



MMi Dashboard

Iron Ore Price Indices

Iron Ore Port Stock (FOT Qingdao) IOPI62 62% Fe Fines RMB/t  812 1 0.09% May 8th, 2023	Iron Ore Port Stock (FOT Qingdao) IOPI65 65% Fe Fines RMB/t  923 0.43 0.05% May 8th, 2023	Iron Port Stock (FOT Qingdao) IOPI58 58% Fe Fines RMB/t  711 3 0.43% May 8th, 2023
Iron Ore Seaborne (CFR Qingdao) IOSI62 62% Fe Fines USD/dmt  111.60 0.00 0.00% May 8th, 2023	Iron Ore Seaborne (CFR Qingdao) IOSI65 65% Fe Fines USD/dmt  132.15 0.00 0.00% May 8th, 2023	Iron Ore Port Stock (FOT Qingdao) IOPLI 62.5% Fe Lump RMB/t  945 -30 -3.08% Week Ending May 5th, 2023

Exchange Traded Contracts

DCE Iron Ore 62% Fines I2309 (Jan) RMB/t (3pm close)  721.50 24.00 3.44% May 8th, 2023 (3pm close)	SGX Iron Ore (CFR Qingdao) 62% Fe Fines June 23 USD/dmt  105.50 6.50 6.57% May 8th, 2023 (5.30 pm Print)	SHFE Rebar RB2310 (Jan) RMB/t  3732 110 3.04% May 8th, 2023 (3pm close)
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Freight Rates

C3, Tubarao - Qingdao USD/t  22.32 -0.03 -0.11% May 5th, 2023	C5, W. Australia - Qingdao USD/t  8.91 0.20 2.24% May 5th, 2023	Steel Rebar (China Domestic) RMB/t  3830 -140 -3.53% Week Ending May 5th, 2023
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Inventory Levels

Iron Ore Inventory at Chinese Ports (35) million tonnes  125.16 -1.79 -1.41% Week Ending May 5th, 2023	Steel Inventory in China million tonnes  15.86 -0.54 -3.26% Week Ending May 5th, 2023	Steel HRC (China Domestic) RMB/t  3980 -90 -2.21% Week Ending May 5th, 2023
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IRON ORE PORT STOCK INDEX (IOP1)

May 8th, 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
IOP162	62% Fe Fines	812	1	0.1%	869	880	858	892	109.01	0.03	0.0%	120.06	120.58	117.93	122.93
IOP158	58% Fe Fines	711	3	0.4%	813	798	761	793	96.05	0.37	0.4%	113.29	110.17	105.29	110.04
IOP165	65% Fe Fines	923	0	0.0%	981	992	970	1003	124.54	-0.02	0.0%	136.05	136.43	133.84	138.73

IRON ORE SEABORNE INDEX (IOS1)

MARKET COMMENTARY

May 8th, 2023		CFR Qingdao, USD/dry tonne							DCE iron ore futures market rose by 5.02%, the main contract 12309 closed 721.5, some traders were active to sell, steel mills purchased on demand in the morning, but purchases are down in the afternoon. Today the overall market transaction atmosphere is acceptable. PBF at Shandong port dealt 782-795 yuan/mt; increased 5 yuan/mt from Last Friday. PBF at Tangshan port dealt 800-820 yuan/mt; increased 10-20 yuan/mt from Last Friday. According to SMM shipping data, global shipping volume increased by 15.3% month on month to 32.94 million tons this week, with Australia's shipping volume increasing by 12.6% month on month to 18.94 million tons. Brazil's freight volume increased by 26.3% month on month to 6.09 million tons. The arrival volume increased by 0.82% month on month to 22.358 million tons. The transportation volume of overseas mines has returned to normal levels, and there is still room for growth in the future. And the demand for iron ore was in a downward trend in May, with overall supply becoming increasingly loose. Adding to today's news of crude steel level control, iron ore prices fell this morning, but the subsequent news of coking coal imports led to a significant increase in double coke prices, driving the entire black system to resonate upwards.
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²	
IOS162	62% Fe Fines	111.60	0.00	0.00%	115.32	124.54	83.90	147.90	
IOS165	65% Fe Fines	132.15	0.00	0.00%	125.14	140.27	94.45	171.85	

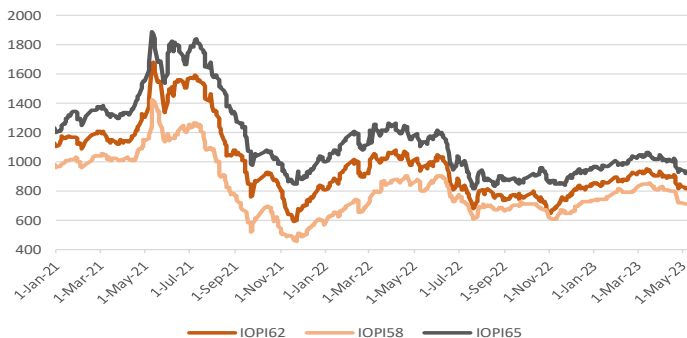
IRON ORE PORT LUMP INDEX (IOP1)

Week Ending May 5th, 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
IOP162	62.5% Fe Lump	945	-30	-3.1%	927	1030	770	1330	127.13	-8.92	-6.56%	120.05	137.80	95.00	180.00

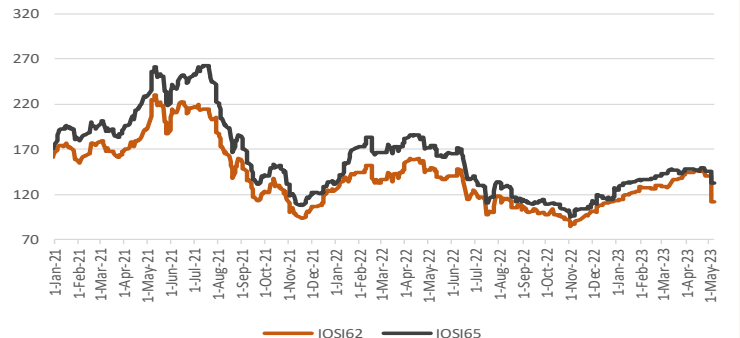
IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending May 5th, 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	1008	-1.1%	779	1645	146.53	-1.08%	110.31	255.69
Hebei	Qian'an	65% Fe Concentrate	Dry	985	-4.8%	780	1630	143.18	-4.83%	110.51	251.57
Liaoning	Anshan	65% Fe Concentrate	Wet	765	-3.8%	620	1310	111.20	-3.77%	87.40	202.32
Shandong	Zibo	65% Fe Concentrate	Dry	1022	-1.2%	800	1752	148.56	-1.16%	117.19	272.32
Week Ending May 5th, 2023				This week	Change %	Low ²	High ²	1 Exchange rate applied: RMB/USD = 6.7522 2 Last 12 months			
China Mines Concentrate Composite Index RMB/WT				888.41	-4.18%	706.36	1511.22	3 Weekly exchange rate applied: RMB/USD =6.87528			

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

May 8th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	December	January	February	March	MTD	QTD	YTD	December	January	February	March	MTD	QTD	YTD
IOP162	62% Fe Fines	822	856	892	924	869	881	880	109.43	117.00	121.64	124.91	120.06	120.90	120.58
IOP158	58% Fe Fines	711	751	799	832	813	792	798	95.17	103.34	109.79	113.41	113.29	109.35	110.17
IOP165	65% Fe Fines	935	968	1003	1036	981	993	992	124.90	132.80	137.36	140.49	136.05	136.72	136.43

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

FREIGHT RATES

May 8th, 2023		CFR Qingdao, USD/dry tonne							May 5th, 2023						
Index	Fe Content	December	January	February	March	MTD	QTD	YTD	Route	Designation	Change	Change %	Low ²	High ²	
IOS162	62% Fe Fines	108.92	119.76	127.73	134.77	112.14	114.83	124.54	W. Australia - Qingdao	C5	8.91	0.20	2.24%	3.57	16.77
IOS165	65% Fe Fines	116.83	132.39	138.06	145.14	122.86	125.09	140.27	Tubarao - Qingdao	C3	22.32	-0.03	-0.11%	6.70	36.40

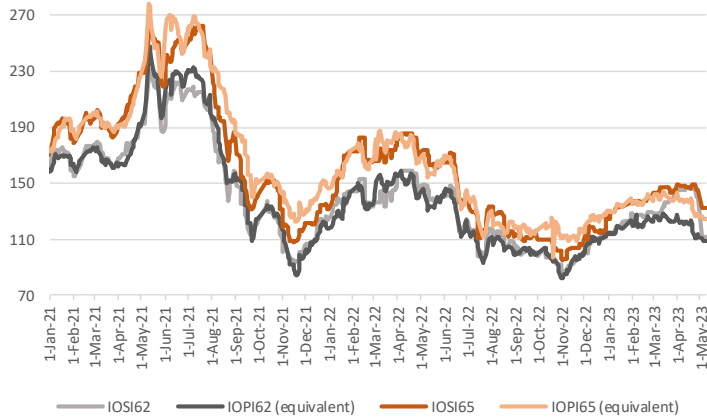
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending May 5th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne ¹						
Index	Fe Content	December	January	February	March	MTD	QTD	YTD	December	January	February	March	MTD	QTD	YTD
IOP162	62.5% Fe Lump	922	964	988	1012	925	924	1032	117.06	126.47	129.95	131.15	119.39	120.08	137.99

IRON ORE INDEX PREMIUMS/DISCOUNTS

May 8th, 2023		PORT STOCK INDEX (RMB/WT)		May 8th, 2023		SEABORNE INDEX (USD/DMT)	
Index	Fe Content	Spread to IOP162	% Spread to IOP162	Index	Fe Content	Spread to IOS162	% Spread to IOS162
IOP158	58% Fe Fines	-101	-12.41%	IOP165	65% Fe Fines	20.55	18.41%
IOP165	65% Fe Fines	112	13.76%				

IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

May 8th, 2023				May 8th, 2023			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	755	1	-57	Roy Hill	107.10	0.00	-4.50
SIMEC Fines	683	1	-129	SIMEC Fines	103.60	0.00	-8.00
PB Fines	781	1	-31	PB Fines	107.85	0.00	-3.75
Newman Fines	780	1	-32	Newman Fines	110.75	0.00	-0.85
MAC Fines	762	1	-50	MAC Fines	107.85	0.00	-3.75
Jimblebar Blended Fines	676	1	-136	Jimblebar Blended Fines	100.25	0.00	-11.35
Carajas Fines	992	1	180	Carajas Fines	141.15	0.00	29.55
Brazilian SSF	775	1	-37	Brazilian SSF	115.25	0.00	3.65
Brazilian Blend Fines	794	1	-18	Brazilian Blend Fines	117.00	0.00	5.40
RTX Fines	695	1	-117	RTX Fines	101.50	0.00	-10.10
West Pilbara Fines	724	1	-88	West Pilbara Fines	105.85	0.00	-5.75

May 8th, 2023			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	711	3	0
FMG Blended Fines	720	3	9
Robe River	720	3	9
Western Fines	723	3	12
Atlas Fines	717	3	6
Yandi	704	3	-7

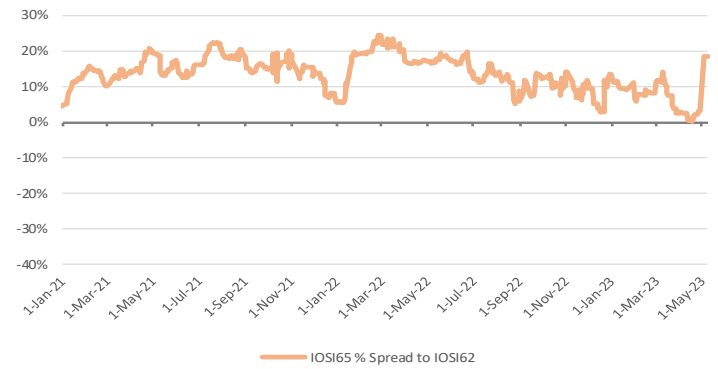
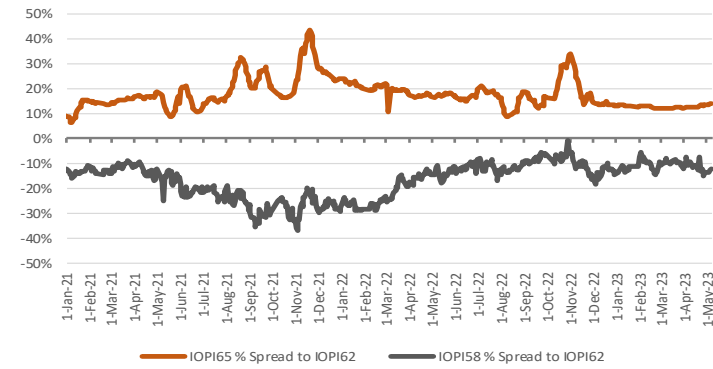
IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	5.00	0.00	1% Fe	High Grade Fe 60 - 63%	0.75	0.00
	High Grade Fe 63 - 64%	5.00	0.00		High Grade Fe 63 - 64%	4.50	0.00
	High Grade Fe 64 - 65%	5.00	0.00		High Grade Fe 64 - 65%	4.50	0.00
	High Grade Fe 65 - 65.5%	5.00	0.00		High Grade Fe 65 - 65.5%	4.50	0.00
	Low Grade Fe	20.00	0.00	1% Alumina	High Fe Grade Al <2.25%	0.75	0.00
1% Alumina	High Fe Grade Al <2.25%	10.00	-5.00		High Fe Grade Al 2.25-4%	0.75	0.00
	High Fe Grade Al 2.25-4%	5.00	0.00		High Fe Grade Si <4%	2.75	0.00
	Low Fe Grade Al <2.25%	48.00	-7.00		High Fe Grade Si 4 - 6.5%	2.00	0.00
	Low Fe Grade Al 2.25-4%	21.00	2.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.50	0.00
1% Silica	High Fe Grade Si <4%	19.00	-3.00		High Fe Grade 0.115%<P<0.15%	8.50	0.00
	High Fe Grade Si 4 - 6.5%	21.00	2.00		Low Fe Grade 0.09%<P<0.1%	5.00	0.00
	Low Fe Grade	17.00	0.00				

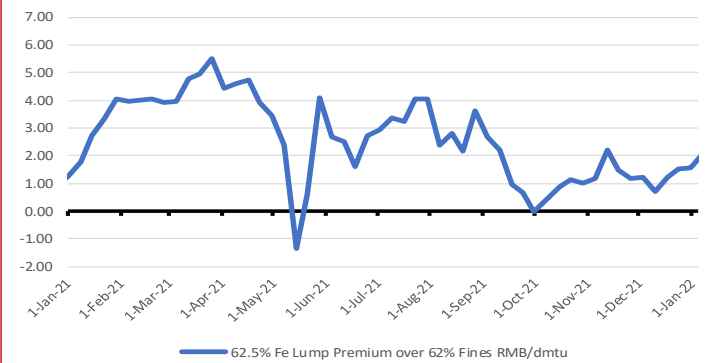
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-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	-10.00	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	-15.00	0.00

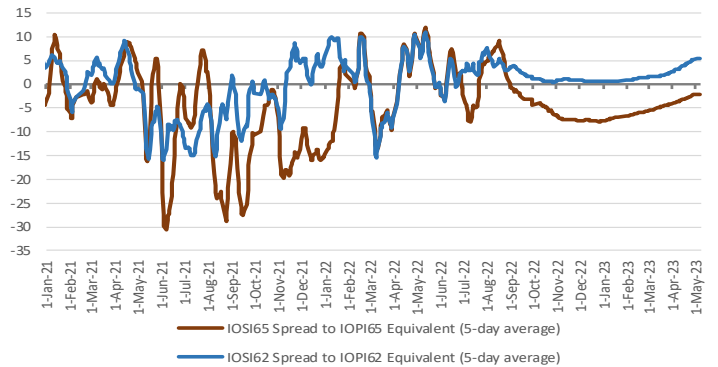
IRON ORE INDEX PREMIUMS/DISCOUNTS



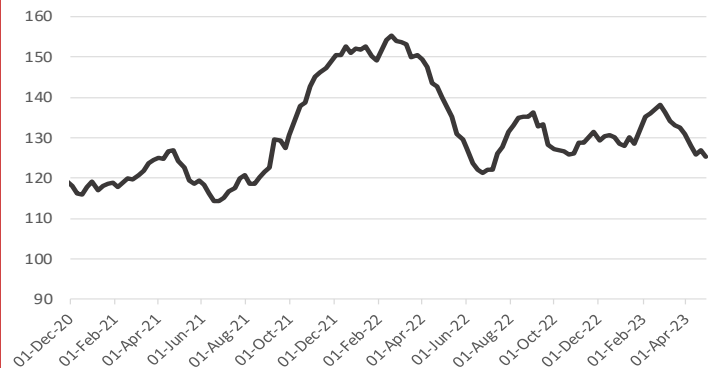
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



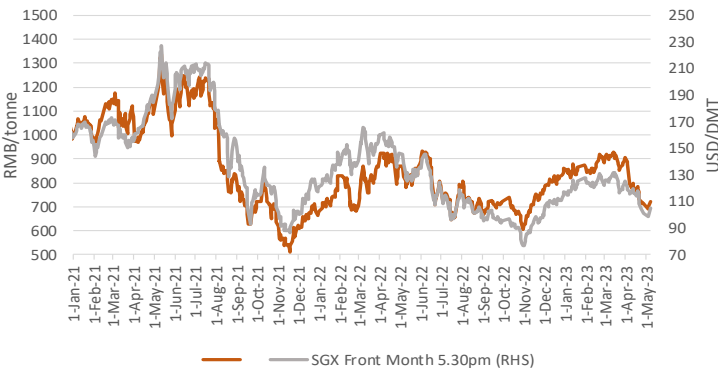
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

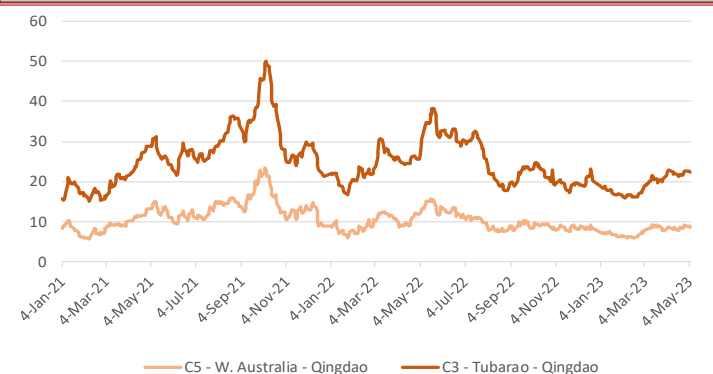
Week Ending May 5th, 2023

Province	This week	Change %	Low ²	High ²
Jingtang	12.27	0.33%	9.84	19.20
Qingdao	25.05	-0.20%	9.41	26.24
Caofeidian	12.69	-2.23%	9.05	16.29
Tianjin	9.38	1.63%	7.14	12.97
Rizhao	16.24	-3.79%	9.44	19.26
Total (35 Ports)	125.16	-1.41%	98.80	155.39

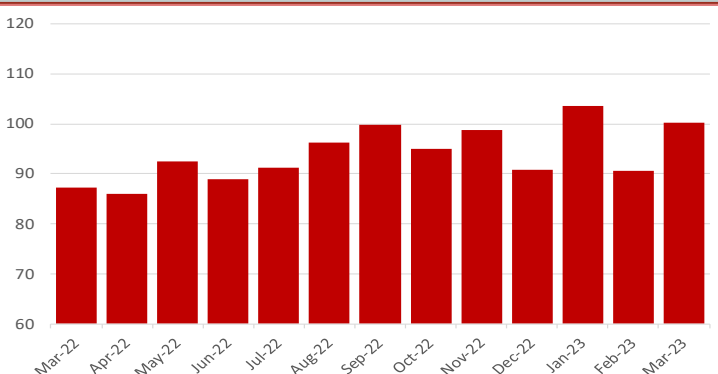
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	May 8th, 3pm close			May 8th, 5:30pm		
Contract	I2309	Change	Change %	Jun. 23	Change	Change %
Closing Price	721.50	24.00	3.44%	105.50	6.50	6.57%
Vol traded ('000 lots)	99.64	6.70	7.21%	9.63	2.62	37.42%
Open positions ('000 lots)	77.77	-0.03	-0.04%	24.44	0.73	3.10%
Day Low	694.0	18.50	2.74%	97.05	2.85	3.03%
Day High	722.0	21.50	3.07%	105.70	6.20	6.23%

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	2023/5/5	Change	Change %
ReBar HRB400 ϕ 18mm	3,830	-140	-3.53%
Wirerod Q300 ϕ 6.5mm	4,040	-140	-3.35%
HRC Q235/SS400 5.5mm*1500*C	3,980	-90	-2.21%
CRC SPCC/ST12 1.0mm*1250*2500	4,510	-100	-2.17%
Medium & Heavy Plate Q235B 20mm	4,230	-120	-2.76%
GI ST02Z 1.0mm*1000*C	4,900	-90	-1.80%
Colour Coated Plate	7,250	-150	-2.03%

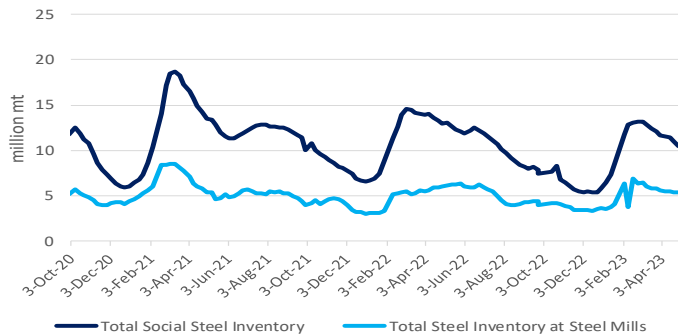
CHINESE STEEL MILL PROFITABILITY

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

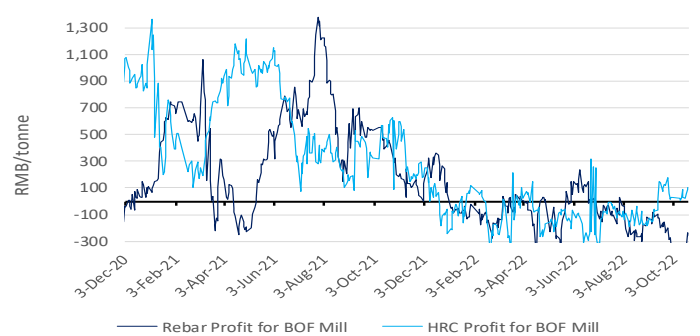
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	140.50	-5	Mmi CFR Equivalent index for 1st Feb
Coke	2,510	-200	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,870	-150	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,315	-163	Q234, incl. tax
Rebar cost - Blast furnace	3,779	-184	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	-39	14	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,793	-183	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	167	63	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

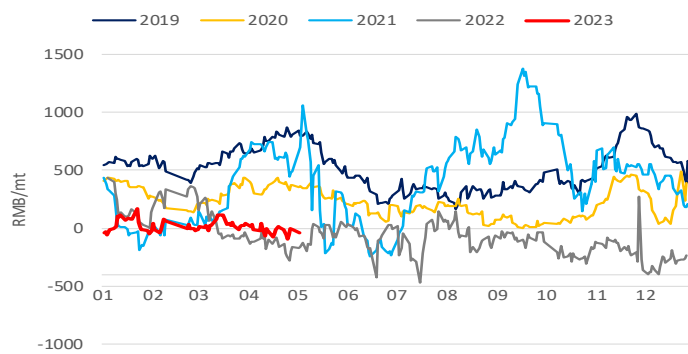
CHINESE STEEL INVENTORIES



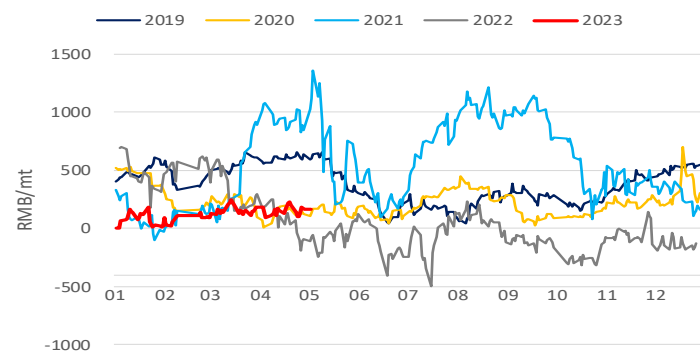
CHINESE STEEL MILL PROFITABILITY



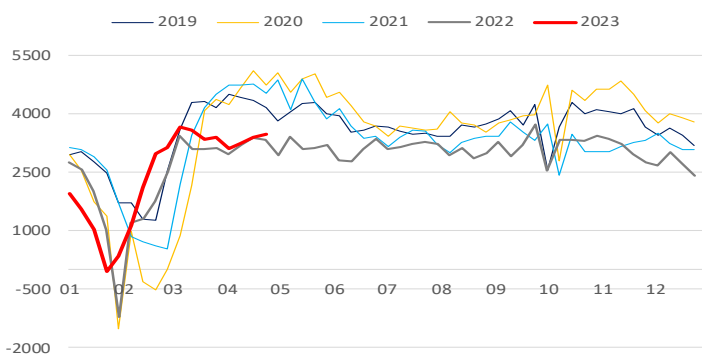
CHINESE STEEL MILL PROFITABILITY—Rebar



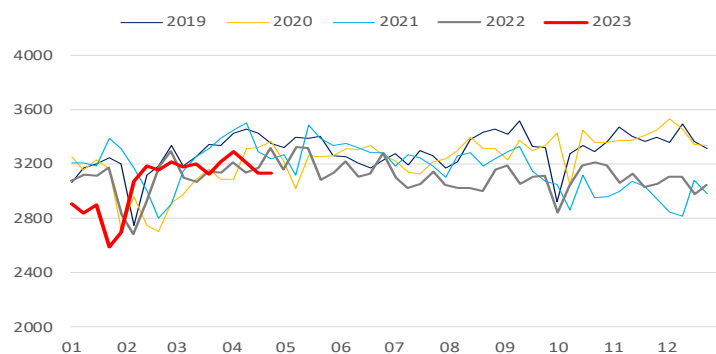
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



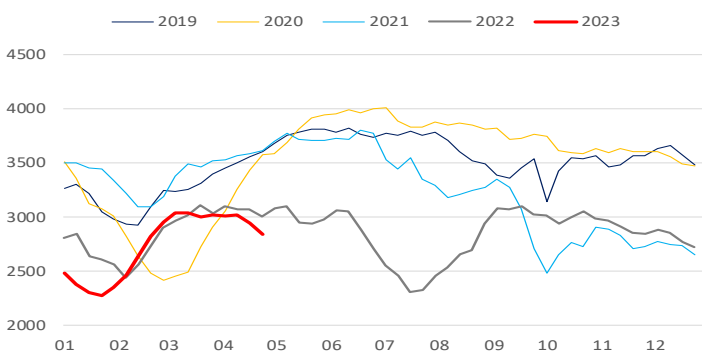
CHINESE STEEL CONSUMPTION—Rebar



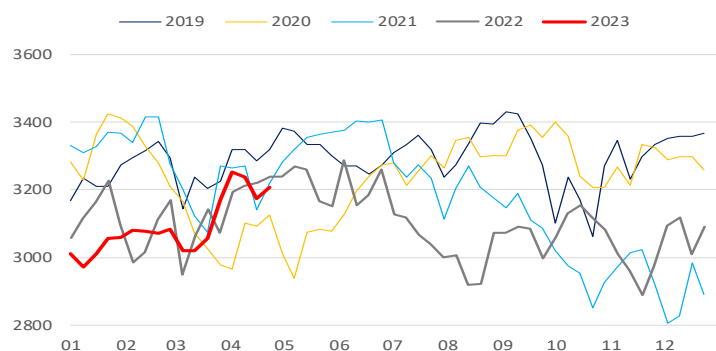
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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)					Iron Ore Index Compilation Rationale and Data Exclusions
Fe %	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 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
Alumina %	65.00	62.00	58.00	62.50	
Silica%	1.40	2.25	2.25	1.50	
Phosphorus %	1.50	4.00	5.50	3.50	
Sulphur %	0.06	0.09	0.05	0.08	
Moisture %	0.01	0.02	0.02	0.02	
	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					
May 8th, 2023	Specifications applied for 62% brand assessments						Specifications applied for 62% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture		Fe	Alumina	Silica	Phos	Moisture
Roy Hill	60.88%	2.35%	4.45%	0.055%	9.26%	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	61.64%	2.31%	3.87%	0.099%	9.45%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	9.50%
Newman Fines	62.49%	2.31%	3.98%	0.090%	7.72%	Newman Fines	62.30%	2.40%	4.30%	0.095%	8.00%
MAC Fines	60.43%	2.38%	4.64%	0.078%	7.57%	MAC Fines	60.80%	2.35%	4.40%	0.075%	7.80%
Jimblebar Blended Fines	60.87%	2.95%	4.53%	0.111%	7.32%	Jimblebar Blended Fines	60.50%	3.10%	4.80%	0.120%	7.80%
Carajas Fines	64.90%	1.39%	1.82%	0.080%	7.78%	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	62.56%	1.58%	4.79%	0.091%	8.72%	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%
May 8th, 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%						

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	IOSI62	IRCN0034	
IOPI58	IRCNQ002	IRCNQ005	IOSI65	IRCN0035	
IOPI65	IRCNQ003	IRCNQ006			
IOPLI62	IRCN0036	IRCN0037			

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