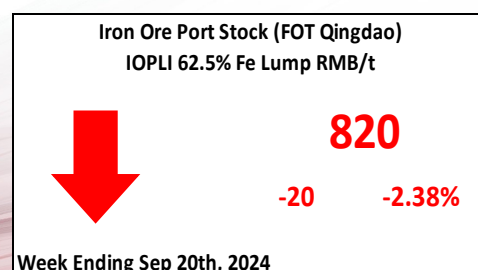
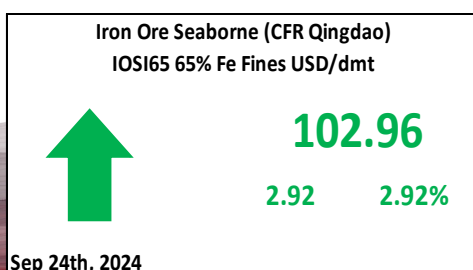
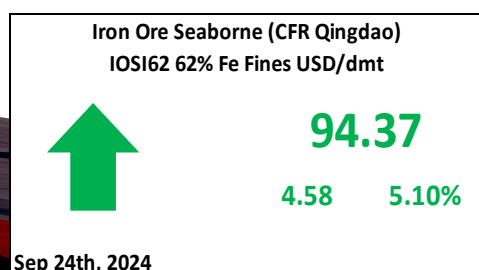
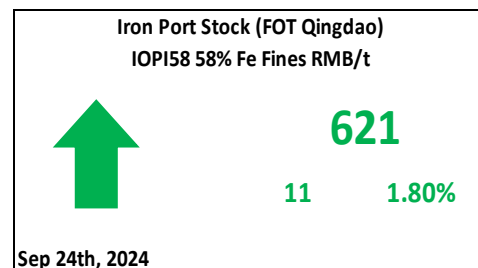
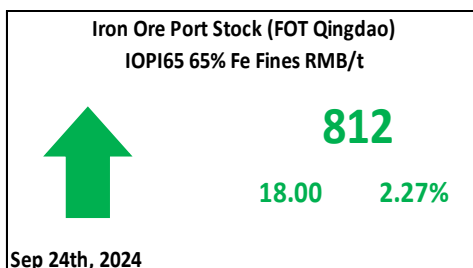
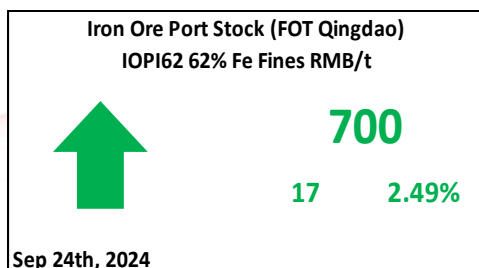


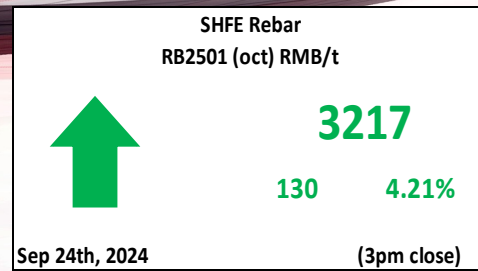
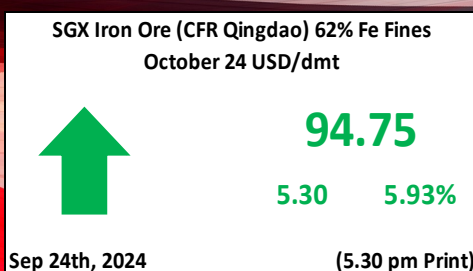
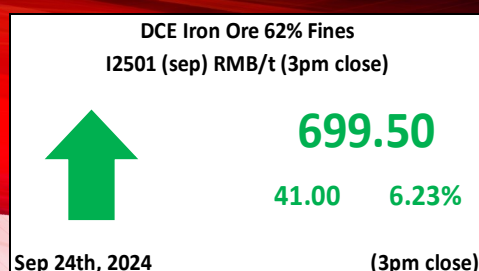


# MMi Dashboard

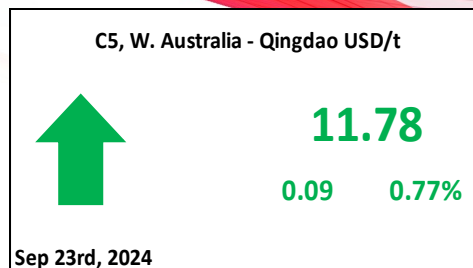
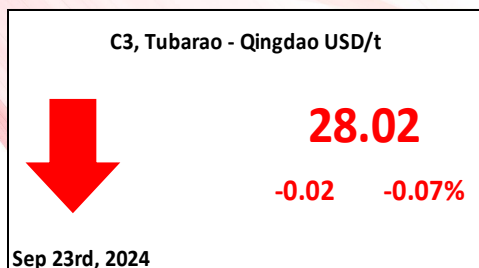
## Iron Ore Price Indices



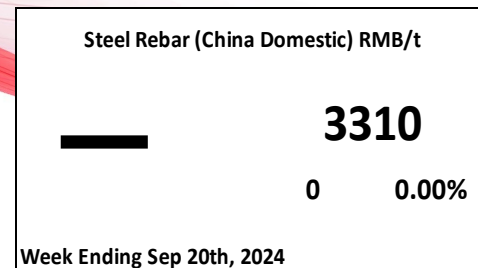
## Exchange Traded Contracts



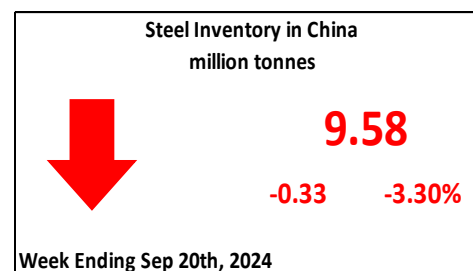
## Freight Rates



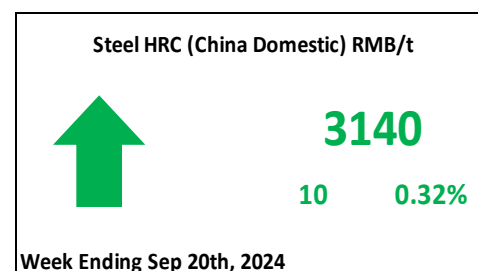
## Steel Price



## Inventory Levels



## Steel Price



## IRON ORE PORT STOCK INDEX (IOPI)

Sep 24th, 2024		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	700	17.0	2.49%	880	895	770	1063	91.68	2.35	2.6%	116.38	121.03	101.00	140.00
IOPI58	58% Fe Fines	621	11.0	1.80%	785	781	665	963	81.79	1.54	1.9%	104.50	106.10	86.00	128.00
IOPI65	65% Fe Fines	812	18.0	2.27%	996	1026	881	1175	106.95	2.49	2.4%	132.21	139.47	116.00	155.00

## IRON ORE SEABORNE INDEX (IOSI)

## MARKET COMMENTARY

Sep 24th, 2024		CFR Qingdao, USD/dry tonne						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>
IOSI62	62% Fe Fines	94.37	4.58	5.10%	116.42	116.42	99.20	146.75
IOSI65	65% Fe Fines	102.96	2.92	2.92%	130.60	130.60	115.45	171.65

Today, iron ore futures opened low and closed high, with a significant increase throughout the day. The most-traded contract I2501 closed at 699.5 yuan/mt, up 4.64% for the day. Traders were moderately active in selling, and speculative transactions slightly increased; steel mills were more cautious, with some restocking as needed. The market transaction atmosphere was average today. In Shandong, PB fines traded at around 685-705 yuan/mt, up 20-35 yuan/mt from yesterday; in Tangshan, PB fines traded at 710-720 yuan/mt, also up 20-35 yuan/mt from yesterday. According to SMM statistics, blast furnace maintenance reduced production by 93,300 mt this week, a significant decrease WoW. The reduction is expected to continue expanding next week, boosting iron ore demand. Additionally, most steel mills needed to restock before the holiday, providing strong support for ore prices. Meanwhile, the central bank announced a series of growth-stabilizing real estate policies today, including lowering down payments and easing mortgage rates, which boosted market macro sentiment and led to a significant rise in futures. In the short term, ore prices may continue to fluctuate upward.

## IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending Sep 20th, 2024		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	820	-20	-2.4%	994	1041	900	1210	103.07	-2.37	-2.25%	126.95	136.27	113.28	153.57

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

Week Ending Sep 20th, 2024				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	870	-0.3%	779	1645	122.83	0.05%	110.31	255.69
Hebei	Qian'an	65% Fe Concentrate	Dry	965	-1.0%	780	1630	136.24	-0.64%	108.71	251.57
Liaoning	Anshan	65% Fe Concentrate	Wet	770	-1.3%	620	1310	108.71	-0.89%	87.40	202.32
Shandong	Zibo	65% Fe Concentrate	Dry	915	-0.4%	800	1752	129.18	-0.04%	0.00	272.32

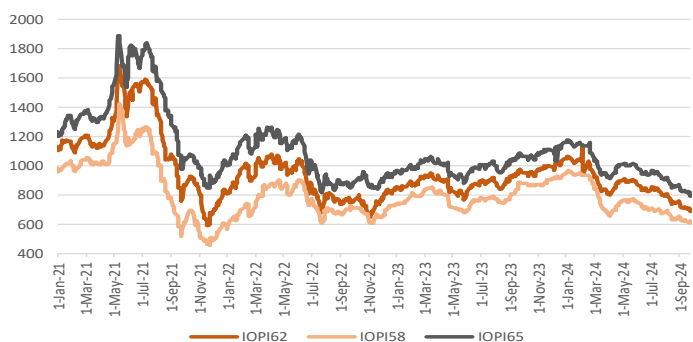
Week Ending Sep 20th, 2024

This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
854.57	-0.53%	706.36	1511.22

China Mines Concentrate Composite Index RMB/WT

<sup>1</sup> Exchange rate applied: RMB/USD = 6.7522    <sup>2</sup> Last 12 months  
<sup>3</sup> 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

Sep 24th, 2024		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	May	June	July	August	MTD	QTD	YTD	May	June	July	August	MTD	QTD	YTD
IOPI62	62% Fe Fines	894	842	829	765	880	874	895	117.28	110.03	107.99	99.33	115.32	115.83	120.56
IOPI58	58% Fe Fines	762	719	692	656	785	779	781	100.47	94.46	90.48	85.58	103.33	103.96	105.35
IOPI65	65% Fe Fines	1006	954	940	876	996	992	1026	132.42	125.13	123.05	114.39	131.20	131.91	139.19

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

## FREIGHT RATES

Sep 24th, 2024		CFR Qingdao, USD/dry tonne							Sep 23rd, 2024							
Index	Fe Content	May	June	July	August	MTD	QTD	YTD	Route		Designation	Change	Change %	Low <sup>2</sup>	High <sup>2</sup>	
IOSI62	62% Fe Fines	120.10	110.42	107.58	99.33	112.14	115.18	116.42	W. Australia - Qingdao		C5	11.78	0.09	0.77%	3.57	16.77
IOSI65	65% Fe Fines	136.06	125.14	123.01	114.06	122.86	129.04	130.60	Tubarao - Qingdao		C3	28.02	-0.02	-0.07%	6.70	36.40

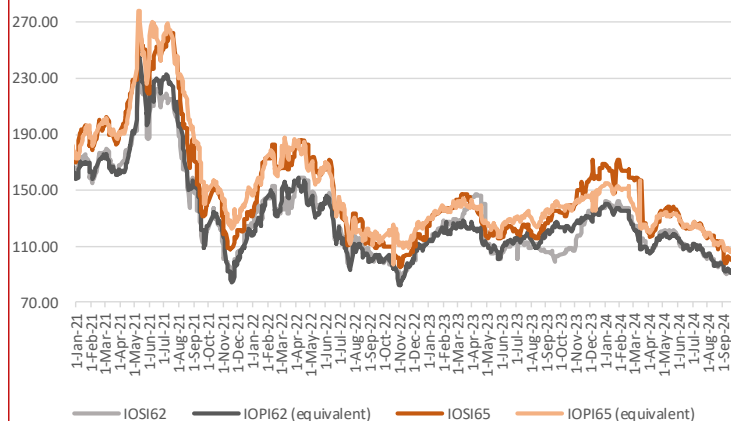
## IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending Sep 20th, 2024		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne <sup>1</sup>						
Index	Fe Content	May	June	July	August	MTD	QTD	YTD	May	June	July	August	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	1024	1011	1001	911	933	989	1017	129.18	127.27	125.75	114.10	119.96	126.47	134.98

## IRON ORE INDEX PREMIUMS/DISCOUNTS

Sep 24th, 2024				PORT STOCK INDEX (RMB/WT)		Sep 24th, 2024				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	-79	-11.29%	IOPI65	65% Fe Fines	8.59	9.10%				
IOPI65	65% Fe Fines	112	16.00%								

## IRON ORE INDEX COMPARISONS (USD/DMT)



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



## IRON ORE BRAND SPOT PRICE ASSESSMENTS

Sep 24th, 2024	PORT STOCK INDEX (RMB/WT)			Sep 24th, 2024	SEABORNE INDEX (USD/DMT)		
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	643	17	-57	Roy Hill	89.85	4.55	-4.52
SIMEC Fines	568	17	-132	SIMEC Fines	86.35	4.55	-8.02
PB Fines	671	17	-29	PB Fines	90.60	4.55	-3.77
Newman Fines	667	17	-33	Newman Fines	93.45	4.50	-0.92
MAC Fines	649	17	-51	MAC Fines	90.60	4.55	-3.77
Jimblebar Blended Fines	563	17	-137	Jimblebar Blended Fines	82.95	4.50	-11.42
Carajas Fines	880	17	180	Carajas Fines	123.90	4.55	29.53
Brazilian SSF	660	17	-40	Brazilian SSF	98.10	4.55	3.73
Brazilian Blend Fines	684	17	-16	Brazilian Blend Fines	99.75	4.60	5.38
RTX Fines	582	17	-118	RTX Fines	84.25	4.60	-10.12
West Pilbara Fines	612	17	-88	West Pilbara Fines	88.60	4.55	-5.77
Sep 24th, 2024	PORT STOCK INDEX (RMB/WT)						
	Price	Change	Diff to IOPI58				
SSF	621	11	0				
FMG Blended Fines	629	11	8				
Robe River	629	11	8				
Western Fines	631	11	10				
Atlas Fines	627	11	6				
Yandi	615	11	-6				

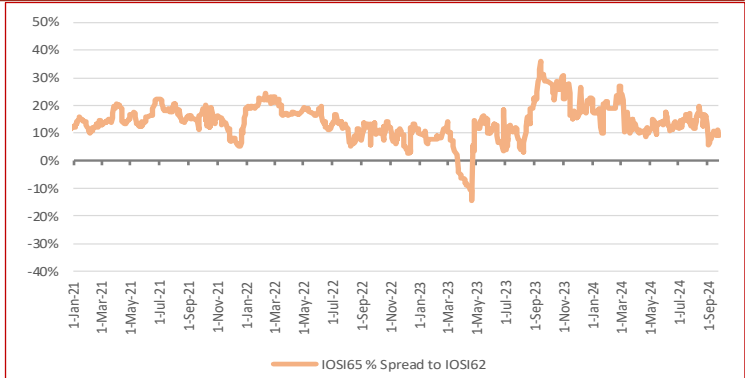
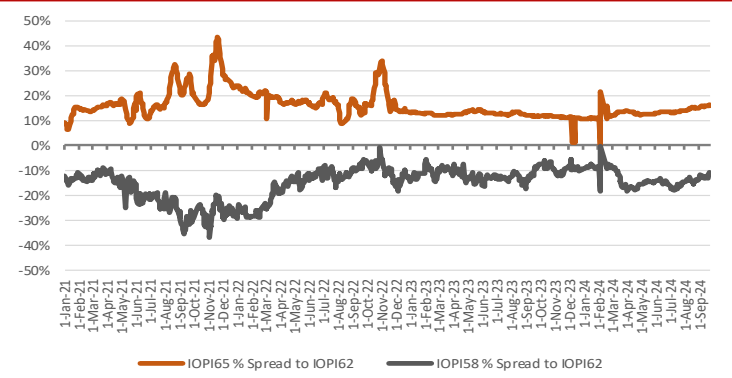
## IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	3.50	0.00
	High Grade Fe 63 - 64%	5.00	0.00		High Grade Fe 63 - 64%	0.25	0.00
	High Grade Fe 64 - 65%	5.00	0.00		High Grade Fe 64 - 65%	0.25	0.00
	High Grade Fe 65 - 65.5%	5.00	0.00		High Grade Fe 65 - 65.5%	0.25	0.00
1% Alumina	Low Grade Fe	25.00	-1.00	1% Alumina	High Fe Grade Al <2.25%	0.25	0.00
	High Fe Grade Al <2.25%	60.00	0.00		High Fe Grade Al 2.25-4%	1.75	0.00
	High Fe Grade Al 2.25-4%	5.00	0.00				
	Low Fe Grade Al <2.25%	40.00	0.00				
1% Silica	Low Fe Grade Al 2.25-4%	20.00	-5.00	1% Silica	High Fe Grade Si <4%	0.50	0.00
	High Fe Grade Si <4%	38.00	1.00		High Fe Grade Si 4 - 6.5%	0.50	0.00
	High Fe Grade Si 4-6.5%	9.00	0.00				
0.01% Phosphorus	Low Fe Grade	37.00	0.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	2.00	0.00
	High Fe Grade 0.09%<P<0.115%	8.00	0.00		High Fe Grade 0.115%<P<0.15%	2.50	-0.25
	High Fe Grade 0.115%<P<0.15%	8.00	0.00		Low Fe Grade 0.09<P<0.1%	5.00	0.00
	Low Fe Grade 0.09<P<0.1%	5.00	0.00				

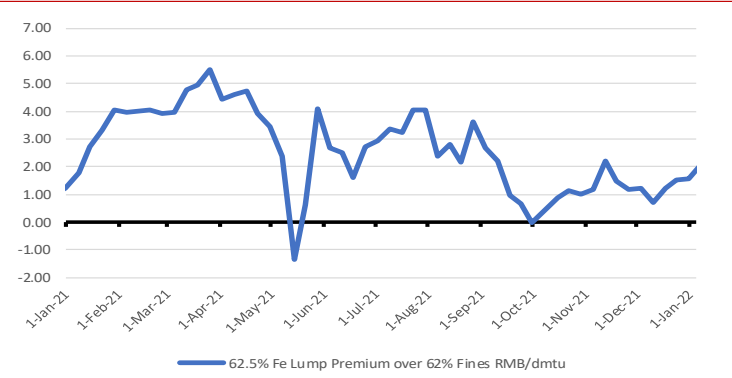
## Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-50.00	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	-15.00	0.00	Jingtang	-15.00	0.00	Majishan	0.00	0.00	Taicang	-20.00	0.00
Dalian	0.00	0.00	Lanqiao	0.00	0.00	Qingdao	0.00	0.00	Tianjin	-10.00	0.00

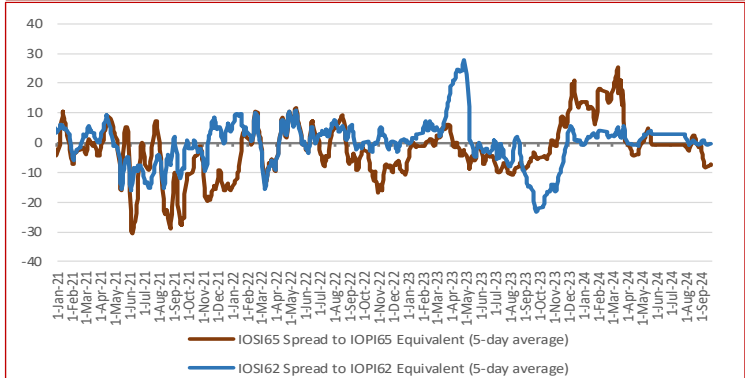
IRON ORE INDEX PREMIUMS/DISCOUNTS



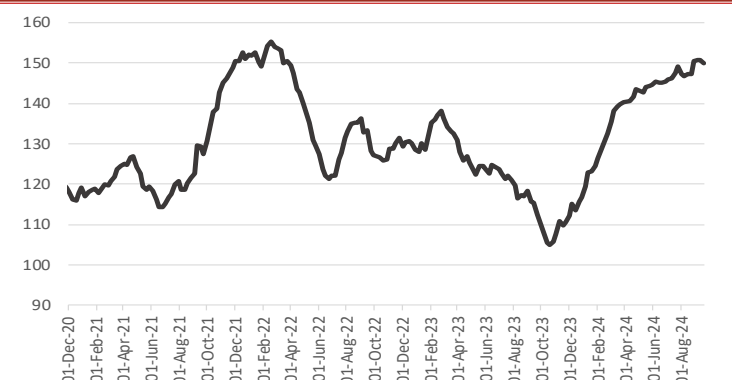
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



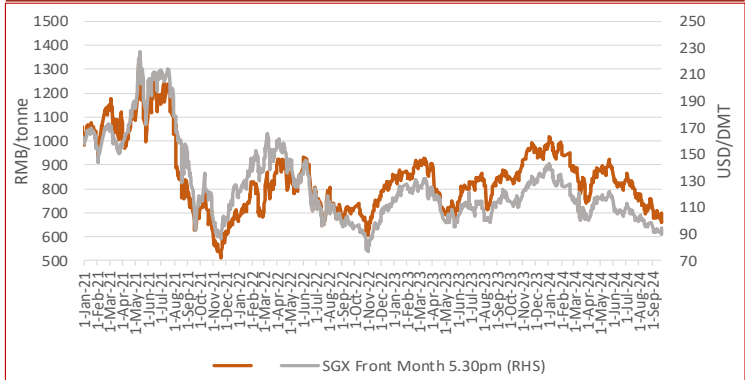
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



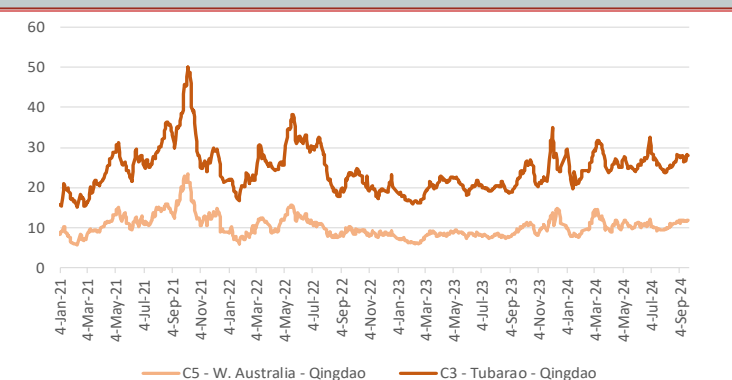
IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending Sep 20th, 2024				
Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	14.27	-2.19%	8.41	19.20
Qingdao	24.75	-1.59%	9.41	26.24
Caofeidian	17.74	-2.58%	7.56	18.47
Tianjin	11.96	-0.83%	6.49	12.97
Rizhao	20.99	1.30%	9.44	20.99
<b>Total (35 Ports)</b>	<b>150.00</b>	<b>-0.48%</b>	<b>98.80</b>	<b>155.39</b>

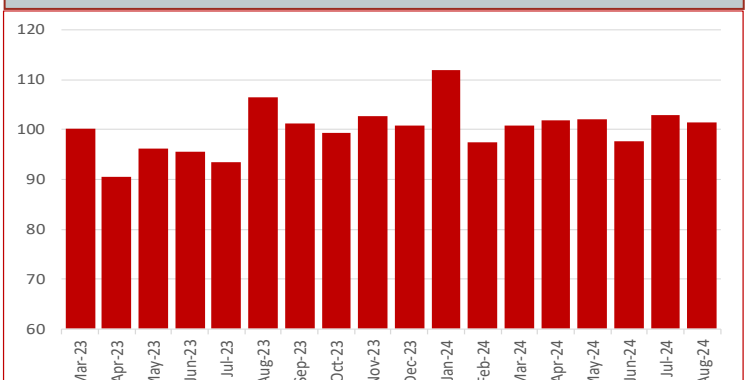
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Contract	Change	Change %	Contract	Change	Change %
Contract	I2501			October. 24		
Closing Price	699.50	41.00	6.23%	94.75	5.30	5.93%
Vol traded ('000 lots)	91.00	30.80	51.16%	13.22	1.20	9.97%
Open positions ('000 lots)	56.78	-5.72	-9.16%	37.71	-0.97	-2.50%
Day Low	657.5	-0.50	-0.08%	89.60	0.40	0.45%
Day High	701.5	20.00	2.93%	95.15	3.05	3.31%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

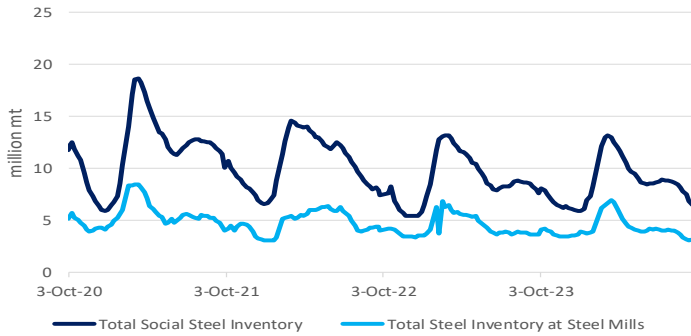
Steel Spot Market RMB/tonne			
Product	2024/9/20	Change	Change %
ReBar HRB400 φ18mm	3,310	0	0.00%
Wirerod Q300 φ6.5mm	3,550	-10	-0.28%
HRC Q235/SS400 5.5mm*1500*C	3,140	10	0.32%
CRC SPCC/ST12 1.0mm*1250*2500	3,560	10	0.28%
Medium & Heavy Plate Q235B 20mm	3,270	30	0.93%
GI ST02Z 1.0mm*1000*C	3,720	10	0.27%
Colour Coated Plate	6,050	0	0.00%

CHINESE STEEL MILL PROFITABILITY

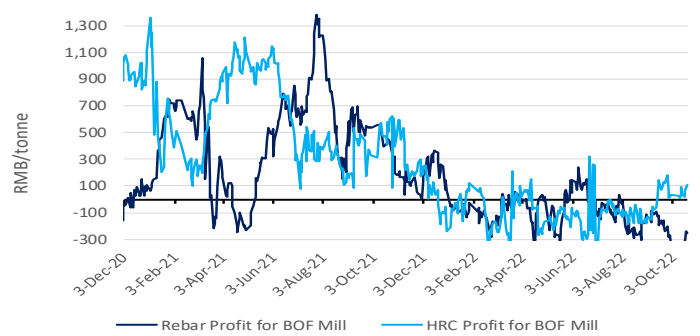
SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)			
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	91.85	-0	Mmi CFR Equivalent index for 1st Feb
Coke	1,845	55	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,360	0	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	2,513	10	Q234, incl. tax
Rebar cost - Blast furnace	3,065	11	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	165	-11	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,145	10	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	-15	-10	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

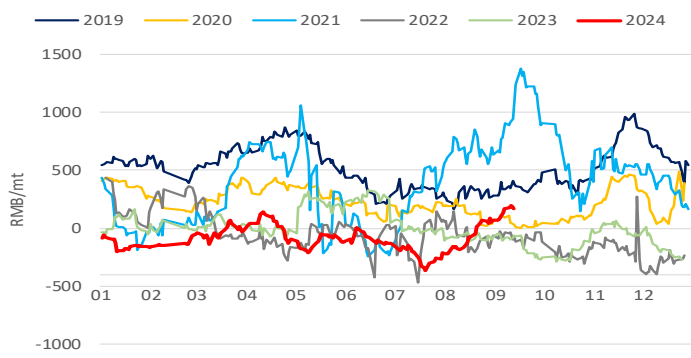
CHINESE STEEL INVENTORIES



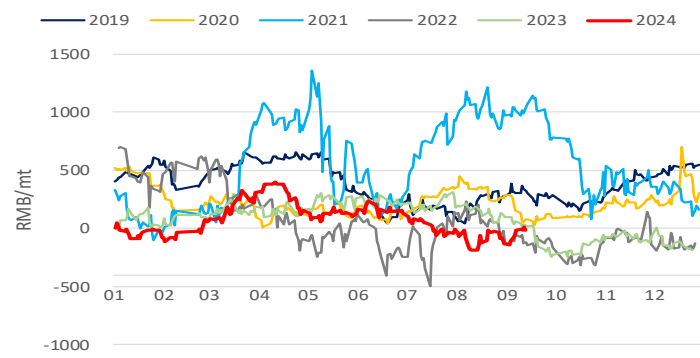
CHINESE STEEL MILL PROFITABILITY



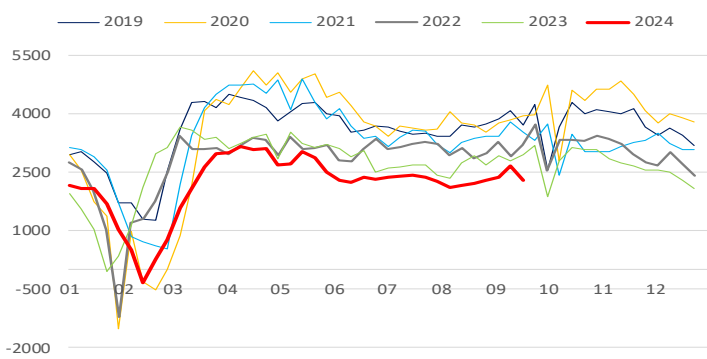
CHINESE STEEL MILL PROFITABILITY—Rebar



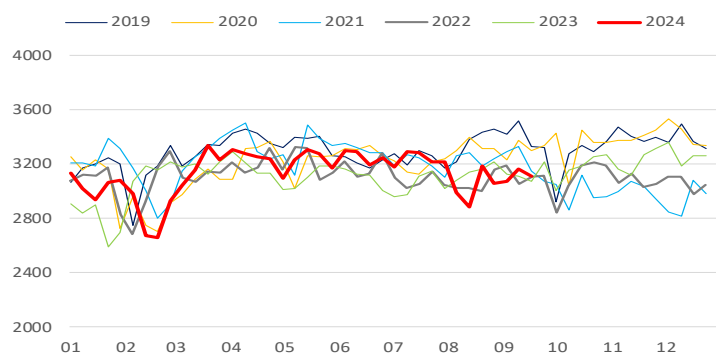
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



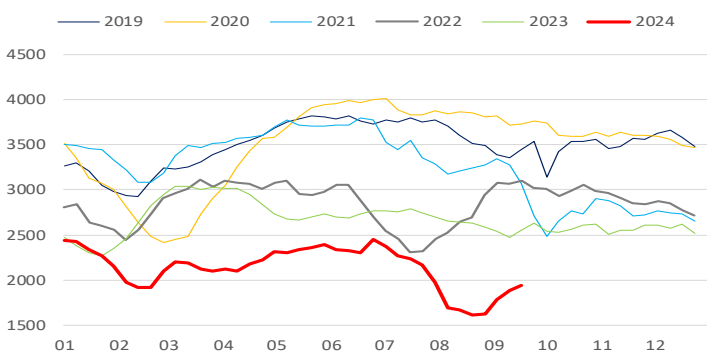
CHINESE STEEL CONSUMPTION—Rebar



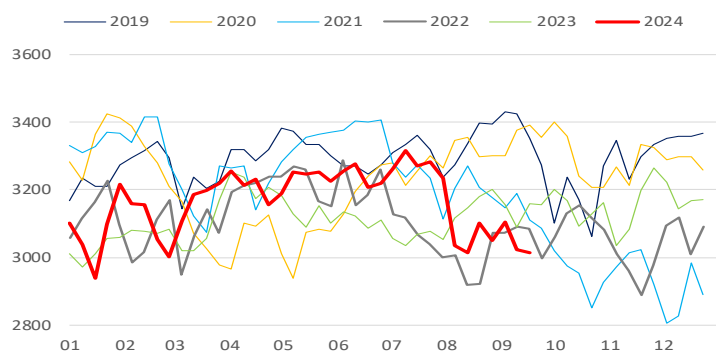
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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																				
	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%	<table border="1"> <thead> <tr> <th colspan="4">Data Exclusions*</th> </tr> <tr> <th></th> <th>62%</th> <th>58%</th> <th>65%</th> </tr> </thead> <tbody> <tr> <td>Port Index</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Seaborne index</td> <td>0</td> <td></td> <td>0</td> </tr> <tr> <td>Lump Index 62.5</td> <td>0</td> <td></td> <td></td> </tr> </tbody> </table>	Data Exclusions*					62%	58%	65%	Port Index	0	0	0	Seaborne index	0		0	Lump Index 62.5	0		
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Lump Index 62.5	0																								
Pricing Point	Qingdao Port (FOT and CFR respectively)			FOT Qingdao Port	* Number of price submissions for iron ore indices that were excluded from index calculations today as they were anomalous and could not be verified																				
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 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					
Sep 24th, 2024	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%
Sep 24th, 2024	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		IRCN0034
IOPI58	IRCNQ002		IRCNQ005		IRCN0035
IOPI65	IRCNQ003		IRCNQ006		
IOPLI62	IRCN0036		IRCN0037		

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