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Manual for TSR20 Futures Contract Trading

20号胶期货

合约交易操作手册

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Manual for TSR20 Futures Contract Trading

August 2019

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Contents

Commodity Profile

Definition and Classification

Rubber is mainly categorized as natural rubber and synthetic rubber. Natural rubber's raw material is natural latex collected from Hevea brasiliensis. It is manufactured into solid elastics by solidifying, drying and other processes. Synthetic rubber consists of highly elastic synthetic polymers, which is also known as synthetic elastomers. Synthetic rubber is broadly defined as rubber that is synthesized using chemical methods as differentiated from natural rubber which is collected from rubber trees.

Natural rubber is classified into two categories based on its forms: solid natural rubber (rubber sheet and standard rubber) and concentrated latex. Solid natural rubber is made using either traditional manufacturing method or standard manufacturing method. Traditional manufacturing method is used to produce rubber sheet, among which is mostly rubber smoked sheet (RSS). Rubber smoked sheet is mainly classified into RSS 1, RSS 2, RSS 3, RSS 4, and RSS 5. Standard manufacturing method produces standard rubber, which is known as technically specified rubber (TSR). TSR is graded by physical and chemical property indicators such as dirt, ash, nitrogen content, volatile-matter content, initial plasticity, and plastic retention index. According to national standards and ISO standard, standard rubber is generally categorized by raw materials and properties as follows: LoV (Low Viscosity Constant Viscose), CV (Constant Viscose), L (Light-coloured Rubber), WF (Whole Field Latex Rubber), TSR5, TSR10, TSR20, 10CV, and 20CV.

Among the physical and chemical property indicators of the classification of natural rubber, dirt refers to non- authigenic substances remained on the sieve; ash is the residual content after calcination; nitrogen content is the mass ratio of nitrogen element; volatile-matter content is the amount of gas produced after decomposition by heat; initial plasticity is an indicator of the molecular mass and plasticity of rubber; plastic retention index is the index of oxidation resistance and high temperature operating performance of raw rubber.

Figure 1: Rubber Classification

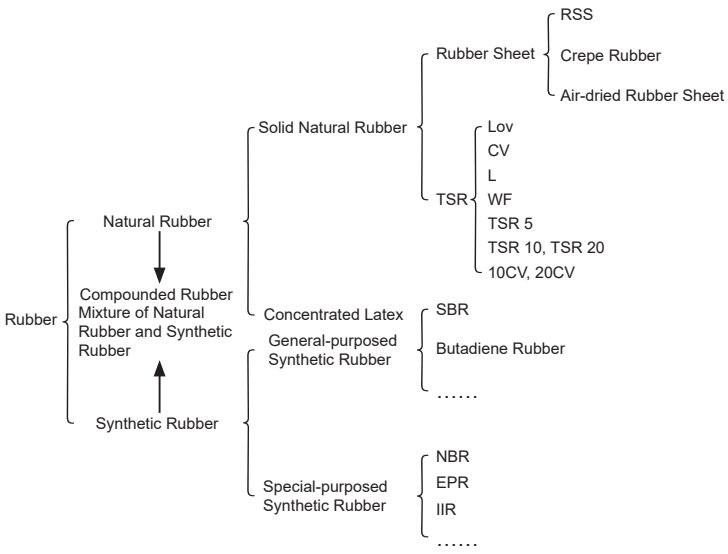


Table 1: Grades of TSR

Raw Material	Characteristics	Grades
Whole field latex	With specified viscosity	CV or LoV
	Light-colored rubber, with a specified color index	L
	With no specified viscosity or color	WF
Rubber sheet or solidified mixed latex	No specified viscosity or color	5
Field-grade coagulum and/or sheet rubber	With no specified viscosity	10 or 20
	With specified viscosity	10 CV or 20 CV

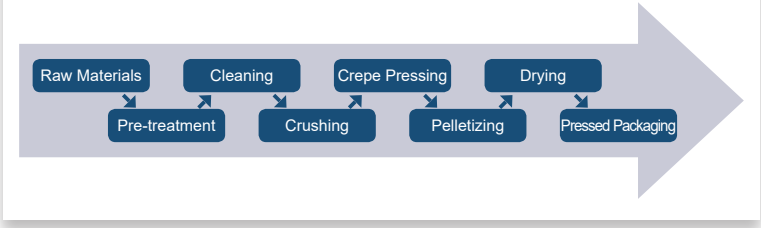
Production Process of TSR20

The production process of TSR20 includes raw material pre-treating, cleaning, crushing, crepe pressing, pelletizing, drying, pressed packaging, and other procedures. Among all procedures, the key steps are crushing, crepe pressing, and drying.

Taking STR20 as an example, the basic raw materials are cup lump from thousands of small-holders and USS and RSS simply processed by small-holders. The raw materials mentioned above are mixed and processed based on certain formula ratios. As non-rubber substances such as sawdust and sand may be mixed into the raw materials during the procedure of rubber tapping, transportation, and storage, the raw materials need to go through a pre-treatment procedure such as sorting and flushing. During production, the raw materials also need to be washed, crushed and pressed for multiple times. Such physical processing procedures can remove non-rubber impurities in raw materials and improve the physical properties of the rubber. After the above

procedures, the rubber goes through a pelletizing machine which produces small irregular particles with smaller diameter, and enters into a drying process. The semi-finished product is then pressed and packed into natural rubber units with standardized weight and size. The production process of SMR20 and SCR20 resembles that of STR20, while the process of SIR20 includes the air drying of crepe.

Figure. 2: The Flow Chart for TSR20 Production Process



Applications of TSR20

Natural rubber performs excellently in terms of rebound resilience, insulation, water repellence, plasticity et cetera. After proper treatment, it can also be proof against oil, acid, alkali, heat, cold, pressure and wear. Accordingly, natural rubber can be widely used. --Tyres, rubber tubes, rubber belts, and shoe materials are its main downstream applications. About 70% of the global natural rubber is used for tire manufacturing, 10% for rubber tubes and belts, 10% for shoe materials, and 10% for other rubber products. About 80% of the natural rubber used in tire manufacturing is TSR20. The consumption of TSR20 has become a major indicator of the technical prowess of a country's tyre industry.

Overview of Domestic and Global TSR20 Market

International Market

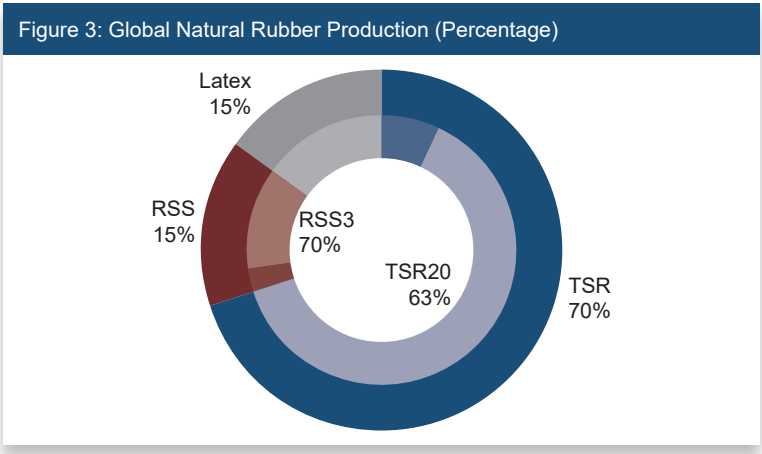
Production

Currently, natural rubber plantation has spread to more than 40 countries and regions in Asia and Africa. Countries with large planting areas include Thailand, Indonesia, Malaysia, China, India, Vietnam, Nigeria, Brazil, Sri Lanka, Libya, etc. Amongst all, Southeast Asian countries account for more than 80% of the world's total natural rubber plantation and production.

In the early days of natural rubber production, the global industry mainly produced RSS. However, with the transformation and upgrading of natural rubber production processes, processing plants maintained or gradually dropped the production of RSS. Instead, they increased the investment in TSR20 factories. Currently, TSR20 has become the most important and representative variety of natural rubber and is representing the future direction of the tyre industry.

Amongst the world's natural rubber products, TSR, RSS and latex account for about 70%, 15% and 15% of the market respectively. Of all TSRs, TSR 20 accounts for about 90%. In 2018, the global production of natural rubber was 13.87 million tons, of which about 8.73 million tons was TSR20, accounting for63% of the world's total. Currently, TSR20 has become the world's mostly produced and consumed variety of natural rubber.

Figure 3: Global Natural Rubber Production (Percentage)



Source: IRSG, Shanghai International Energy Exchange

Thailand, Indonesia and Malaysia are the major producers of natural rubber. In 2018, the natural rubber production of these three countries was 5.15 million, 3.49 million, and 600 thousand tons respectively, accounting for 67% of the world's total. Among them, the TSR20 production of the three countries was 2.95 million, 3.38 million, and 450 thousand tons respectively, accounting for 78% of the world's total.

Consumption

In 2018, the global consumption of natural rubber was 13.81 million tons, of which about 8.29 million tons was TSR20. China, Europe, East Asia (including Japan and South Korea), India, and the United States were the top five consumer countries (regions), consuming 5.50 million, 1.24 million, 1.07 million, 1.22 million, and 1.01 million tons of natural rubber respectively, accounting for 73% of the world's total. About 70% of the world's natural rubber was used in tyre manufacturing, of which about 80% was TSR20.

With a history of more than 160 years, the tyre industry is stably growing at a low speed.. It is predicted that the global tyre production will maintain a stable growth from the year of 2010 to 2020, with an annual compound growth rate of 4.20% approximately.

The development of the global tyre industry is fairly mature with a concentrated market. According to statistics of American media Tire Business, the top ten tyre companies globally had a combined market share of 61.35% in 2017, while the top three tire companies globally had a combined market share of 36.59%.

Some tyre companies in the emerging markets are eroding the market share of industry giants with increasing competitiveness. In the future, emerging markets will maintain rapid growth and become the main driver for the global market.

International Futures Market

Internationally, the major exchanges that conduct natural rubber futures trading are Tokyo Commodity Exchange (TOCOM), Singapore Exchange (SGX), Thailand Futures Exchange (TFEX), and the National Multi Commodity Exchange of India (NMCE). All four exchanges carry out RSS futures trading. Among them, Singapore Exchange (SGX) and Tokyo Commodity Exchange (TOCOM) conduct the trading of TSR20 futures.

Currently, SGX's TSR20 futures serve as the main pricing reference for TSR20 globally. The price of natural rubber futures of Shanghai Futures Exchange (SHFE) and that of RSS3 of Tokyo Commodity Exchange (TOCOM) affect TSR20 price with different extents. Natural rubber futures of SHFE has been smoothly operated with active trading since its launch. In 2018, the total trading turnover, trading volume, and delivery of natural rubber in SHFE were 7.36 trillion yuan (unilateral, the same below),61.8455 million lots and 222,800 tons respectively. The well-functioning of the futures has played a prominent role in serving the real economy.

Domestic Market

Production

China's natural rubber plants mainly use field-grade latex as raw material to produce various standard rubbers with SCR WF as the main product, while the production of TSR20 is relatively small.

Consumption

Currently, China is the world's largest consumer of natural rubber and TSR20, and the largest producer of tyre. In 2018, the total apparent consumption of natural rubber in China was over 6 million tons, of which about 4.5 million tons was TSR20, accounting for 70%. The rapid development of China's tyre industry had led to a fast growth of natural rubber consumption.

As a major tyre producer bolstered by growing domestic demand and pivoting international tyre production to China, China has seen its tyre industry growing rapidly in recent years before entering the current low-speed growth period.

Trade Flow

The natural rubber of China mainly depends on import. According to the statistics from the General Administration of Customs, China imported 5.66 million tons of natural rubber in 2018, of which 4.4 million tons was TSR20, accounting for about 78%. China's imports of natural rubber mainly come from Thailand, Malaysia, and Indonesia, accounting for 75% of the total imports. Among them, TSR20 was mainly imported from the above three countries and accounts for 77% of the total import.

China's tyre manufacturers have a long-term demand for TSR20 and usually make annual production plans. Therefore, the monthly demand is relatively stable. China's monthly import volume of natural rubber and TSR20 usually remain between 200 and 300 thousand tons. The import volume decreases at the beginning of each year due to China's lunar New Year holiday.

Currently, the spot trade of TSR20 mainly flows from Southeast Asian countries such as Thailand, Malaysia and Indonesia to China's coastal areas. Some of them are made into tyres for re-export, while others are distributed to inland from the coast. Qingdao, Shanghai, Hangzhou, Ningbo, Tianjin and Nanjing are China's main ports for TSR20 import.

As for the import trading mode, China's TSR20 is mainly imported via bonded trade.

Factors Causing TSR20 Price Fluctuation

Price Fluctuation of TSR20

The price of TSR20 fluctuates frequently with a high volatility. From 2010 to 2018, the price of Thailand STR20 fluctuated between a maximum of 38,205 yuan/ton (5,790 dollars/ton) and a minimum of 7,185 yuan/ton (1,096 dollars/ton) with the highest annual volatility reaching 106%. In terms of yield, the daily yield fluctuated between a highest point of 10.89% and a lowest point of -6.86%, averaging -0.03% with a standard deviation of 1.39%. In 2010, a global liquidity surplus led to a rise in the price of TSR20 to 38,205 yuan/ton in early 2011 and increased the prices of commodities across the board. From 2011 to the first half of 2016, the price of TSR20 showed a downward trend due to an oversupply caused by harvesting previously planted rubber trees. From the second half of 2016 to the first season of 2017, global commodity price increased, together with the worries caused by floods in Thailand, TSR20 price increased fast. From the second season of 2017, the Thailand government sold national stocks , theTSR20 price thus decreased. In 2018, affected by trade conflicts between China and USA, TSR20 price fluctuated in a small scale.

Figure 4: Spot Price Trend of TSR20 from 2010 to 2018

Source: Oilchem, Shanghai International Energy Exchange

Table 2: Annual Volatility of TSR20 Price from 2010 to 2018

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Annual Volatility	69%	54%	42%	32%	36%	38%	106%	50%	16%

Source: Oilchem, Shanghai International Energy Exchange

Factors Affecting TSR20 Price

Natural rubber has the characteristics of agricultural products, industrial products and finance. Many factors may affect the price of TSR20, including the international and domestic supply and demand,as well as the economy, development of major industries in rubber applications, production and application of synthetic rubber, natural factors, exchange rate, policies, etc.

TSR20 Futures Trading Guidelines

TSR20 futures are traded on the basis of “international platform, net pricing, bonded physical delivery and RMB denomination ”.

Modes of Participating in TSR20 Futures Trading

Domestic Institutions

Domestic clients eligible to apply for membership of Shanghai International Energy Exchange (hereinafter referred to as “INE”) can apply to become non-futures firm members to directly participate in TSR20 futures trading, while other domestic clients can participate in trading through the brokerage of domestic futures firm members .

Overseas Clients

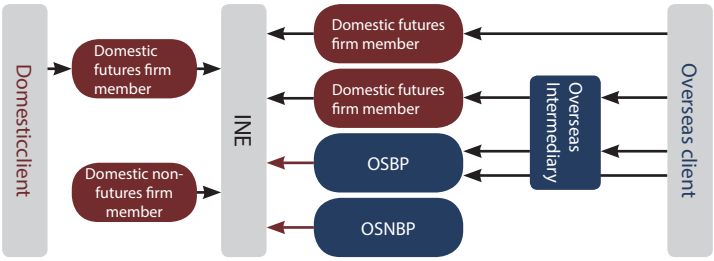
Four Modes for Overseas Clients to participate in TSR20 futures trading:

I: Direct brokerage of domestic futures firms

II: Sub-entrustment by overseas intermediaries to domestic futures firms or overseas special brokerage participants (OSBPs)

III: Participate through overseas special brokerage participants

IV: Participate as overseas special non-brokerage participants (OSNBPs)

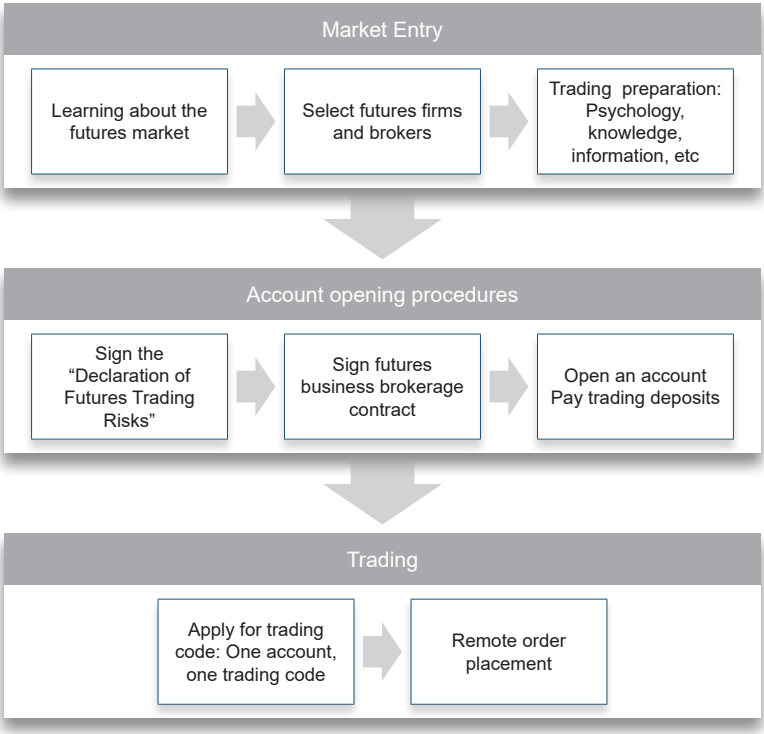


Note: Black arrows indicate trading, settlement and delivery. Red arrows indicate direct access to trading, but overseas special participants must settle and deliver through domestic futures firm members.

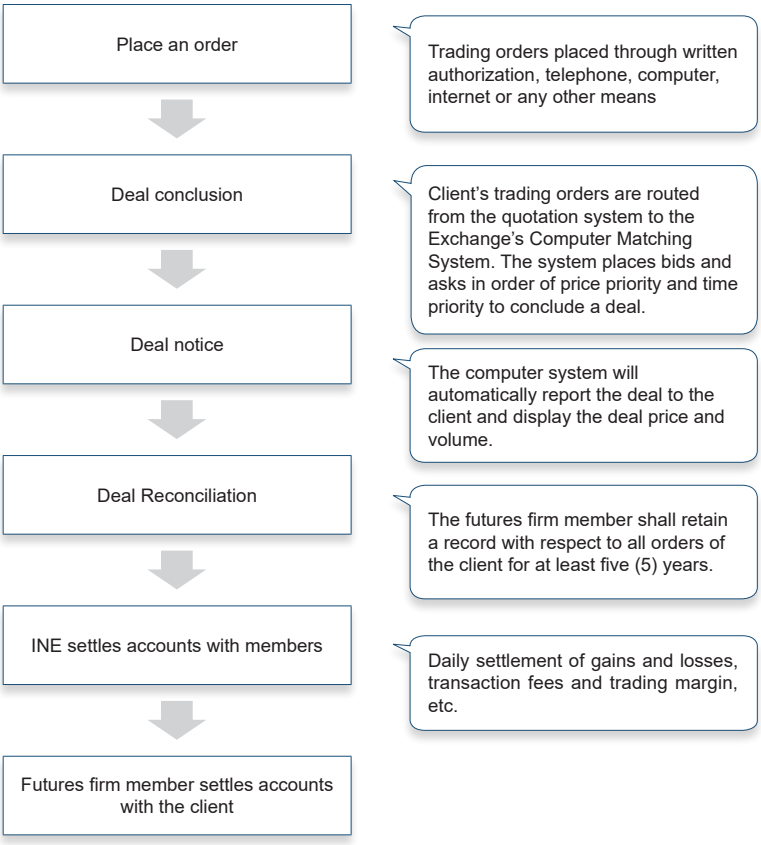
Guidelines for Domestic Members and Clients to Access the Market

Membership Admission Process

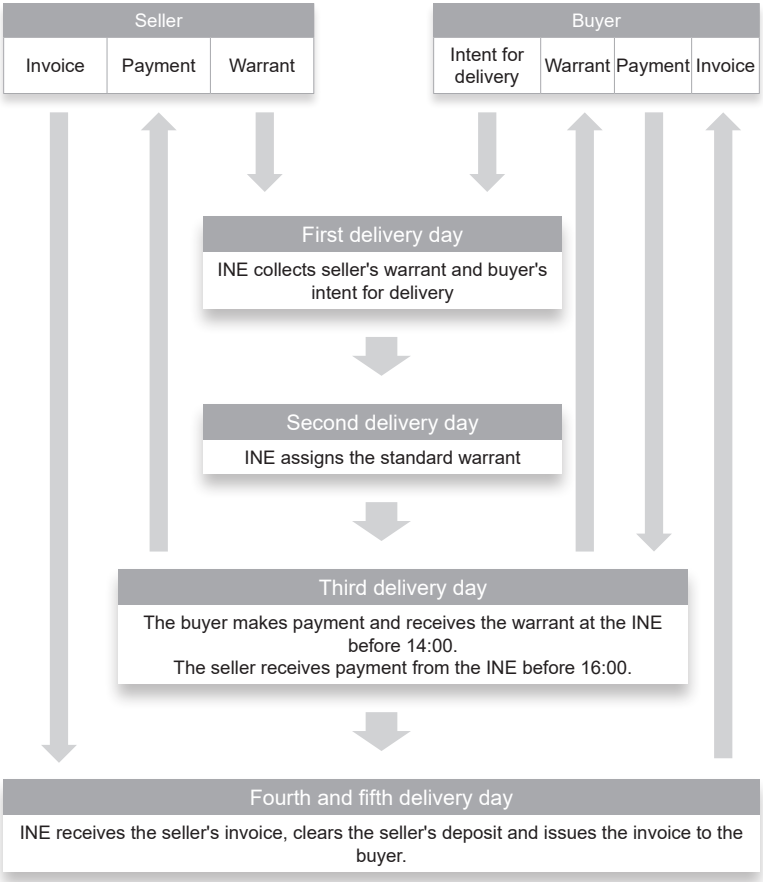
Process of Market Access for Domestic Clients



Trading and Settlement Process



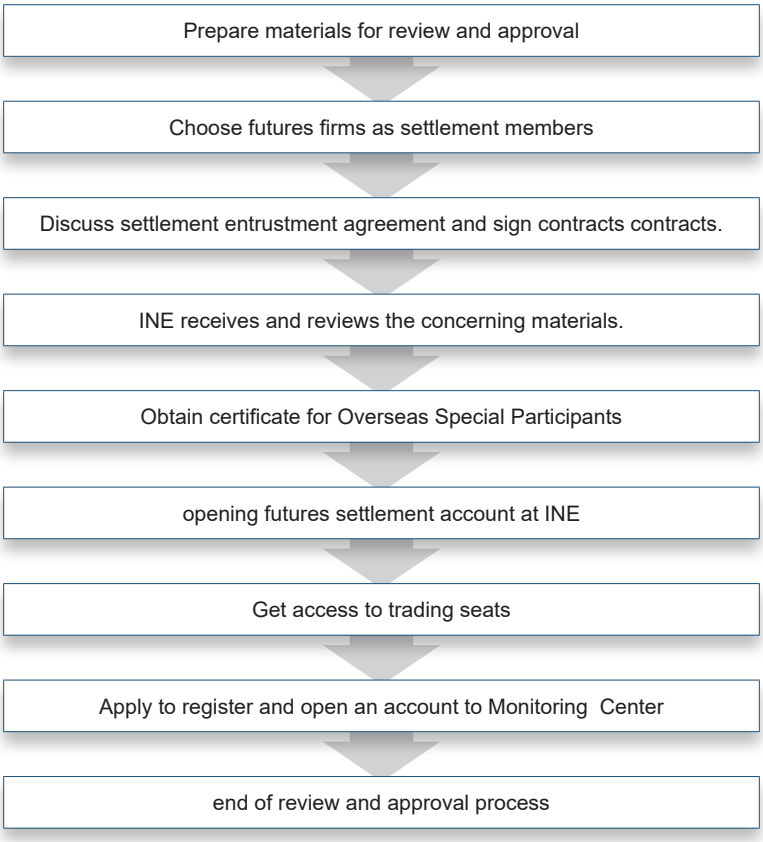
Delivery Process



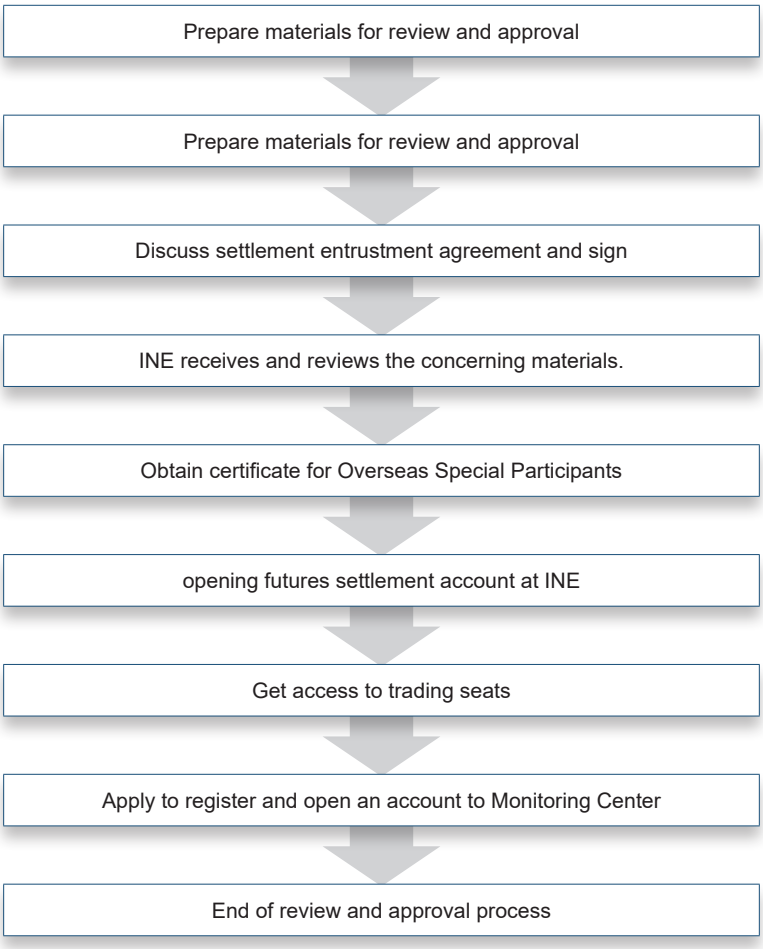
Account Opening Process for Overseas Clients and Brokers

Qualification Application/Filing Process of Overseas Special Participants and Intermediaries

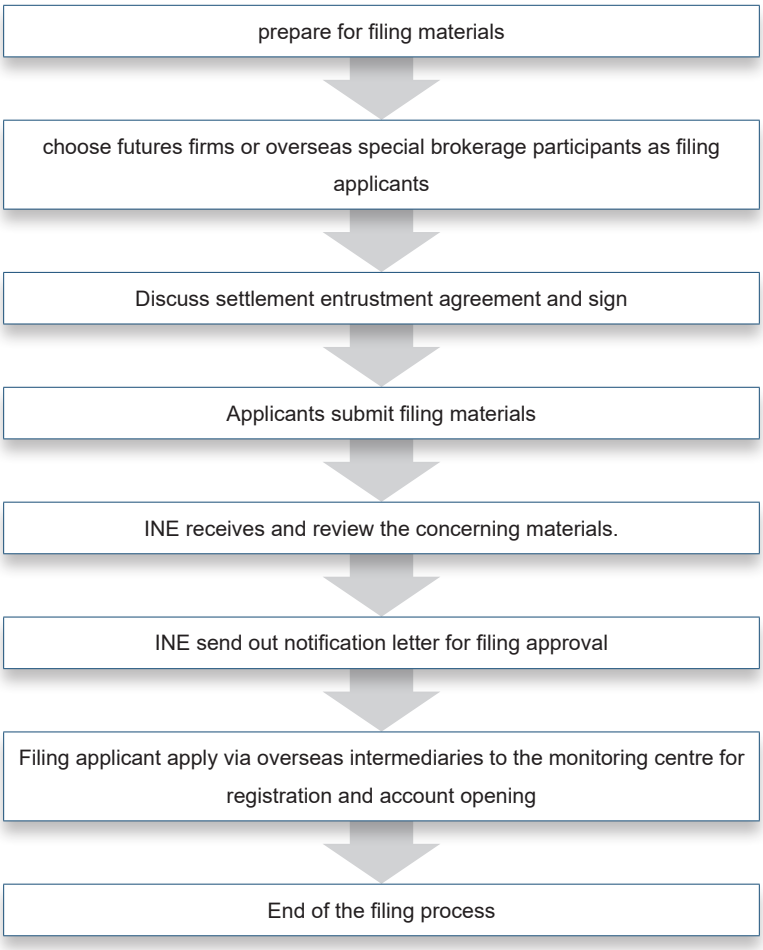
1. Qualification Application Process of Overseas Special Non-Brokerage Participants



2. Qualification Process for Overseas Special Brokerage Participants

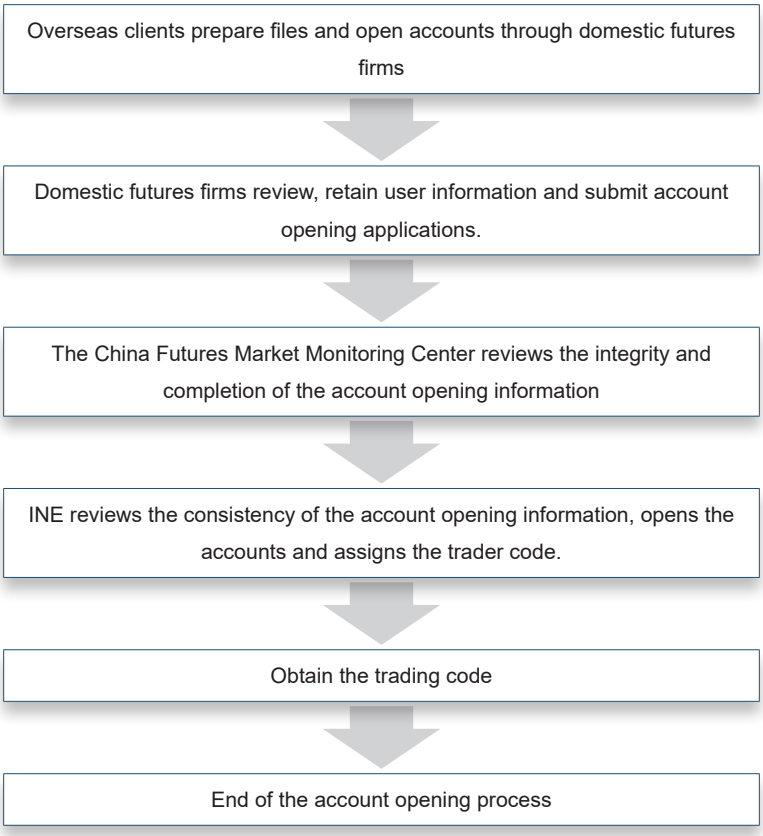


3. Filing Process of Overseas Intermediaries

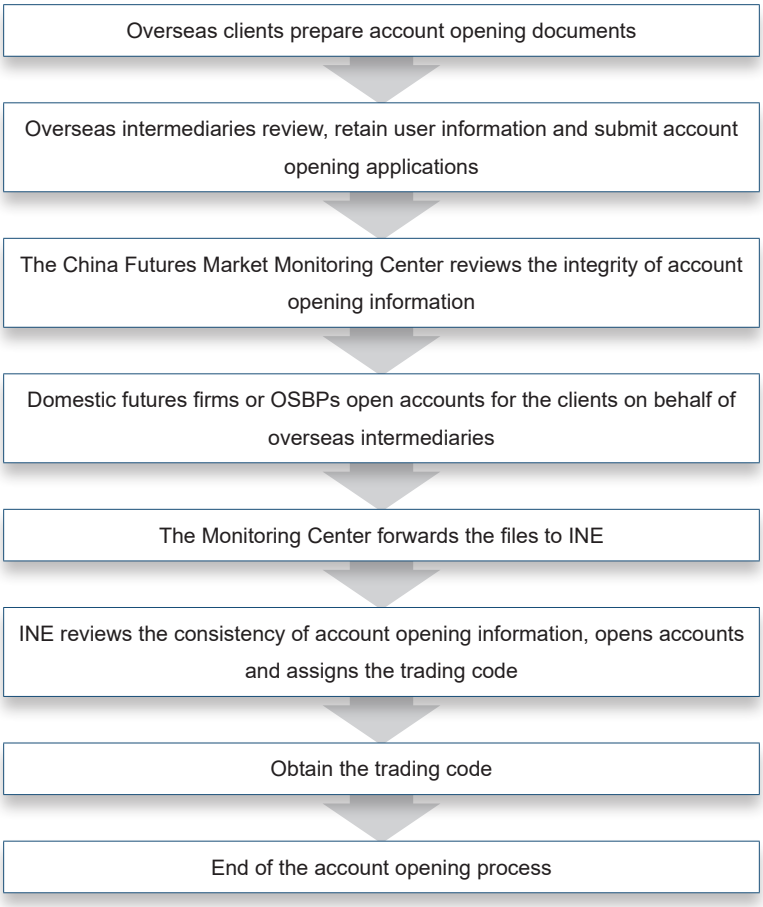


Account opening process for overseas clients

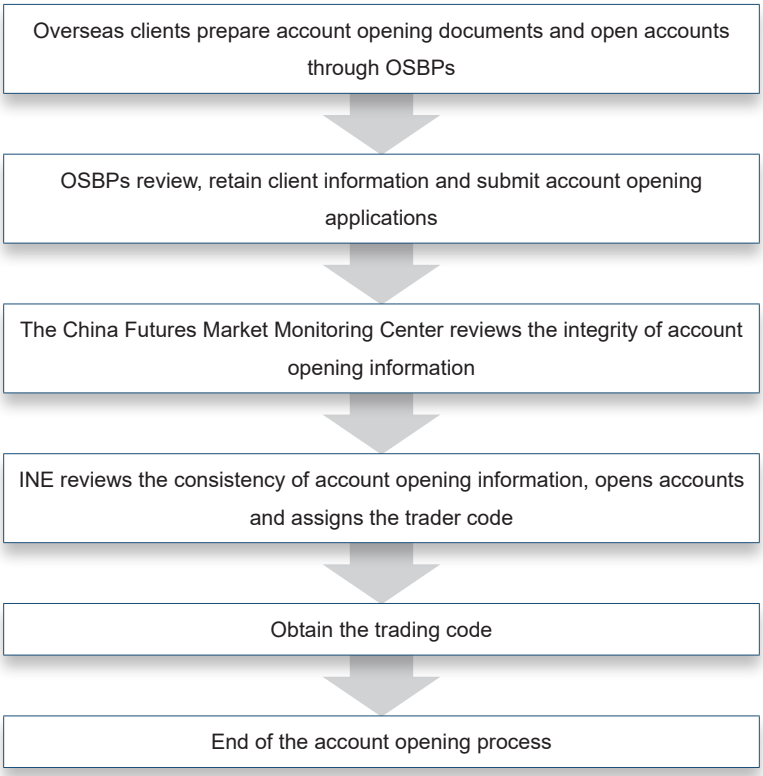
1. Account Opening Process through Direct Brokerage of Domestic Futures Firms



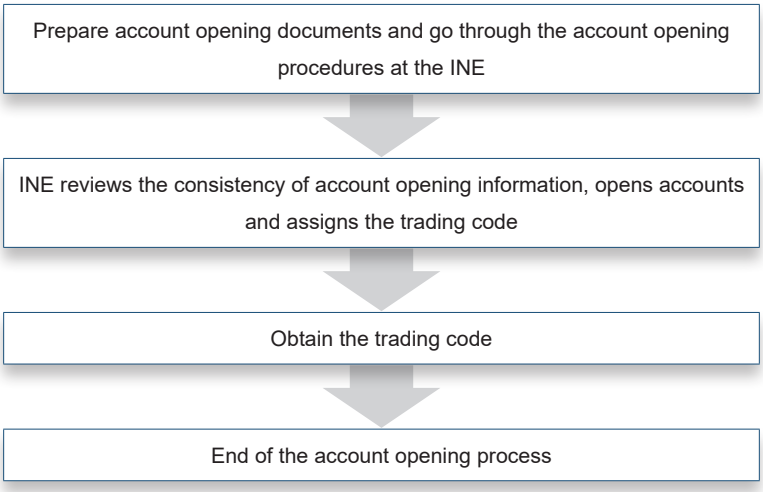
2. Account Opening Process through Sub-entrustment by Overseas Intermediaries to Domestic Futures Firms



3. Account Opening Process through OSBPs

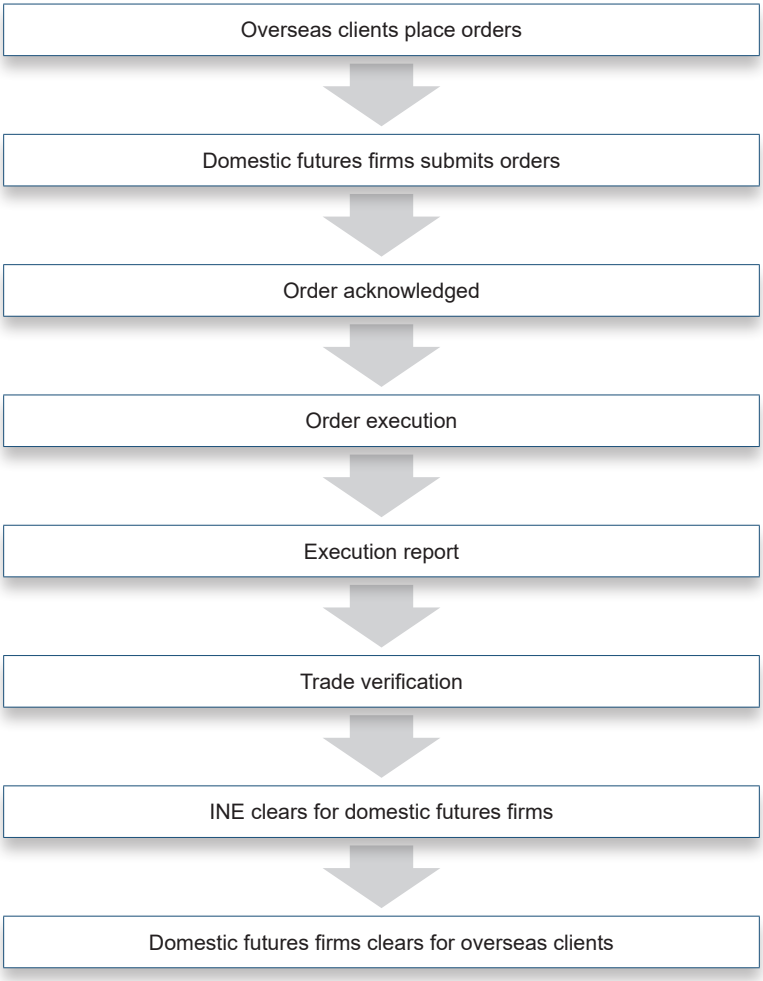


4. Account Opening Process as OSNBPs

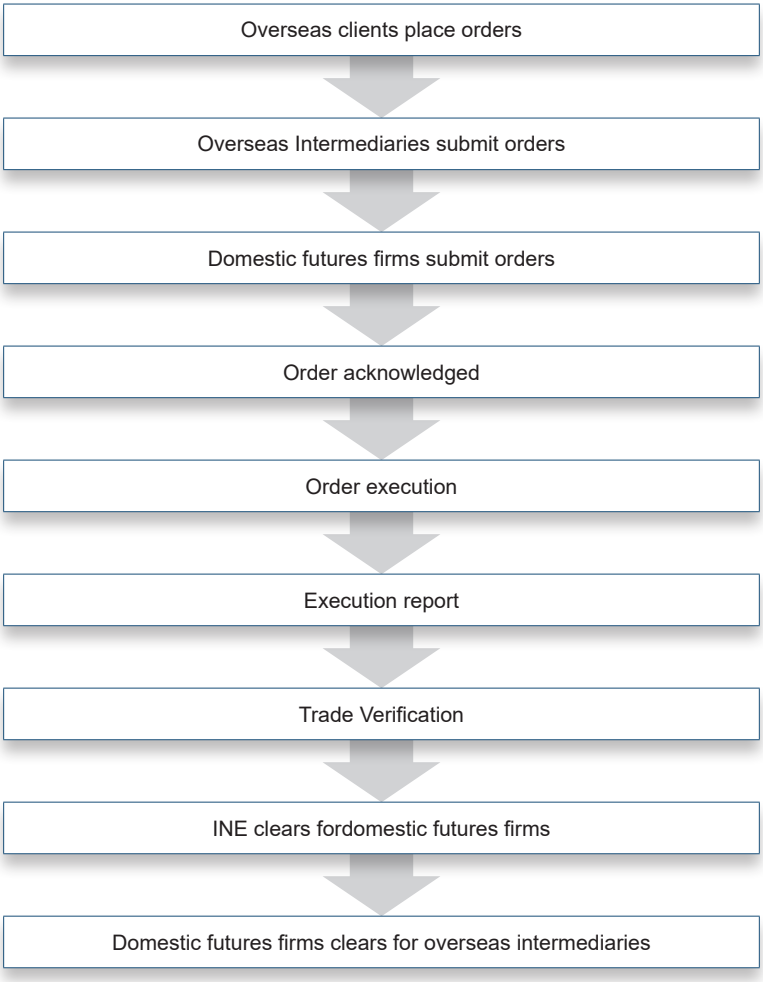


Clearing Process for Overseas Clients

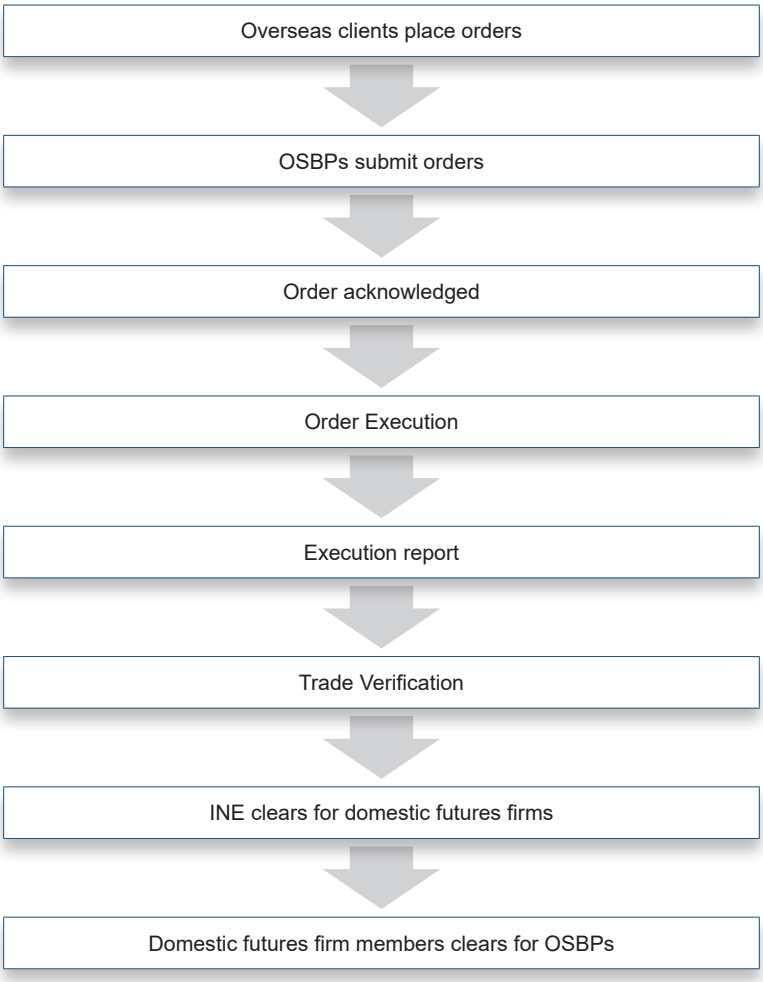
1. Clearing Directly through a Domestic Futures Firms



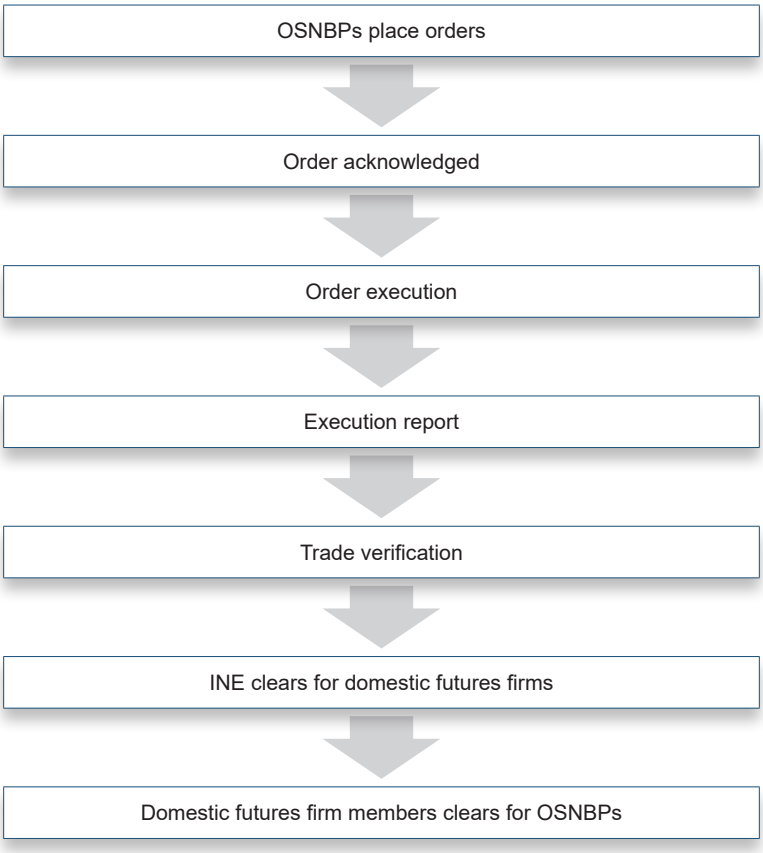
2. Clearing through Overseas Intermediaries



3. Clear through OSBPs

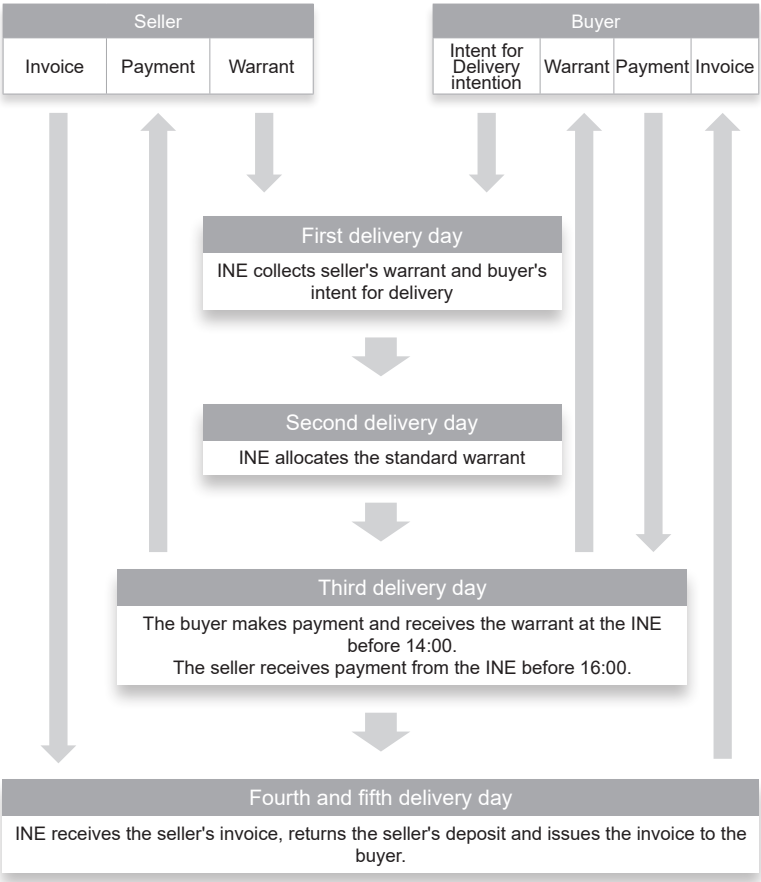


4. Clearing as OSNBPs

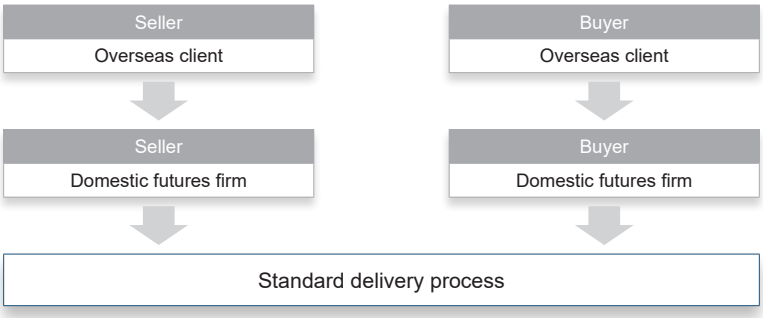


Delivery Process for Overseas Clients

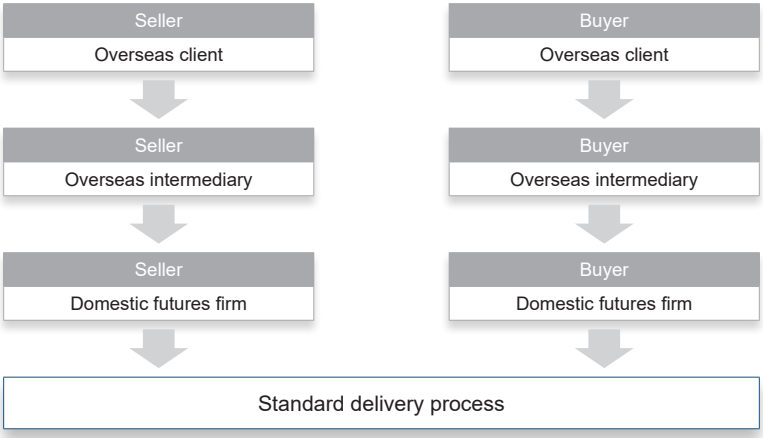
1.Standard Delivery Process



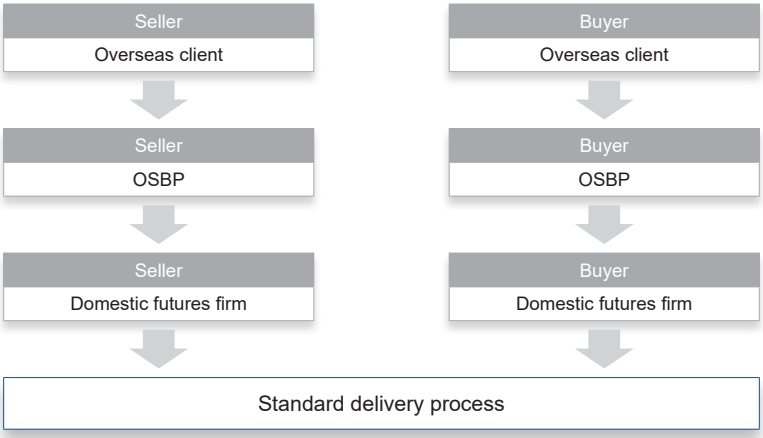
2. Delivery Directly through Domestic Futures Firms



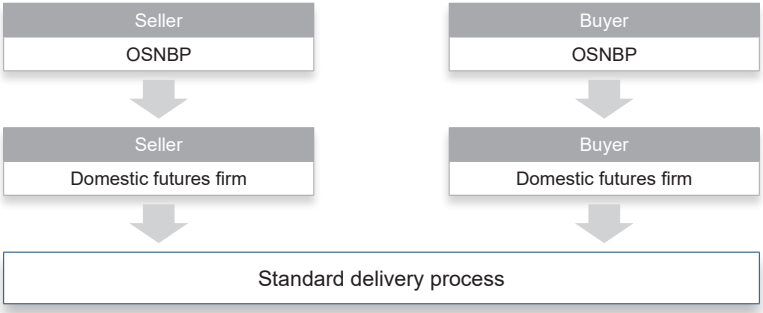
3. Delivery through Overseas Intermediaries



4. Delivery through OSBPs



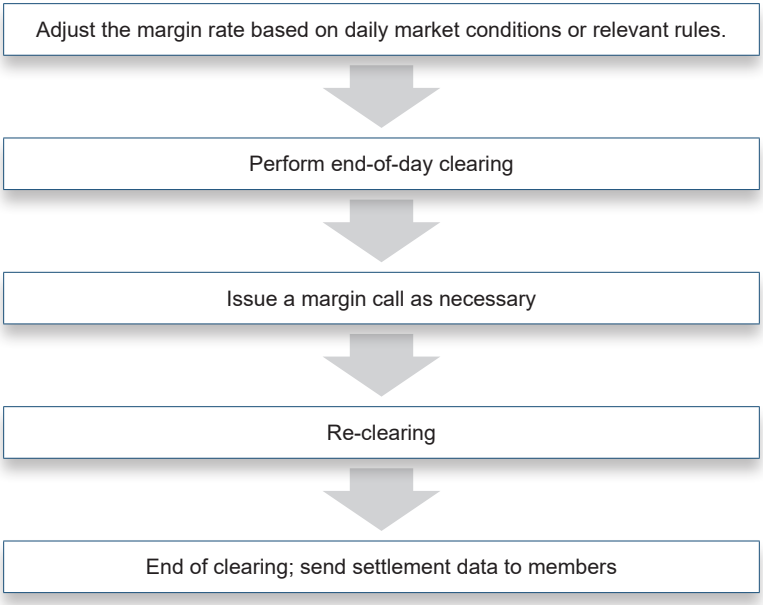
5. Delivery as OSNBPs



Other Trading Processes and Rules

Day-end Clearing Process

After the close of a trading day, INE clears the gains and losses, trading margins, transaction fees, taxes and other fees for each member based on the settlement price of the day. INE also transfers the net receivables and payables of each member by crediting or debiting its clearing deposit accordingly.



Futures Trading Rules

1. Risk Management Rules

(1) Trading Margin Requirement

"Trading margin" refers to the funds deposited by a Member into a dedicated settlement account with the Exchange to ensure the fulfillment of a contract and already used as margin for the positions held by the Member. It is the margin already occupied by the contract. The minimum trading margin for TSR20 futures contract is 7% of the contract value.

INE sets different trading margins for different trading period of a futures contract (i.e. from the day when the contract is listed to the last trading day).

Margin requirements at different stages of a TSR20 futures contract

Trading period	TSR20 minimum trading margin percentage
From the date the contract is listed	7%
From the 1st trading day of the 1st month before the delivery month	10%
From the 1st trading day of the delivery month	15%
From the second trading days before the last trading day	20%

If the trading margin of a futures contract shall be adjusted, the Exchange shall, at the daily clearing on the trading day prior to the next trading day when the adjustment to the margin requirement is applied, settle all positions the futures contract based on the new trading margin rate. If the margin is insufficient at that time, the position holder must deposit funds to meet the new margin requirement, and the relevant Member shall ensure the new margin requirement is met before the opening of the next trading day.
The holder of a short position may use standard warrants as the performance bond for the futures contracts with the same underlying and equivalent amount of positions he/she holds, in which case, the trading margin requirement for these positions shall be waived.

(2) Price Limit
Price limit is that the maximum price fluctuation of a contract in a trading day shall not exceed the prescribed range. Quoting prices beyond such limit will be deemed invalid and will not be executed.

In the event that a Limit-locked market occurs to a futures contract on a trading day (denoted as D1, whereas D0 represents the previous trading day, and the following five (5) successive trading days are D2, D3, D4, D5 and D6), the price limit and the trading margin for the futures contract on D2 shall be adjusted as follows:
(i) The same direction limit price for D2 shall be fixed at three percent (3%) greater than that for D1;
(ii) The trading margin on D2 shall be fixed at two percent (2%) greater than the percentage range or price limit for D2. If the adjusted trading margin is smaller than what is applied at the clearing of D0, the same trading margin applied on D0 shall be used as the trading margin for that contract.

If D1 is the first trading day for a newly listed futures contract, the contract's trading margin on that day shall be adopted as the trading margin at the daily clearing on D0.

The price limit and trading margin for the futures contract on D3 shall be adjusted as follows:
(i) If a same direction Limit-locked market does not occur on D2, the price limit and trading margin for D3 shall return to the normal level;
(ii) If a reverse direction Limit-locked market occurs on D2, a new round of a Limit-locked market is deemed to be triggered, i.e. D2 shall become D1 for the new round of Limit-locked market, and the trading margin rate and the price limit for the following trading day shall be set pursuant to Article 16 of these Risk Management Rules;
(iii) If the same direction Limit-locked market exists on D2, the price limit for D3 shall be fixed at 5 percent (%) above the price limit on D1, and the trading margin shall be fixed at 2 percent (%) above the regular price limit for D3. If the adjusted trading margin is smaller than what was applied at the clearing of D0, the trading margin on D0 will be applied to meet the margin requirements for that contract

If the same direction Limit-locked market continues to exist on D3, which means for three (3) consecutive trading days, the market has been lock at limit price, the Exchange may, at the daily clearing of D3, suspend withdrawal of funds by a part of or all of its Members and take corresponding measures on D4 as follows:
(i) if D3 is the last trading day of the futures contract, the contract shall move into its settlement and delivery phase on the next trading day;
(ii) if D4 is the last trading day, the futures contract shall continue to trade on D4, the price limit and the trading margin for D3 shall be extended to D4, and the contract shall move into its settlement and delivery phase on the next trading day;

(iii) if neither D3 nor D4 is the last trading day, the Exchange may, after the market close on D3, execute either of the two measures prescribed in Article 19 or 20 of these Risk Management Rules subject to market conditions.

Article 19 of the “Risk Management Rules” prescribes that the Exchange may, in its sole discretion, following the market close on D3, announce that the futures contract prescribed in Article 16 will continue to trade on D4, and take one or more of the following measures:
(i) Requiring additional trading margins from a part of or all of the Members and/or OSPs on either or both of the long or short position at the same or different rates of trading margin;
(ii)Suspending the opening of new positions by a part of or all of the Members and/or OSPs;
(iii) Adjusting the price limit to 7 percent (%) above the price limit on D1;
(iv) Limiting the withdrawal of funds;
(v) Requiring the liquidation of positions by a prescribed deadline;
(vi) Exercise forced position liquidation;
(vii) Other measures the Exchange deems necessary.

If the Exchange implements the measures in preceding paragraph, the trading of the contract on D5 shall be conducted as follows:
(i) if a same direction Limit-locked market does not occur on D4, the price limit and trading margin for D5 shall return to the normal level;
(ii) if a reverse direction Limit-locked market occurs on D4, a new round of a Limit-locked market is deemed to be triggered, i.e. D4 shall become D1 for the new round of a Limit-locked market, and the trading margin and the price limit for the following trading day shall be set pursuant to Article 16 of these Risk Management Rules;

(iii) if the same direction Limit-locked market continues to exist on D4, which means for four (4) consecutive trading days, market has been locked at limit price, the Exchange shall announce that an abnormal circumstance occurs, and take risk control measures as provided in the applicable rules of the Exchange.

Article 20 of the “Risk Management Rules” prescribes that the Exchange may, in its sole discretion, after the market close on D3, announce its decision to suspend the futures contract described in Article 16 from trading on D4, and announce on D4 its decision to take either of the measures stipulated in Article 21 or 22 of the Risk Management Rules.

Measure 1: Given the circumstances prescribed in Article 20 of the Risk Management Rules, the Exchange may, in its sole discretion, announce that the trading of the contract described in Article 16 of these Risk Management Rules will be extended to D5, and take one or more of the following measures:
(i) Requiring additional trading margins from a part of or all of the Members and/or OSPs on either or both of the long or short position at the same or different rates of trading margin□
(ii) Suspending the opening of new positions by a part of or all of the Members and/or OSPs;
(iii) Adjusting the price limit, but not to be over twenty percent (20%) up or down;
(iv) Limiting the withdrawal of funds;
(v) Requiring the liquidation of positions by a prescribed deadline;
(vi) Exercising forced position liquidation;
(vii) Other measures the Exchange deems necessary.

If the Exchange implements the measures in preceding paragraph, the trading of the contract described in Article 16 on D6 shall be conducted as follows:
(i) If a same direction Limit-locked market does not occur on D5, the price limit

and trading margin for D6 shall return to the normal level;
(ii) If a reverse direction Limit-locked market occurs on D5, a new round of a Limit-locked market is deemed to be triggered, i.e. D5 shall become D1 for the new round of a Limit-locked market, and the trading margin and the price limit for the following trading day shall be set pursuant to Article 16 of these Risk Management Rules;
(iii) If the same direction Limit-locked market continues to exist on D5, which means for five (5) consecutive trading days, market has been locked at limit price, the Exchange shall announce that an abnormal circumstance occurs and take risk control measures as provided in the applicable rules of the Exchange.

Measure 2: Given the circumstances prescribed in Article 20 of the Risk Management Rules, the Exchange may, in its sole discretion, exercise forced position reduction on the positions described in Article 16 on D4. The Exchange shall automatically match all existing unfilled orders that are placed at the limit price by the close of D3 with the open interests held by each trader (trader here refers to a Client, a Non-Futures Firm Member (the "Non-FF Member"), or an Overseas Special Non-Brokerage Participant (the "OSNBP")), who incurs gains on his/her net positions, on a pro rata basis in proportion to the positions of the contract and at the limit price of D3. If that trader holds both long and short positions, these positions shall be matched and settled before being matched with the remaining orders in the above ways.

(3) Risk Management at Great Price Fluctuation
If the cumulative price change (denoted as N) in a TSR 20 futures contract reaches nine percent (9%) in three (3) consecutive trading days (denoted as D1-D3), or twelve percent (12%) in four (4) consecutive trading days (denoted as D1-D4), or thirteen point five percent (13.5%) in five consecutive trading days (denoted as D1-D5), the Exchange may, in view of market conditions,

take one or a combination of the following measures, and report to the CSRC in advance.:

(i) Require additional trading margin from a part of or all of the Members and/or OSPs on either or both of the long or short position, at the same or different rates of trading margin;

(ii) Limit the withdrawal of funds by a part of or all the Members;

(iii) Suspend the opening of new positions for a part of or all of the Members and/or the OSPs

(iv) Adjust the limit price, but not to be over twenty percent (20%) up or down;

(v) Order the liquidation of positions by a prescribed deadline

(vi) Exercise forced position liquidation;

(vii) Other measures the Exchange deems necessary.

The N is calculated using the following formula:

$$N = \frac{P_t - P_0}{P_0} \times 100\% \qquad t=3,4,5$$

$P_0$is the settlement price of the trading day prior to D_1

$P_t$is the settlement price of t trading day, t = 3,4,5

$P_3$is the settlement price of D_3

$P_4$is the settlement price of D_4

$P_5$is the settlement price of D_5

(4) Position Limit

“Position limit” means the maximum positions (either long or short side) allowed to be held by a member, an OSP, an overseas intermediaries or a client as prescribed by the Exchange.

Proportions and Sizes of the Position Limit for a TSR20 Futures Contract at Different Periods of Trading

	From the day of listing to the delivery month		From the day of listing to the last trading day of the 2nd month before the delivery month		The 1st month before the delivery month		Delivery month	
	Total Open Interests (lots)	Position limit percentage (%)	Position limit (lots)		Position limit (lots)		Position limit (lots)	
		Futures firm member, OSBP, overseas intermediary	Non-futures firm member and OSNBP	Client	Non-futures firm member and OSNBP	Client	Non-futures firm member and OSNBP	Client
TSR20 futures	≥ 50,000	25	2000	2000	600	600	200	200

Note: The open interest and position limits are either long or short positions.

(5) Large Trader Reporting

A Member, an OSP or a Client whose general position in a futures contract reaches the general position limit set by the Exchange, or an Overseas Intermediary whose general position in a futures contract reaches or exceeds sixty percent (60%) of its general position limit, shall take the initiative to report to the Exchange by 15:00 of the following trading day.

The Exchange, in its sole discretion, may appoint specific Members, OSPs, Overseas Intermediaries or Clients to submit large trader position reports or other supporting materials, and may examine the above-mentioned documents submitted from time to time.

(6) Forced Position Liquidation

The Exchange shall impose forced position liquidation, if:

(i) The clearing deposit balance of a Member recorded on any of the internal ledgers at the Exchange, which are whether to serve its own Clients or its authorized clearing entities, falls below zero (0), and the Member fails to meet the margin requirement within the specified time limit;

(ii) The open interest of a Non-FF Member, an OSNBP or a Client exceeds the applicable position limit;

(iii) A Non-FF Member, an OSNBP or a Client fails to round the positions held in a futures contract to multiples as required within the specified time limit, or is not qualified to conduct delivery for matured contracts in its possession;

(iv) A violation of the Exchange's rules occurs that warrants a forced position liquidation;

(v) Any emergency happens that warrants a forced position liquidation;

(vi) Any other conditions exist that makes the forced position liquidation necessary.

(7) Risk Warning

The Exchange applies risk warning. The Exchange may, as it deems necessary, resort to such measures as requesting an explanation, giving a verbal alert, issuing a risk warning letter, giving a reprimand, issuing a risk warning notice to the public, alone or in combination, to warn against and resolve risks.

(8) After the market closes on the eighth trading day prior to the last trading day of a TRS20 futures contract, positions held by individual Clients who are not capable of issuing or accepting invoices during delivery shall be closed out completely. From the seventh trading day prior to the last trading day on, the positions held by such Clients will be subject to forced position liquidation by the Exchange.

2. Hedge Trading Rules

Hedge trading refers to buying (or selling) a commodity in the spot market while selling (or buying) futures contracts of the same commodity in the same amount in the futures market. No matter how price fluctuates in the spot market, the trader may always make profits in one market while losing money in the other, and the amount of loss is roughly equal to the amount of gain, thus avoiding risks.

Hedging positions of TSR20 futures contracts require the approval of INE. Hedge positions are classified into long hedge and short hedge, and into hedge positions for regular month (from the day of listing to the last trading day of the second month before the delivery month) and hedge positions for nearby delivery month (from the first day of the first month before the delivery month to the last day of the delivery month).

(1) A Non-FF Member, an OSNBP or a Client shall provide the following materials to apply for the hedging quota for regular months in accordance with the contract:

(i) an Application (Approval) Form of Hedging Quota for Regular Months, including applicant's basic information, contracts applied, hedging quota applied for regular months and other information;

(ii) a copy of the business license, a certificate of incorporation, or other documents which may prove the applicant's business scope;

(iii) business performance of physical commodities in the previous year or the latest audited annual financial report;

(iv) a business plan of physical commodities for the current year or the following year, and any purchase and sale contracts or other valid certificates related to the application for hedging;

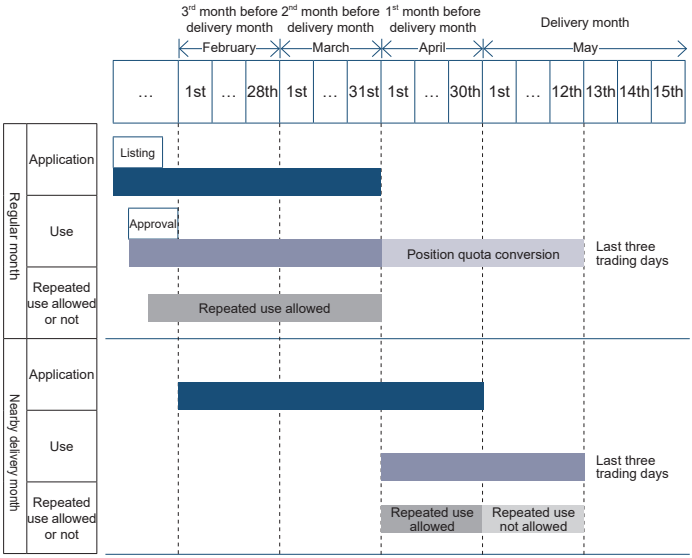
(v) a hedging strategy, including analyses of the source of risks and hedging objectives;

(vi) hedging management rules, if the applicant is a Non-FF Member or an OSNBP;
(vii) other materials required by the Exchange.
A Non-FF Member, an OSNBP or a Client may apply for hedging quota for regular months for multiple contracts once at a time.

(2) A Non-FF Member, an OSNBP or a Client, applying for hedging quota for the nearby delivery months, may apply for the quota of certain contract(s) and submit the following materials in accordance with the contract:
(i) an Application (Approval) Form of Hedging Quota for Nearby Delivery Months, including the applicant's basic information, the contracts applied, the hedging quota applied for nearby delivery months, etc.;
(ii) a copy of business license, a certificate of incorporation, or other documents which may prove the applicant's business scope;
(iii) relevant materials which can prove the authenticity of the hedging needs, including the production plan for the current year or the previous year, warrants for physical commodities, processing orders, purchase and sale contracts, purchase and sale invoices, or other valid certificates of the ownership of physical commodities corresponding to the application quota;
(iv) hedging management rules, if the applicant is a Non-FF Member, or an OSNBP;
(v) other materials required by the Exchange.
If the above materials have been submitted to the Exchange and no change occurs thereafter, there is no need to re-submit the materials.

(3) Time of application and Use of Hedging Quota

Take NR2005 contract as an example:



Note: For those who do not apply for the hedging quota for nearby delivery months as the nearby delivery months approach, the Exchange shall take the lower level between the hedging quota in regular months and the general position limit of such listed product in nearby delivery months as the hedging quota for nearby delivery months.

(4) Hedging with TSR20 Futures

Example of short hedge:

Natural rubber producers and rubber traders, as commodity suppliers in the TSR20 market, may mitigate the price risk by holding short positions of TSR20 futures in order to ensure reasonable profits and reduce losses caused by falling prices upon official delivery. In other words, they may sell futures contracts of the equal amount in the futures market, and hedge by buying back the contracts upon delivery of the spot commodity.

Example: The spot price of TSR20 was 12,000 yuan/ton in July. Based on the production plan and the current price, a rubber factory worried that over-supply in the spot market would cause the price of TSR20 to fall, and thus reduce its profit. In order to avoid the risks caused by the price drop, the factory decided to take short hedge in TSR20 futures contracts at Shanghai International Energy Exchange. The trading process and the gains and losses are shown as follows:

	Spot market	Futures market	Basis
July 1	The price of TSR20 is 12,000 yuan/ton.	Sell 100 lots of September TSR20 contract at a price of 12,500 yuan/ton	-500 yuan/ton
August 1	Sell 1000 tons of TSR20; at a price of 11,000 yuan/ton	Buy 100 lots of September TSR20 contract at a price of 11,500 yuan/ton	-500 yuan/ton
Hedging results	Lose 1000 yuan/ton	Gain 1000 yuan/ton	
		Net gain 0	

Although the price fall by 1000 yuan/ton in spot market caused 1 million yuan of loss to the factory, the factory gained a profit of 1 million yuan in the futures market by hedge trading which offset the impact of adverse price changes in the spot market.

Example of Long Hedge:

For TSR20 consumers such as tire and automobile manufacturing companies, the price fluctuation of raw materials is a major risk in their production and operation. In order to prevent losses caused by rising raw material prices, TSR20 consumers may mitigate price risks by holding long positions. In other words, they may buy futures contracts of equal amount in the futures market, and hedge by selling off the contracts upon the delivery of the spot commodities.

Example: In June, a tire factory and a local distributor reached a forward contract in which the tire factory agreed to supply finished products in September. However, the tire factory had neither finished products nor TSR20 for making tires at the moment. In order to lock the costs and profits, the tire factory decided to participate in the trading of TSR20 futures at Shanghai International Energy Exchange. The transaction is shown as follows:

	Spot market	Futures market	Basis
June 1	The price of TSR20 is 10,200 yuan/ton.	Buy 100 lots of September TSR20 contract at a price of 10,800 yuan/ton	-600 yuan/ton
August 25	Buy 1000 tons of TSR20 at a price of 11,000 yuan/ton.	Sell 100 lots of September TSR20 contract at a price of 11,600 yuan/ton	-600 yuan/ton
Hedging results	Lose 800 yuan/ton	Gain 800 yuan/ton	
		Net gain 0	

Although the price change in spot market caused 800,000 yuan of loss to the factory, the factory gained a profit of 800,000 yuan in the futures market by hedge trading, which offset the impact of adverse price changes in the spot market.

3. Clearing Rules

(1) Daily Clearing

The Exchange implements daily mark-to-market

If, after the completion of daily clearing, the clearing deposit balance of any internal ledger of a Member with the Exchange is lower than the prescribed minimum requirement, such clearing result shall be deemed as the Exchange's margin call to the Member, and the gap between the two amounts shall be the amount of additional funds required by the margin call..

Following the margin call, the Exchange may instruct Designated Depository Banks to debit the funds from the Member's dedicated fund account and credit the funds to the Exchange's dedicated settlement account. If a deficiency still exists, the Member shall make it up prior to the market opening of the next trading day. In the event the Member fails to make it up, the following shall apply:

(i) If the clearing deposit balance of any internal ledger of the Member with the Exchange is no less than zero, the corresponding Member or OSP of such internal ledger shall not open any new position;

(ii) If the clearing deposit balance of any internal ledger of the Member with the Exchange is lower than zero, the Exchange shall implement forced position liquidation or take other measures according to the Risk Management Rules of the Shanghai International Energy Exchange.

After the completion of daily clearing, the clearing deposit balance in RMB of any internal ledger of a Member shall not be lower than the minimum clearing deposit; otherwise, the Exchange may debit corresponding funds in RMB from the Member's dedicated fund account. If a deficiency still exists, the Member shall make it up prior to market opening of the next trading day. If the Member fails to make it up in time, the Exchange may impose forced foreign exchange conversion by converting the Member's foreign currency funds in its dedicated fund account or in the Exchange's dedicated settlement account into RMB.

(2) Margin Collaterals

A Non-FF Member, an OSNBP or a Client may, subject to the Exchange's approval, use standard warrants, foreign exchange and other assets as margin. The Clearing House of the Exchange shall be responsible for margin collateral business. The cutoff time for deposit or withdrawal application submission is 15:00 of each trading day. In a special cases, the Exchange may extend the processing time.

The margin collaterals are limited to the following assets:

- Standard warrants.
- Foreign exchange (types of currencies, haircuts and scopes of application shall be prescribed by the Exchange separately)
- Other assets approved by the INE.

The application procedures for depositing marketable securities:

- Application: A Non-FF Member or an OSNBP shall submit an application to the Exchange to apply margin collaterals. A Client shall authorize its FF Member, OSBP, or Overseas Intermediary to apply to the Exchange and complete relevant procedures.
- Verification and deposit: The Exchange shall verify and deposit the margin collaterals.

The value of the margin collateral shall be calculated as follows::

(i) For standard warrants used as margin collateral, the settlement price of the day for the front-month futures contract of the underlying product shall be used as the benchmark price for calculating the market value of the standard warrants. Prior to the market close of the day, the market value shall be calculated based on the benchmark price of the previous trading day. The haircut for standard warrants as margin shall be set at least twenty per cent (20%).

(ii) The benchmark price for other margin collaterals shall be determined by the Exchange.

The term “discounted value” means the after-haircut value of the margin collaterals. During the daily clearing, the Exchange shall update the benchmark prices of the day and adjust the discounted values of margin collaterals according to the aforementioned methodology.

4. Delivery Rules

(1) Delivery Method

The delivery of TSR20 futures contracts implements physical delivery, bonded delivery and warehouse delivery.

Immature TSR20 futures contract may adopt EFP delivery procedures. To take this option, the buyer and seller shall submit their intentions and be paired with each other in advance.

(2) Final Settlement Price

The final settlement price for TSR20 futures is the benchmark price for the delivery settlement of TSR20 futures, and is calculated as the volume-weighted average of the executed prices of that contract during the last five (5) trading days that the contract has been traded. At delivery settlement, the buyer and the seller shall settle based on such final settlement price as adjusted by the premiums or discounts of the delivery.

(i) The bonded final settlement price shall be the basis for calculating and assessing the dutiable value of TSR 20 at customs declaration by the holder of a TSR 20 bonded standard warrant. The formula for the bonded final settlement price of an expired contract is:

Bonded Final Settlement Price = Final Settlement Price

(ii) When a bonded standard warrant is used in an EFP, the formula for the EFP bonded final settlement price is:
EFP Bonded Final Settlement Price = Settlement price of the previous trading day prior to the EFP application day of the first-nearby contract

(iii) When non-standard warrants are used in an EFP, the final settlement price shall be as negotiated by the trading parties.

(3) Packaging
Each TSR20 bale shall have a net weight of 35kg and be wrapped in a 30-65 μm-thick polyethylene film with a vicat softening temperature of less than 95 degrees Celsius.

One pallet of TSR20 consists of 36 bales and be packaged according to relevant pallet wrapping standards. The pallet shall be readily loaded onto or unloaded from racks and stacked. Each pallet shall indicate the grade number, net weight, manufacturer name, factory code manufacturing date, etc.

Any loaded-in TSR20 shall be dry and clean. A Designated Delivery Storage Facility shall not issue standard warrants for any TSR 20 that is found at time of acceptance to have serious packaging damage or a performance defect such as surface aging or cracking, exposure to rain or moisture, mold, undercooked or serious contamination.

(4) Necessary Certificates for Load-in
At the time of load-in and creation of standard warrant for TSR 20, the owner shall submit the inspection report by the relevant Designated Inspection Agency, bill of lading, certificate of origin, approval of load-in issued by the customs, and other relevant documents to the Exchange for verification.

At the time of load-in and creation of standard warrant for TSR 20, the owner shall additionally deliver the phytosanitary certificate, the certificate of accreditation of the testing laboratory as well as their Chinese translations and the quality inspection report to the Designated Delivery Storage Facility for safekeeping. The Designated Delivery Storage Facility shall keep such documents secure and provide them to the owner during import customs clearance; the owner shall return such documents to the Designated Delivery Storage Facility following the completion of import customs clearance and, if it is the last shipment, submit them to the customs as required.

(5) Period of Validity

The range of manufacturing dates of TSR 20 underlying each standard warrant shall not exceed thirty (30) days, the earliest of which shall be taken as the manufacturing date for the standard warrant. A standard warrant for TSR 20 is valid for twelve (12) months from the manufacturing date.

Any TSR 20 for physical delivery shall be loaded in within ninety (90) days of the date of manufacturing, after which no standard warrant shall be issued for such TSR 20.

An inspection report of TSR 20 loaded in for generating standard warrants is valid for one hundred and eighty (180) days following issuance, and the inspection report for stored commodities is valid for ninety (90) days following issuance. After the valid date, the corresponding commodity shall be re-inspected and delivered only after passing the new inspection. The holder of the bonded standard warrant shall be solely liable for the quality of the loaded-in TSR 20 if it fails the new inspection, unless the Designated Delivery Storage Facility is liable..

(6) Delivery Fees

The buyer and the seller in a physical delivery shall each pay a delivery fee of RMB forty (4) yuan/ton to the Exchange. The Exchange will charge delivery fees based on each standard warrant by weight in name.

(7) Standard Warrant Management
A Member, an OSP or an Overseas Intermediary shall appoint designated personnel to conduct delivery, clearing and settlement, and other standard warrant businesses through the Standard Warrant Management System.

Clients of an OSBP or an Overseas Intermediary shall authorize the OSBP, Overseas Intermediary or its carrying Futures Firm Members to conduct the business.

The standard warrant account follows the trading code system; i.e. each standard warrant business participant shall have one exclusive standard warrant account.

(8) Exchange for Physical (EFP)
The exchange for physical, or the EFP, is the process where the buyers and the sellers who hold opposite positions of a futures contract expiring in the same month reach an agreement through negotiation to, upon approval of the Exchange, tender a notice of EFP to have their respective positions in such contract closed out by the Exchange at the price prescribed by the Exchange, and exchange, at the price mutually agreed upon, the warrant of the underlying commodity which has a quantity equivalent to and is identical to or similar with the underlying commodity of the futures contract.

The EFP application period is from the listing day of a futures contract to the second trading day (including that day) prior to the last trading day of the contract.

After the buyers and the sellers who hold opposite positions of a futures contract expiring in the same month reach an agreement, either party may submit the EFP application to the Exchange via the Standard Warrant Management System

before 14:00 of any trading day (the application day) within the EFP application period, and perform the EFPs upon the approval of the Exchange.

Clients of an OSBP or an Overseas Intermediary shall authorize the OSBP, Overseas Intermediary or its carrying Futures Firm Members to conduct the EFP delivery.

Non-futures firm members and OSNBPs may directly apply to the INE for EFP.

If the non-standard warrants are used for the EFPs, the buyer and the seller shall abide by the relevant laws and regulations, and provide the relevant agreement for sale and purchase, the non-standard warrants and other materials.

The Exchange shall, before 15:00 of the application day, close the positions of the corresponding futures contract of the delivery month held by the buyer and the seller tendering the EFP, at the settlement price of the trading day immediately before the application day for the corresponding contract of the delivery month.

If the standard warrants are used for the EFPs and the settlement is conducted via the Exchange, the trading margin shall be calculated based on the settlement price of the trading day before the application day for the corresponding delivery month contract. The exchange of the payment for the underlying commodities and the standard warrants shall be completed within the time agreed upon by the buyer and the seller.

The seller shall submit the invoices to the Exchange within seven (7) trading days immediately after exchanging the payment for underlying commodities and the standard warrants. After receiving the invoices from the seller, the Exchange shall issue the invoices to the buyer on the next trading day.

Standard Contract

Contract Specification

Product	TSR 20
Contract Size	10 metric tons/lot
Price Quotation	(RMB) Yuan/metric ton (no tax or duty included in the quotation)
Minimum Price Fluctuation	5 Yuan/metric ton
Daily Price Limits	±5% from the settlement price of the previous trading day
Delivery Months	January, February, March, April, May, June, July, August, September, October, November, and December
Trading Hours	9:00-11:30 a.m., 1:30-3:00 p.m. (the Beijing Time), and other trading hours as prescribed by the Exchange
Last Trading Day	The 15th day of the delivery month (postponed accordingly if it is a national holiday or weekend; the Shanghai International Energy Exchange is entitled to adjust the last trading day in accordance with the national holidays or weekends.)
Delivery Period	Five (5) consecutive trading days after the last trading day
Grades and Quality Specifications	Refer to Appendix for detailed quality standards
Delivery Venues	Delivery Storage Facilities designated by the Shanghai International Energy Exchange
Minimum Trading Margin	7% of contract value
Settlement Type	Physical delivery
Product Symbol	NR
Listing Exchange	Shanghai International Energy Exchange

Appendix for the Standard Contract

Delivery Unit

The delivery unit for the standard contract of TSR20 futures contract is 10 tons

The delivery quantity shall be integral multiple(s) of the delivery unit.

Quality Standards

1. The quality of physically delivered TSR20 shall meet the standards set out by the Exchange.

Quality Standards for TSR 20 of INE		
Indicators	Limit	Test
Impurities left on 45μm mesh size sifter (mass fraction)%, maximum value	0.16	GB/T 8086
Ash (mass fraction)%, maximum value	1.0	GB/T 4498.1
Nitrogen content (mass fraction)%, maximum value	0.6	GB/T 8088
Volatile component (mass fraction)%, maximum value	0.8	GB/T 24131.1
Initial plasticity (P_0), minimum value	30	GB/T 3510
Plastic retention index (PRI), minimum value	40	GB/T 3517

2. TSR20 underlying each standard warrant shall be registered with the Exchange, accompanied by the corresponding certificate of quality.

3. TSR20 underlying each standard warrant shall comprise rubber of the same brand, manufacturer (factory), and packaging specification.

Registered Commodities

Registered commodity and their manufacturers (factories), and the rate of premium and discount thereof for various brands will be separately announced by the Exchange.

Designated Delivery Storage Facilities

Designated delivery storage facilities and the rate of premium and discount thereof will be separately announced by the Exchange.

Registered Commodities

Registered Commodities of TSR 20 Futures

No.	Country	Enterprise for Registration	Brand	Factory Code/ Manufacturer (Factory)	Date of Registration	Delivery Grade
1	China	Guangdong Guangken Rubber Group Co., Ltd.	GKR	Yunnan Guangken Rubber Co., Ltd. Xiaojie Manufaturing Rubber Factory Jinghong City Baka Manufacturing Rubber Co., Ltd.	August 5th, 2019	SCR20
2		China Hainan Rubber Industry Group Co., Ltd.	BD	Jinlong Rubber Processing Branch Jinshui Rubber Processing Branch	August 5th, 2019	SCR20
3		Yunnan Natural Rubber Industry Group Co., Ltd.	Gold Phoenix	YJ-17-01 Mojiang Co., Ltd. Bashatian Rubber Factory	August 5th, 2019	SCR20
4		Sinochem International Corporation	Sinochem Rubber	BX Xishuangbanna Sinochem Rubber Co., Ltd. Jinghong Rubber Factory CX Hainan Sinochem Rubber Co., Ltd.	August 5th, 2019	SCR20
5	Thailand	Guangken Rubber (Satun) Co., Ltd.	GKR	AZ	August 5th, 2019	STR20
6		Guangken Rubber(Mekong River) Co., Ltd.	GKR	CP	August 5th, 2019	STR20
7		Guangken Rubber (Thai Southern) Co., Ltd.	GKR	DB	August 5th, 2019	STR20
8		Hua Tai Rubber Co., Ltd.	Hua Tai	AX	August 5th, 2019	STR20
9		Nam Hua Rubber Co., Ltd.	Sri Trang	BQ	August 5th, 2019	STR20
10		Rubberland Products Co., Ltd.	Sri Trang	CI	August 5th, 2019	STR20

No.	Country	Enterprise for Registration	Brand	Factory Code/ Manufacturer (Factory)	Date of Registration	Delivery Grade
11	Thailand	Sin Tong Thai Rubber Co., Ltd.	STT	CA	August 5th, 2019	STR20
12		Southland Resources Co., Ltd.	Southland	BJ1	August 5th, 2019	STR20
				BJ2		
				BJ4		
				BJ5		
13		Sri Trang Agro-industry Public Co., Ltd.	Sri Trang	BD1	August 5th, 2019	STR20
				BD2		
				BD5		
14		Teck Bee Hang Co., Ltd.	Tecrum	H2	August 5th, 2019	STR20
				H6		
				H8		
15		Thai Hua Rubber Public Co., Ltd.	Thai Hua	BN2	August 5th, 2019	STR20
				CR		
16		Thai Hua Rayong Rubber Co., Ltd.	Thai Hua Rayong	BK	August 5th, 2019	STR20
17		Thaimac STR Co., Ltd.	Thaimac	BS	August 5th, 2019	STR20
18		Thaitech Rubber Corporation Ltd.	TRC	AG1	August 5th, 2019	STR20
19		Tongthai Technical Rubber Co., Ltd.	TTT	BL	August 5th, 2019	STR20
20		Von Bundit Co., Ltd.	Von Bundit	AJ1	August 5th, 2019	STR20
				AJ3		
21	Malaysia	Hevea KB Sdn. Bhd.	HEVEA PRO	HL	August 5th, 2019	SMR20
22		Seng Hin Rubber (M) Sdn. Bhd.	Seng Hin	BY	August 5th, 2019	SMR20
23	Indonesia	PT. Bintang Gasing Persada	Bintang Gasing	SFX	August 5th, 2019	SIR20
24		PT. Hok Tong	HEVEA PRO	SGO	August 5th, 2019	SIR20
25		PT. Sri Trang Lingga Indonesia	Sri Trang	SFZ	August 5th, 2019	SIR20

Notes:
1. Net weight of each package: 35 kilograms
2. Packaging: Each package is covered with polyethylene film which is marked with the product logo; each pallet contains 1.26 metric tons, the pallet is in compact packaging, and the outer package is attached with a shipping mark.
Shanghai International Energy Exchange will pay close attention to the change and development trend of TSR20 market, adjust the registered commodities in time and announce them separately.

The Product List for TSR20 Futures

No.	Country	Registered Enterprise	Brand	Factory	Place of Origin	Product logo
1	China	Guangdong Guangken Rubber Group Co., Ltd	GKR	Yunnan Guangken Rubber Co., Ltd. Xiaojie Manufaturing Rubber Factory	Beside Manyangguang Village, Menglong Town, Jinghong City, Yunan Province	云南广垦橡胶有限公司小街制胶厂 SCR 20 Net Weight: 35kg Yunnan Guangken Rubber Co.,Ltd.Xiaojie Manufacturing Rubber Factory
				Jinghong City Baka Manufacturing Rubber Co., Ltd.	Baka Village's Group, Baka Village, Damenglong Town, Jinghong City, Yunan Province	景洪市坝卡制胶有限公司 SCR 20 Net Weight: 35kg Jinghong City Baka Manufacturing Rubber Co.Ltd.
2		China Hainan Rubber Industry Group Co., Ltd	BD	Jinlong Rubber Processing Branch	Longjiang Farm, Baisha County, Hainan Province	
				Jinshui Rubber Processing Branch	Longjiang Farm, Baisha County, Hainan Province	
3		Yunnan Natural Rubber Industry Group Co., Ltd	Gold Phoenix	YJ-17-01 Mojiang Co., Ltd. Bashatian Rubber Factory	Sinanjiang Town,Mojiang County, Yunan Province	
4		Sinochem International Corporation	Sinochem Rubber	Xishuangbanna Sinochem Rubber Co., Ltd. Jinghong Rubber Factory	Manfa Village, Menghan Town, Jinghong City, Yunan Province	西双版纳中化橡胶有限公司 TSR 20 35Kg BX Xishuang ban na Sinochem Rubber Company Limited
				Hainan Sinochem Rubber Co., Ltd.	NO1，Zhonghua Road,Qiaofeng Farm,Nada Town,Danzhou City,Hainan Province	海南中化橡胶有限公司 TSR 20 35KG CX Hainan Sinochem Rubber Company Limited

No.	Country	Registered Enterprise	Brand	Factory	Place of Origin	Product logo
5	Thailand	Guangken Rubber (Satun) Co., Ltd.	GKR	AZ	310 Moo 10 Tambol Kuankalong,Amphur Kuankalong Satun 91130, Thailand	
6		Guangken Rubber(Mekong River) Co., Ltd.	GKR	CP	5 Moo 7 Mooban Thonyai，Tambol Nakha，Amphur Muang，Udonthani 41000,Thailand	
7		Guangken Rubber (Thai Southern) Co., Ltd.	GKR	DB	88 Moo 1,Tambon Tharongchang,Amphoe Phunphin,Suratthani 84130,Thailand	
8		Hua Tai Rubber Co., Ltd.	Hua Tai	AX	26/9 Kamchanawanich Road,Tambol Pangla,Aumphur Sadao,Songkhla 90170,Thailand	
9		Nam Hua Rubber Co., Ltd.	Sri Trang	BQ	41 Moo 3,Tambon Samnak Kham, Amphoe Sadao,Songkhla 90120，Thailand	
10		Rubberland Products Co., Ltd.	Sri Trang	CI	338 Moo 2,Tumbol Nonsomboon,Amphur Mueang Bungkan,Bungkan 38000,Thailand	
11		Sin Tong Thai Rubber Co., Ltd.	STT	CA	178/1 Moo 2 Klaeng, Mueang Rayong, Rayong 21160，Thailand	
12		Southland Resources Co., Ltd.	Southland	BJ1	199/9 Moo 8,T.Dusit,A.Thampannara Nakhonsithammarat 80260，Thailand	
				BJ2	130 Moo 4,Sai-Asia Road,T.Thachang, A.Bangklam,Songkhla 90110，Thailand	
				BJ4	199 Moo 7,T.Kokkong,A. Muangbuengkan, Buengkan 38000，Thailand	
				BJ5	126 Moo 8,Phetchkasem Rd.,KM.441, Khaochairaj Sub District,Patew District,Chumphon 86210，Thailand	

No.	Country	Registered Enterprise	Brand	Factory	Place of Origin	Product logo
13	Thailand	Sri Trang Agro-industry Public Co., Ltd.	Sri Trang	BD1	1 Moo 2,Tambon Tham Yai,Amphoe Thung Song,Nakhon Si Thammarat 80110，Thailand	
				BD2	139 Moo 2,Trang-Sikao Road, Tambon Na Mueang Phet, Amphoe Sikao,Trang 92000， Thailand	
				BD5	218 Moo 7 Tumbol Muangsrikai, Amphur Warinchamrab, Ubonratchathani 34190,Thailand	
14		Teck Bee Hang Co., Ltd.	Tecrum	H2	43 Moo 6 Satharanaprayod Road, Thasab, Muang District, Yala 95000,Thailand	
				H6	101/2 Moo 11， Satharanaprayote Road, Lumphu, Muang District, Naratiwat 96000,Thailand	
				H8	14/4 Moo 2, Surat-Punpin Road, Wadpradoo, Muang District, Suratthani 84000,Thailand	
15		Thai Hua Rubber Public Co., Ltd.	Thai Hua	BN2	168/1 Moo 4,T.Dinthong,A.Wangthong, Phitsanulok 65130，Thailand	
				CR	148,148/1 Moo 15，Nittayo Rd.，Phon-Ngam Nhonghan Udon Thani 41130, Thailand	
16		Thai Hua Rayong Rubber Co., Ltd.	Thai Hua Rayong	BK	7/23 Moo 4, Kached Subdistrict, Muang District, Rayong 21100,Thailand	
17		Thaimac STR Co., Ltd.	Thaimac	BS	111 Moo 2，Pelah Subdistrict,Klongthom District,Krabi 81120,Thailand	
18		Thaitech Rubber Corporation Ltd.	TRC	AG1	150 Moo 13,Asia Road,Kumpangpetch, Rattaphum, Songkhla 90180,Thailand	

No.	Country	Registered Enterprise	Brand	Factory	Place of Origin	Product logo
19	Thailand	Tongthai Technical Rubber Co., Ltd.	TTT	BL	28 Moo 1 Khao Wongkot, Kaeng Hang Maeo, Chanthaburi 22160, Thailand	
20		Von Bundit Co., Ltd.	Von Bundit	AJ1	65 Moo 1,Suratthani-Nasarn Road, Amphur Muang,Suratthani 84100, Thailand	
				AJ3	555/1 Moo 7,Tambol Nongnakum,Amphur Muang,Udonthani 41000,Thailand	
21	Malaysia	Hevea KB Sdn. Bhd.	HEVEA PRO	HL	PT 187940 – PT 187942, Off Persiaran Perindustrian Kanthan 1, Kawasan Perindustrian Kanthan, 31200 Chemor, Perak,Malaysia	
22		Seng Hin Rubber (M) Sdn. Bhd.	Seng Hin	BY	Kawasan Perindustrian Sg.Nal,Jalan Stapunal,18000 Kuala Krai,Kelantan, Malaysia	
23	Indonesia	PT. Bingtang Gasing Persada	Bintang Gasing	SFX	JL.Raya Tanjung Api-api Desa Gasing KM.10 Kecamatan Talang Kelapa, Kabupaten Banyuasin Palembang，Sumatera Selatan，Indonesia	
24		PT. Hok Tong	HEVEA PRO	SGO	JL. Mayjend Satibi Darwis RT. 27 RW. 06, Kelurahan Keramasan, Kecamatan Kertapati, Palembang 30259，Sumatera Selatan ,Indonesia	
25		PT. Sri Trang Lingga Indonesia	Sri Trang	SFZ	JL. TPA 2 RT.26 & 29 Kelurahan Keramasan, Kecamatan Kertapati, Palembang 30259，Sumatera Selatan ,Indonesia	

Designated Delivery Storage Facilities

The list of the Designated Delivery Storage Facilities for TSR20 futures is as follows:

No.	Name	Address	Contanct	Telephone No.
1	CMST Shandong International Logistics Co., Ltd.	NO.45 Beijing Road ,Qingdao Free Trade Zone	Wang Zhiyong	13954207760
			Cui Kunli	15805323066
2	Shanghai Zhongchu Lingang logistics co.,ltd	NO.195 Shuanghui RD. China(Shanghai) pilot free trade zone	Lu Bing	13564496979
		NO.98 Changman RD. China(Shanghai) pilot free trade zone	Wang zhonglian	13331955737
3	Shanghai Yangshan Free Trade Port C.Steinweg Logistics CO., LTD	NO.288 Hai Wang Road, Shanghai Yangshan Free Trade Port Shanghai, China	Liang Jingjing	15812987825
4	C.Steinweg Logistics(Shanghai Wai Gao Qiao Bonded Logistics Zone)Co.,Ltd.	No.89 Shen Ya Road, Shanghai Waigaoqiao Bonded Logistics Zone Shanghai, China	Xu Yun	13817283912
5	Qingdao Sinotrans Supply Chain Management Co., Co., Ltd.	44, Moscow Road,Qingdao Free Trade Port Zone, Shandong	Zhang Chao	15153205257
		5#Warehouse in Bonded Logistics Park,No.68 Qianwan Port Road,Qingdao,Shandong	Xue Lei	18561575666
6	Lobb Heng (Qingdao) Co., Ltd.	No. 39, Beijing Road, Qingdao Free Trade port area (A) of China.	Xue Shanwen	18669836338
			Hu Yingchun	18678905721
7	Qingdao Port International Longistics Co.,Ltd	No. 18 (A), Weisi Road, Free Trade Port Area, Qingdao	Yan Yan	13468287229
		No. 572 , Tongjiang Road, Free Trade Port Area, Qingdao (temporary)	Zhao Tianyue	18669844878
8	China Merchants International Terminal (Qingdao) Company Ltd.	3#Warehouse in Bonded Logistics Park,No.68 Qianwan Port Road,Qingdao,Shandong	Lu Ning	13854239920

No.	Name	Address	Contanct	Telephone No.
9	JiGang Steel International Logistics Qingdao Free Trade Zone Co.Ltd,	No.43 Moscow road qingdao free yrade port zone shangdong provine(A)	Han Yumin	13864104639
			Chen Song	15064041620
			Wang Daizong	15265200370
10	HSF Modern Property Group Co., LTD.	No.69 Nan Yi Huan Rd, Laocheng Econimic Developemnt District(Haikou Free Trade Zone),Bonded Warehouse A1,Chengmai, Hainan	Huang Caihui	13098909257
			Zeng Weihu	18689679557

Designated Inspection Agencies

The list of the Designated Inspection Agencies for TSR20 futures is as follows:

No.	Designated Inspection Agencies	Address	Contact	Telephone No.	Fax
1	Shanghai Customs Industrial Products and Raw Material Testing Technology Center	No.1208 Minsheng Road, Pudong New District, Shanghai	Zhao Bo	13916691165	021-68544524
			Li Chen	13331978879	
2	China Testing and Certification Group Shandong Co., Ltd.	No. 85 South Fuzhou Road, Shinan District, Qingdao, Shandong	Sun Naiyu	13805325759	0532-80887830

Appendix

Rules for TSR20 (Futures) Inspection

Chapter 1 General Provisions

Article 1 These Rules are jointly formulated by the TSR 20 futures inspection agencies designated by the Shanghai International Energy Exchange (hereinafter referred to as the "Exchange").

Article 2 These Rules are formulated in accordance with the relevant provisions of national commodity inspection and the Exchange to ensure the smooth operation of TSR 20 futures delivery inspection and regulate the TSR 20 physical delivery inspection activities.

Article 3 These Rules shall govern the TSR 20 futures delivery inspection business of the Exchange, and shall be binding on the Exchange, the Designated Inspection Agencies, the Designated Delivery Storage Facilities, inspection consigners and other related parties.

Chapter 2 Inspection Procedures

Section 1 Methods

Article 4 The inspection methods herein refer to the following documents. The latest version of undated referential documents shall apply to these Rules:

GB/T 8086 Raw Natural Rubber—Determination of Dirt

GB/T 4498.1 Rubber—Determination of Ash—Part 1: Muffle Furnace Method

GB/T 8088 Raw Natural Rubber and Natural Rubber Latex,—Determination of Nitrogen Content

GB/T 24131.1Rubber, Raw—Determination of Volatile Matter Content—Part 1: Hot-mill Method and Oven Method

GB/T 3510 Rubber, Unvulcanized—Determination of Plasticity—Rapid Plastimeter Method

GB/T 3517 Rubber, Raw Natural—Determination of Plasticity Retention Index (PRI)

Section 2 Inspection Procedures

Article 5 Application and acceptance

(1) The TSR 20 applied for inspection shall be the goods produced by the manufacturers recognized by the Exchange.

(2) The TSR 20 owner shall complete the acknowledgment of inspection consignment prepared by a Designated Inspection Agency, and submit the application for inspection together with the Storage Locality List of TSR 20 (Futures) issued by a Designated Delivery Storage Facility to the Designated Inspection Agency before the creation of the standard warrant and after the load-in.

The Storage Locality List of TSR 20 (Futures) shall specify brand, manufacturer or factory code, load-in time, production date and storage locality, among other information.

If the owner entrusts a person to submit the inspection application, a power of attorney shall be provided. The owner and his proxy are collectively referred to as the “inspection consigner”.

(4) The Designated Inspection Agency shall accept the said application within two (2) days of receipt, and give a timely notice to the inspection consigner.

Article 6 The Designated Inspection Agencies shall carry out sampling inspection of all the TSR 20 goods declared once only and inspect by different batches.

The weight of a single batch for inspection shall not exceed 100.8 metric tons, and those above 100.8 metric tons shall be moved into another batch. The TSR 20 in each batch shall come from the same bill of lading if any.

Article 7 The Designated Inspection Agencies shall determine the sampling date after acceptance of the inspection application and notify the inspection consigner of the date.

Article 8 The Designated Inspection Agencies shall check whether the acknowledgment of inspection consignment and the Storage Locality List of TSR 20 (Futures) are consistent with the goods on the spot. If it is really the case, the inspectors will determine the inspection batches. Otherwise, the inspectors will terminate the inspection, for which the inspection consigner shall be held liable.

Article 9 The inspectors shall examine the packaging and appearance of the goods before sampling. If the packaging of the rubber block is found failing to meet the requirement of compact packaging, or is in abnormal conditions such as water-logging and pollution, the inspectors may terminate the inspection, for which the inspection consigner shall be held liable.

Article 10 If the packaging and appearance of the goods are normal, the inspectors can conduct sampling.

At load-in inspection (initial inspection), the pallets on which the TSR 20 goods will be unpackaged shall take up 10 percent of the total number of pallets per batch (If the number of pallets is non-integer, round up to the nearest integer). The inspectors will select two rubber blocks from the unpackaged TSR 20 goods on each pallet for appearance inspection. The two blocks will be weighted, with one for sampling.

At inspection of loaded-in TSR 20 (re-inspection), the pallets on which the TSR 20 goods will be unpackaged shall take up five percent of the total number of pallets per batch (If the number of pallets is non-integer, round up to the nearest integer). The inspectors will select four rubber blocks from the unpackaged TSR 20 goods on each pallet for appearance inspection. The four blocks will be

weighted, with two for sampling.

Article 11 The total net weight of samples taken from each inspection batch shall not exceed ±0.5% of the total weight, and the outer packaging shall meet the compact packaging requirement for pallets. The net weight of each rubber block is 35 kg, wrapped in polyethylene film. The rubber block to be measured will be deemed as conform to the requirements if its weight range is within ±3% of the standard weight.

(1) When sampling, the inspectors shall cut an experimental sample of about 150 g at the shortest parallel side of each block and perpendicular to the largest surface, and cut another experimental sample of about 150 g from the opposite angle with the same method; or cut two experimental samples with each weighing about 150 g from any opposite angle.

(2) When testing the properties mentioned in the TSR 20 quality standards (see the table in Appendix 1), the inspectors shall use the composite laboratory samples and test them with the inspection methods set forth in the table of Appendix 1.

(3) To test the properties mentioned in the TSR 20 quality standards (see the table in Appendix 1), the samples shall be kept for at least six months.

Article 12 After the inspection is completed, the Designated Delivery Storage Facilities shall put the inspected goods back to the original storage locality and package them simply like before to avoid contamination.

Chapter 3 Inspection Report

Article 13 The Designated Inspection Agencies shall issue an inspection report within five (5) working days after the end of the on-site sampling.

Article 14 The Designated Inspection Agencies shall issue the inspection report in Chinese and English according to the requirements of the consigner (Refer to Appendix 2 for the report format). The report number shall be unique.

Article 15 The composite prepared for the TSR 20 of each inspection batch shall be deemed acceptable if the test result of each property mentioned in the quality standards conforms to the requirements of Appendix 1.

Chapter 4 Supplementary Provisions

Article 16 Matters not provided in these Rules shall refer to the Articles of Association, the General Exchange Rules and other implementing rules of the Exchange.

Article 17 The Designated Inspection Agencies (joint) of the Exchange reserve the right to interpret these Rules.

Article 18 These Rules shall come into force as of August 5th, 2019 after being filed with the Exchange.

Appendices:

1. TSR 20 (Futures) Quality Standards of the Shanghai International Energy Exchange
2. Inspection Report (Sample)

Appendix 1

Quality Requirements on the TSR 20 of the Shanghai International Energy Exchange

1. The quality of physically delivered TSR 20 shall meet the standards set out by the Exchange.

TSR 20 Quality Standards of the Shanghai International Energy Exchange

Property	Limit	Test Method
Dirt retained on the 45 μm sieve maximum % (mass fraction)	0.16	GB/T 8086
Ash maximum % (mass fraction)	1.0	GB/T 4498.1
Nitrogen content maximum % (mass fraction)	0.6	GB/T 8088
Volatile-matter content maximum % (mass fraction)	0.8	GB/T 24131.1
Initial plasticity (P_0) minimum	30	GB/T 3510
Plasticity retention index (PRI) minimum	40	GB/T 3517

2. TSR 20 underlying each standard warrant shall be registered with the Exchange, accompanied by the corresponding certificate of quality.

3. TSR 20 underlying each standard warrant shall comprise rubber of the same brand, manufacturer (factory), and packaging specification.

Appendix 2

Inspection Report (Sample)

Application No.:

Report No.:

Date:

Consigner:

Product: TSR 20

Place of Origin:

Brand:

Manufacturer/Factory Code:

Bill of Lading No. (if any):

Weight Declared (metric tons):

Manufacturing Date:

Sampling Spot:

Inspection Results:

At the request of the consigner, XX randomly drew typical samples from the goods stored at the under-mentioned place on MM DD, YYYY. The on-site inspection showed that the weight test results **(meet/do not meet)** the standards. The laboratory test results are shown as follows:

Storage Locality No.:

Tested Property (Unit)	Limit	Test Results	Test Method
Dirt (%)	≤0.16		GB/T 8086
Ash (%)	≤1.0		GB/T 4498.1
Nitrogen content (%)	≤0.6		GB/T 8088
Volatile-matter content (%)	≤0.8		GB/T 24131.1
Initial plasticity (P_0)	≥30		GB/T 3510
Plasticity retention index (PRI)	≥40		GB/T 3517

Conclusion: The above test results **(meet/do not meet)** the quality requirements of the Shanghai International Energy Exchange on the TSR 20 futures contracts.

Signature of the Designated Inspection Agency

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上海市浦东新区浦电路500号 200122

www.shfe.com.cn www.ine.cn 800-820-3618