

IRON ORE FUTURES TRADING MANUAL





DCE Investor Education Material

Futures Trading Manual Series

Dalian Commodity Exchange



CONTENTS

I. Overview of Iron Ore	01
II. Overview of Production, Consumption and Circulation of Iron Ore	02
(I) Overview of Production, Consumption and Trade of Iron Ore in the World · · · · · · · · ·	02
(II) Overview of Production, Consumption and Trade of Iron Ore in China · · · · · · · · · · · · · · · · · · ·	07
III. International Iron Ore Pricing Mechanism and Factors Influencing Price	18
IV. Iron Ore Futures and Derivatives Market	20
(I) International Iron Ore Derivatives Market	20
(II) Common Trading Strategies of Iron Ore Traders	21
(III) Major Participants in International Iron Ore Market	22
V. Iron ore Futures Trading Guide	22
(I) Iron Ore Futures Traders' Participation Modes	22
(II) Trading Authority and Account Opening	23
(III) Settlement	25
(IV) Hedging and Arbitrage	27
(V) Delivery	30
(VI) Risk Management	33
Annex 1: DCE Iron Ore Futures Contract	37
Annex 2: DCE Iron Ore Delivery Quality Standard	38
Annex 3: List of Designated Delivery Warehouses for DCE Iron Ore	42



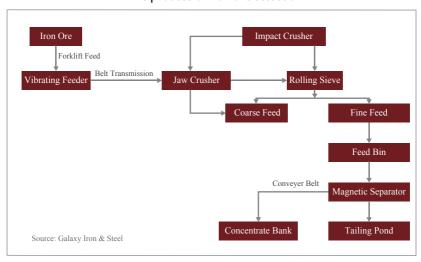
I. Overview of Iron Ore

Iron ore refers to the ore that has use value, contains iron element or iron compounds, and is the important raw material for iron and steel production. There are many varieties of iron ore, with those for iron-making mainly including magnetite (Fe₃O₄), hematite (Fe₂O₃) and siderite (FeCO₃). The ore products are gradually selected from the natural ore (iron ore) through the procedures such as crushing, grinding, magnetic separation, flotation, and re-selection. It takes about 1.6 tons of iron ore to produce 1 ton of cast iron, and iron ore accounts for more than 60% in the cast iron cost. Therefore, the iron ore is also an important raw material closely related to the national economy.

According to different physical forms, the iron ore family is divided into raw ore, lump ore, fine ore, ore concentrate, sintering ore, and pellet ore. The lump ore is a high grade ore that can be directly put into furnace; fine ore and ore concentrate can only be put into blast furnace after artificial agglomeration. Where, the fine ore is the main raw material to produce sintering ore, and ore concentrate is the main raw material to produce pellet ore. The fine ore is selected as the subject matter for futures trading of iron ore on the Dalian Commodity Exchange.

In the international trade practices, according to origin, grade, impurity content and other indicators, the imported iron ore can be classified into PB Fines, Yandi Fines, Mac Fines, Newman Fines, Robe River Fines, Rocket Fines, Special Fines, Atlas Fines, CSN Fines, SSFT Fines, SFCJ Fines, Southern Brazil Fines, Brazilian Coarse Fines, Indian Fines and the corresponding lumps.

The process of iron ore selection



China is a major country in steel production and consumption. The demand for iron ore drives the iron ore output to constantly increase in China. The raw iron ore output in China was 218 million tons in 2001. By 2005, it reached 420 million tons, which almost doubled that in 2001. In 2017, China had the raw iron ore output of 1.23 billion tons, equivalent to 310 million tons of ore concentrate, consumed about 1.14 billion tons of iron ore, and imported 1.07 billion tons of iron ore and its ore concentrate.

In recent years, the annual price negotiation system of iron ore is collapsed, and the trade price begins to be marketed and indexed, with the iron ore price violently and frequently fluctuated. From 2016 to the beginning of 2018, the price fluctuates between RMB300-700/ton, with the maximum fluctuation of more than RMB400/ton, and the maximum increase of nearly 70% within a year.

II. Overview of Production, Consumption and Circulation of Iron Ore

(I) Overview of Production, Consumption and Trade of Iron Ore in the World

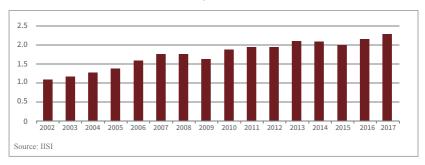
- 1. Production of Iron Ore in the World
- (1) The iron ore output is on the rise in the world as a whole

After 2000, rapid development of the iron and steel industry in the world, especially in Asia, drove the iron ore consumption in the world to significantly increase, thereby promoting the global iron ore production. In 2002-2011, the overall output of iron ore was on the rise, and was increased by 1.05 billion tons. The annual growth was about 105 million tons, and the average annual growth rate was 8.49%. Especially from 2003 to 2007, the average annual growth rate was more than 10%. In 2011, the global iron ore output was 1.96 billion tons. In 2012, influenced by the price fluctuation of iron ore, the global output, seeing its first decline since the 2009 financial crisis, was reduced to 1.904 billion tons. However, it rose again and reached 2.04 and 2.05 billon tons in 2013 and 2014, respectively. As small and medium-sized mines withdrew from the market successively with the ore prices falling below the break-even levels, the global iron ore output declined again in 2015, with the annual output amounting to 2.01 billion tons. In 2016, iron ore prices stabilized and picked up, and with small and medium-sized mines resuming production and outputs remaining at high levels at the four largest international mines, the global iron ore production returned to the uptrend. The annual outputs stood at 2.11 billion tons and 2.20 billion tons in 2016 and 2017 respectively.



Global iron ore output trend in 2002-2017

Unit: billion tons



(2) Iron ore production is centralized in the world

South America, Asia and Oceania provide the main sources of global iron ore in recent years, and the countries producing iron ore in these regions mainly include Brazil, China, India and Australia. In 2008-2015, the annual growth rate of iron core (raw ore output) was more than 40 million tons in Australia and China. Sum of the output of the top 10 countries and regions producing iron ore is more than 80% of the global total. It is clear that the iron ore production is centralized in the world.

Production situation of iron ore in top 10 countries ranked according to the iron ore output except China in 2008-2015 (Unit: million tons)

	2008	2009	2010	2011	2012	2013	2014	2015
Brazil	346	305	372	397	380.09	391.10	399.40	422.55
Australia	349.82	394.07	432.78	477.33	520.03	608.90	723.70	811.24
India	223	223.60	209.00	191.80	152.60	136.10	129.80	142.50
Russia	99.27	92.05	99.06	103.81	103.34	102.50	101.45	101.97
Ukraine	71.81	65.83	79.17	81.19	808.3	83.70	82.41	81.97
United States	53.6	26.70	49.90	54.70	54	52.	54.30	43.10
South Africa	48.98	55.42	55.00	52.90	59	60.60	66.92	61.38
Canada	33.39	32.97	37.50	37.10	39.40	41.84	44.20	45.95
Sweden	23.85	17.68	25.29	26.11	26.54	27.29	28.14	24.60
Venezuela	21.46	14.9	14	20.02	14.90	7.83	5.85	8.25
Total	1271.18	1228.22	1373.71	1441.96	1430.72	1511.85	1636.17	1743.51
Whole world	1716.77	1589.09	1870.06	1943.79	193136	1977.24	2001.13	2006.35
% of the top 10 countries	74.04%	77.29%	73.46%	74.18%	74.08%	76.46%	81.76%	86.90%

Source: IISI

(3) The four major mines have obvious supply advantages

The world's high grade iron ore mines are mainly in Australia and Brazil. The four largest iron ore production companies in the world include the Rio-Tinto, BHP Billiton, FMC in Australia, and VALE in Brazil, the output of which ranks No. 1.

a. Australia

About 90% of the proven iron ore resources in Australia are concentrated in Western Australia, mainly in the Pilbara and Midwest regions. The main producers are Rio Tinto and BHP Billiton, the world's second largest and third largest iron ore suppliers. In addition, FMG officially started production in the second quarter of 2008 and became Australia's third largest iron ore supplier.

b. Brazil

The two largest iron ore producing areas in Brazil are the "Iron Quadrangle" and Carajas, both of which are world-class super-large iron ore mines. Vale is the world's largest iron ore producer and exporter, as well as the largest mining company in the Americas. Its iron ore production accounts for more than 85% of Brazil's total, and its main mineral products can be mined for nearly 400 year continuously.

The Brazilian iron ore is mainly the hematite characterized by high iron content, medium silicon content and low aluminum content, hence one of the first choices of raw materials for large-sized steel plants.

The iron ore output of the four largest iron ore production companies, VALE, BHP Billiton, Rio-Tinto and FMG in 2017 is respectively 367 million tons, 231 million tons, 349 million tons and 191 million tons.

Iron ore output of 4 major manufacturers in 2010-2017 Unit: million tons

Manufacturer	2010	2011	2012	2013	2014	2015	2016	2017
VALE	309.46	322.60	319.90	300.00	332.00	342.99	348.85	366.51
ВНР	128.06	149.40	160.80	170.00	204.00	237.34	226.32	230.86
RIO	184.63	191.77	199.00	266.00	295.00	327.57	347.62	348.81
FMG	43.89	53.91	67.77	126.50	159.90	167.50	190.80	191.40
Total	666.04	717.68	747.47	862.50	990.90	1075.40	1113.59	1137.58
Proportion in the global output (%)	35.6%	36.9%	38.7%	43.6%	49.5%	53.6%	52.9%	51.6%

Source: Annual report disclosed by each company



2. Iron ore Consumption in the World

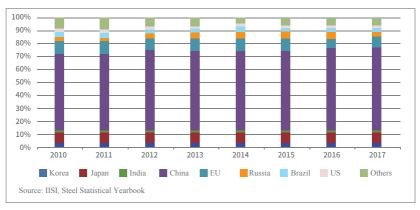
(1) Iron ore consumption is increased year by year in the world

In 2010-2017, the global iron ore consumption was increased by 15.25%, with the average annual growth rate of 2.21%, where the iron ore consumption in China was increased by about 21.38% with the average annual growth rate of 2.05%; the iron ore consumption growth of 70.24% in India was also very fast with the average growth rate close to 8%.

(2) The demand in China is the main driving force

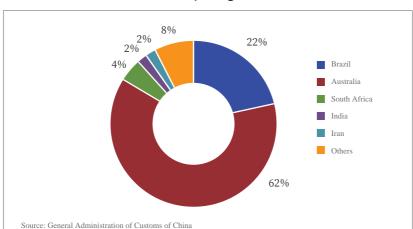
As can be seen from the changes of the proportion of the apparent consumption of iron ore in the top 10 countries of the world ranked according to the cast iron output in the global consumption in 2010-2017 in the figure below, the consumption of iron ore jumped by 3.63 percentage points to 60.66% in China in 2017; that in Japan, Brazil, EU, US and Russia was decreased by 1.40%, 0.67%, 1.37%, 0.77% and 0.36% respectively; that in Korea remained stable, while the proportion of Indian consumption in the aggregate consumption of the world was increased slightly by 1.81%.

Changes of the proportion of the apparent consumption of iron ore in main countries in the global consumption in 2010-2017



(3) Import sources are different in each country of the world

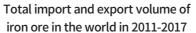
The sources of iron ore differ in each country. Japan depends on import of more than 99% of iron ore, 61% of which was imported from Australia, 21% from Brazil, 8% from India and 4% from South Africa. South Korea, Germany and Italy also depend on import of almost 100% iron ore mainly from Brazil and Australia; the United States depends on import of about 50% iron ore mainly from Australia, Brazil, India, South Africa and Venezuela; the iron ore in Russia, Ukraine, India and Brazil mainly comes from themselves. In 2017, among China's imported iron ore, 62.30% came from Australia, 21.35% from Brazil, 2.34% from India and 4.20% from South Africa.



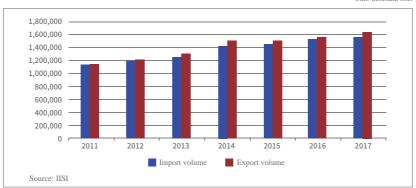
Distribution of countries exporting iron ore to China in 2017

3. Iron Ore Trade in the World

From 2011 to 2016, the total import volume of iron ore in the world, almost equivalent to the export volume, was increased by 33.74%, with the average annual growth rate of 5.99%. By calculation of the import and export volumes of major countries in the world, it is predicted that the import and export volumes in 2017 will be 1.566 billion tons and 1.616 billion tons, up 2.67% and 2.11% respectively.



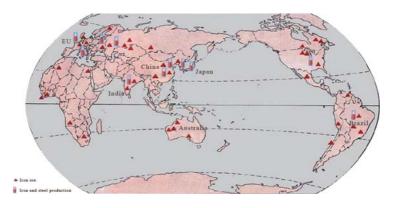
Unit: thousand tons





Global steel production distribution is inconsistent with the iron ore resources distribution. Major steel producing countries, such as Japan, South Korea, the U.K., and Italy, completely depend on import of iron ore; China needs to import large amounts because its steel production scale is more than the support of its own iron ore resources; the supply and demand of iron ore in Russia is practically balanced; Brazil, India, Australia can not only meet their own domestic demand for iron ore, but also export large amounts. The world iron ore trade forms a pattern of exporting from Australia, Brazil and India etc. to China, Japan and the European Union countries etc.

Global iron ore and main steel producing area distribution map



Source: Compiled by relevant data

(II) Overview of Production, Consumption and Trade of Iron Ore in China

- 1. Production of Iron Ore in China
- (1) Iron Ore Output Falling Back

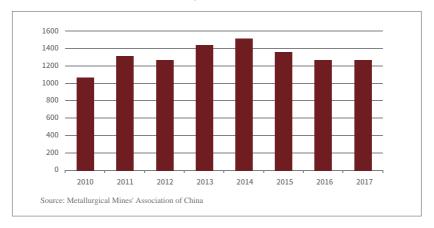
In recent years, the steel industry in China has rapidly developed, and there is substantially increased demand for iron ore, driving the iron ore output in China to be constantly increased.

The raw ore output in China was 218 million tons in 2001, decreased by 2.5% compared with that in 2000. After that, it was increased year by year. By 2005, it reached 420 million tons, which almost doubled that in 2001. The raw iron ore output reached 1.38 billion tons in 2015. However, with the increasing dependence on iron ore imports in

China, the domestic ore production began to decline in 2015. The rebounding ore prices in 2016 and 2017 did not prevent the outputs from dropping further, with the outputs standing at 1.28 billion tons and 1.23 billion tons respectively.



Unit: million tons



(2) Largest Production in the Bohai Rim Region

From the perspective of different regions, the raw iron ore output in the Bohai Rim Region represented by Hebei and Liaoning provinces is the largest, and is close to 60% of the total output of China. If Shanxi and Inner Mongolia near the Bohai Rim Region are considered, the output in this region will account for more than 65% in the national output.

Details of raw iron ore output in main provinces of China in 2017

Region	Output (million tons)	Proportion in the national output (%)
Hebei	582	47.3
Sichuan	144	11.7
Liaoning	122	9.9
Shanxi	66	5.4
Anhui	37	3.0

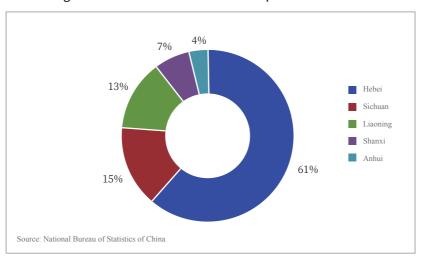
Source: China Iron and Steel Association



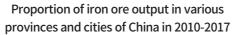
(3) Iron ore production areas are centralized

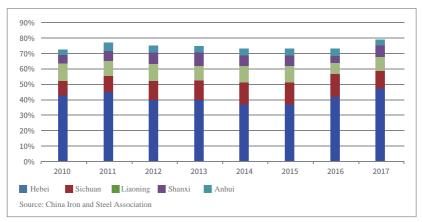
From the perspective of different provinces, iron ore is not exploited in Tianjin, Shanghai, Ningxia and Tibet due to restrictions by resources, but is produced in all other areas. Where in 2017, the output in Hebei and Sichuan is high, and is respectively 580 million tons and 140 million tons. In addition, the output in Liaoning, Shanxi and Anhui is also high, and is respectively 120, 66.30 and 37.26 million tons. The iron ore output in Hebei, Liaoning, Sichuan, Anhui and Shanxi accounts for about 77% of the total output in China. The proportion of output in Hebei is the highest (47%); followed by Sichuan (11.7%); the proportion of output in Liaoning, Shanxi and Anhui is respectively 9.9%, 5.4% and 3.0%.

Regional distribution of raw iron ore output in China in 2017



The output in Hebei and Sichuan is high, and is more than 50% of the total output. The iron ore output in Liaoning is decreased continuously in recent three years, and that in other provinces and cities is not significantly changed. The iron ore production areas are centralized in China





(4) Concentration degree of iron ore production is relatively low

Most iron ore producers in China are small miners, and the concentration degree of iron ore production is low. The sum of output in top 10 producers, which are all state-owned enterprises except Huaxia Jianlong, is less than 24% of the total output.

Top 10 raw iron ore producers in China in 2017

Unit: million tons

Company	Province	Raw ore output
Anshan Iron & Steel Mining	Liaoning	56.32
Huaxia Jianlong	Beijing	47.61
Hebei Iron & Steel Mining	Hebei	36.75
Panzhihua Iron & Steel Mining	Sichuan	35.31
Taiyuan Iron & Steel Mining	Shanxi	34.40
Benxi Iron & Steel Group	Liaoning	22.01
Baosteel Group	Inner Mongolia	19.24
Maanshan Iron & Steel Mining	Anhui	13.91
Shougang Mining	Hebei	12.89
Minmetals Hanxing Mining	Hebei	12.00
Total		290.45
Proportion in the total output of China (%)		23.63%

Source: China Iron and Steel Association



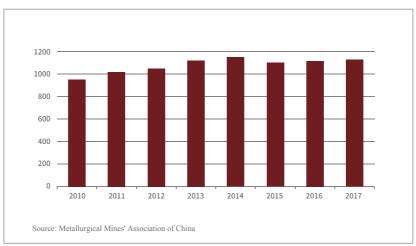
2. Iron Ore Consumption in China

(1) The iron ore demand is increasing year by year in China

Steel mills are final consumers of iron ore, and the steel productivity distribution determines the iron ore consumption pattern. From the perspective of historical situation, the iron ore demand is gradually increasing in China. In 2008, the cast iron output was 469 million tons in China, and the demand for iron ore was about 750 million tons. By 2009, the cast iron output was increased to 544 million tons, and the demand for iron ore was about 870 million tons with the year-on-year growth of 15.9%. In 2014, the cast iron output rose to 712 million tons and the demand for iron ore was about 1,140 million tons. In 2015, the cast iron output dropped slightly to 691 million tons, and the demand for iron ore was about 1,105 million tons. In 2016 and 2017, the cast iron outputs rebounded again to 701 million tons and 711 million tons respectively, equivalent to 1.122 billion tons and 1.138 billion tons of iron ore respectively in demand. The iron ore output in China was also increased with the increase of the consumption all the time. But in 2010, the iron ore consumption growth rate in China was obviously slowed down. On the one hand, the restricted steel productivity reduced the demand for iron ore; on the other hand, the constantly increasing iron ore price also increased the risks of hoarding and speculation of iron ore, and inhibited the speculative demand.

Iron ore demand trend in China in 2010-2017

Unit: million tons

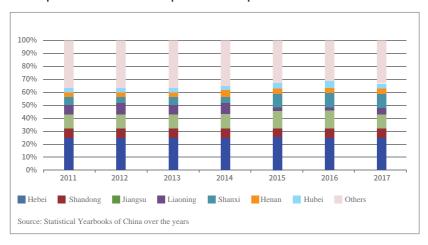


(2) Demand for iron ore in China is centralized

From the perspective of cast iron output, the cast iron output is high in Hebei. The iron and steel output was 180 million tons in Hebei in 2017, and the cast iron output in Shandong and Jiangsu is more than 65 million tons in recent two years. There is main demand for iron ore in these provinces.

From the perspective of proportion in various provinces and cities, in recent six years, the proportion of cast iron output in Hebei, Shandong, Liaoning, Jiangsu, Shanxi, Hubei and Henan is practically stable with a little change, and the sum of proportion in other provinces and cities is decreased slightly. From the perspective of overall proportion, the output in the top 7 provinces and cities ranked according to the cast iron output accounts for about 67% of the total output, suggesting that the demand for iron ore in China is also centralized.

Proportion of cast iron output in various provinces and cities of China



(3) Demand for iron ore is centralized in the Bohai Rim Region

From the perspective of regions, the cast iron output in Hebei, Shandong and Liaoning accounts for 43% of the total output of China; the cast iron output in Jiangsu is 70 million tons, accounts for 10% of the total output, which is less than 1/3 of that in the above three provinces. From the perspective of the regional demand, the demand for iron ore is also centralized in the Bohai Rim Region.



Cast iron output in various regions of China in 2017

Province	Output (million tons)	Proportion in the total output of China (%)
Hebei	180	25.32
Shandong	66	9.23
Liaoning	61	8.61
Jiangsu	71	10.03
Shanxi	40	5.56
Hubei	24	3.38
Henan	27	3.80

Source: SteelHome.com

3. Iron Ore Trade in China

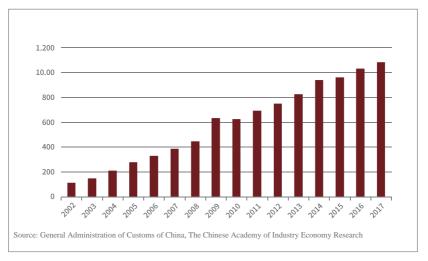
(1) Rapid growth of import volume of iron ore in China

China is the biggest iron and steel producer in the world. However, as its iron ore cannot meet the demand of iron and steel production due to output and grade etc., China needs to import a large amount of iron ore.

In 2001, China imported iron ore of 92.39 million tons, which was increased by 32.04% than the previous year. By 2002, the iron ore imported by China was more than 100 million tons, reaching 111 million tons with the year-on-year growth of 20.67%. Since then, the import volume of iron ore in China has always remained high with the annual growth rate of over 30%. In 2010, the import growth of iron ore in China was somewhat slowed down, slightly lower than that in 2009, and terminated the rapidly rising trend since 2000, followed by the slowly rising trend. During this period, the average annual growth rate of import volume of iron ore in China was 21.8%. The constantly rising import volume also allows the iron ore import dependency of China to be constantly improved. The iron ore import dependency of China was about 63% in 2012. China imported 930 and 950 million tons of iron ore in 2014 and 2015, respectively. In 2016, the import exceeded 1 billion tons to reach 1.025 billion tons, and in 2017, the import of iron ore increased to 1.07 billion tons.

Import volume of iron ore in China in 2000-2017

Unit: million tons



(2) Import proportion of iron ore in China is stable and tends to be diversified

From the perspective of the import proportion, the proportion of iron ore imported to China is stable. Since 2012, the volume and amount of iron ore imported by China from the top 5 countries ranked according to the volume of iron ore exported to China have always accounted for about 80% of the total import volume. In particular, the total proportion of Australia and Brazil over the years is over 65%. The proportion of Australian iron ore was considerably increased. From the perspective of the scope of countries, China imported from increasing number of countries, showing that the sources of iron ore imported by China are gradually diversified.



Top 5 countries ranked according to the volume and amount exported to China in 2012-2017

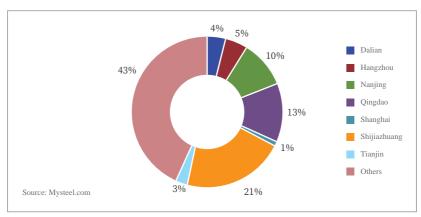
Year	Country	Export volume (million tons)	Export amount (US\$ million)	Proportion of Volume (%)	Proportion of amount (%)
	Australia	351	44905	47.24	46.97
	Brazil	164	22630	22.07	23.67
2012	India	33	3681	4.44	3.85
2012	South Africa	40	5528	5.38	5.78
	Iran	17	1815	2.29	1.90
	Total	605	78559	81.42	82.17
	Australia	417	54936	50.85	51.97
	Brazil	155	21424	18.90	20.27
2013	South Africa	43	6024	5.24	5.70
2010	Iran	22	2377	2.68	2.25
	Ukraine	16	2329	1.95	2.20
	Total	537	69581	79.63	82.39
	Australia	548	54370	58.92	58.09
	Brazil	171	17991	18.39	19.22
2014	South Africa	44	4874	4.73	5.21
2011	Iran	21	1859	2.26	1.99
	Ukraine	19	2273	2.04	2.43
	Total	803	81367	86.34	86.93
	Australia	607	35859	63.89	62.26
	Brazil	192	12165	20.21	21.12
2015	Ukraine	20	1518	2.10	2.64
2010	South Africa	45	3063	4.74	5.32
	Iran	13	688	1.37	1.19
	Total	877	53293	92.31	92.53
	Australia	640	34971	62.48	61.58
	Brazil	215	12435	20.96	21.90
2016	South Africa	45	2734	4.38	4.82
	India	25	844	2.45	1.49
	Iran	15	823	1.43	1.43
	Total	939	51807	91.70	91.22
	Australia	668	46190	62.30	60.88
	Brazil	229	17226	21.35	22.70
2017	South Africa	45	3503	4.20	4.62
	Iran	20	1383	1.82	1.82
	India	2	1751	0.16	2.31
	Total	964	70053	89.83	92.33

Source: Mysteel.com

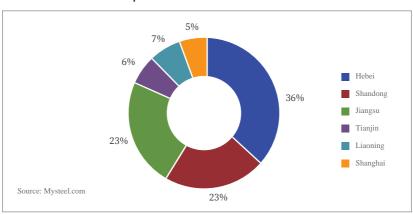
(3) Imported iron ore is mainly centralized in the Bohai Rim Region

From the perspective of import customs, over 50% of imported iron ore is declared to customs in the Bohai Rim Region, showing that the Bohai Rim Region is the most important region for China to import iron ore. Besides, iron ore imported to China is often unloaded in ports of these customs.

Proportion of iron ore imported from various customs in 2017



Proportion of imported iron ore in various provinces and cities in 2017





As can be seen from the provinces importing iron ore in 2017, the proportion of import was higher than 15% in Hebei, Shandong and Jiangsu, and more than 4% in Liaoning and Tianjin. The total proportion of the top 5 provinces in the total import volume was 65%. As can be seen from the situation over the years, the overall proportion of the top 5 provinces and cities is stable, but the proportion of some provinces and cities fluctuates.

As can be seen from the proportion of imported iron ore in various provinces and cities in 2013-2017, the proportion of import in Hebei, Shandong and Jiangsu was still high, while the ranking of other provinces and cities was basically stable. As can be seen from the change trend in 2013-2017, provinces importing more iron ore had higher steel productivity.

Proportion of imported iron ore in the top 6 provinces in 2013-2017

20	2013		2014		2015		2015		2016	20	17
Province	Proportion of import										
Hebei	22.83	Hebei	25.05	Hebei	28.12	Hebei	29.05	Hebei	25.13		
Shandong	20.02	Shandong	18.92	Shandong	15.95	Shandong	15.92	Shandong	15.84		
Jiangsu	13.06	Jiangsu	13.12	Jiangsu	13.64	Jiangsu	15.31	Jiangsu	15.97		
Shanghai	4.88	Shanghai	4.62	Shanghai	4.83	Shanghai	3.89	Shanghai	3.86		
Beijing	5.86	Tianjin	7.63	Beijing	6.72	Tianjin	5.09	Tianjin	4.07		
Liaoning	3.91	Liaoning	3.76	Liaoning	3.99	Liaoning	4.08	Liaoning	4.81		
Others	29.43	Others	26.88	Others	26.76	Others	26.67	Others	30.32		

Source: Mysteel.com

(4) International transportation depends on sea transportation, while internal transportation combines a variety of ways

The international trade of iron ore is basically focused on sea trade, and rail transport and other means account for less than 10%. In 2012, the total volume of global iron ore trade was 1.1 billion tons, and the sea trade volume reached 900 million tons, accounting for 93.8% of the total trade volume of iron ore. The sea trade has become the main mode of the international iron ore trade.

The iron ore produced in China, seldom inter-provincially transported, is generally consumed nearby, and is usually transported by means of short haul, auto for instance. Imported seaborne iron ore is transferred to inland through long-distance transportation tools, such as water transport and train, because the iron ore must be unloaded in port.

(5) Regional flow direction is clear

As can be seen from the table below, there are surplus iron ore in Hebei, Shandong, Beijing, Shanghai and Inner Mongolia, which are the main places for outflow of iron ore, while Shanxi, Henan, Hubei, Jiangsu, Hunan and Yunnan are short of iron ore, and are the main places for inflow of iron ore.

Therefore, China may be divided into three regions according to the latitude:

- a. North region: It means the area to the north of Huaihe River and Tongbai Mountain line, which can be further subdivided into Bohai Rim and surrounding areas, other northeast areas, central area and northwest area. This region is mainly intended to unload imported ore through the Bohai Rim port, and transport the ore to steel mills by rail.
- b. Yangtze River Delta Region and areas along the Yangtze River: It is mainly intended to import ore using the port near Yangtze Estuary, which is then transported to docks along the Yangtze River through waterway-waterway transit; some ore is transported to inland steel mills by rail via Beilun port or after going ashore.
- c. South China: It refers to the area to the south of Nanling, including four provinces, namely Guangdong, Guangxi, Yunnan and Hainan. The ore unloaded in southern coastal ports is mainly transported to steel mills by rail.

III. International Iron Ore Pricing Mechanism and Factors Influencing Price

Before 2008, the global iron ore prices were negotiated by the world's leading iron ore suppliers with their major traders for a one-year contract period. When any mine and a steel company enter into an iron ore sale contract and set the "initial price", other negotiators will accept the result, also known as "following suit". In 2010, Vale was the first to change the original annual pricing mechanism to adopt an index-based method for quarterly pricing, which would be gradually transformed to the monthly pricing commonly used in the market currently. At present, the major reference for the pricing at major mining companies is the Platts Index.

The iron and steel industry is an important pillar for the national economy. It involves a wide range of industries, with a high degree of industrial correlation and a strong driving force for consumption, playing a significant role in economic construction, social development, fiscal taxation, national defense, employment stability and other fields. As a raw material for iron and steel production, the iron ore pricing is affected by many factors:

1. Cost

The iron ore cost is influenced by a series of factors, such as mining equipment, labor cost, water and electricity cost required for mining, relevant taxes, and freight etc., which all affect the CIF of iron ore, thereby affecting the ore market price.



2. Policy

Iron ore is an international bulk commodity, and its price is influenced by all kinds of policy factors, such as import and export policy in the country of origin, tariff policy in the importing country, and steel and iron industry development policy in the consumer country, which all affect the iron ore price. Since July 1, 2016, China has fully implemented the resource tax reform and levied tax ad valorem on iron ore. The move has reduced the burden on iron ore enterprises to a certain extent, especially benefiting the low-grade iron mines in reducing production costs and improving profitability.

3. Output Changes

The productivity and output fluctuations of iron ore influence the market price. If the mining enterprises stop production or reduce output due to equipment maintenance and natural conditions etc. of the production enterprises, the iron ore price will also change accordingly.

4 International Trade Price

As the iron ore import dependency is high in China and the international ore price is strongly correlated with the domestic price, the changes of the international market price will be transferred to the domestic price, thereby affecting the market price of iron ore. The impact of the exchange rate has also been transferred to the iron ore prices through the import and export trade.

5. Downstream Demand Changes

The market price of iron ore will also fluctuate with the downstream demand changes. The market price will rise when the downstream consumption grows under short supply, and will fall when the downstream consumption declines under ample supply.

6. Substitute Product Price

The price will decline when the iron ore market price is high and the price of the substitute product such as scrap steel is low.

7. Inventory Changes

Inventory changes will also affect the market price of iron ore. For example, the price will decline when local inventory level rises and traders are willing to sell, and will fall when traders hoard up goods for short of local inventory.

8. Macroeconomic and Financial Situations

Macroeconomic situation is the core factor affecting all assets, and naturally, iron ore is no exception. It mainly affects iron ore prices in the following aspects. First of all, it indirectly influences the iron ore demand by affecting the supply and demand of steel. The macroeconomic strength will affect the growth rates of real estate, infrastructure and manufacturing, the three major sectors for steel demand. If infrastructure investment and real estate investment increase, which in turn will drive the recovery of steel demand, and

the steel mills are more active in resuming production with profitability improved, it will eventually boost the demand for iron ore and drive up the ore prices; otherwise, if the macroeconomic growth rate is stable or decreases, then the stimulus will weaken, the steel demand will slow down, the steel mills' profit space will narrow, the iron ore demand will decline, and the prices will face greater downward pressure. Secondly, from the perspective of supply, macroeconomic fluctuations at home and abroad will be transmitted to supply through the impact on demand. The main reason is that the strength of demand will cause the mines to suspend or resume production. After 2008, for example, the economic crisis significantly brought down the steel demand, which led to a sharp drop in iron ore demand, with small and medium-sized foreign mines extensively going bankrupt and the supplies reduced, laying a solid foundation for the rebound of ore prices in 2016.

The financial market, especially from the perspective of exchange rates, also has a certain impact on iron ore prices, mainly for the following two factors. The first is the exchange rate between the RMB and the U.S. dollar. If the RMB is depreciated, it will generally lower the intention to import or affect the iron ore prices in terms of the costs, and especially the sharp depreciation of the RMB will shore up the ore prices on the side of the cost. The second is the fluctuations of foreign exchange rates, mainly the Australian Dollar, the Brazilian Real and the US Dollar, which will affect the ore prices in terms of the cost. As the C1 cost of Australian or Brazilian iron ore is paid in local currency, and the sales are settled in U.S. dollars, the depreciation of the domestic currency against the U.S. dollar will weaken its support for cost, and otherwise the support for cost will be strengthened. Finally, the monetary policy will also influence ore prices, mainly shown by the impact of the cost of funds on the traders. The increased cost of funds will heighten the capital pressure on the traders or even lead to dumping in serious situations, thus causing the ore prices to go down; in addition, the monetary policy has impact on investment, thus affecting the steel demand and indirectly influencing the iron ore demand.

IV. Iron Ore Futures and Derivatives Market

(I) International Iron Ore Derivatives Market

In 2013, DCE launched the iron ore futures with the 62% iron content as the quality requirement for the standard product, with physical delivery implemented. In addition to the iron ore futures on DCE, Singapore Exchange Limited (SGX), Chicago Mercantile Exchange (CME) and Hong Kong Exchanges and Clearing Limited (HKEx) have carried out the trading of the iron ore derivatives, which are based on the Platts 62% CFR index with cash delivery implemented.

The iron ore swap market in Singapore is an active iron ore derivatives market overseas, with the iron ore swap launched by SGX in September 2012. The underlying product in



trading is the Platts 62% Iron Ore index, which is settled in U.S. dollars. The trading mode of iron ore swap is over-the-counter trading, with the transactions matched artificially by the brokers. In addition, the clearing and brokerage are separated and traders conduct the settlement through the SGX-certified Bank for International Settlements. The swap contract has the non-physical delivery performed through cash settlement at the expiration based on the 62% Platts index of the month.

The terms of the SGX contracts are up to 48 months, and the OTC transactions can be made into monthly, quarterly or annual contracts. Its dominant contracts are M+1, Q+1 and so on, which are more adaptive to the actual operations for spot hedging.

The main participants in the swap market are exchanges, clearing members, inter-dealer brokers (IDBs) and traders. Since the swap contracts form an OTC market that is not open or transparent as well as more demanding for investors, the main traders are industrial traders and professional investment institutions. In addition, with large sizes, the swap contracts set a higher threshold for the participation of ordinary retail investors.

(II) Common Trading Strategies of Iron Ore Traders

Participants in domestic iron ore futures include industrial clients such as steel mills, traders, mines and investment institutions, etc.

From the perspective of trading strategy, the industrial clients participating in the spot trading perform hedging, basis pricing and other operations mainly by integrating the futures and physicals. The practices of hedging include among others that when the forward contracts are in a discounted state, the steel companies buy the forward contracts to set up the virtual inventories; predicting the price drops, the traders sell at the quoted price to lock in the trade profits for their physicals. The basis pricing means that the buyer and the seller do not set a fixed price when signing a purchase and sales contract, and instead, the buyer selects the futures price at a certain point in time as the final transaction price before shipment with the basis locked in accordance with the futures prices on the designated exchange. Through the "iron ore futures price + basis" pricing, the steel mills and traders actually transfer the price fluctuation risk to the futures market. The traders usually open the hedging positions in the futures market at the same time as the contract is signed, and then close the futures positions when the goods are resold. As a result, the traders can hedge against the possible losses caused by the spot price fluctuations. In addition, the pricing power for the goods is transferred from the upstream sellers in the form of fixed price to the downstream buyers, who have more power in pricing then. The product traded on DCE is the medium-and-high-grade iron ore of more than 60% content, and there is the medium-and-low-grade iron ore of about 55% in the spot market. As a result, when the spot traders think that the price difference between high grade and low

grade iron ore may narrow or expand, they will realize their pre-judgment on the trend of the price difference through the operations of buying low-grade iron ore physicals and selling the futures, or selling low-grade iron ore physicals and buying the futures.

Investment institutions' trading modes are more flexible, and their strategies include one-side speculation, calendar spreads, cross-product spreads, cross-market spreads and so on. The calendar spread mainly refers to the spread transaction between two dominant contracts. Currently the dominant contracts of the iron ore futures on DCE are the three for January, May and September, which have larger open interests and trading volumes than other contracts, and expanding or shrinking spreads between the contracts usually provide clear opportunities for trading. The cross-product spread mainly refers to the operations for the profits of steel mills, such as going short on the profits of the steel mills, which includes the processes of going short on the rebar to a scale and going long on the iron ore and coking coal at the same time, and vice versa. In addition, the operations also include the trading based on the strength relations of the commodities on the ferrous industry chain, such as the ratio of rebar to iron ore and the ratio of coking coal to iron ore. Currently the cross-market spread mainly refers to the spread trading between the iron ore futures contracts on DCE and the iron ore swap contracts on SGX.

(III) Major Participants in International Iron Ore Market

Major participants in the international iron ore spot market and the participants in the futures market and swap market include industrial clients, institutional clients and others. Among them, industrial clients include global steel production companies, global iron ore spot traders, and some mines and steel companies. Institutional clients mainly include two groups. One group is the investment clients based on the research in fundamentals, and the other is the investment clients mainly based on quantitative technology research or statistical arbitrage.

V. Iron ore Futures Trading Guide

(I) Iron Ore Futures Traders' Participation Modes

Domestic Traders

The domestic non-futures company members can directly participate in the futures trading, and the domestic traders can participate in the futures trading through domestic futures company members.

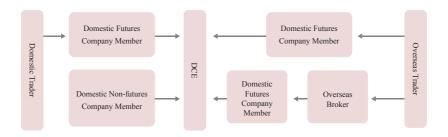
Overseas Traders

There are two modes for overseas traders to participate in trading of specified domestic futures products.

Mode 1: The overseas traders participate in the trading through futures company members



Mode 2: The overseas traders participate in the trading through overseas brokers which entrust the futures company members with the trading.

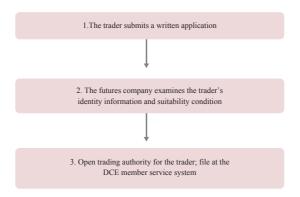


(II) Trading Authority and Account Opening

The process of domestic traders applying for trading authority for specified domestic futures products

- 1. Traders which already complete account-opening prior to the implementation of the Measures for Management of Trader Suitability of Specified Domestic Futures Products of Dalian Commodity Exchange (the "Measures") may directly participate in the trading of specified domestic futures products.
- 2. Traders whose account-opening is completed after the implementation of the Measures shall apply for the trading authority of the specified domestic futures products before participating in the trading of specified domestic futures products.

The process is as follows:



The process of account-opening by overseas traders

1. Direct Account-opening Mode

1. The overseas trader applies for account opening and submits account-opening materials to the futures company

2. The futures company reviews the account-opening materials and the suitability condition1, and submits the account-opening application through the unified account-opening system of the monitoring center

3. The monitoring center inspects the account-opening materials

4. The Exchange checks the account-opening materials and allocates the trading code

5. Obtain the trading code

6. End of the account-opening process

7. The futures company set up trading authority

(Open the overseas trader's trading authority for specified domestic futures products as of the date of the Exchange's notification that the overseas trader can participate in trading of the specified domestic futures products, with its trading authority for other products closed.)

2. Sub-delegation Account-opening Mode

The overseas client applies for account opening and submits account-opening materials to the overseas broker

*

The overseas broker reviews the account-opening materials and the suitability condition, and submits the account-opening application through the unified account-opening system of the monitoring center

₩.

3. The monitoring center inspects the account-opening materials

ŧ.

4. The entrusted futures company agrees to the application for account opening

ŧ

5. The Exchange checks the account-opening materials and allocates the trading code

+

6. Obtain the trading code

+

7. End of the account-opening process

ī.

8. The futures company set up trading authority for the trader

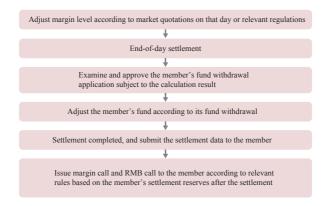
(Open the overseas trader's trading authority for specified domestic futures products as of the date of the Exchange's notification that the overseas trader can participate in trading of the specified domestic futures products, with its trading authority for other products closed.)



(III) Settlement

1. DCE End-of-day Settlement Process

After the end of the daily trading, DCE shall settle the profits and losses, trading margins, commissions, taxes and other costs for all the contracts at the settlement price of the then-current day, transfer the net amounts of the accounts receivable and payable, and appropriately increase or decrease the member's settlement reserves.



2. Settlement Process and Relevant Regulations

(1) Daily Settlement

DCE implements the mark-to-market policy.

After the completion of the settlement on the then-current day, in case the member's settlement reserve is lower than the minimum balance, the settlement result shall be deemed to be the margin call by the Exchange to the member.

The member shall make additional payments to the minimum balance of the settlement reserve prior to the opening of the market on the immediately following trading day. In case no such additional payments are made, the opening of a new position shall be prohibited if the balance of the settlement reserve is greater than zero but less than the minimum balance of the settlement reserve, or the Exchange shall carry out the forced liquidation against such member subject to the applicable provisions if the balance of the settlement reserve is less than zero.

When the RMB funds in the member's settlement reserve is less than the minimum balance of the settlement reserve, the Exchange shall issue to the member a notice of additional payment of RMB funds. The member shall additionally pay the RMB funds to the minimum balance of the settlement reserve prior to the opening of the market on the immediately following trading day. In case no such additional payments are made, the Exchange may carry out the forced swap against such member's foreign exchange funds in

the special settlement account or the foreign exchange funds in such member's special funds account after the closing of the market in the second session of the immediately following trading day.

(2) Assets Used as Margins

The foreign exchange funds, warehouse receipts on par and other assets may be used as margins subject to the approval by DCE. DCE will handle the business of using assets as margins.

- 3. Categories of Assets Used as Margins
- (1) The warehouse receipts on par other than those of the egg and the No. 2 soybean;
- (2) Foreign exchange funds (The currency category, conversion method and scope of application shall be separately announced by DCE.); and
- (3) Other negotiable securities and assets separately determined by DCE.

Procedures for use of warehouse receipts on par as margins

Application: As for the use of the warehouse receipts on par as margins, the traders shall apply to DCE and the futures company members shall handle the relevant business procedures, and the non-futures company members shall handle the relevant business procedures by themselves.

Procedures for use of foreign exchange funds as margins

Application: The member which intends to handle the business of using foreign exchange funds as margins shall file, electronically or in writing and prior to the closing of the market of each trading day, an application to the Exchange for deposit of the foreign exchange funds. The Exchange shall complete, prior to the closing of the market of the then-current day, the member's business of using foreign exchange funds as margins; and with respect to the application which is filed by the member in writing and after the closing of the market of each trading day for deposit of the foreign exchange funds, the Exchange shall complete, prior to the opening of the market of the immediately following trading day, the business of the member's using foreign exchange funds as margins.

The method of calculating the value of assets used as margins:

- 1) In case the warehouse receipt on par is used as margins, its market value will be determined with the then-current day settlement price of the futures contract in the latest delivery month in respect of the product as the benchmark price, and the market value of the warehouse receipt on par prior to the closing of the market on the then-current day will be calculated with the settlement price of the futures contract in the latest delivery month in respect of the product on the immediately previous trading day. The amount used as margins shall not exceed 80% of the market value of the warehouse receipt on par.
- 2) The benchmark price for foreign exchange funds used as margins shall be determined by the Exchange. The currency category, conversion method and scope of application shall be separately announced by DCE.



(IV) Hedging and Arbitrage

Hedging

The hedging management by DCE shall be subject to the qualification accreditation and quota management policies. Based on different contract months, the hedging position amount shall be divided into the hedging position amount of the general months (as of the contract launch date through the last trading day of the first month preceding the delivery month) and that of the delivery months (as of the first trading day of the delivery month to the last trading day).

1. Applying for Hedging Qualification

The trader shall file an application through its futures company member; and after its application materials have been examined by the futures company member, the futures company member shall handle the submission formalities to the Exchange on behalf of the trader pursuant to these Measures, and the non-futures company member shall directly handle the submission formalities to the Exchange. The trader which entrusts an overseas broker with futures trading and intends to apply for hedging qualification shall entrust its overseas broker with the handling, and the overseas broker shall then entrusts a futures company member with the handling.

The following application materials shall be submitted when applying for hedging qualification.

- (1) The photocopy of the duplicate of the trader's business license;
- (2) The photocopies of the corresponding VAT special invoices, and other certification materials acceptable by the Exchange; and
- (3) The original letter of commitment.
- 2. Applying for Hedging Amount of General Months

The non-futures company members and the traders applying for general month hedging amount shall submit the following application materials according to their products:

- (1) The physicals operation performance for the recent one year, and the physicals operation plans during the hedging period, with respect to the applied products;
- (2) Submit the amount for hedging positions in the hedging management system through futures company members; and
- (3) Other materials required by the Exchange.

No submission will be required in case the above materials have already been submitted to the Exchange.

Hedging traders need to submit the above materials to the members, which shall then input the data related to physicals operation and the application amount in the member service system. The amount applied for by the hedging traders shall be less than or equal to the data related to physicals operation. Hedging traders shall update the above information at least once in a natural year.

With respect to the application for increasing the hedging position amount of the general months, the Exchange shall examine, and make reply with respect to, the complete application materials within five working days upon receipt thereof. The Exchange shall carry out supervision and management over the hedging trading of the non-futures company members and the traders.

3. Applying for Hedging Amount of Delivery Months

The non-futures company members and the traders applying for delivery month hedging amount shall submit the following application materials according to their contracts:

- (1) The physicals operation performance for the recent one year, and the physicals operation plans during the hedging period, with respect to the applied products;
- (2) Submit the amount for hedging positions in the hedging management system through futures company members;
- (3) Hedging scheme, mainly including risk source analysis and value preservation objectives;
- (4) The certification materials and use statement with respect to the physicals which are already held and proposed to be held; materials to prove the authenticity of the need of hedging trading near the delivery month, including the production plan of the year or the previous year, the physicals warehouse receipts corresponding to the application amount, the processing order, the purchase and sale contract, the purchase and sale invoice, or other effective vouchers to prove the possession of physicals; and

(5) Other materials required by the Exchange.

With respect to the application for increasing the hedging position amount of the delivery months, after receipt of the complete application materials, the Exchange shall carry out examination as of the first trading day of the first month preceding the contract delivery month and make reply within five trading days. The Exchange shall carry out supervision and management over the hedging trading of the non-futures company members and the traders.

4. Automatically Approved Hedging Amount

When the hedging positions of the general months enter the delivery months, they will be transformed by the Exchange to be the hedging position increase of the delivery month as per the lower standards of the hedging position amount of the general months and the speculative position limit of the delivery month of such product. At the time, the client's openable position amount of the delivery month = the speculative position limit of delivery month + the increased hedging position amount of the delivery month automatically transformed. Suppose that a trader holds 4,000 contracts of hedging positions on the last trading day in the first month immediately preceding the delivery month, this trader's speculative position limit of the delivery month is 2,000 contracts, then the increased hedging amount of the delivery month automatically approved is min [4000, 2000] = 2,000 contracts. The hedging trader's openable position amount of delivery month will reach 4,000 contracts (the increased hedging amount automatically approved of 2,000 contracts, and the speculative position limit of 2,000 contracts).



5. Deadlines for Application for and Use of Hedging Amount

The deadline for use of the general month hedging amount is the last trading day of the month immediately preceding the delivery month.

The deadline for use of the delivery month hedging amount is as of the first trading day of the delivery month through the last trading day of the delivery month.

The deadline for application for delivery month position amount is the last trading day of the month immediately preceding the delivery month.

Arbitrage Trading

Arbitrage trading can be divided into calendar spread and inter-commodity spread. Calendar spread refers to arbitrage trading among different contracts of the same product. Inter-commodity spread refers to arbitrage trading among contracts of different products. On the basis of the different contract months, the arbitrage may be divided into the arbitrage of the general months (as of the contract launch date through the last trading day of the first month preceding the delivery month) and that of the delivery months.

The trader shall file an application for increasing arbitrage position amount through its futures company member; and after its application materials have been examined by the futures company member, the futures company member shall handle the submission formalities to the Exchange on behalf of the trader pursuant to these Measures, and the non-futures company member shall directly handle the submission formalities to the Exchange. The trader which entrusts an overseas broker with futures trading and intends to apply for arbitrage position amount shall entrust its overseas broker with the handling, and the overseas broker shall then entrust a futures company member with the handling.

1. Applying for Arbitrage Position Amount of General Months

The non-futures company members or traders which apply for increasing the arbitrage position amount of the general months shall submit the following materials to the Exchange:

- (1) The arbitrage position amount increase application form, which mainly includes the applicant's basic information, applied products and quantities, the arbitrage strategy, and other information required by the Exchange; and,
- (2) Other materials required by the Exchange.

The arbitrage position increase of the general months granted to the non-futures company members or traders shall be applicable to all the contracts of the general months with respect to the applied products.

Non-futures company members and traders may apply for additional amount of arbitrage position. With respect to the application for increasing the arbitrage position amount of the general months, the Exchange shall examine, and make reply with respect to, the complete application materials within five working days upon receipt thereof. The Exchange may carry out, from time to time, supervision and management of the credit and the futures market trading of the members and the traders.

2. Applying for Arbitrage Position Amount of Delivery Month

The non-futures company members or traders which apply for increasing the arbitrage position amount of the delivery months shall submit the following materials to the Exchange:

- (1) The arbitrage position amount increase application form, which mainly includes the applicant's basic information, applied products, contracts and quantities, the arbitrage strategy, and other information required by the Exchange;
- (2) The analysis of the deviation of the price differences of the applied contracts; and
- (3) Other materials required by the Exchange.

The arbitrage position increase of the delivery months granted to the non-futures company members or traders shall only be applicable to the applied contracts.

The deadline of applying for increasing the arbitrage position amount of the delivery months shall be the last trading day of the first month preceding the delivery month of the nearby month contract of the arbitrage positions;

With respect to the application for increasing the arbitrage position amount of the delivery months, after receipt of the complete application materials, the Exchange shall carry out examination as of the first trading day of the first month preceding the delivery month of the nearby month contract of the arbitrage positions and make reply within five trading days. The Exchange may carry out, from time to time, supervision and management of the credit and the futures market trading of the members and the traders.

(V) Delivery

General Delivery Rules

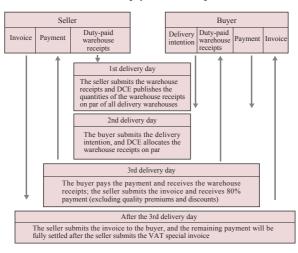
- 1. Iron ore futures shall be delivered in the form of physical delivery, with the delivery unit of 10,000 metric tons.
- 2. Iron ore futures can be delivered through bill of lading or warehouse receipts on par. The warehouse receipts on par shall be divided into the bonded warehouse receipts on par and the duty-paid warehouse receipts on par on the basis of the duty-paid status.
- 3. Physical delivery shall be conducted by the members on behalf of the traders, and in the name of the members within the Exchange.
- 4. No position shall be liquidated by delivery if its holder is a natural person trader or the total number of positions in a contract is not an integral multiple of its delivery unit.
- 5. After the closing of the market on the last trading day, all contracts that remain open shall be performed by delivery. The Exchange will match the contracts matured in the delivery month in computerized systems on the principle of "Least Matched Pairs". Bonded warehouse receipts will be preferentially distributed to overseas buyers.
- 6. Circulation of Invoice
- (1) In the case of duty-paid delivery, the selling trader issues a VAT invoice for the buying trader; the invoice is transferred, collected, and verified by both the selling and buying members under the supervision of the Exchange.
- (2) In the case of bonded delivery, it is required to adopt the mode of invoicing by five parties, i.e., the selling trader shall issue an invoice to the selling member, which shall issue



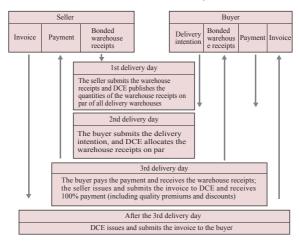
an invoice to the Exchange, and the Exchange shall issue an invoice to the buying member, which shall then issue an invoice to the buying trader. The overseas traders or the overseas brokers shall issue the certificate of receipt, and the Exchange and the members shall issue zero tax rate VAT common invoice.

One-off Delivery Process

Duty-paid Delivery



Bonded Delivery



Note: For detailed process, please refer to the Detailed Delivery Rules of Dalian Commodity Exchange and the Detailed Rules for Implementation of Bonded Delivery of Dalian Commodity Exchange.

Delivery Expenses

- 1. The delivery fee for iron ore is 0.5 CNY/MT.
- 2. The warehousing fee for iron ore is 0.5 CNY/MT per day.
- 3. The inspection fee for iron ore, negotiated between the vendor and the designated quality inspection agency, shall be borne by the vendor and handed over by the designated delivery warehouse.
- 4. A price ceiling is implemented for the delivery-in and delivery-out fees of iron ore. The charging standards will be published upon the approval of the Exchange.

Flow of Warehouse Receipts

The warehouse receipts on par of iron ore are issued by the designated delivery warehouses. The warehouse receipts on par are categorized into receipts on par of warehouses and factory warehouses on the basis of the storage site. The warehouse receipts on par of iron ore are collectively cancelled on the last trading day of March each year.

1. Flow of Warehouse Receipts

Delivery forecast: The seller shall report the delivery forecast to the Exchange through the member and pay a deposit of 20 CNY/MT. Commodities that have been delivered, cancelled and converted to spot goods need no delivery forecast if they are to be delivered again at the same designated delivery warehouse, but a renewed inspection on them is required.

Warehouse receipts registration: The member can register warehouse receipts at the Exchange by the right of the registration materials which are submitted to the Exchange by the delivery warehouse after the inspection of the designated quality inspection agency and the examination and acceptance by the delivery warehouse.

Handover of warehouse receipts: In the delivery, the seller submits warehouse receipts and invoices (or other documents, vouchers and/or receipts acceptable by the Exchange) and collects the payment while the buyer submits the payment and collects the warehouse receipts.

Warehouse receipts deregistration: Holders of warehouse receipts go through the deregistration procedures at the Exchange and collect the Notification of Delivery or the delivery password.

Pick up goods: Three days before the actual day of delivery-out of the iron ore, the vendor shall contact the designated delivery warehouse by virtue of the Notification of Delivery or the delivery password for the relevant arrangements.

2. Flow of Factory Warehouse Receipts

Warehouse receipt registration: After the full settlement of the payments and other costs by the member or trader with the factory warehouse, the factory warehouse may submit the application for registration of the warehouse receipts on par through the



electronic warehouse receipts system. The Exchange shall register the receipts after verifying the bank guarantee or cash deposit and other items submitted by the factory warehouse.

Handover of warehouse receipts: In the delivery, the seller submits the warehouse receipts and invoices (or other documents, vouchers and/or receipts acceptable by the Exchange) and collects the payment while the buyer submits the payment and collects the warehouse receipts.

Warehouse receipts deregistration: Holders of warehouse receipts go through the deregistration procedures at the Exchange and collect the Notification of Delivery or the delivery password.

Pick up goods: The factory warehouse shall deliver the goods out within four days after the issuing day (the issuing day excluded) of the Notification of Delivery.

(For details, please refer to the Measures for Management of Warehouse Receipts on Par of Dalian Commodity Exchange)

Delivery Sites

The designated delivery warehouses for iron ore are located in the major harbors surrounding the Huanghai Sea and the Bohai Sea such as Tianjin, Tangshan, Qingdao, Rizhao, Lianyungang and Dalian, or near the mines in the hinterland (subject to the announcement of the Exchange). The bulk cargo logistics center at Dalian Port is a designated bonded delivery warehouse of iron ore futures, and overseas traders may choose to conduct physical delivery at Dalian Port. The Exchange will gradually expand the bonded delivery sites to other delivery ports.

(VI) Risk Management

1. Margin

The Exchange shall implement the margin policy. The minimum trading margin of the iron ore futures contract shall be 5% of the contract value. With respect to a futures contract, the Exchange will gradually increase its trading margin in the applicable periods as from the fifteenth trading day of the month immediately preceding the delivery month. Traders can inquire the latest trading margin standard of iron ore on the Exchange's official website: Mainpage - Business/Service - Business Parameter - Trading Parameter - Trading Parameter Table.

Margins of Iron Ore Futures Contract at Different Periods

Trading Period	Margins (RMB/Contract)
As of the launch date of the contract	5% of contract value
The fifteenth trading day of the month immediately preceding the delivery month	10% of contract value
The first trading day of the delivery month	20% of contract value

The Exchange may raise the margin standard according to the increase in the position of the contract and publish it to the market. The standards for the trading margin of such contract within a certain trading period shall be applicable upon settlement on the trading day immediately preceding the commencement date of such trading period.

2. Price Limit

The Exchange shall implement the price limit policy. The Exchange shall formulate the daily maximum price fluctuation ranges for each futures contract. The Exchange may adjust the rising/falling spans of the price limit on the basis of the market situation. The price limit of iron ore contract in the general months is 4% of the settlement price of the previous trading day. Traders can inquire the latest price limit of iron ore on the Exchange's official website: Mainpage - Business/Service - Business Parameter - Trading Parameter - Trading Parameter Table.

When the price limits are touched consecutively, the Exchange will raise the price limit and the margin standard.

	1st price limit	2nd price limit	3rd price limit
Price Limit	P	P+3%	P+5%
Margin Standard	M	M1=Max[M,P+5%]	Max[M1,P+7%]

Note: M and P respectively represent the trading margin standard and the price limit during the trading hours on the day when the contract touches the first price limit, and M1 refers to the trading margin standard for the second price limit.

In the event that the one-sided non-continuous quotation under the same-direction price limit occurs on the N+2 trading day as on the N+1 trading day with respect to the iron ore contract, such contract will directly be subject to the delivery in case the N+2 trading day is the last trading day of such contract, or trading shall be continuously carried out on the N+3 trading day as per the price limit and the margin level of the N+2 trading day in case the N+3 trading day is the final trading day of such contract. Except for the foregoing two circumstances, the Exchange may decide to apply, and announce, on the N+2 trading day either of the following measures to the contract:

Measure 1: On the N+3 trading day, the Exchange will take one or more of such following measures to mitigate or prevent the market risks as increasing the trading margins, unilaterally or bilaterally, proportionally or disproportionally, and/or for all or part members; suspension of opening a new position for all or part members; adjustment of the price limit; limited withdrawal; liquidation within the limited period; and forced liquidation or other measures.

Measure 2: After the closing of the market on the N+2 trading day, the Exchange shall carry out the forced position-reduction.



3. Risk Management for Wild Price Fluctuation

The Exchange shall have the right to take the measures of increasing the trading margins, on the basis of the market situation, unilaterally or bilaterally, proportionally or disproportionally, and/or for all or part members in the event that with respect to a certain futures contract, the sum of the rising (falling) spans calculated as per the settlement price for three consecutive trading days reaches two times the maximum rising/falling spans described in such contract, the sum of the rising (falling) spans calculated as per the settlement price for four consecutive trading days reaches two point five times the maximum rising/falling spans described in such contract, or the sum of the rising (falling) spans calculated as per the settlement price for five consecutive trading days reaches three times the maximum rising/falling spans described in such contract. The increased portions of the trading margin shall not exceed the amount one time the trading margin described in the contract.

4. Position Limit

With respect to a certain contract, the position limit shall refer to the unilaterally calculated maximum amount of its speculative position which may be held by the member or the trader as prescribed by the Exchange. The positions of the traders of actual controlling relationship and the non-futures company members shall be calculated on a consolidated basis.

The position limits of non-futures company members and traders in general months (from the contract launch day to the 9th trading day of the month immediately preceding the delivery month):

Product	Open interests calculated unilaterally	Non-futures company member	Trader	
Iron Ore	Open interests ≤200,000	20,000	20,000	
Iron Ore	Open interests >200,000	Open interests ×10%	Open interests ×10%	

The position limits of non-futures company members and traders from 10th trading day of the month immediately preceding the delivery month to the delivery month. The position limit for individual traders in the delivery month is zero.

Product	Time Period	Non-futures company member	Trader
Iron Ore	From the 10th trading day of the month immediately preceding the delivery month	6,000	6,000
	The delivery month	2,000	2,000

5. Trading Limit

The trading limit shall refer to the maximum quantity over a certain contract within a certain period that can be opened by a member or trader as prescribed by the Exchange. The Exchange may, on the basis of the market situation, formulate the trading limits over different products or contracts or over part or all members or traders, the specific standards for which

shall be separately published by the Exchange. The opening quantity of hedging trading shall not be limited by the trading limit.

If the Exchange implements trading limit on the iron ore product or contracts, it will issue a notice on its official website.

6. Large Position Report

The Exchange shall implement the large position report policy. When a non-futures company member's or a trader's speculative positions of a certain product satisfy no less than 80% of the position limit of its positions as prescribed by the Exchange, the non-futures company member or the trader shall report to the Exchange the information of its funds and positions; and the trader must make the report through the futures company member. The trader which entrusts an overseas broker to engage in futures trading shall entrust its overseas broker to make the reporting, and the overseas broker shall then entrust a futures company member to make the reporting.

The non-futures company member and the trader shall ensure the authenticity, accuracy and completeness of the large position reports and other materials provided by them.

The Exchange may adjust the position report level on the basis of the market risks.

In case the non-futures company member's or the trader's positions reach the reporting limits as prescribed by the Exchange, the non-futures company member or the trader shall initiatively report to the Exchange prior to 15:00 of the immediately following trading day. In case of the necessity of any further or supplementary report, the Exchange will notify the relevant member.

7. Forced Liquidation

Any occurrence of the following circumstances to the member or trader may entitle the Exchange to carry out the forced liquidation against its position:

- (1) The member's settlement reserve is less than zero and fails to be fully paid up within the required period;
- (2) The position quantity of the non-futures company member and the trader exceeds their position limits;
- (3) Suffering the punishment of forced liquidation by the Exchange due to any irregularity;
- (4) Any circumstance under which the forced liquidation shall be carried out on the basis of the Exchange's emergency measures; or
- (5) Any other circumstance under which the forced liquidation shall be carried out.

8. Risk Warning

The Exchange shall implement the risk warning policy. Where deemed necessary, the Exchange may respectively or concurrently take one or more of such measures of requiring reporting information, conversation reminding, issuance of the risk warning letter and other measures so as to warn and mitigate or prevent the risks.



Annex 1: DCE Iron Ore Futures Contract

DCE Iron Ore Futures Contract (As of 1809 contract)

Product	Iron Ore
Trading Unit	100MT/Contract
Price Quote	CNY/MT
Tick Size	0.5 CNY/MT
Daily Price Limit	4% of last settlement price
Contract Months	Monthly contracts (12 contracts per year)
Trading Hours	9:00 - 11:30 am, 1:30 - 3:00 pm Beijing Time, Monday - Friday, and other hours announced by DCE
Last Trading Day	10th trading day of the delivery month
Last Delivery Day	3rd trading day after the last trading day
Deliverable Grades	DCE Iron Ore Delivery Quality Standards (F/DCE I001-2017)
Delivery Location	The warehouses and delivery locations designated by DCE
Minimum Trading Margin	5% of the contract value
Delivery Form	Physical delivery
Ticker Symbol	I
Exchange	Dalian Commodity Exchange

Annex 2: DCE Iron Ore Delivery Quality Standard

DCE Iron Ore Delivery Quality Standard (F/DCE 1001-2017)

(In accordance with the DCE [2017] No. 276 Document, this standard will be implemented as of the 1809 contract of iron ore.)

1. Content and Scope

- 1.1 The standard herein dictates the quality requirement, testing methods, inspection guidelines and transportation requirements for iron ore delivered at DCE.
- 1.2 The standard herein refers to mined natural iron ores made into fines and concentrates through crushing and screening that can be used to produce artificial lumps such as sinters and pellets.
- 1.3 The standard herein applies to iron ore products on par and substitutes delivered under the iron ore futures contract of DCE.

2. Cited Rules

The provisions of the following rules are incorporated herein by reference. For those rules noted with dates, their amendments (excluding corrections) and revised versions may not be applied to this standard; for those without noted dates, their latest versions shall be applied to this standard.

GB/T 10322.1-2000 Sampling and preparation of samples of iron ore

GB/T 6730 5-2007 Determination of total iron content of iron ore

GB/T 6730.62-2005 Determination of calcium, silicon, magnesium, titanium, phosphorus, manganese, aluminum and barium content of iron ore

GB/T 6730.61-2005 Determination of carbon and sulfur content of iron ore

GB/T 6730.54-2004 Determination of lead content of iron ore

GB/T 6730.53-2004 Determination of zinc content of iron ore

GB/T 6730.36-1986 Determination of copper content by atomic absorption spectrophotometry

GB/T 6730 45-2006 Determination of arsenic content of iron ore

GB/T 6730.69-2010 Determination of fluorine and chlorine content of iron ore

GB/T 6730.49-1986 Determination of sodium and potassium content by atomic



absorption spectrophotometry

 $GB/T\ 6730.22\text{-}1986\ Determination of titanium content by diantipyrine methane photometry$

GB/T 10322.7-2004 Determination of size distribution of iron ore by sieving

GB/T 10322.5-2000 Determination of moisture content of iron ore of a consignment

Terms and definitions under GB/T 20565 apply to this standard.

3. Terms and Definitions

Terms and definitions under this standard are in accordance with GB/T 20565

- 4. Quality Requirements
- 4.1 Par grade product quality requirements

Target	Quality Standard		
Iron (Fe)	=62.0%		
Silicon dioxide (SiO2)	≤4.0%		
Aluminum oxide (Al ₂ O ₃)	≤2.5%		
Phosphorus (P)	≤0.07%		
Sulfur (S)	≤0.03%		
	Lead (Pb) ≤0.02%		
	Zinc (Zn) ≤0.02%		
	Copper (Cu) ≤0.20%		
Trace elements	Arsenic (As) ≤0.02%		
	Titanium dioxide (TiO₂) ≤0.80%		
	Chlorine + Fluorine ≤0.20%		
	Potassium oxide (K2O) + Sodium oxide (Na2O) ≤0.30%		
Grain size	Not more than 20% are broader than 6.3 mm and not more than 35% are finer than 0.15 mm		

4.2 Substitute product quality allowances (premiums and discounts)

Target	Tolerance	Premium/Discount (CNY/MT)
		≥60.0% & <62.0%: -1.5 per 0.1% decrease
Iron (Fe)	≥60.0%	>62.0% & ≤65.0%: +1.0 per 0.1% increase
		>65.0%: Pricing at 65.0%
Silicon dioxide (SiO ₂) + Aluminum oxide (Al ₂ O ₃)	≤8.5%	0
Silicon dioxide (SiO2)	≤6.5%	>4.0% & ≤4.5%: -1.0 per 0.1% increase; >4.5% & ≤6.5%: -2.0 per 0.1% increase (calculated accumulatively)
Aluminum oxide (Al ₂ O ₃)	≤3.5%	>2.5% & ≤3.0%: -1.5 per 0.1% increase; >3.0% & ≤3.5%: -3.0 per 0.1% increase (calculated accumulatively)
Phosphorus (P)	≤0.15%	>0.07% & ≤0.10%: -1.0 per 0.01% increase
Sulfur (S)	≤0.20%	-1.0 per 0.01% increase
Grain size	Not less than 70% are finer than 0.075 mm	0

4.3 Iron ores are priced on dry basis, where the weight of moisture is deducted. The measured moisture rounded up to one decimal place shall be deducted when determining the weight of the delivered physical iron ores (e.g. 6.3% weight should be deducted for 6.32% moisture).



- 5. Testing Methods and Inspection Guidelines
- 5.1 Sampling and preparation of samples are subject to the standards in GB/T10322.1-2000;
- 5.2 Determination of iron content is subject to the standards in GB/T6730.5-2007;
- 5.3 Determination of silicon dioxide, aluminum oxide and phosphorus contents are subject to the standards of GB/T6730.62-2005;
- 5.4 Determination of sulfur content is subject to the standards in GB/T6730.61-2005;
- 5.5 Determination of lead content is subject to the standards in GB/T 6730.54-2004;
- 5.6 Determination of zinc content is subject to the standards in GB/T 6730.53-2004;
- 5.7 Determination of copper content is subject to the standards in GB/T 6730.36-1986;
- 5.8 Determination of arsenic content is subject to the standards in GB/T 6730.45-2006;
- 5.9 Determination of fluorine content is subject to the standards in GB/T 6730.69-2010;
- 5.10 Determination of chlorine content is subject to the standards in GB/T 6730.69-2010;
- 5.11 Determination of potassium oxide content is subject to the standards in GB/T 6730.49-1986;
- 5.12 Determination of sodium oxide content is subject to the standards in GB/T 6730.49-1986;
- 5.13 Determination of titanium dioxide content is subject to the standards in GB/T 6730.22-1986;
- 5.14 Determination of grain size is subject to the standards in GB/T10322.7-2004;
- 5.15 Determination of moisture is subject to the standards in GB/T10322.5-2000.
- 6. Transportation Requirements

Iron ore products should be shipped in clean train carriages, vehicle carriages, steamship holds or other means of transport.

- 7. Additional Note
- 7.1 The standard is subject to the interpretation of DCE.

Annex 3: List of DCE Designated Delivery Warehouses for Iron Ore

Discount (CNY/MT) Compared with Delivery Warehouse on Par 0 0 0 0 0 0 Warehouse on Par (Yes/No) Yes Yes Yes Yes Yes Yes Yes Lianyungang Caofeidian Caofeidian Port Area Port Area Port Area Port Area Jingtang Port Area Port Area Delivery Qingdao Port Are Tianjin Rizhao Caofeidian Station Shipping: Dock at Shipping: Dock at ianyungang Port t Caofeidian Port Railway: Rizhao at Tangshan Port at Qingdao Port Shipping: Dock Shipping: Dock Shipping: Dock Caofeidian Port Shipping: Dock Shipping: Dock at Rizhao Port at Tianiin Port Station / Port Railway: East Lianyungang Jingtang Port Caofeidian Shipment Dongdagu Huangdao Railway: Railway: Railway: Station Railway: Railway: Station Station Station Station Station ist of DCE Designated Delivery Warehouses for Iron Ore Contractual Capacity (million tons) 001 00 20 40 300 20 20 787434794@qq.com sygsswb@163.com hzg.ywb@qdport.com suxin1129@126.com zhaoyan_tcp@163.com wlchun2001@163.com lyglp@163.com 94747044@qq.com cfdp_dikun@163.com ctcoyk@126.com E-mail 0518-82389267 0532-86851759 0315-8821678 0633-8382545 022-25703089 0315-8850534 0315-2916471 Fax 0518-82389267 13605132219 0532-82988356 13805428892 0315-8821176 18633131983 022-25703089 18920123126 022-25703089 0633-7387681 13963032805 0315-8821557 13483571603 0315-2916471 13931521582 0315-2916471 15081925688 0315-8821628 13932581066 5930950627 13582586199 Fe. Chunpeng Chen Peng Zhang Fangfang Zhou Weiming Zhao Yan Contact Yan Kai Wang Xiaodan Lu Zhigang Di Kun Wang Lichun 222042 Li Ping Su Xin Shan Postcode 276826 266011 063210 063200 300452 063611 Room 2220, Xin'gang District, Lianyungang Avenue, Tianjin Port Bulk Cargo Logistics South Office Building Port Group Business Room 309, Qingdao Fangshan Caofeidian Industrial Park Tangshan Caofeidian Shiye Port Co., Ltd., Building, Lianyun Room 107, Control Rizhao, Shandong Room 508, Hongyi Address Center Building, Dock, Caofeidian of Tangshan Port Shanghai Road, Tangshan, Hebei 481 Jin'an No.2 Group Co., Ltd. Department, 6 Industrial Park, Gangqing Rd., Province Qingdao Province Center Fingtang Port Area Bonded Storage & Lianyungang Port Exchange Market Caofeidian Shiye Import & Export Transportation Co., Ltd. Rizhao Port Co., Caofeidian Port Group Co., Ltd **Tangshan Port** Port Co., Ltd. Qingdao Port International Fianjin Port Name **Fangshan** Co., Ltd. Co., Ltd. Co., Ltd. Jiangsu Ltd. No. က 4 9

Note: The contractual capacity refers to the minimum guaranteed warehouse capacity in the agreement signed by the delivery warehouses with the Exchange. The actual storage of goods by a delivery warehouse may exceed the contractual capacity.



List of DCE Designated Delivery Factory Warehouses for Iron Ore

Premium and Discount (CNY/MT) Compared with Delivery Warehouse on Par	0	•	0	,	0	0		Ð	c	,	0	0	0
Delivery Warehou se on Par (Yes/No)	γρς			Yes	Voc		;	Yes		Yes		Yes	
Daily Delivery Speed (MT/Day)	-		1.5		-	П		2	٠		1	1	-1
Maximum of Warehouse Receipts on Par (MT)	51)	20	ì	15	15	6	70	30	ì	10	51	10
Shipment Station / Port	Railway:	Baizhuang Station	Railway: East Lianyungang Station	Shipping: Dock at Lianyungang Port	Railway: East Lianyungang Station Shipping: Dock at Lianyungang Port	Railway: Dongdagu Station Shipping: Dock at Tianjin Port	Railway: South Caofeidian Station	Shipping: Dock at Caofeidian Port	Railway: Fenshui Station	Shipping: Dock at Lanshan Port	Railway: Huangdao Station Shipping: Dock at Qingdao Port	Railway: Rizhao Port Shipping: Dock at Rizhao Port	Railway: South Caofeidian Station Shipping: Dock at Caofeidian Port
E-mail	gracegu1997@sina.com	136713818@qq.com	y ujie@shasteelresources.com	futures@shasteelresources.com	dufang@chinargl.com	jasonwulei@gmail.com	liuxu@sinosteel.com	weiqf@sinosteel.com	houdianyin@rizhaosteel.com	xushaoqing@rizhaosteel.com	dinggp@czbi.net		zyw@ciec.com
Fax	0315_7793187		000	0512-58953864	010-84193729		010-62688859		9811300			0571-87621520	
Tel.	0315-2793187 15081656960	0315-2793198 18732511756	0512-58953861 13914919041	021-68599120-671 15995743182	010-84193799 13911201973	0916869659	010-62689292 13693546961	010-62688967 18910556593	18660300787	13562368527	13957172551	13588473296	18958002699
Contact	Gu Lili	Jia Haijian	Yu Jie	Li Huijuan	Du Fang	Wu Lei	Liu Xu	Wei Qingfeng	Hou Dianyin	Xu Shaoqing	Hu Ha	Ding	Zhu Yiwen
Postcode	000£90			215625	010001			100080	008926			310020	
Address	81 North Jianshe Rd., Tangshan, Hebei Province Room 605, Shagang Building, Jinfeng Town, Zhangjiagang, Jiangsu Province		23/F, New Poly Plaza, 1 Chaoyangmen North Street, Dongcheng District, Beijing		32/F, 8 Haidian Street, Haidian District, Beijing		600 Yanhai Rd., Lanshan District	Rizhao, Guangdong Province	35/F, Hanjia International, 8 Dangui Street, Fuchun Rd., Jianggan District,		Jianggan District, Hangzhou		
Name	Hebei Iron & Steel	Group Mining Co., Ltd.	Jiangsu Shagang	International Trade Co., Ltd.	Ruiganglian Group	Co., Ltd.	Sinosteel Resources	Co., Ltd.	Rizhao Steel	Holding Group Co., Ltd.		Hangzhou CIEC Group Co., Ltd.	
ž 12	-	. 2			6		4		v			9	

IRON ORE FUTURES TRADING MANUAL

List of DCE Designated Delivery Factory Warehouses for Iron Ore

Name Name
No. Name Address Poscode Contact Tel. Fax E-mail Sinpment Sinpment Maximum of Daily Varietions (Warehouse Delivery (Warehouse Delive
Name Name
Name
No Name
No Name
No. Name Address Postcode Contact Tel.
No. Name Address Postcode Contact
No. Name Address Postcode
No. Name Address Shandong Huaxin Industrial Fortune Para, 257 Jiwan Co., Ltd. Shandong Province Angang Steel Street, Tiedong Province Street, Tiedong Province Street, Tiedong Province Company Limited Liaoning Province Liaoning Province Street, Tiedong Province Street, Tiedong Province Company Limited Liaoning Province Street, Tiedong Materials Supply Marsion, 321 Mansion, 321 Management Co., Rd., Huangpu Ltd. Shanghai Infundational Infundational Infundational Infundational Infundational Infundational Infundational Trade Company District, Shanghai Infundational Trade Chaoyang District, Co., Ltd. Beijing Street, Xicheng District, Beijing
No. Name Shandong Huaxin Industry & Trade Co., Ltd. Angang Steel Company Limited Materials Supply Management Co., Ltd. Ltd. HBIS Group HBIS Group Beijing Infernational Trade Co., Ltd. Co., Ltd. Co., Ltd.
S 6 0 1 1 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3
N



List of DCE Designated Bonded Delivery Warehouses for Iron Ore

Shipment Station / Port Delivery Area Warehouse on Compared with Delivery Shipment Station / Port Delivery Area Warehouse on Compared with Delivery Warehouse on Patr Warehouse of Railway: Jin'gang Ore Dock Warehouse of Railway: Jin'gang Ore Dock at Station Dalian Port
•.
•.
•.
apacity
Contractual Capacity (million tons)
Tel. 0411-87595577 13604250299
Contact Zhao Meng Liu Hu
Postcode
Address Dalian Port Ore Terminal Co., Ltd., Xingang, Dalian economic and Technological Develonment Topes
Name of Bonded Delivery Warehouse Dalian Port Bulk Cargo Logistics Center Co., Ltd.

IRON ORE FUTURES TRADING MANUAL

Disclaimer

This Manual is formulated by Dalian Commodity Exchange, mainly for the purpose of providing the market participants with the business related to introduction of overseas traders of iron ore futures. The information hereof is only for reference, and will not constitute any investment suggestion or investment invitation or any recommendation for participation in investment activities in other forms. Dalian Commodity Exchange will be exempted from liability for any direct or indirect investment profit/loss consequence caused by the information provided herein. The copyright hereof is reserved by Dalian Commodity Exchange. When it is cited or published by any market institution, it shall not be cited, deleted or modified against its original intention.

DCE Investor Education Material Futures Trading Manual Series



Dalian Commodity Exchange





Dalian Commodity Exchange

Address: No.129 Huizhan Road, Dalian 116023, China Tel:86-411-8480 8888 Fax:86-411-8480 8588

www.dce.com.cn



1st Edition, 2018

This material does not serve as any basis for market entry, and is for reference only. Relevant authoritative materials shall prevail, as errors, omissions or discrepancies might occur in the content of this material.