



MMi Dashboard

Iron Ore Price Indices

Iron Ore Port Stock (FOT Qingdao) IOPI62 62% Fe Fines RMB/t	
	811
-11	-1.34%
May 5th, 2023	

Iron Ore Port Stock (FOT Qingdao) IOPI65 65% Fe Fines RMB/t	
	923
-11.00	-1.18%
May 5th, 2023	

Iron Port Stock (FOT Qingdao) IOPI58 58% Fe Fines RMB/t	
	708
-1	-0.14%
May 5th, 2023	

Iron Ore Seaborne (CFR Qingdao) IOSI62 62% Fe Fines USD/dmt	
	111.60
0.00	0.00%
May 5th, 2023	

Iron Ore Seaborne (CFR Qingdao) IOSI65 65% Fe Fines USD/dmt	
	132.15
0.00	0.00%
May 5th, 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)	
	697.50
8.00	1.16%
May 5th, 2023 (3pm close)	

SGX Iron Ore (CFR Qingdao) 62% Fe Fines June 23 USD/dmt	
	99.00
-0.05	-0.05%
May 5th, 2023 (5.30 pm Print)	

SHFE Rebar RB2310 (Jan) RMB/t	
	3622
7	0.19%
May 5th, 2023 (3pm close)	

Freight Rates

C3, Tubarao - Qingdao USD/t	
	22.34
-0.17	-0.74%
May 4th, 2023	

C5, W. Australia - Qingdao USD/t	
	8.72
-0.04	-0.51%
May 4th, 2023	

Steel Rebar (China Domestic) RMB/t	
	3830
-140	-3.53%
Week Ending May 5th, 2023	

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	

IRON ORE PORT STOCK INDEX (IOPI)

May 5th, 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	811	-11	-1.3%	869	880	858	892	108.98	-1.63	-1.5%	120.06	120.58	117.93	122.93
IOPI58	58% Fe Fines	708	-1	-0.1%	813	798	761	793	95.68	-0.22	-0.2%	113.29	110.17	105.29	110.04
IOPI65	65% Fe Fines	923	-11	-1.2%	981	992	970	1003	124.56	-1.64	-1.3%	136.05	136.43	133.84	138.73

IRON ORE SEABORNE INDEX (IOSI)

MARKET COMMENTARY

May 5th, 2023		CFR Qingdao, USD/dry tonne							DCE iron ore futures declined by 0.99% today, the main contract closed at 697.5. The traders' willingness to ship is general. The steel mills are not active to purchase. The overall trading sentiment of the market is less. PBF at Shandong port deal 772-777 yuan/mt, decrease 12-23 yuan/mt. PBF at Tangshan port deal 788-800 yuan/mt, decrease 10 yuan/mt. Yesterday, due to poor data on finished products and news from overseas banking, Singapore's swaps fell, driving iron ore lower in the night trading. However, today's iron ore oversold has been repaired, and the market mentality remains unstable. Based on the current fundamentals, the negative feedback of the industrial chain is basically taking shape. The impact of maintenance this week has increased by 171000 tons
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²	
IOSI62	62% Fe Fines	111.60	0.00	0.00%	115.36	124.62	83.90	147.90	
IOSI65	65% Fe Fines	132.15	0.00	0.00%	125.07	140.32	94.45	171.85	

IRON ORE PORT LUMP INDEX (IOPLI)

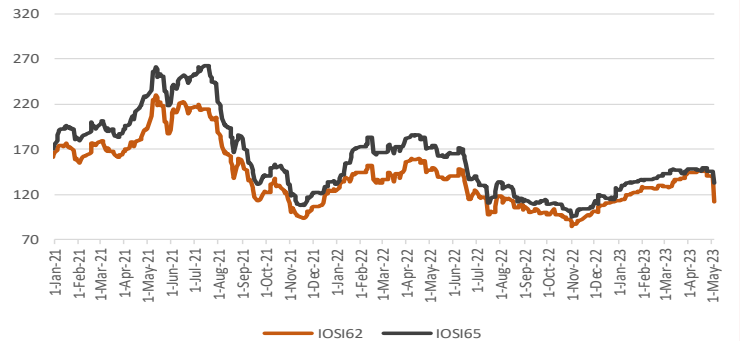
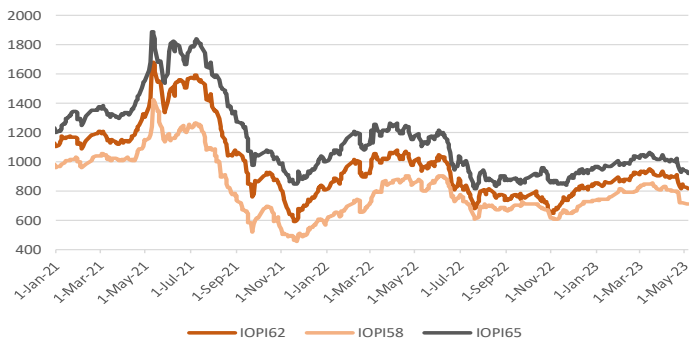
Week Ending May 5th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne ³						
Index	Fe Content	Price	W-o-W	Change %	MTD	YTD	Low ²	High ²	Price	W-o-W	Change %	MTD	YTD	Low ²	High ²
IOPLI62	62.5% Fe Lump	945	-30	-3.1%	927	1030	770	1330	127.13	-8.92	-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 ³ Weekly exchange rate applied: RMB/USD = 6.87528			
China Mines Concentrate Composite Index RMB/WT				888.41	-4.18%	706.36	1511.22				

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 5th, 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
IOPI62	62% Fe Fines	822	856	892	924	869	881	880	109.43	117.00	121.64	124.91	120.06	120.90	120.58
IOPI58	58% Fe Fines	711	751	799	832	813	792	798	95.17	103.34	109.79	113.41	113.29	109.35	110.17
IOPI65	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 5th, 2023		CFR Qingdao, USD/dry tonne							May 4th, 2023		FREIGHT RATES - DRY BULK US\$/wet tonne				
Index	Fe Content	December	January	February	March	MTD	QTD	YTD	Route	Designation	Change	Change %	Low ²	High ²	
IOSI62	62% Fe Fines	108.92	119.76	127.73	134.77	112.14	114.86	124.62	W. Australia - Qingdao	C5	8.72	-0.04	-0.51%	3.57	16.77
IOSI65	65% Fe Fines	116.83	132.39	138.06	145.14	122.86	125.02	140.32	Tubarao - Qingdao	C3	22.34	-0.17	-0.74%	6.70	36.40

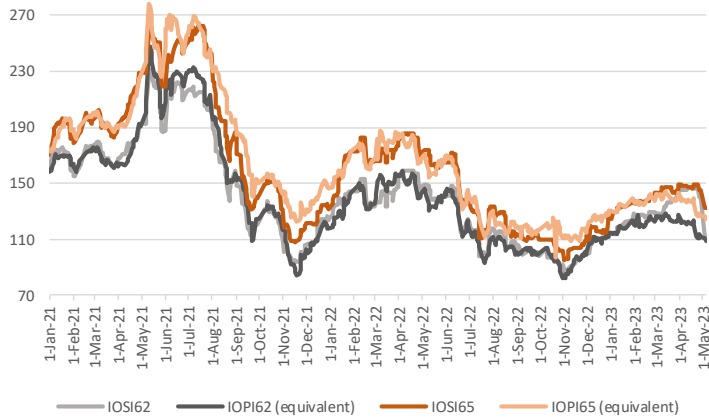
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

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
IOPLI62	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 5th, 2023		PORT STOCK INDEX (RMB/WT)		May 5th, 2023		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	-103	-12.70%	IOSI65	65% Fe Fines	20.55	18.41%
IOPI65	65% Fe Fines	112	13.81%				

IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

May 5th, 2023				May 5th, 2023			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	754	-11	-57	Roy Hill	107.10	0.00	-4.50
SIMEC Fines	682	-11	-129	SIMEC Fines	103.60	0.00	-8.00
PB Fines	780	-11	-31	PB Fines	107.85	0.00	-3.75
Newman Fines	779	-11	-32	Newman Fines	110.75	0.00	-0.85
MAC Fines	761	-11	-50	MAC Fines	107.85	0.00	-3.75
Jimblebar Blended Fines	675	-11	-136	Jimblebar Blended Fines	100.25	0.00	-11.35
Carajas Fines	991	-11	180	Carajas Fines	141.15	0.00	29.55
Brazilian SSF	774	-11	-37	Brazilian SSF	115.25	0.00	3.65
Brazilian Blend Fines	793	-11	-18	Brazilian Blend Fines	117.00	0.00	5.40
RTX Fines	694	-11	-117	RTX Fines	101.50	0.00	-10.10
West Pilbara Fines	723	-10	-88	West Pilbara Fines	105.85	0.00	-5.75
May 5th, 2023							
PORT STOCK INDEX (RMB/WT)							
	Price	Change	Diff to IOPI58				
SSF	708	-1	0				
FMG Blended Fines	717	-1	9				
Robe River	717	-2	9				
Western Fines	720	-1	12				
Atlas Fines	714	-1	6				
Yandi	701	-1	-7				

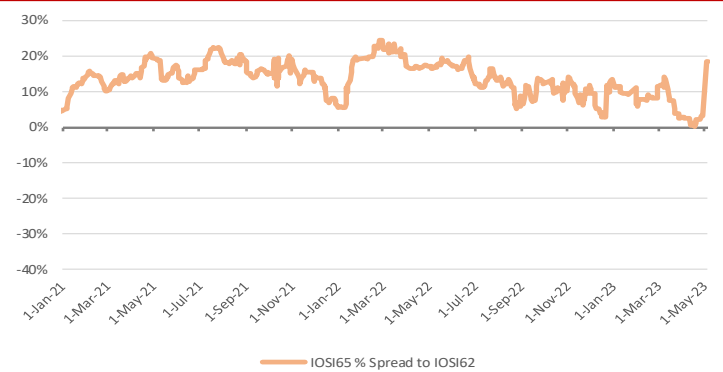
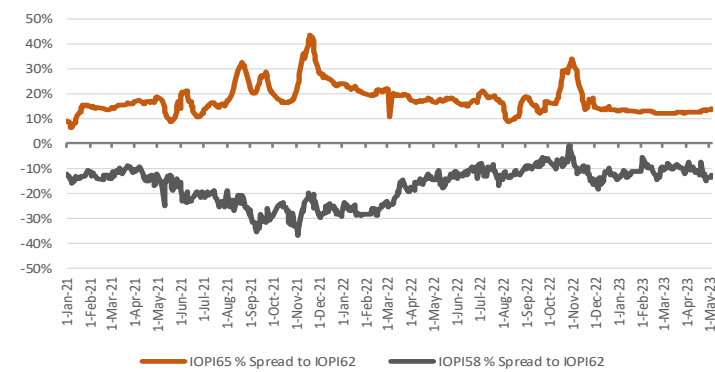
IRON ORE INDEX NORMALISATION DIFFERENTIALS

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	-0.50
	High Grade Fe 63 - 64%	5.00	0.00		High Grade Fe 63 - 64%	4.50	0.75
	High Grade Fe 64 - 65%	5.00	0.00		High Grade Fe 64 - 65%	4.50	0.75
	High Grade Fe 65 - 65.5%	5.00	0.00		High Grade Fe 65 - 65.5%	4.50	0.75
	Low Grade Fe	20.00	0.00				
1% Alumina	High Fe Grade Al <2.25%	15.00	-7.00	1% Alumina	High Fe Grade Al <2.25%	0.75	-0.25
	High Fe Grade Al 2.25-4%	5.00	0.00		High Fe Grade Al 2.25-4%	0.75	0.50
	Low Fe Grade Al <2.25%	55.00	-8.00				
	Low Fe Grade Al 2.25-4%	19.00	0.00				
1% Silica	High Fe Grade Si <4%	22.00	-2.00	1% Silica	High Fe Grade Si <4%	2.75	-0.50
	High Fe Grade Si 4-6.5%	19.00	3.00		High Fe Grade Si 4 - 6.5%	2.00	0.75
	Low Fe Grade	17.00	1.00				
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	5.00	0.00	0.01%	High Fe Grade 0.09%<P<0.115%	0.50	0.00
	High Fe Grade 0.115%<P<0.15%	5.00	0.00	Phosphorus	High Fe Grade 0.115%<P<0.15%	8.50	0.25
	Low Fe Grade 0.09<P<0.1%	5.00	0.00				

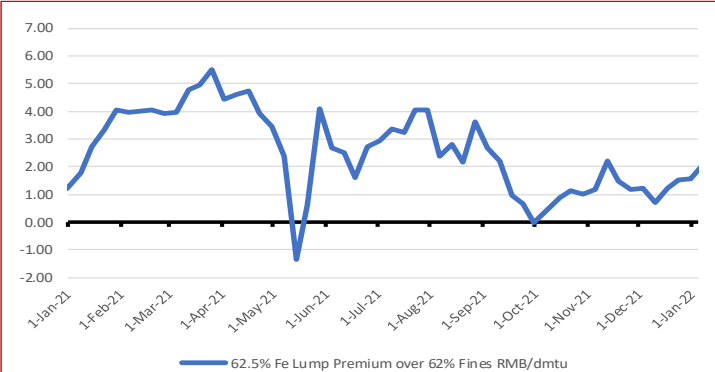
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

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

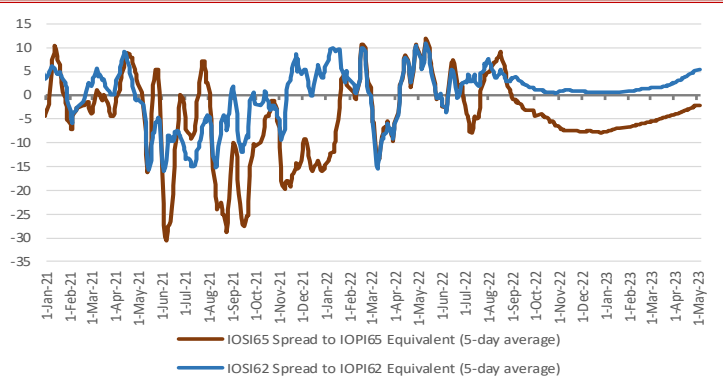
IRON ORE INDEX PREMIUMS/DISCOUNTS



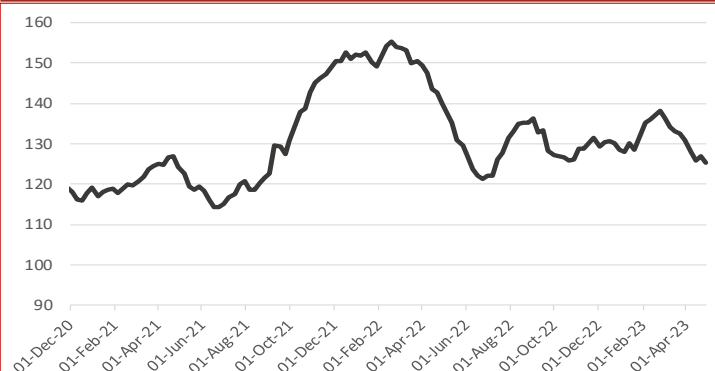
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



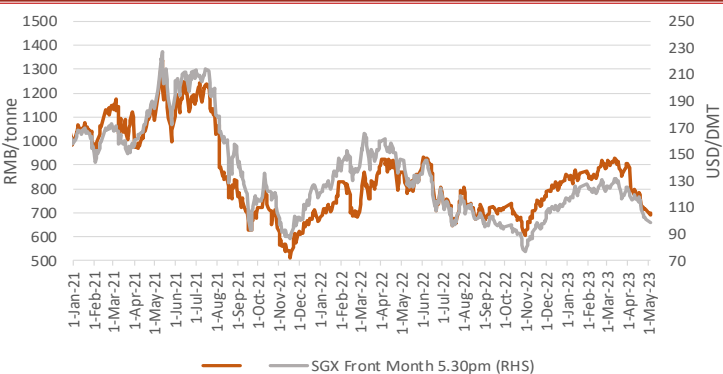
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

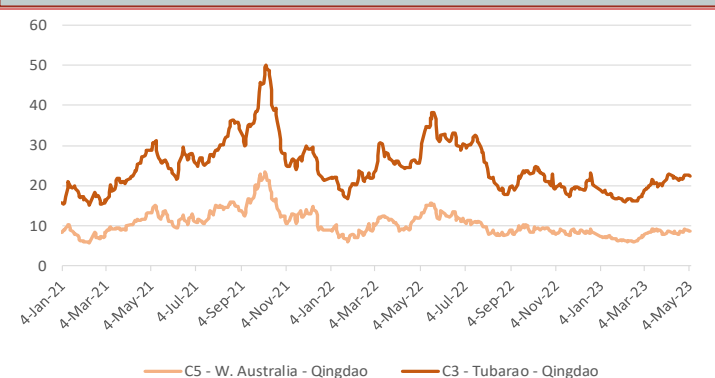
Week Ending May 5th, 2023

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

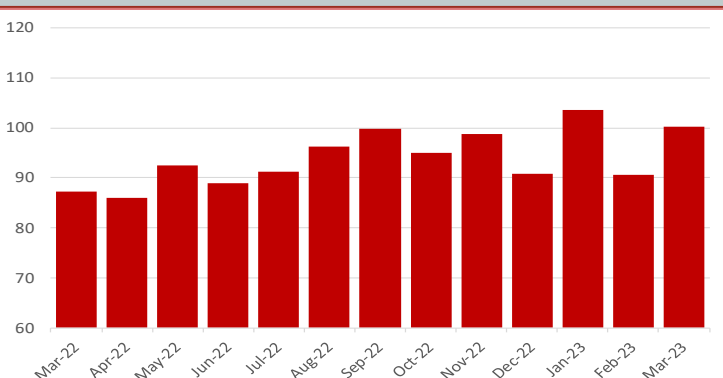
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	May 5th, 3pm close			May 5th, 5:30pm		
Contract	I2309	Change	Change %	Jun. 23	Change	Change %
Closing Price	697.50	8.00	1.16%	99.00	-0.05	-0.05%
Vol traded ('000 lots)	92.94	38.17	69.68%	7.01	3.57	103.97%
Open positions ('000 lots)	77.80	0.02	0.02%	23.71	0.56	2.44%
Day Low	675.5	-21.50	-3.08%	94.20	-4.80	-4.85%
Day High	700.5	-13.50	-1.89%	99.50	-1.70	-1.68%

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%

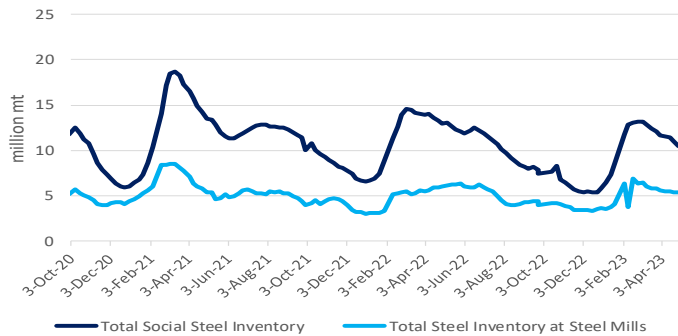
CHINESE STEEL MILL PROFITABILITY

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

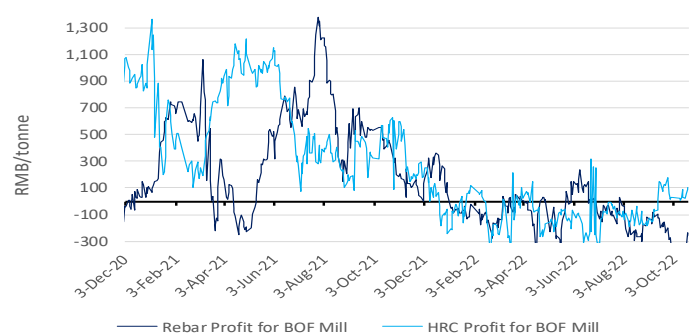
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	140.50	-5	Mmi CFR Equivalent index for 1st Feb
Coke	2,510	-200	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,870	-150	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,315	-163	Q234, incl. tax
Rebar cost - Blast furnace	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

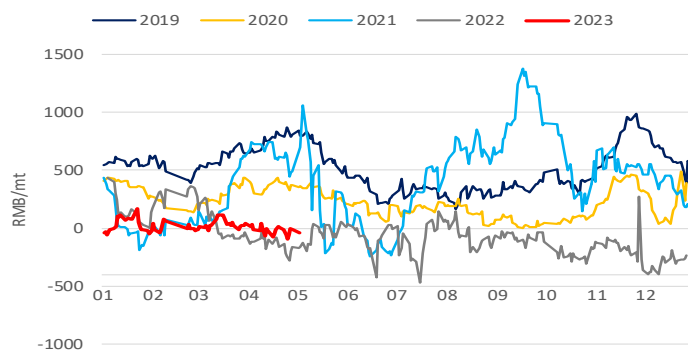
CHINESE STEEL INVENTORIES



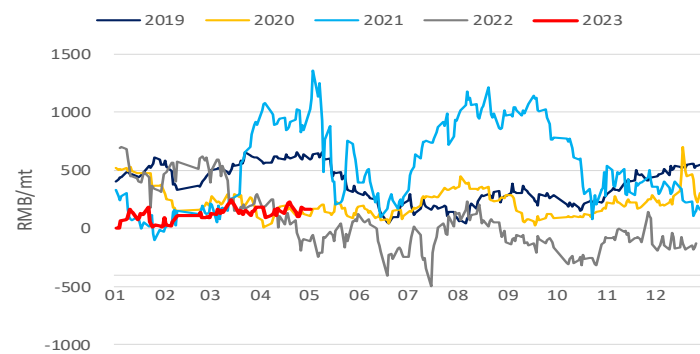
CHINESE STEEL MILL PROFITABILITY



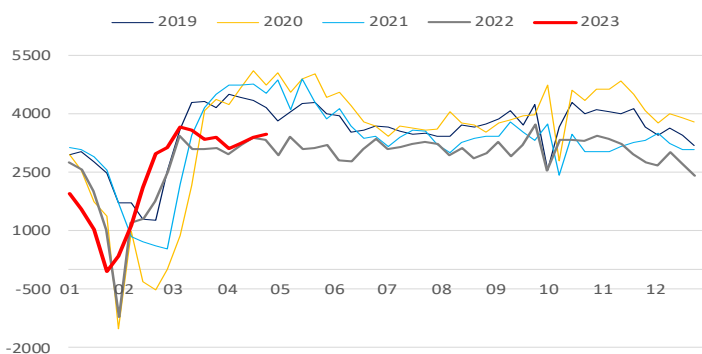
CHINESE STEEL MILL PROFITABILITY—Rebar



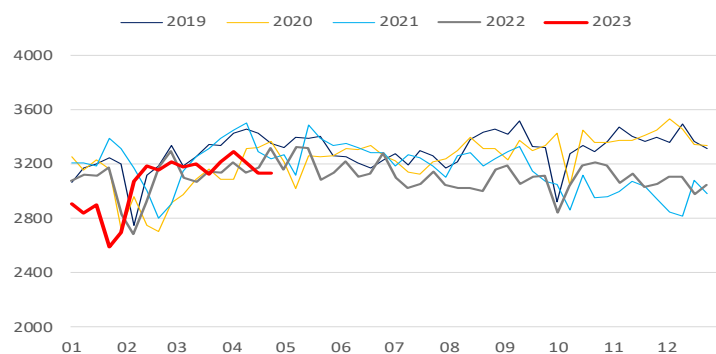
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



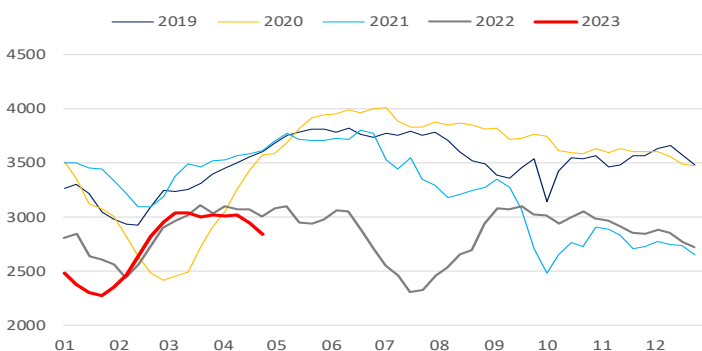
CHINESE STEEL CONSUMPTION—Rebar



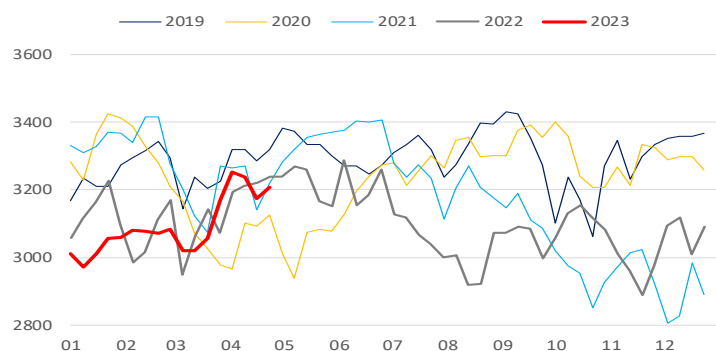
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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 5th, 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 5th, 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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