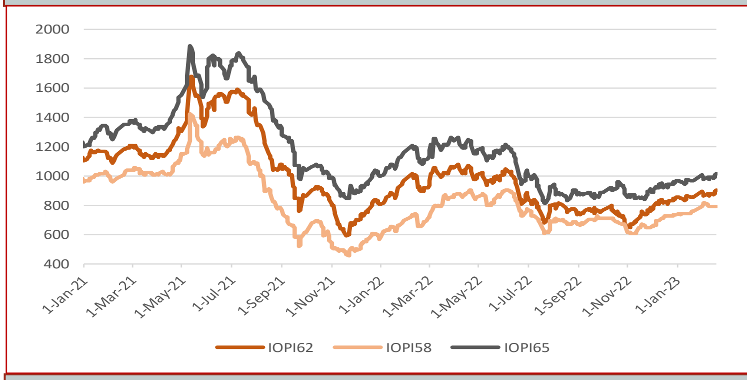
Week Ending Feb 17th, 2023				RMB/tonne (excluding tax) [3]				USD/tonne (excluding tax) [3]			
Province	Region	Product	Basis	This week	Change %	Low [2]	High [2]	This week	Change %	Low [2]	High [2]
Hebei	Hanxing	66% Fe Concentrate	Dry	**1036**	-4.3%	779	1645	**151.62**	-4.34%	110.31	255.69
Hebei	Qian'an	65% Fe Concentrate	Dry	**1055**	1.0%	780	1630	**154.40**	0.96%	110.51	251.57
Liaoning	Anshan	65% Fe Concentrate	Wet	**790**	0.0%	620	1310	**115.62**	0.00%	87.40	202.32
Shandong	Zibo	65% Fe Concentrate	Dry	**1059**	-4.2%	800	1752	**154.98**	-4.25%	117.19	272.32

Week Ending Feb 17th, 2023	This week	Change %	Low [2]	High [2]
China Mines Concentrate Composite Index RMB/WT	937.76	-1.07%	706.36	1511.22

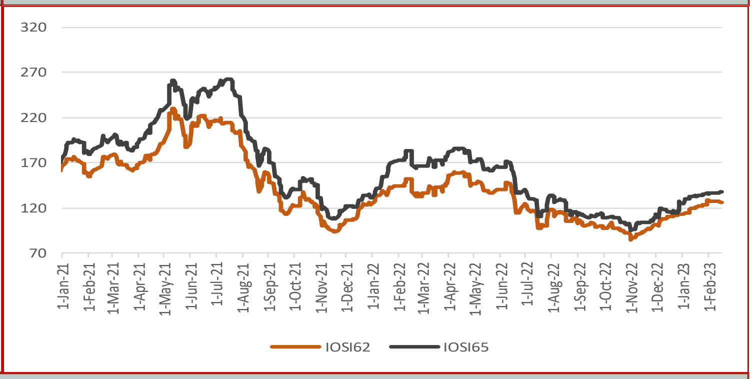
[1] Exchange rate applied: RMB/USD = 6.7522 [2]Last 12 months

[3] Weekly exchange rate applied: RMB/USD =6.7849

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

Feb 17th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	October	November	December	January	MTD	QTD	YTD	October	November	December	January	MTD	QTD	YTD
IOPI62	62% Fe Fines	736	714	822	856	**869**	881	880	95.56	92.18	109.43	117.00	**120.06**	120.90	120.58
IOPI58	58% Fe Fines	683	635	711	751	**813**	792	798	89.34	82.39	95.17	103.34	**113.29**	109.35	110.17
IOPI65	65% Fe Fines	918	865	935	968	**981**	993	992	120.08	112.37	124.90	132.80	**136.05**	136.72	136.43

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

Feb 17th, 2023		CFR Qingdao, USD/dry tonne						
Index	Fe Content	October	November	December	January	MTD	QTD	YTD
IOSI62	62% Fe Fines	95.80	93.05	108.92	119.76	**107.14**	107.50	122.30
IOSI65	65% Fe Fines	106.70	102.40	116.83	132.39	**117.49**	118.39	139.46

FREIGHT RATES

Feb 16th, 2023		FREIGHT RATES - DRY BULK US$/wet tonne				
Route	Designation		Change	Change %	Low [2]	High [2]
W. Australia - Qingdao	C5	**6.08**	-0.09	-1.43%	3.57	16.77
Tubarao - Qingdao	C3	**16.17**	-0.13	-0.79%	6.70	36.40

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

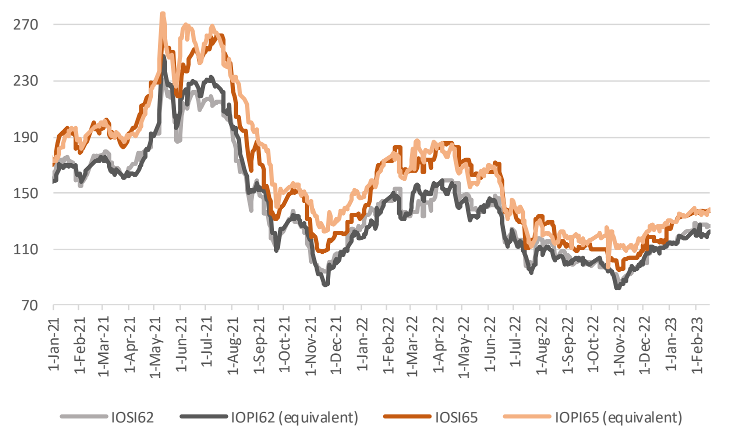
Week Ending Feb 17th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne [1]						
Index	Fe Content	October	November	December	January	MTD	QTD	YTD	October	November	December	January	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	877	811	922	964	**899**	900	1036	109.81	100.83	117.06	126.47	**115.69**	116.42	138.89

IRON ORE INDEX PREMIUMS/DISCOUNTS

Feb 17th, 2023		PORT STOCK INDEX (RMB/WT)	
Index	Fe Content	Spread to IOPI62	% Spread to IOPI62
844	844	**844**	84400.00%
774	774	**774**	77400.00%

Feb 17th, 2023		SEABORNE INDEX (USD/DMT)	
Index	Fe Content	Spread to IOSI62	% Spread to IOSI62
IOSI65	65% Fe Fines	**10.93**	8.65%

IRON ORE INDEX COMPARISONS (USD/DMT)



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

IRON ORE BRAND SPOT PRICE ASSESMENTS

Feb 17th, 2023	PORT STOCK INDEX (RMB/WT)		
	Price	Change	Diff to IOPI62
Roy Hill	844	844	844
SIMEC Fines	774	774	774
PB Fines	869	869	869
Newman Fines	870	870	870
MAC Fines	851	851	851
Jimblebar Blended Fines	766	766	766
Carajas Fines	1082	1082	1082
Brazilian SSF	865	865	865
Brazilian Blend Fines	882	882	882
RTX Fines	784	784	784
West Pilbara Fines	812	812	812

Feb 17th, 2023	SEABORNE INDEX (USD/DMT)		
	Price	Change	Diff to IOSI62
Roy Hill	121.90	0.00	-4.52
SIMEC Fines	118.40	0.00	-8.02
PB Fines	122.70	0.00	-3.72
Newman Fines	125.55	0.00	-0.87
MAC Fines	122.70	0.00	-3.72
Jimblebar Blended Fines	115.05	0.00	-11.37
Carajas Fines	155.95	0.00	29.53
Brazilian SSF	130.15	0.00	3.73
Brazilian Blend Fines	131.05	0.00	4.63
RTX Fines	116.30	0.00	-10.12
West Pilbara Fines	125.65	0.00	-0.77

Feb 17th, 2023	PORT STOCK INDEX (RMB/WT)		
	Price	Change	Diff to IOPI58
SSF	791	1	0
FMG Blended Fines	801	1	10
Robe River	801	1	10
Western Fines	804	1	13
Atlas Fines	798	1	7
Yandi	784	1	-7

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	0.00
	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	18.00	0.00
1% Alumina	High Fe Grade Al <2.25%	83.00	0.00
	High Fe Grade Al 2.25-4%	5.00	0.00
	Low Fe Grade Al <2.25%	50.00	0.00
	Low Fe Grade Al 2.25-4%	25.00	0.00
1% Silica	High Fe Grade Si <4%	5.00	0.00
	High Fe Grade Si 4-6.5%	22.00	0.00
	Low Fe Grade	15.00	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%	8.00	0.00

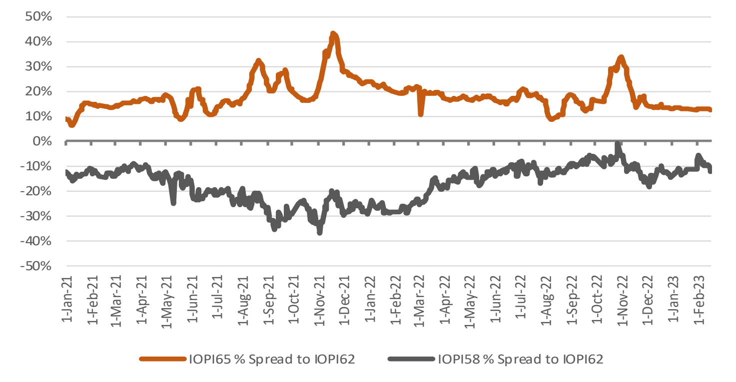
Seaborne Index Product Differentials (USD/dry tonne)

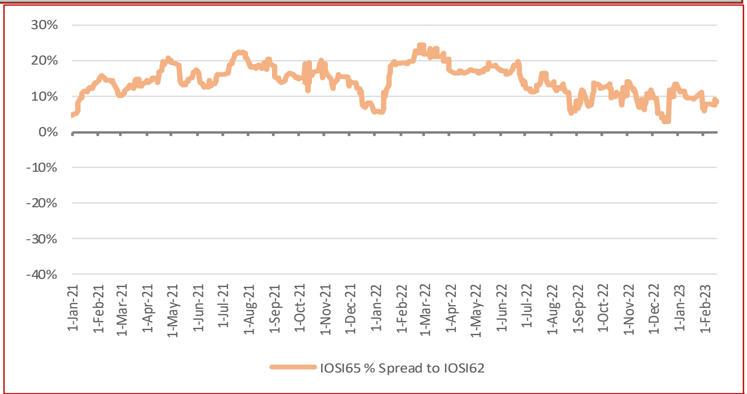
	Applicable range	Value	Change
1% Fe	High Grade Fe 60 - 63%	1.75	0.00
	High Grade Fe 63 - 64%	4.00	0.00
	High Grade Fe 64 - 65%	4.00	0.00
	High Grade Fe 65 - 65.5%	4.00	0.00
1% Alumina	High Fe Grade Al <2.25%	1.50	0.00
	High Fe Grade Al 2.25-4%	1.00	0.00
1% Silica	High Fe Grade Si <4%	3.00	0.00
	High Fe Grade Si 4 - 6.5%	0.25	0.00
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	1.50	0.00
	High Fe Grade 0.115%<P<0.15%	4.25	0.00

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

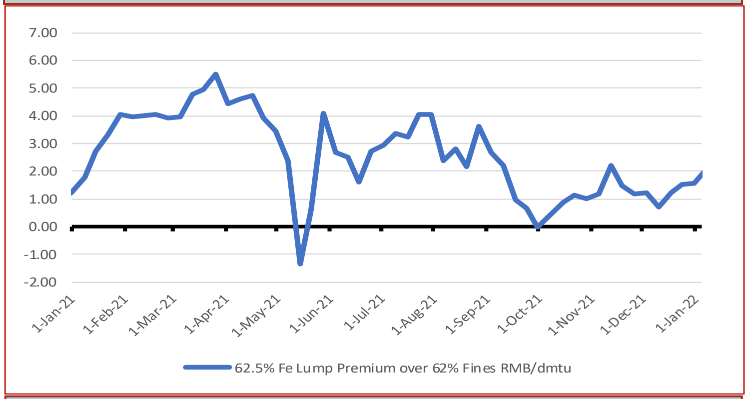
Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-100.00	0.00	Fangcheng	-25.00	0.00	Lanshan	0.00	0.00	Rizhao	0.00	0.00
Beilun	0.00	0.00	Jiangyin	-30.00	0.00	Lianyungang	0.00	0.00	Shekou	0.00	0.00
Caofeidian	5.00	0.00	Jingtang	-20.00	0.00	Majishan	0.00	0.00	Taicang	-30.00	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

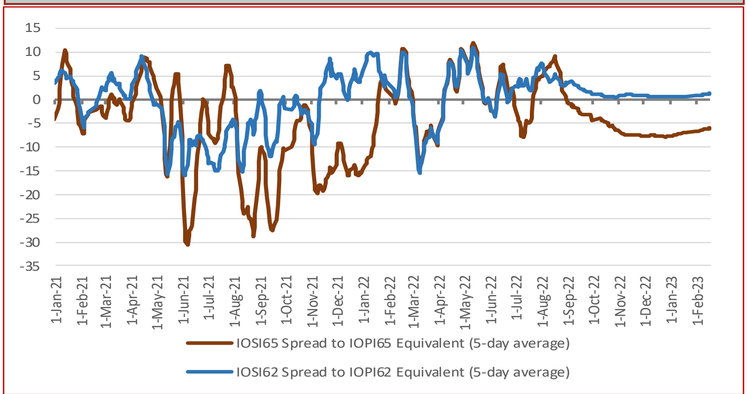




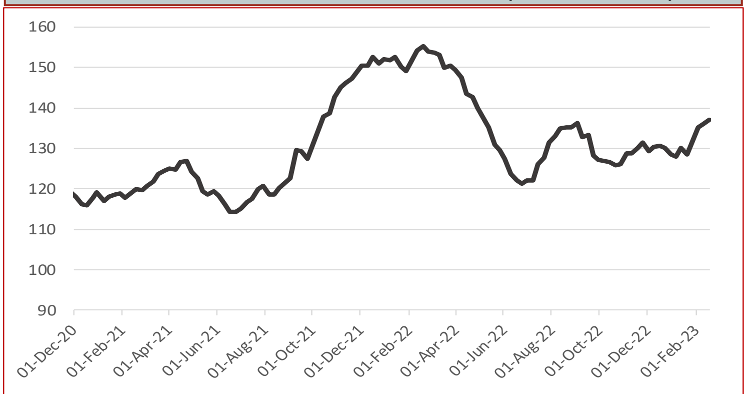
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



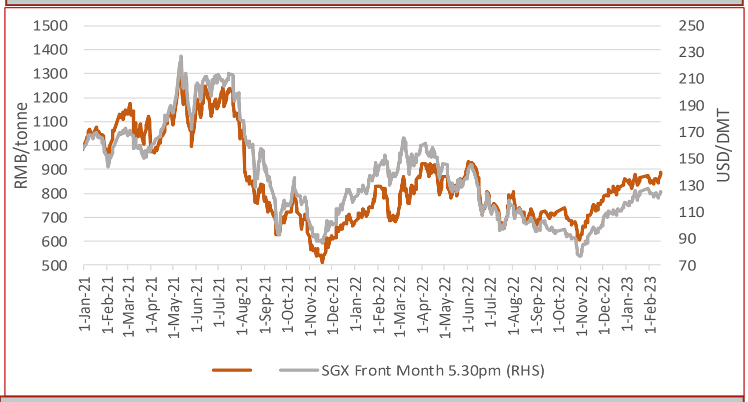
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

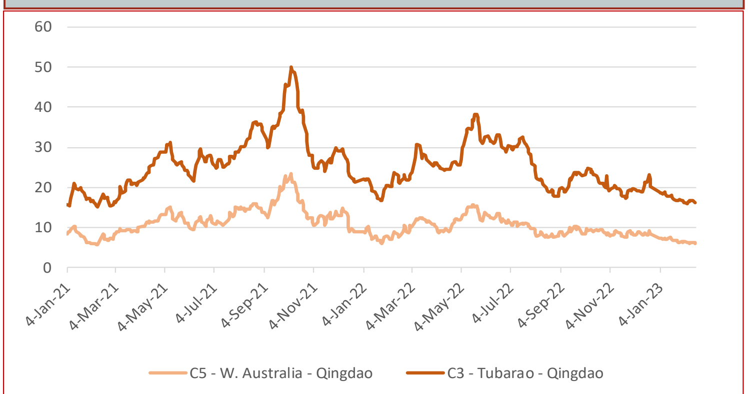
Week Ending Feb 17th, 2023

Province	This week	Change %	Low [2]	High [2]
Jingtang	12.14	1.34%	9.84	19.20
Qingdao	26.24	1.27%	9.41	26.24
Caofeidian	11.63	5.34%	9.05	16.29
Tianjin	11.88	0.25%	7.14	12.97
Rizhao	19.15	1.38%	9.44	19.26
Total (35 Ports)	137.11	0.75%	98.80	155.39

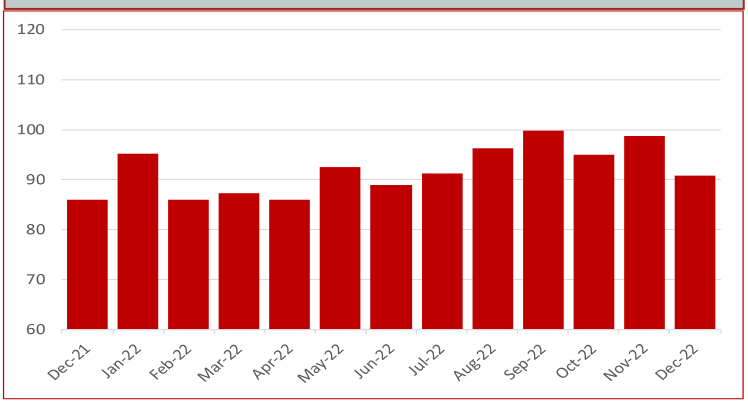
IRON ORE FUTURES CONTRACTS

	DCE (RMB/WMT)			SGX (USD/DMT)		
Closing Date	Feb 17th, 3pm close			Feb 17th, 5:30pm		
Contract	I2305	Change	Change %	Mar. 23	Change	Change %
Closing Price	889.50	24.00	2.77%	125.30	2.10	1.70%
Vol traded ('000 lots)	64.75	-0.51	-0.78%	4.99	0.32	6.81%
Open positions ('000 lots)	93.66	4.36	4.89%	30.91	-1.32	-4.09%
Day Low	879.5	25.50	2.99%	124.45	2.30	1.88%
Day High	893.0	20.00	2.29%	126.70	2.40	1.93%

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	2023/2/17	Change	Change %
ReBar HRB400 ϕ18mm	4,180	40	0.97%
Wirerod Q300 ϕ6.5mm	4,430	40	0.91%
HRC Q235/SS400 5.5mm*1500*C	4,240	80	1.92%
CRC SPCC/ST12 1.0mm*1250*2500	4,620	30	0.65%
Medium & Heavy Plate Q235B 20mm	4,300	60	1.42%
GI ST02Z 1.0mm*1000*C	4,870	40	0.83%
Colour Coated Plate	7,580	80	1.07%

CHINESE STEEL MILL PROFITABILITY

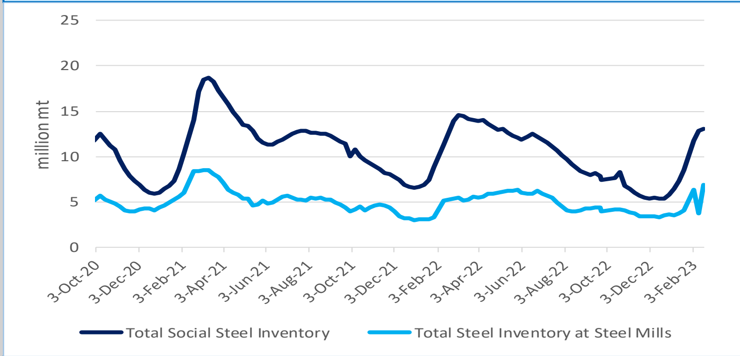
SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)

Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt exluding tax	127.10	0	Mmi CFR Equivalent index for 1st Feb
Coke	2,960	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	3,150	-50	steel scrap (6mm) in Zhangjiagang, exl. tax
Billet Cost	3,613	1	Q234, incl. tax
Rebar cost - Blast furnace	4,126	11	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	64	79	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	4,128	11	based on actual weight, incl. tax
Hot-rolled coil proft - Blast furnace	112	79	based on Shanghai prices, incl. tax

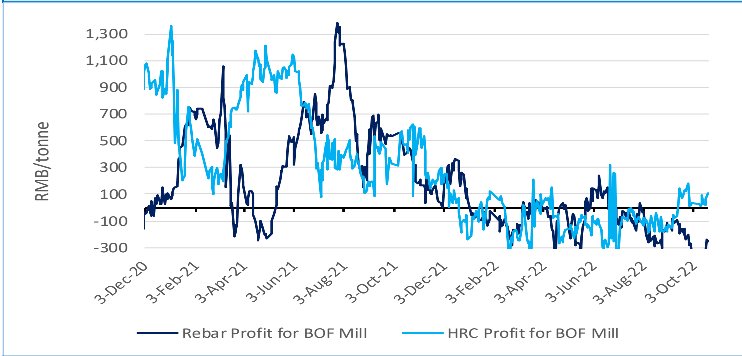
Note: 1. Costs in the table are caluclated based on todays market prices and facout our management, sales, financial and depreciations fe

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

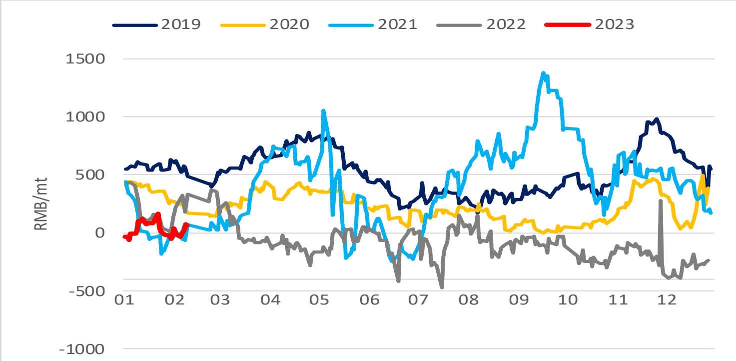
CHINESE STEEL INVENTORIES



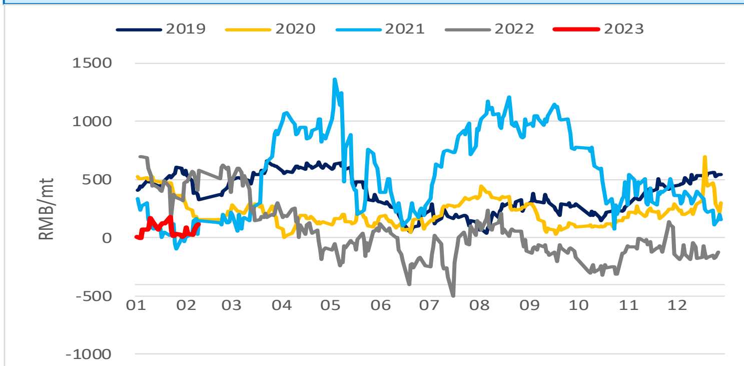
CHINESE STEEL MILL PROFITABILITY



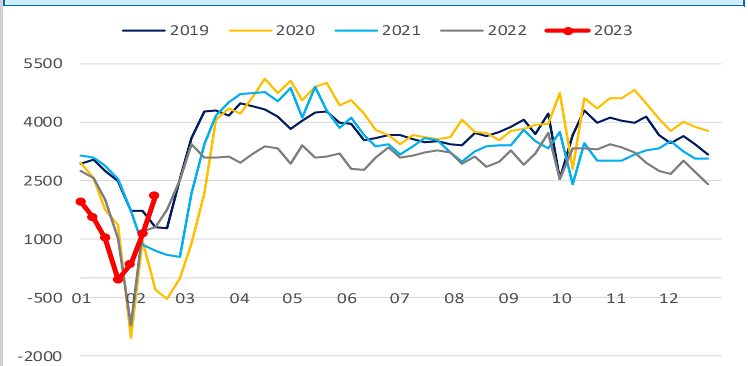
CHINESE STEEL MILL PROFITABILITY—Rebar



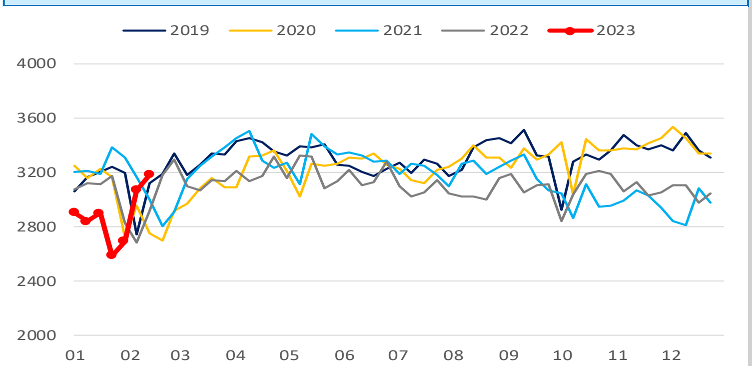
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



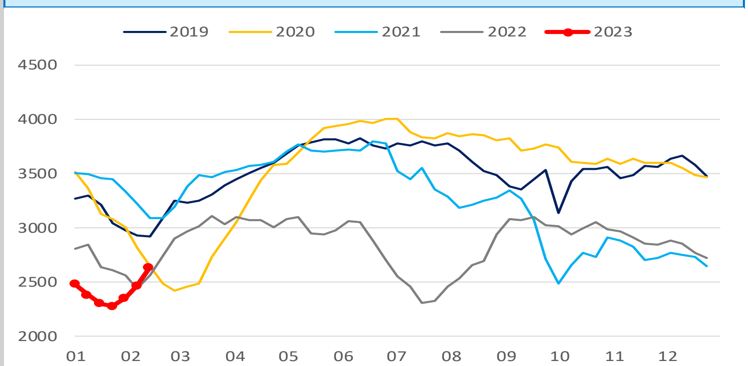
CHINESE STEEL CONSUMPTION—Rebar



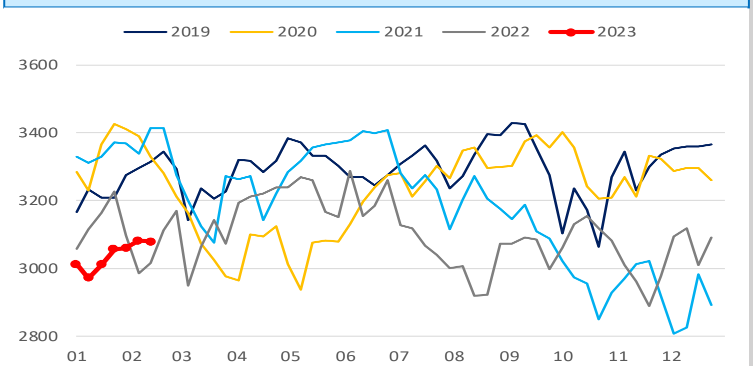
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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

Feb 17th, 2023	Specifications applied for 62% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture
844 844	60.88%	2.35%	4.45%	0.055%	9.26%
774 774	60.00%	2.30%	6.30%	0.060%	6.00%
869 869	61.64%	2.31%	3.87%	0.099%	9.45%
870 870	62.49%	2.31%	3.98%	0.090%	7.72%
851 851	60.43%	2.38%	4.64%	0.078%	7.57%
766 766	60.87%	2.95%	4.53%	0.111%	7.32%
1082 1082	64.90%	1.39%	1.82%	0.080%	7.78%
865 865	62.00%	1.00%	6.50%	0.040%	6.00%
882 882	62.56%	1.58%	4.79%	0.091%	8.72%
784 784	61.00%	3.10%	4.50%	0.135%	7.50%
812 812	60.10%	2.30%	4.70%	0.075%	8.50%

Feb 17th, 2023	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

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