**Offset Paper Futures and Options Contract Trade Operations Manual**

**2025**

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**OFFSET PAPER FUTURES AND OPTIONS**

**TRADING HANDBOOK**

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# OFFSET PAPER FUTURES

## Offset Paper at A Glance

Offset printing paper (also known as “uncoated woodfree paper (UWP)”) is widely used in books, textbooks, magazines, notebooks, and color pictures, making it an important medium for dissemination of culture and knowledge, writing, and printing. As such, it is a major component of the papermaking industry and is closely related to a country’s economic and social development. Indeed, how much offset printing paper is consumed is a key measure of how modern and developed a country is.

### Overview and Classification

China can now produce hundreds of kinds of paper, covering virtually every product type on the market. By purpose of use, paper products are classified into four categories: printing and writing paper, packaging paper, toilet and tissue paper, and specialty paper. Printing and writing paper—an important carrier of information, knowledge, and culture—is further classified into uncoated printing and writing paper (e.g., **offset printing paper**, xerographic copy paper, and writing paper), coated printing paper (e.g., coated woodfree paper), and newsprint paper (Figure 1).

Offset printing paper, made primarily from bleached wood pulp, is the archetypical type of printing and writing paper and the go-to choice for all mainstream books. At present, the vast majority of offset printing paper on the market is the double-sided variety (shortened to “offset paper” in this Handbook); and “offset paper” is the name that the industry usually uses when referring to offset printing paper. According to the China Paper Association (CPA), offset paper accounts for more than half of the uncoated printing and writing paper and around 40% of the printing and writing paper consumed in China.

Offset paper is broadly segmented by quality measures such as grammage (Gram per Square Metre, normally abbreviated as GSM) and brightness. The most common kind of offset paper on the market, widely used for books, periodicals, and office, has a grammage of 60-90 g/m2. Offset paper with a grammage of 25-40 g/m2 is often referred to as lightweight paper (or low-density paper) and ideal for dictionaries. Offset paper rated at 140 g/m2 and above, often called heavyweight offset paper and noted for its high surface smoothness and folding resistance, is mainly used for promotional and advertisement posters, premium product catalogs, meeting invitations, and birthday cards. Paper mills also differentiate offset paper by brightness levels, ranging from bright white and natural white to beige. Typically, the D65 brightness is 95% and above for bright white, between 80% and 85% for natural white, and below 80% for cream.

**Figure 1: Types of Paper**



### Characteristics

Offset paper is made from bleached softwood kraft pulp (BSKP), bleached hardwood kraft pulp (BHKP), or chemi-mechanical pulp (CMP) through a process comprising pulping, forming, dewatering, drying, double-sided sizing, additional drying and calendaring. This process makes the paper suitable for printing and writing. In addition, both sides of the paper are coated with a sizing agent, most of which is starch, to create a hydrophobic layer that produces desirable physical properties such as smoothness and ink absorbency. Offset paper is known for its dimensional stability, uniform ink absorbency, smoothness, tight and opaque texture, and strong water resistance. It is commonly fed into offset and other types of printing machines to produce monochrome or colored paper products.

### Production Process

Papermaking is one of the Four Great Inventions of ancient China. Rudimentary papermaking techniques were already known during the Western Han Dynasty (ca 202 BC to 8 AD). Cai Lun of the Eastern Han Dynasty (25–220 AD) then improved them with raw materials such as tree barks, rags, and fishing nets and processes like shredding, grinding, roasting, and drying. This produced paper suitable for writing and printing and represented the birth of the more modern papermaking techniques. China’s papermaking technology would spread to the Middle East during the Tang Dynasty (618–907 AD) and then to Europe in the 11th century. In 1803, the first papermaking machine was commissioned in the UK by Frenchman Louis-Nicolas Robert, marking the advent of industrial papermaking.

Offset paper has two main production stages: stock preparation and papermaking (Figure 2). In the stock preparation stage, the pulp goes through a blending system, and then fillers and colorants are added. It then undergoes impurity removal and deaeration, followed by the addition of retention aids, strengthen agents, sizing agents, and other chemicals. In the papermaking stage, the pulp is diluted and then screened under pressure before being fed into the headbox of the fourdrinier machine. On the fourdrinier machine, the pulp undergoes forming, pressing, drying, surface sizing, additional drying, calendering, and winding. The finished reels are either rewound and slit into rolls of different specifications, or cut into sheets, then packaged for storage.

**Figure 2: Process Flow for the Offset Paper**

|  |
| --- |
| **Pulp** |
| **Blending system**Adding fillers and colorants |
| **Centrifugal cleaner and deaerator**Removing impurities and air; adding retention aids, strengthen agents, and sizing agents, etc. |
| **Pressure screen**Diluting and screening |
| **Headbox** |
| **Papermaking machine**Forming, pressing, drying, surface sizing, additional drying, calendering, and winding |
| **Rewinder**Rewinding and slitting | **Paper cutter**Cutting |
| **Offset paper rolls** | **Offset paper sheets** |

### Uses

Offset paper has a vast array of end uses, making it an indispensable paper product today. With a larger production and sales volume than any other type of printing and writing paper, it is one of the most common paper types in daily use and widely found in education, business, and daily settings. Most books are printed on offset paper; in fact, offset paper is chiefly used for books, periodicals, and notebooks. According to Sublime China Information (SCI), books accounted for 90% of the offset paper consumed in 2024, followed by periodicals and notebooks at 5% and 3%, respectively.

China is the world’s largest producer and consumer of offset paper, accounting for more than 20% of the global total by both metrics. Since the nationwide roll-out of nine-year compulsory education in 1985, book readership has risen significantly alongside basic education in China. In particular, China’s production of offset paper grew rapidly between 2001 and 2013. After 2013, due to the impact of digital media and the phase-out of outdated capacity, many paper mills that did not meet environmental standards shut down their production lines, leading to a sharp decline in output of low-grade offset paper. However, the capacity for all-wood-pulp offset paper has continued to grow, supported by stable and robust demand in the book market.

### Key Quality Indicators

(1) Grammage and grammage variance

Grammage is the most fundamental property of offset paper and is closely related to several other quality metrics. Grammage indicates the mass of paper per unit area, expressed in grams per square meter (g/m²). Grammage variance, or cross-direction variance, is expressed as a percentage (%) and significantly impacts the post-printing processes. Large variances can not only mean weight shortage, but also lead to printing misalignments, misregistration, paper breaks, and other printing defects, directly affecting paper’s downstream usability. Therefore, setting a reasonable range for grammage variance helps improve quality and consistency in book printing tasks.

(2) Thickness and thickness variance

Thickness is another basic property that substantially affects paper’s printability. This measurement is taken in microns (μm) after applying a specified pressure on each of the two measurement surfaces. Thickness variance, measured in percentage (%), also significantly impacts post-printing processes. Large thickness variances can cause wrinkling, misregistration, paper breaks, and other printing defects.

(3) Opacity

Opacity, measured in percentage (%), is an optical property that indicates the degree by which light is obstructed when it hits the paper surface. Low opacity (i.e., high transparency) can cause images (and text) to blend into each other when printed on both sides, thereby affecting how they look.

(4) Water absorbency (front-back average)

Water absorbency, also known as the Cobb value, is a crucial quality that affects print and writing performance. It is defined as the average amount of water absorbed by both sides of the paper/paperboard per unit area under specified time and environmental conditions, expressed in grams per square meter (g/m²).

(5) Tensile index

Tensile index, measured in Newton-meters per gram (N·m/g), indicates the maximum tension paper can withstand. High-speed printing puts tension on paper in all directions. Tensile strength represents the mechanical strength of paper. A low tensile index means the paper is susceptible to breaking during high-speed printing.

(6) Smoothness (front-back average and front-back difference)

Smoothness measures the surface evenness of paper. Higher smoothness ensures uniform ink transfer, producing clearer images and text. Smoothness (front-back average) is measured in seconds (s), where a higher value indicates a smoother surface. Smoothness (front-back difference) is expressed as a percentage (%). During the quality test of offset paper, both front and back sides are measured for smoothness, with separate standards set for the average and difference of the two sides.

(7) Cross-direction dimensional stability

Cross-direction dimensional stability, measured in percentage (%), indicates the relative change in paper size when the paper is exposed to moisture and drying. This value is often used to indicate the dimensional stability of paper. Paper with good dimensional stability resists deformation and misregistration during printing.

(8) D65 brightness

D65 brightness is a measure of paper’s optical property. Higher D65 brightness implies greater light reflectance but also greater strain to the eye. The national standard GB/T 30130-2023 “Offset Paper” requires D65 brightness be no higher than 90%. But for a more attractive appearance, many books and publications still use paper laced with fluorescent brighteners to achieve a brightness above 95%. In order to strictly adhere to the national standard, protect the vision of students and adults, and encourage reduced use of fluorescent additives in papermaking, SHFE’s offset paper futures contract provides that deliverables must have a “D65 brightness of 80.0–85.0%.”

(9) Cross-direction folding endurance

Cross-direction folding endurance, measured in the number of double folds, refers to how many times the paper can be folded to a specified angle and under a specified load before it breaks. Children’s books usually require a higher folding endurance.

### Green Transition

The paper industry is a strong example of a circular economy. China now has a mostly complete production, trading, and consumption ecosystem supported by renewable raw materials, recyclable products, and recoverable wastes.

Since the start of the 21st century, China has aggressively tackled environmental pollution. Under a rigorous discharge permit system, companies have reduced energy consumption and emissions, phasing out close to 50 million metric tons of outdated output capacity. A series of measures, including severe penalties on unauthorized discharges, have made the paper industry’s reputation as a major polluter a thing of the past.

Following the 18th CPC National Congress, with greater national priority and rising public awareness for environmental issues, China’s paper industry faces higher requirements on going green and low-carbon and recycling. Furthermore, the 20th CPC National Congress has put forward an ambitious plan for building a modern socialist country in all respects, including a directive for faster green transition. On July 31, 2024, the CPC Central Committee and the State Council issued the *Opinions on Accelerating Green Transition in All Areas of Economic and Social Development*, calling for a vigorous push for the green and low-carbon transformation of the paper industry; wider adoption of clean, low-carbon, and energy efficient production technologies and equipment; and the update and upgrade of industrial processes. As a result, the paper industry is now on a fast trajectory of transformation and upgrade, made possible by the development and use of green production technologies that make more efficient use of resources at a lower energy cost and discharge level. For instance, advanced pulping and papermaking techniques and equipment can reduce the creation of wastewater, air pollutants, and solid wastes.

SHFE’s offset paper futures is the world’s first printing and writing paper futures and options. SHFE will be committed to supporting national green initiatives by establishing institutional arrangements that encourage the industry to fully engage in the green and circular economy. In particular, in selecting deliverable brands the SHFE gives precedence to companies with green certifications. This and other measures will promote industry transformation and upgrade, thereby helping China achieve its carbon peaking, carbon neutrality, and green development goals.

## International and Domestic Offset Paper Markets

### International Market

**(1) Production**

Global production of offset paper for books, periodicals, and textbooks totaled approximately 45.72 million metric tons in 2023, down 5.1% year-on-year and accounting for 11.2% of the paper and paperboard produced that year. Between 2014 and 2023, the rise of digital media only had a moderate impact on offset paper as opposed to newsprint paper and coated woodfree paper. However, falling volume of commercial printing jobs such as advertisement inserts and brochures contributed to an annual production decline of 1.6% for offset paper over the period (Figure 3).

**Figure 3: Global Production of Newsprint, Offset, and Coated Woodfree Paper, 2014–2023**

Unit: 1,000 mt

The relative output level of each continent was mostly unchanged in recent years. Asia, in particular China, Indonesia, and Japan, was the largest producer of offset paper in 2023, representing 66.2% of the global output. It was followed by Europe (most prominently Germany, Sweden, and Finland) at 15.6%, North America at 10.1%, and South America and other regions at 8.1% (Figure 4).

**Figure 4: Global Production of Offset Paper by Region, 2023**

**(2) Consumption**

The global consumption of offset paper—for books, periodicals, and textbooks—totaled approximately 45.55 million metric tons in 2023, down 5.1% year-on-year and accounting for 11.1% of the paper and paperboard consumed that year (Figure 5).

**Figure 5:** **Global Production of Newsprint, Offset, and Coated Woodfree Paper, 2014–2023**

The relative consumption volume of each continent was also mostly constant from 2014 to 2023. Specifically, Asia (notably China, India, Japan, Vietnam, and South Korea) was the largest consumer in 2023 at 61.4% of the global total. It was followed by Europe (mostly Germany, Sweden, Spain, Finland, and Norway) at 15.1%, North America at 10.7%, and South America and other regions at 12.8% (Figure 6).

**Figure 6:** **Global Apparent Consumption of Offset Paper by Region, 2023**

### Domestic Market

**(1) Production**

According to CPA, China has been the world’s largest producer of uncoated printing and writing paper (the majority of which is offset paper) since 2009 after surpassing the United States. In 2024, China produced 18.45 million metric tons of it, making up 70.4% of its total printing and writing paper output and 13.5% of its total paper and paperboard output. This makes uncoated paper the third-largest paper category in China, behind only containerboard and corrugating medium. About 70% of this paper is suitable for offset printing, and the 60-90 g/m² grade, used for books, periodicals, magazines, textbooks, and office supplies, comprises roughly 70% of the total volume of offset paper produced.

In 2024, China produced approximately 9.48 million metric tons of offset paper, accounting for 51.4% of its uncoated printing and writing paper and 6.9% of its total paper and paperboard output. The output capacity for printing and writing paper has been growing in China in recent years, especially among the industry leaders. SCI reports that between 2019 and 2024, output capacity for offset paper has been growing at an average annual rate of 6.8% from 11.74 to 16.52 million metric tons. However, this increase did not translate into actual output, as capacity utilization has been trending down (Figure 7).

**Figure 7: China’s Output Capacity, Output, and Capacity Utilization for Offset Paper, 2019–2024**

Source: SCI

Average monthly production of offset paper in China over the past three years (2022–2024) was 781,000 metric tons (Figure 8). This production shows seasonal patterns, with output scaling back around February due to the Spring Festival, and peaking during March-April and September-November—which are the contract bidding and delivery months for textbooks and study guides for the spring and autumn semesters (somewhat delayed in 2021). But with steady growth in adult readership in recent years and rising popularity of educational, lifestyle, science fiction books, offset paper production remains mostly stable from month to month.

**Figure 8: Monthly Production of China’s Offset Paper, 2019-2024**

In China, offset paper is mainly produced in the economically well-developed coastal provinces in East China, Central China, and South China. Specifically, Shandong, Guangdong, Jiangsu, Guangxi, and Henan collectively account for over 70% of the national production capacity. With its vast forest areas, proximity to Guangdong and other major markets, and strong policy support for the paper industry in recent years, Guangxi is poised to become one of China’s leading production hubs for offset paper.

**(2) Consumption**

China’s apparent consumption of offset paper has overall been growing in recent years (Figure 9). Production slightly exceeds consumption, but their trends are largely aligned. Most consumption attributes to the economically developed and densely populated regions in North China, East China, and South China. Guangdong, Zhejiang, Shandong, Hebei, and Beijing are the top five consumers of publishing and printing paper, collectively accounting for 48.7% of the national total. Due to its proximity to Beijing—China’s cultural center—Hebei consistently ranks among the top five provinces by offset paper consumption (Table 1); this is best exemplified by Langfang, Hebei, home to a vast number of printing companies.

**Figure 9: China’s Apparent Consumption of Offset Paper, 2019–2024**

**Table 1: Publishing and Printing Paper Consumption in Major Chinese Provinces and Cities, 2023**

|  |  |  |
| --- | --- | --- |
| **Region** | **Consumption (1,000 reams)** | **Share of National Total (%)** |
| Guangdong | 46,659 | 12.9 |
| Shandong | 38,444 | 10.6 |
| Hebei | 31,226 | 8.6 |
| Zhejiang | 29,851 | 8.2 |
| Beijing | 28,890 | 8.0 |
| Jiangsu | 27,559 | 7.6 |
| Henan | 16,737 | 4.6 |
| Hubei | 16,536 | 4.6 |
| Hunan | 15,911 | 4.4 |
| **Total** | **362,671** |

Source: *China Statistical Yearbook 2024*, National Bureau of Statistics

In the book segment, according to the *2021 Report on the News and Publishing Industry* from the National Press and Publication Administration, China had 587 publishing houses at the end of 2021, consisting of 220 central-level publishers and 367 local publishers. In 2021, China produced 11.86 billion copies (sheets) of books, up 14.4% year-on-year, with a total printing volume of 106.59 billion sheets.

By category, book printing reached 7.52 billion copies (sheets) in 2021, accounting for 63.5% of the total printed publications. This comprised 7,170 million books (sheets) on social sciences and humanities, 320 million books (sheets) on science and technology, and 30 million books (sheets) on general topics, representing 60.6%, 2.7%, and 0.3% of the total, respectively. For textbooks, 4.32 billion copies (sheets) of were printed in 2021—36.5% of the total printed publications. This total included 1.88 billion copies (sheets) of middle school textbooks and 1.95 billion copies (sheets) of elementary school textbooks, accounting for 15.9% and 16.5% of the total printed publications, respectively (Figure 10).

**Figure 10: Publication of Books and Textbooks in China, 2021**

Source: *2021 Report on the News and Publishing Industry*, National Press and Publication Administration

In the periodical segment, 10,185 periodical titles were published nationwide in 2021, totaling 2.009 billion copies, 11.897 billion sheets, and RMB 21.733 billion in suggested retail price. Among them:

* Philosophy and social sciences: 1,040 million copies (52.0%)
* Culture and education: 480 million copies (24.1%)
* Literature and art: 100 million copies (5.0%)
* Natural sciences and technology: 250 million copies (12.3%)
* General topics: 130 million copies (6.6%)

Across all categories there was a sharper decline in total publication volume. Philosophy/social sciences and culture/education periodicals showed the smallest decline, raising their relative market share. Literature and art periodicals continued to experience significant print reductions with decreasing shares. General topic periodicals achieved growth in both print volume and market share.

**3. Import and export**

In 2020, Chinese import for offset paper soared 162.9% year-on-year to 920,000 metric tons, owing to an influx of overseas products resulting from demand shock in international markets. In 2021, imports by China hit a record of 1.069 million metric tons as overseas mills, for cost and profit reasons, tried to take advantage of the relatively high market price in China. From 2022 to 2024, imports have fallen amid price decline in China and recovery of overseas demand.

China’s export of offset paper has shown overall growth in recent years due to a cost advantage relative to the neighboring countries benefited from domestic paper manufacturers’ accelerated integration of forestry, pulp and paper industries (Figure 11).

**Figure 11: China’s Import and Export Volumes of Offset Paper, 2019–2024**

Source: General Administration of Customs

## Price Fluctuations and Influencing Factors

### Pricing Model

The paper industry is highly market-driven and prices vary greatly across different products. Costs, profit margin, market demand, and quality difference all have an impact on manufacturer pricing. Companies will also adjust the price based on market changes when and as needed.

Cost determines the price floor. Pricing starts with the marginal cost (covering the price of raw materials and utilities, etc.) then the average fixed costs (e.g., wages, depreciation, and administrative and operational expenses). This gives the total unit cost, to which the expected profit margin is added to arrive at the final price. For offset paper, pulp and energy account for around 70% and 10–20% of the overall production cost.

### Pricing Factors

**1. Macroeconomy**

Empirical studies show a strong positive correlation between GDP and national paper consumption and between overall education level and offset paper consumption. At the founding of the People Republic of China in 1949, the literacy rate was as low as 20% and per capita paper consumption was a mere 0.5 kg. Today, Chinese adults read an average of 4.7 paper books a year, with a reading rate of 59.5%. Paper consumption is closely related to the national economy and cultural sophistication.

**2. Changes in global reading habits**

Fast, recent advances in computers and mobile devices, coupled with a growing awareness for energy efficient and environmental lifestyles, have spurred a global interest in paperless reading and paperless office, with significant impact on the demand for offset paper. In particular, information technologies can readily fill the role of newsprint paper in today’s digital era, fueling a paperless revolution. Migrating routine office work, government documents exchange, and public administration services to networked computers has also greatly reduced the use of paper and other printing and copying supplies. Despite this, the offset paper market still shows strong resilience, thanks to the unique reading experience and emotional value provided by physical books, as well as a persistent demand for children’s books and textbooks. The shift in global consumption habits may have a fundamental, long-term impact on offset paper prices.

**3. Supply-demand dynamics**

China’s paper industry has expanded rapidly since 2000. Indeed, China became the world’s second-largest consumer of paper and paperboard in 2004, and surpassed the former leader—the United States—in 2009. Most of the growth in output capacity and demand for offset paper is coming from the Asia-Pacific region, and from China in particular due to the rising standards of living. The supply-demand situation in China is the most fundamental determining factor of offset paper prices.

**4. Cost of pulp and other raw materials**

The primary raw material for offset paper is bleached chemical wood pulp, with fibers constituting about 70% of the production cost. But depending on the desired product quality, which is controlled by the relative proportion of BSKP and BHKP, some companies also use recycled office paper. Chemical wood pulp is primarily made from CMP and BHKP, therefore their price has a major impact on the production cost of offset paper. Other inputs include coal and other raw materials, whose price has been highly volatile in recent years. As a result, they make up a rising share of the total production cost and are becoming the latest key pricing factors.

**5. National policies**

Following the 18th CPC National Congress, China has established and amended a series of environmental laws, regulations, policies, and normative documents to reflect a greater priority on environmental protection and rising environmental awareness. The implementation of the “Three Cuts, One Lower, and One Strengthen” policy in 2016—which calls for cutting excess capacity, reducing excess inventory, deleveraging, lowering costs, and strengthening areas of weakness—along with stricter environmental policies, compelled many of the smaller paper mills to retire outdated capacities, causing a short-term price shock in the offset paper market. In 2021, the government instituted policies to rein in the amount of school homework and after-school tutoring. This affected both the education publishing and paper industries, resulting in decreased sales of study guides and, as a result, a fall in offset paper prices.

## Offset Paper Futures Contract of the Shanghai Futures Exchange

### Contract Specifications

|  |  |
| --- | --- |
| Product | Offset Paper |
| Contract Size | 40 metric tons/lot |
| Price Quotation | RMB yuan/metric ton |
| Minimum Price Fluctuation | 2 yuan/metric ton |
| Daily Price Limit | Within 4% of the settlement price of the preceding trading day |
| Listed Contracts | Monthly contract for the most recent 12 months |
| Trading Hours | 9:00 a.m. to 11:30 a.m., 1:30 p.m. to 3:00 p.m., and other hours specified by SHFE |
| Last Trading Day | 15th day of the contract month (postponed accordingly if it is a legal holiday in China and subject to separate adjustment and announcement by SHFE if it falls in the Spring Festival month or another month specially designated by SHFE) |
| Delivery Period | Two consecutive business days after the last trading day |
| Grade and Quality Specifications | Offset paper with a grammage of 65 g/m2, 70 g/m2, 75 g/m2, or 80 g/m2, with quality specifications meeting or exceeding the requirements under GB/T 30130-2023 “Offset Paper” (see appendix for details) |
| Delivery Venue | Delivery venues designated by SHFE |
| Minimum Trading Margin | 5% of contract value |
| Settlement Type | Physical delivery |
| Delivery Unit | 40 metric tons |
| Contract Symbol | OP |
| Listing Exchange | Shanghai Futures Exchange (SHFE) |

### Contract Appendix

**I. Delivery Unit**

The contract size for offset paper futures is 40 metric tons per lot; the delivery unit is 40 metric tons per standard warrant. Delivery should be made in integral multiple(s) of the delivery unit.

**II. Quality Standards**

1. Offset printing paper intending for physical delivery should be double-sided offset paper (“offset paper”) with a grammage of 65 g/m2, 70 g/m2, 75 g/m2, or 80 g/m2; thickness of 82 μm, 88 μm, 94 μm, or 100 μm; and grammage variance, thickness variance, opacity, water absorbency (front-back average), tensile index, smoothness (front-back average), smoothness (front-back difference), and cross-direction dimensional stability meeting or exceeding the specifications for “Premier” grade under GB/T 30130-2023 “Offset Paper”; a D65 brightness of 80.0–85.0%; and cross-direction folding endurance meeting or exceeding the specification for “Qualified” grade.

2. Deliverable offset paper rolls with a width of 780 mm, 787 mm, 880 mm, or 889 mm should have a dimensional variance no higher than ±3 mm.

3. The offset paper underlying each standard warrant must be commodity certified by SHFE.

4. The offset paper underlying each standard warrant should consist of commodity of the same manufacturer, brand, grammage, and width, and have dates of production spanning no more than 15 consecutive days.

5. The weight in a delivery of offset paper is as indicated on the packaging label. Weight tolerance corresponding to each standard warrant should not exceed ±1.5%. Each standard warrant should indicate the weight of the commodity and the number of rolls.

**III. Certified Commodities**

Offset paper intended for physical delivery must be commodity certified by SHFE. The list of certified manufacturers and brands will be separately determined and announced by SHFE.

**IV. Delivery Storage Facilities**

The list of Delivery Storage Facilities and the premiums and discounts applied to delivery storage facilities at different locations will be separately specified and announced by SHFE.

## Highlights of the Offset Paper Futures Rules of the Shanghai Futures Exchange

The optimized rules of the Shanghai Futures Exchange came into effect on October 23, 2024.

This round of optimization restructured the secondary rules according to the framework of “administrative measures + product rules.” Administrative measures contain the general principles and requirements that are applicable to all products (See the SHFE website: Services → Rules → SHFE Rules); product rules contain specific provisions on the trading, delivery, risk control, hedging, and arbitrage trading of each particular product.

The main structure and key provisions of the *Offset Paper Futures Rules of the Shanghai Futures Exchange* are summarized below.

**(I) Rule structure**

**(II) Delivery modes**

Offset paper futures contracts may be physically delivered through an Exchange of Futures for Physicals, a delivery warehouse, or a delivery factory.

**(III) Quality requirements**

See the *Offset Paper Futures Contract of the Shanghai Futures Exchange* for the grade and quality specifications for deliverables.

**(IV) Packaging requirements**

1. The offset paper underlying each standard warrant should consist of commodity of the same manufacturer, brand, grammage, and width, and have dates of production spanning no more than fifteen (15) consecutive days. The earliest of such dates is taken as the date of production on the standard warrant.

2. Deliverable offset paper should be packaged in rolls and meet the packaging requirements for commodities certified by SHFE. Each roll of offset paper intended for delivery should have a reel diameter of 1,050 ± 50 mm and a core diameter of 76 ± 0.5 mm. The outer packaging should have a conspicuous identification label indicating such information as the product name, weight, and specifications.

3. Offset paper intended for delivery should have a uniform fiber distribution and flat surface, free from folds, wrinkles, damage, holes, light spots, tears, stains, sand, hard lumps, obvious felt marks, fish scale marks, pinholes visible against a light source, or loose powder or lint.

4. The offset paper that, for the purpose of delivery, undergoes testing in the same inspection lot should have uniform color without noticeable color difference, with ΔE no higher than 2.0. Offset paper intended for delivery should have no more than one sheet break per roll. Splices must be securely joined by adhesives and clearly marked.

**(V) Required documentations for deliverables**

1. Domestic commodity: the certificate of inspection issued by a Designated Inspection Agency and other relevant materials.

2. Imported commodity: the certificate of inspection issued by a Designated Inspection Agency; the customs declaration form, certificate of VAT withholding by the customs, bill of lading, and certificate of quality corresponding to the imported commodity; and other relevant materials. These documents need to be validated by SHFE.

**(VI) Delivery unit**

Offset paper futures is 40 metric tons per contract. The delivery unit is 40 metric tons per standard warrant. Delivery should be made in integral multiple(s) of the delivery unit.

**(VII) Final settlement price**

The benchmark price for delivery settlement of an offset paper futures contract is the arithmetic average of the settlement prices of the contract on the last five (5) trading days on which it has been executed.

**(VIII) Load-in and load-out inspection**

1. Offset paper arriving at a delivery warehouse should be inspected for quality by a Designated Inspection Agency. The quality indicated on the quality inspection report issued by the Designated Inspection Agency is conclusive; a standard warrant may be issued only if inspection indicates that the commodity meets the quality specifications prescribed by SHFE. The owner should ensure that the commodity loaded in meets the quality specifications established by SHFE.

2. Quality tests should be conducted by the sampling method. Samples should be taken only within the delivery warehouse and not at stations, docks, or any other mid-transit stages. Up to 120 metric tons of commodity form one inspection lot; any unit above 120 metric tons should be divided into multiple inspection lots. The offset paper in each inspection lot should be of the same manufacturer, brand, and grammage, and have dates of production spanning no more than 15 consecutive days. The earliest of such dates will be taken as the date of production for the inspection lot.

3. The delivery warehouse is to provide cooperation during an inspection by the Designated Inspection Agency, and should double-check the number and weight of offset paper packages loaded in and out.

**(IX) Validity period of standard warrants**

1. Warehouse standard warrants

Domestically produced offset paper intended for physical delivery: The offset paper should be loaded in within three months of its date of production. The standard warrant is valid till December 31 if the date of production is on or before June 30, and till June 30 of the next year if it is on or after July 1. Standard warrants beyond the validity period will be cancelled, with the corresponding commodity converted to spot goods.

Imported offset paper intended for physical delivery: The offset paper should be loaded in within three months of its port arrival date. The standard warrant is valid till December 31 if the arrival date is on or before June 30, and till June 30 of the next year if it is on or after July 1. Standard warrants beyond the validity period will be cancelled, with the corresponding commodity converted to spot goods.

2. Factory standard warrants

The delivery validity period for a factory standard warrant is 12 months from the date of issuance; factory standard warrants beyond this validity period may not be used in futures delivery. The owner should, before a factory standard warrant expires, either apply for taking delivery or convert the factory standard warrant into a bill of lading for spot goods, and then cancel the factory standard warrant. Following the expiration of a factory standard warrant, the corresponding commodity will be converted into spot goods and the factory standard warrant will be cancelled automatically. The method of take-delivery should be jointly determined by the factory and the owner.

**(X) Application to issue factory standard warrants**

Before issuing any factory standard warrants, a factory should submit an issuance notice to SHFE, specifying such information as the product, name of the carrying Member, name of the owner, the quantity of standard warrants to be issued, the commodity brand, and the take-delivery location.

**(XI) Application for taking delivery with factory standard warrants**

1. An owner who intends to take delivery should submit an application through the Standard Warrant Management System to the intended factory before the 20th day of the month preceding the proposed take-delivery month. The application should specify such information as the grammage, width, and quantity of the commodity; the proposed take-delivery date, method, and plan (including daily quantity); and the identification and contact information of the delivery taker.

2. The factory will confirm the owner’s application within three business days of receiving it based on, among others, the owner’s proposed grammage, width, take-delivery date, and take-delivery plan.

If the owner’s proposed take-delivery date coincides with that of other owners holding factory standard warrants and their total daily take-delivery quantity exceeds the daily shipment quantity of the factory, then the factory may make an overall arrangement for shipment considering the order of their submission of applications and their take-delivery plans. The factory should also provide the owner with a take-delivery time period to choose from and a corresponding shipment plan (including daily shipment quantity) within three business days after the owner’s submission of application.

If agreeing to the arrangement, the owner may choose one day from the said period as the take-delivery date and confirm the shipment plan. If not, the owner may renegotiate with the factory until they agree on a take-delivery date and a shipment plan. If the negotiation fails, the factory should ship the commodity in the order of take-delivery dates; if the take-delivery dates fall into the same day, the factory should ship the commodity in the order of the applications.

**(XII) Resolution of quality disputes**

A delivery taker who questions the quality of any delivered commodity (said commodity should be stored at the take-delivery location of the Factory) should submit a written objection to SHFE, accompanied by the quality inspection results issued by a Designated Inspection Agency, within twenty (20) business days following the cancellation of corresponding warrants, or be deemed to have no objection over the delivered commodity and SHFE will no longer handle any objection regarding any commodity thus delivered.

**(XIII) Required trading margin over the lifecycle of a contract**

|  |  |
| --- | --- |
| **Stage of Trading** | **Trading Margin** |
| As of listing | 5% |
| As of the first trading day of the month before the delivery month | 10% |
| As of the first trading day of the delivery month | 15% |
| As of the second trading day before the last trading day | 20% |

**(XIV) Percentage-based position limit and fixed-amount position limit over the lifecycle of a contract**

**Relative and Absolute Position Limit for an Offset Paper Futures Contract over Its Lifecycle (Unit: Lot)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Product | From the date of listing to the delivery month | From the date of listing to the last trading day of the second month before the delivery month | The month before the delivery month | The delivery month |
| Open interest in a particular contract (lots) | Percentage-based position limit (%) | Open interest in a particular contract (lots) | Percentage-based position limit (%)Fixed-amount position limit (lots) | Fixed-amount position limit (lots) | Fixed-amount position limit (lots) |
| FF Member | Non-FF Member | Client | Non-FF Member | Client | Non-FF Member | Client |
| Offset paper | ≥ 25,000 | 25 | ≥ 25,000 | 10 | 10 | 500 | 500 | 100 | 100 |
| < 25,000 | 2,500 | 2,500 |

Note: Open interest and the fixed-amount position limit are single-counted (long or short but not both).

**Annexes**

**I. Certified Commodities for SHFE Offset Paper Futures**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Country** | **Enterprise** | **Trademark** | **Producer** | **Place of Production** |
| 1 | China | Shandong Sun Paper Industry Joint Stock Co., Ltd. | Tian Yang | Shandong Sun Paper Industry Joint Stock Co., Ltd. | Jining, Shandong |
| Guangxi Sun Paper Board Co., Ltd. | Beihai, Guangxi |
| 2 | China | Yueyang Forest & Paper Co., Ltd. | Yue Yang Lou | Yueyang Forest & Paper Co., Ltd. | Yueyang, Hunan |
| 3 | China | Shandong Huatai Paper Industry Shareholding Co., Ltd. | Huatai Mu Dan | Shandong Huatai Paper Industry Shareholding Co., Ltd. | Dongying, Shandong |
| Guangdong Huatai Paper Co., Ltd. | Jiangmen, Guangdong |
| 4 | China | Asia Symbol (Shandong) Pulp and Paper Co., Ltd. | Aria | Asia Symbol (Shandong) Pulp and Paper Co., Ltd. | Rizhao, Shandong |
| 5 | China | Asia Symbol (Guangdong) Paper Co., Ltd. | Aria | Asia Symbol (Guangdong) Paper Co., Ltd. | Jiangmen, Guangdong |
| 6 | China | Shandong Bohui Paper Industry Co., Ltd. | Swan | Shandong Bohui Paper Industry Co., Ltd | Zibo, Shandong |
| 7 | China | Shandong Yinhe Ruixue Paper Co., Ltd. | YINHE RUYI | Shandong Yinhe Ruixue Paper Co., Ltd. | Liaocheng, Shandong |
| YinHe LuckySnow |
| 8 | China | Nine Dragons Paper (Beihai) Co., Ltd. | Hai Long | Nine Dragons Paper (Beihai) Co., Ltd. | Beihai, Guangxi |
| 9 | China | Liansheng Pulp & Paper (Zhangzhou) Co., Ltd. | Liansheng Lan Ye | Liansheng Pulp & Paper (Zhangzhou) Co., Ltd. | Zhangzhou, Fujian |
| 10 | China | Puyang Longfeng Paper Co., Ltd. | Feng Ying | Puyang Longfeng Paper Co., Ltd. | Puyang, Heinan |

**II. Delivery Warehouses for SHFE Offset Paper Futures**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Warehouse** | **Region** | **Storage Address** | **Approved Storage Capacity (1,000 mt)** |
| 1 | Xiamen C&D Warehousing Co., Ltd. | Tianjin | 1 Huaran Road, Huaming Street, Dongli District, Tianjin | 10 |
| Jiaxing, Zhejiang | 3889 Hangzhou Bay Road, Xitangqiao Street, Haiyan County, Jiaxing City, Zhejiang Province | 10 |
| Hai’an, Jiangsu | 211 Yaochi Road, Chengdong Town, Hai’an City, Jiangsu Province | 10 |
| 2 | Qingdao Sinotrans Supply Chain Management Co., Ltd. | Weifang, Shandong | 786, Row 7, 888 Gao’er Road, Weifang Comprehensive Bonded Zone, Weifang City, Shandong Province | 10 |
| Qingzhou, Shandong | 1238 Linglongshan North Road, Qingzhou City, Shandong Province | 10 |
| 3 | XMXYG Superchain Supply Chain Development Co., Ltd. | Tianjin | 201 Haitie Road, Tanggu Xingang Street, Binhai New Area, Tianjin | 10 |
| 4 | Zhejiang Publishing Printing Materials Group Co., Ltd. | Hangzhou, Zhejiang | 3F, Building 9, 369 Wenhai North Road, Qiantang District, Hangzhou City, Zhejiang Province | 5 |
| Total | 65 |

**III. Group Delivery Centers for SHFE Offset Paper Futures**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Group Delivery Center** | **Type** | **Warehouse** | **Region** | **Storage Address** | **Approved Storage Capacity (1,000 mt)** |
| 1 | CMST Development Co., Ltd. | Group Delivery Warehouse | CMST Tianjin Land Port Logistics Co., Ltd. | Tianjin | 9 Lugang Yiwei Road, Tianjin LandPort Logistical Equipment Industrials Park, Beichen District, Tianjin | 15 |
| Group Delivery Warehouse | CMST Qingzhou Logistics Co., Ltd. | Qingzhou, Shandong | 638 Linglongshan North Road, Qingzhou City, Shandong Province | 10 |
| 2 | COSCO Shipping Logistics & Supply Chain Management Co., Ltd. | Group Delivery Warehouse | COSCO Shipping Logistics Nantong Co., Ltd. | Nantong, Jiangsu | 1-1 Tuanjie East Road, Development Zone, Nantong City, Jiangsu Province | 10 |
| 3 | Shandong Port Group Co., Ltd. | Group Delivery Warehouse | Qingdao Port International logistics Co., Ltd. | Qingdao, Shandong | 21 Taohe Road, SCO Demonstration Zone, Jiaozhou City, Shandong Province | 10 |
| Total |  | 45 |

**IV. Delivery Factories for SHFE Offset Paper Futures**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Region** | **Factory** | **Daily Shipment Quantity (mt/day)** | **Take-Delivery Address** | **Approved Storage Capacity (1,000 mt)** |
| 1 | Hunan | Yueyang Forest & Paper Co., Ltd. | 1,000 | 001 New Port Intermodal Logistics Park, Changjiang Street West, Yueyang Area, China (Hunan) Free Trade Pilot Zone | 30 |
| 2 | Shandong | Shandong Bohui Paper Industry Co., Ltd. | 800 | North End, Gongye Road, Maqiao Town, Hengtai Country, Zibo City, Shandong Province | 30 |
| 3 | Shandong | Shandong Sun Paper Industry Joint Stock Co., Ltd. | 1,000 | 1 Youyi Street, Yanzhou District, Jining City, Shandong Province | 15 |
| 4 | Guangxi | Guangxi Sun Paper Board Co., Ltd. | 1,000 | 888 Haisi Street Dong Road, Xinggang Town, Tieshan Port District, Beihai City, Guangxi Zhuang Autonomous Region | 15 |
| 5 | Shandong | Shandong Huatai Paper Industry Shareholding Co., Ltd. | 1,000 | 251 Weigao Road, Dawang Town, Guangrao Country, Dongying City, Shandong Province | 15 |
| 6 | Guangdong | Guangdong Huatai Paper Co., Ltd. | 500 | Shuangshui Town Industrial Park, Xinhui District, Jiangmen City, Guangdong  | 5 |
| 7 | Guangxi | Ning Dragons Worldwide (China) Investment Group Co., Ltd. | 1,000 | 99 Gangzhong Road, Xinggang Town, Tieshan Port District, Beihai City, Guangxi Zhuang Autonomous Region | 20 |
| 8 | Fujian | Liansheng Pulp & Paper (Zhangzhou) Co., Ltd. | 1,000 | 288 Xiating, Tingli Village, Chihu Town, Zhangpu County, Zhangzhou City, Fujian Province | 20 |
| 9 | Zhejiang | Xiamen C&D Paper & Pulp Group Co., Ltd. | 800 | 3889 Hangzhou Bay Road, Haiyan County, Jiaxing City, Zhejiang Province | 25 |
| 10 | Shandong | Xiamen ITG Paper Corp., Ltd. | 800 | 638 Linglongshan North Road, Qingzhou City, Weifang City, Shandong Province | 25 |
| Total | 200 |

**V. Designated Inspection Agencies for SHFE Offset Paper Futures**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Name | Office Address | Contact | Telephone |
| 1 | Sinolight Paper Inspection & Certification Co., Ltd. | 4 Qiyang Road, Wangjing, Chaoyang District, Beijing | Lv Xia | 13671000086 |
| Li Na | 15910835280 |
| 2 | Shanghai Customs Industrial Products and Raw Material Testing Technology Center | 1208 Minsheng Road, Pudong District, Shanghai | Ma Tengzhou | 13564737997 |
| Tao Haihua | 13764173785 |
| 3 | Qingdao Customs Technology Center | 83 Xinyue Road, Chengyang District, Qingdao City, Shandong Province | Zhang Yan | 15105327551 |
| Gao Yonggang | 13210266953 |
| 4 | China Certification & Inspection Group Shandong Co., Ltd. | 85 Fuzhou Nan Road, Qingdao City, Shandong Province | Sun Naiyu | 13805325759 |
| Li Zhenqian | 13793237088 |
| 5 | Shanghai CMST Material Inspection Co., Ltd. | 489 Tieshan Road, Baoshan District, Shanghai | Song Yihua | 13585515287 |
| Yu Sheng | 17721193939 |

## Offset Paper Options

## History of Options

Researchers found that options trading can be traced back to as early as 1200 BC, to the maritime trades of ancient Greeks and Phoenicians. It then saw widespread use in tulip trades in the early 17th century. However, because of the lack of regulation and any form of performance guarantee, many investors suffered heavy losses when the market collapsed.

In 1872, the renowned financier Russell Sage invented over-the-counter (OTC) trading of options in the United States. In 1932 following the wheat market crash at the Chicago Board of Trade (CBOT), the U.S. banned all exchange-traded and OTC options on commodities through the Commodity Exchange Act of 1936, effectively halting the growth of the options market. In 1973, as the U.S. shifted its stance on options and under the organization of the CBOT, the Chicago Board Options Exchange (CBOE) was established, signaling the birth of a unified, standardized, and well-regulated options market. To avoid another Tulip Mania, CBOE established a dedicated clearing organization that significantly reduced the likelihood of seller default.

The success of the U.S. options market encouraged other countries to build their own. The Sydney Stock Exchange unveiled options contracts in February 1976. Shortly after its creation in 1978, the European Options Exchange (now known as Euronext Amsterdam following a series of mergers) launched an options clearing center in partnership with the options and stock exchanges in Sydney and Chicago. The trading of stock options soon spread across Europe. Exchanges in Brussels, Geneva, Basel, and Zurich, as well as the London International Financial Futures and Options Exchange (LIFFE), soon launched options on stocks, bonds, and currencies, spurring a rapid growth of the options market. While financial options markets were flourishing worldwide, CBOT, the Chicago Mercantile Exchange (CME), and the New York Mercantile Exchange (NYMEX) introduced options on agricultural, energy, and other commodities. This represented a significant step forward by the commodity options market.

With the establishment of options markets in the U.S., the U.K., Japan, Canada, Singapore, the Netherlands, Germany, Australia, Hong Kong SAR, and beyond, the range of underlying has expanded from a single stock to nearly 100 products covering commodities, financial securities, currencies, and gold and silver, creating a vibrant global options market.

## Offset Paper Option Contract of the Shanghai Futures Exchange

|  |  |
| --- | --- |
| Underlying Asset | Offset Paper Futures (OP) contract (40 metric tons) |
| Contract Type | Call option and put option |
| Contract Size | 1 OP contract |
| Price Quotation | RMB yuan/metric ton |
| Minimum Price Fluctuation | 1 yuan/metric ton |
| Daily Price Limit | Same as that for the underlying futures contract |
| Contract Month | Option contracts will be listed for the nearest two consecutive months and, when the open interest of the underlying futures contract, after daily clearing, has reached a specific threshold to be separately announced by SHFE, for later months on the second trading day thereafter |
| Trading Hours | 9:00 a.m. to 11:30 a.m., 1:30 p.m. to 3:00 p.m., and other hours specified by SHFE |
| Last Trading Day | The fifth-to-last trading day of the month before the delivery month of the underlying futures contract, subject to adjustment by SHFE in case of a national holiday and other special circumstances |
| Expiration Date | Same as the last trading day |
| Strike Price | The range of strike price is the previous trading day’s settlement price of the underlying futures contract plus or minus 1.5 times the current day’s price limit. The strike price interval is 50 yuan/metric ton if strike price ≤ 5,000 yuan/metric ton; 100 yuan/metric ton if 5,000 yuan/metric ton < strike price ≤ 10,000 yuan/metric ton; 200 yuan/metric ton if strike price > 10,000 yuan/metric ton |
| Option Style | American. Buyers may submit an exercise request during trading hours on any trading day before the expiration date, and an exercise or abandonment request before 3:30 p.m. on the expiration date |
| Contract Symbol | Calls: OP-Contract Month-C-Strike PricePuts: OP-Contract Month-P-Strike Price |
| Listing Exchange | Shanghai Futures Exchange (SHFE) |

### Basic Concepts

**I. Underlying**

The underlying of an option contract refers to the assets that the buyer of the option contract has the right to buy (sell) and the seller has the obligation to sell (buy). The underlying of an SHFE offset paper option contract is an SHFE offset paper futures contract.

**II. Contract Type**

Option contracts include call options and put options.

A call option is an option which entitles the buyer to buy, and obligates the seller to sell, the underlying futures contract at a predetermined price in a specified period of time in the future.

A put option is an option which entitles the buyer to sell, and obligates the seller to buy, the underlying futures contract at a predetermined price in a specified period of time in the future.

**III. Contract Size**

The trading unit of option contracts is “lot.” Option contracts should be traded in whole numbers of one lot.

**IV. Price Quotation**

An option contract has the same price quotation as the underlying futures contract.

**V. Minimum Price Fluctuation**

The minimum price fluctuation of an option contract refers to the minimum allowable price movement of the option contract.

**VI. Daily Price Limit**

An option contract is subject to the same daily price limit as the underlying futures contract.

Daily price limit = the previous day’s settlement price of the underlying futures contract × the current day’s price limit percentage for the underlying futures contract.

**VII. Contract Month**

The contract month of an option contract refers to the delivery month of the underlying futures contract.

**VIII. Last Trading Day and Expiration Date**

The last trading day of an option contract is the final trading day on which the option contract may be traded.

The expiration date of an option contract is the final trading day on which the buyer may exercise its right.

**IX. Strike Price**

The strike price of an option contract is the price, specified in the option contract, at which the buyer has the right to buy or sell the underlying in a specified period of time in the future.

The strike price interval is the gap between two adjacent strike prices of an option contract.

The Exchange may adjust the strike price interval and strike price range to reflect market conditions.

**X. Option Style**

Options are classified into American-style, European-style, and other styles prescribed by the Exchange. The buyer of an American-style option may exercise the option on any trading day before and up to the expiration date; the buyer of a European-style option may exercise the option only on the expiration date.

Offset paper options are American style.

**XI. Contract Symbol**

The contract symbol of an option contract is composed of the contract symbol of the underlying futures contract, contract month, the call or put code, and strike price.

## Key Requirements for Offset Paper Options

### Trading Requirements

Members should be fully prepared in terms of IT systems, options-related rules, risk management, and staff before engaging in options trading.

**I. Trading Code**

Non-FF Members and Clients should apply for trading codes to carry out options trading.

**II. Request for Quote**

A market maker system may be introduced for options trading. Non-FF Members and Clients may request for quote (“RFQ”) from market makers. The Exchange will determine and announce the eligible contracts for, and the frequency of, RFQs, and may adjust them based on market conditions.

FF Members should manage their Clients’ RFQs and require them to submit reasonable RFQs.

**III. Premium**

The price of an option contract refers to the premium of the option contract per quotation unit.

“Premium” refers to the payment made by an option buyer in exchange of the rights under the option.

**IV. Trading Order**

Trading orders for option contracts include limit orders, cancellation instructions, and other orders prescribed by the Exchange. A limit order may be accompanied by the instruction of either “fill or kill (FOK)” or “fill and kill (FAK)”.

The Exchange may adjust the types of trading orders for option contracts according to market conditions and announce them.

**V. Maximum Order Size**

The maximum size of each trading order for offset paper options is 100 lots.

The Exchange may adjust the maximum order size according to market conditions and announce the adjusted value.

**VI. Listing of Option Contracts**

Option contracts will be listed in accordance with the following rules:

(i) The listing date of option contracts for a new month should be set out in the contract;

(ii) The option contracts to be listed should consist of one at-the-money (ATM) contract and several in-the-money (ITM) contracts and out-of-the-money (OTM) contracts;

(iii) Following the listing of an option contract for trading, the Exchange will, in accordance with the rules of the option contract, list option contracts for the same month but at new strike prices based on the price limit and previous settlement price of the underlying futures contract, until market close on the trading day before the expiration date.

(iv) The Exchange will determine and announce the listing reference price of an option contract.

An ATM option refers to an option contract the strike price of which is equal or close to the previous settlement price of the underlying futures contract. If the average of two adjacent strike prices is equal to such settlement price, the higher strike price will be the strike price of the ATM option. An ITM option refers to a call (put) option the strike price of which is lower (higher) than that of the ATM option. An OTM option refers to a call (put) option the strike price of which is higher (lower) than that of the ATM option.

**VII. Close-Out of Option Contracts**

An option contract can be closed out by liquidation, exercise, or abandonment.

Liquidation refers to the method by which an option seller or buyer closes out his option contract by taking a reverse position in an option contract with the same size, underlying futures contract, contract month, expiration date, option style, and strike price as the one he intends to close out.

Exercise refers to the method by which an option buyer closes out his option contract by buying or selling the underlying futures contract at the strike price in accordance with applicable rules.

Abandonment refers to the method by which an option buyer closes out his option contract by not exercising the rights granted by the option upon its expiration.

### Exercise Requirements

**I. Methods of Exercise and Fulfillment by Clients**

Clients should exercise and fulfill their option contracts at the Exchange in accordance with the Exchange’s trading procedures.

**II. Time of Exercise and Fulfillment**

An option buyer may submit an exercise or abandonment request within the time period specified by the Exchange.

An option seller is obligated to fulfill his option contract. Once a buyer exercises his option, the seller should buy or sell the specified quantity of the underlying futures contract at the strike price stated in the option contract.

The Exchange may adjust the time limit for submitting exercise and abandonment requests on the expiration date of an option contract.

**III. Assignment**

Upon passing the time limit for submitting exercise requests, the Exchange will assign exercise requests on a random and unbiased basis.

**IV. Establishment of Futures Positions upon Exercise and Fulfillment**

Upon exercise and fulfillment of a call option, the buyer will hold a long position in the underlying futures at the strike price and the seller will hold a short position in the underlying futures at the same strike price.

Upon exercise and fulfillment of a put option, the buyer will hold a short position in the underlying futures at the strike price and the option seller will hold a long position in the underlying futures at the same strike price.

**V. Automatic Exercise**

For an option contract for which no exercise or abandonment request has been submitted by the specified time limit, the Exchange will:

(i) automatically exercise it, if it is a call option with a strike price lower than the settlement price of the underlying futures contract on that day;

(ii) automatically exercise it, if it is a put option with a strike price higher than the settlement price of the underlying futures contract on that day; or

(iii) treat it as abandoned, if it does not meet the conditions above.

**VI. Netting**

A Non-FF Member or Client may request for the netting of its long and short positions in the same option contract held under the same trading code. The positions thusly offset are deducted from the current day’s open interest for that option contract and added to the contract’s trading volume.

An option buyer may request for the netting of his long and short futures positions obtained upon the exercise of options under the same trading code, or the netting of such futures positions against his existing futures positions to the extent of the former. The positions thusly offset are deducted from the current day’s open interest for that futures contract and added to the contract’s trading volume.

An option seller may request for the netting of his long and short futures positions obtained upon the fulfillment of options under the same trading code, or the netting of such futures positions against his existing futures positions to the extent of the former. The positions thusly offset are deducted from the current day’s open interest for that futures contract and added to the contract’s trading volume.

The time limit and method of submitting these requests will be separately announced by the Exchange.

**VII. Funding Requirements for Exercise**

When submitting an exercise request, an option buyer should have a sufficient funds balance to cover the margin required by the resulting futures positions.

### Clearing Requirements

**I. Payment of Premium and Margin**

In an option trade, the buyer pays the premium but not the trading margin, while the seller receives the premium and needs to pay the trading margin.

When an option buyer establishes a position, he will pay a premium equaling the amount needed to establish that position; when an option buyer closes a position, he will receive a premium equaling the amount needed to close that position.

When an option seller establishes a position, he will receive a premium equaling the amount needed to establish that position; when an option seller closes a position, he will pay a premium equaling the amount needed to close that position.

When an option seller establishes a position, the Exchange will collect a trading margin from him at the margin rate for the option contract applicable at the time of clearing on the previous trading day; when the option seller closes a position, the Exchange will release the trading margin for the corresponding option contract.

**II. Collection of Margin and Fees**

At the time of clearing on a trading day, the Exchange will collect trading margin from option sellers based on the settlement price of the option contract and underlying futures contract on that day, as well as trading fees and exercise (fulfillment) fees from option buyers and sellers based on the number of contracts traded and exercised (fulfilled). The Exchange will then either credit or debit their Members’ clearing deposit through a single funds transfer based on the net amount of receivables and payables.

The Exchange will determine and announce its fee rates and may adjust such fee rates to reflect market conditions.

**III. Settlement Price**

The settlement price of an option contract will be determined by the following method:

(i) The theoretical price of the option contract as determined by the Exchange based on its implied volatility will be treated as its settlement price on any trading day other than the last trading day;

(ii) The formula for the settlement price on the last trading day is as follows:

Settlement price of a call option = Max (settlement price of the underlying futures contract – strike price, minimum price fluctuation);

Settlement price of a put option = Max (strike price – settlement price of the underlying futures contract, minimum price fluctuation);

(iii) The Exchange may adjust the settlement price of the option contract if the price of the option contract is clearly unreasonable.

The implied volatility of an option contract refers to the price volatility of the underlying futures contract given by the option pricing model based on the market price of the option contract.

**IV. Treatment of Positions and Funds upon Exercise or Abandonment**

Following an exercise or abandonment of an option contract, the Exchange will, at the time of clearing, deduct the corresponding position from the respective account of the option buyer and option seller, and release the option seller’s trading margin for such position.

Futures positions established by the exercise (or fulfillment) of an option contract on a given day will not be included in the calculation of the settlement price for that day.

### Risk Control Requirements

**I. Risk Control**

The Exchange implements margin requirement, price limit, position limit, trading limit, large trader position reporting, forced liquidation, and risk warnings to manage the risks of options trading.

**II. Margin Requirement**

Margin is required for options trading. The trading margin rate applicable to an option seller is the higher of:

(i) Settlement price of the option contract × contract size of the underlying futures contract + trading margin for the underlying futures contract – (1/2) × out-of-the money amount of the option contract; and

(ii) Settlement price of the option contract × contract size of the underlying futures contract + (1/2) × trading margin for the underlying futures contract.

Where:

Out-of-the-money amount of a call option contract = Max (strike price – settlement price of the underlying futures contract, 0) × contract size of the underlying futures contract;

Out-of-the-money amount of a put option contract = Max (settlement price of the underlying futures contract – strike price, 0) × contract size of the underlying futures contract.

The Exchange may set different trading margin rates for different combinations of options positions.

**III. Price Limit**

Options trading is subject to price limit. The limit prices for an option contract are calculated as follows:

(i) Upper limit price = the previous settlement price of the option contract + previous settlement price of the underlying futures contract × upper limit rate for the underlying futures contract;

(ii) Lower limit price = Max (previous settlement price of the option contract – previous settlement price of the underlying futures contract × lower limit rate for the underlying futures contract, the minimum price fluctuation of the option contract).

**IV. Limit-Locked Market**

A Limit-Locked Market for an option contract refers to the situation where, within five minutes prior to the close of a trading day, there are only bid (ask) orders at the limit price without any ask (bid) orders at such price, or all ask (bid) orders are instantly filled without deflecting the price from the limit price, and the last price is the same as the upper (lower) limit price.

Where an option contract’s settlement price of the previous trading day is equal to or less than the current-day price limit and, within five minutes before the close of a trading day, there are only ask orders at the lower limit price but no bid orders at such price, or if during such time any bid order is instantly filled without deflecting the price from the lower limit price, then the Exchange will not treat the situation as a Limit-Locked Market.

If a same-direction Limit-Locked Market occurs for three consecutive trading days with respect to an option contract, the Exchange will not implement forced position reduction unless it believes there is an abnormal circumstance.

**V. Suspension of Trading**

An option contract will be suspended from trading when trading of the underlying futures market is suspended.

If an option contract is suspended from trading for a whole day on the last trading day, the last trading day and expiration date of the option contract will be postponed to the next trading day.

**VI. Adjustment of Margin and Price Limit**

The trading margin and price limit for an option contract will be adjusted to the extent that those for the underlying futures contract are adjusted.

**VII. Position Limit**

Options trading is subject to position limit. Position limit for an option contract refers to the maximum position set by the Exchange that can be held by a Non-FF Member or Client in the option contract under ordinary circumstances.

If a Client has obtained multiple trading codes from different FF Members, the combined size of its open positions under all these trading codes should not exceed the position limit imposed by the Exchange with respect to the Client.

Position in option contracts will not be aggregated with that in futures contracts for the purposes of position limit. Position limit for an option contract changes over the different time periods in its lifecycle. These time periods coincide with those for the underlying futures contract.

The open position of a Non-FF Member or Client in an option contract should not exceed the position limit set by the Exchange. The Exchange will determine and announce the general position limit for an option contract and may adjust it to reflect market conditions.

If a Non-FF Member or Client, upon the exercise of an option, holds positions in the underlying futures contract exceeding the applicable position limit, the Exchange will take actions in accordance with applicable rules.

Position limits for Non-FF Members and Clients engaging in hedging, arbitrage trading, and market making will be subject to the applicable rules of the Exchange.

**VIII. Calculation of Options Positions**

The options positions held by a Non-FF Member or Client are calculated as follows:

(i) Longs positions in call options with the same underlying asset + short positions in put options with the same underlying asset;

(ii) Long positions in put options with the same underlying asset + short positions in call options with the same underlying asset.

**IX. Trading Limit**

The Exchange may apply trading limit to option contracts in accordance with the applicable provisions of the *Risk Management Rules of the Shanghai Futures Exchange*.

**X. Large Trader Position Reporting**

Large trader position reporting is in effect for options trading. The reporting threshold and the required submissions are governed by the *Risk Management Rules of the Shanghai Futures Exchange*.

**XI. Forced Liquidation**

Options trading is subject to forced position liquidation. The Exchange will carry out forced liquidation if:

(i) a Member’s clearing deposit balance in any of its subsidiary accounts with the Exchange falls below zero and the Member fails to meet the margin requirement within the specified time limit;

(ii) the open position held by a Non-FF Member, Overseas Special Non-Brokerage Participant, or Client has exceeded the applicable position limit;

(iii) there is a violation of the Exchange’s rules that warrants forced liquidation;

(iv) there is any emergency that warrants forced liquidation; or

(v) there is any other circumstance that necessitates forced liquidation.

The principles and procedures for forced liquidation in relation to options trading are governed by the *Risk Management Rules of the Shanghai Futures Exchange*.

**XII. Risk Warning**

Risk warnings are in effect for options trading. When and how risk warnings will be issued are governed by the *Risk Management Rules of the Shanghai Futures Exchange*.

### Information Management Requirements

**I. Options Trading Information**

Options trading information refers to the options market data and trading related statistics generated from options trading on the Exchange, various announcements / circulars / notices issued by the Exchange, and any other information whose disclosure is required by the China Securities Regulatory Commission (CSRC).

**II. Ownership of Options Trading Information**

The options trading information is the property of, centrally managed and published by, the Exchange. The Exchange may operate and manage such information independently, in partnership with a third party, or through a third party. Without the approval of the Exchange, no organization or individual may publish options trading information or use it for any commercial purpose.

**III. Publication of Options Trading Information**

The Exchange publishes different levels of real-time, delayed, daily, weekly, and monthly options market data; daily, monthly, and yearly options statistics; and any other market data required by laws and regulations.

Real-time market data refers to market data published concurrently with trading activities during trading hours. Delayed market data refers to market data published by the Exchange at a certain interval behind real-time market data. Market data mainly include contract name, last price, price change, trading volume, open interest and the change thereof, bid price, ask price, bid volume, ask volume, settlement price, opening price, closing price, high price, low price, and previous settlement price, among others.

Daily options trading information is published after the close of each trading day, mainly including: contract code, opening price, high price, low price, closing price, previous settlement price, settlement price, price change, trading volume, open interest and the change thereof, turnover, delta, implied volatility, and exercise volume.

Delta is the ratio of the price change of an option contract to the price change of the underlying asset. Exercise volume refers to the quantity of option contracts that are closed out by exercise.

Weekly options trading information is published after the close of the final trading day of each week, mainly including: contract code, weekly opening price, high price, low price, weekly closing price, weekly settlement price, price change (difference between the closing price at the end of the current week and the settlement price at the end of the previous week), trading volume, open interest and any change thereof (difference between the open interests at the end of the current week and the previous week), turnover, and exercise volume.

Monthly options trading information is published after the end of the final trading day of each month, mainly including: contract code, monthly opening price, high price, low price, month-end closing price, price change (difference between the closing price at the end of the current month and the settlement price at the end of the previous month), open interest and any change thereof (difference between the open interests at the end of the current month and the previous month), month-end settlement price, trading volume, turnover, and exercise volume.

Yearly options trading information is published after the end of the final trading day of each year, mainly containing:

(i) the total trading volume and turnover for all option products, and the trading volume and turnover for each product; and

(ii) the total exercise volume for all option products and the exercise volume for each product.

### Investor Eligibility Requirements

**I. Individual Clients**

When an FF Member applies for a trading code or trading access for an individual Client with respect to an option product that has investor eligibility requirements, such individual Client should meet the following criteria:

(i) having full capacity for civil conduct;

(ii) having basic knowledge about futures trading and an understanding of the market rules;

(iii) having records of no fewer than 20 simulated futures or options trades from at least 10 days of trading on Chinese Mainland futures exchanges; or having no fewer than 10 trades in futures, options or other centrally cleared derivatives at a Chinese Mainland trading venue in the past three years; or having no fewer than 10 trades in futures, options or other centrally cleared derivatives in the past three years on overseas exchanges regulated by competent futures regulatory authorities that have signed an MOU on regulatory cooperation with the CSRC;

(iv) having an available balance of no less than RMB 100,000 or its equivalent in foreign currency in his or her margin account on each of the five consecutive trading days before applying for the trading code or trading access;

(v) having no material adverse integrity records, having not been banned from futures market by any competent regulatory authority, and having not been restricted or prohibited from engaging in futures trading by any laws, regulations, ministry-level rules, or rules of the Exchange; and

(vi) meeting any other conditions required by the Exchange.

**II. General Institutional Clients**

When an FF Member applies for a trading code or trading access for a general institutional client with respect to an option product that has investor eligibility requirements, such general institutional Client should meet the following criteria:

(i) having the corresponding personnel with basic knowledge about futures trading and an understanding of the market rules;

(ii) having records of no fewer than 20 simulated futures or options trades from at least 10 days of trading on Chinese Mainland futures exchanges; or having no fewer than 10 trades in futures, options or other centrally cleared derivatives at a Chinese Mainland trading venue in the past three years; or having no fewer than 10 trades in futures, options or other centrally cleared derivatives in the past three years on overseas exchanges regulated by competent futures regulatory authorities that have signed an MOU on regulatory cooperation with the CSRC;

(iii) having an available balance of no less than RMB 100,000 or its equivalent in foreign currency in its margin account on each of the five consecutive trading days before applying for the trading code or trading access;

(iv) having sound internal control, risk management and other relevant rules on futures trading;

(v) having no material adverse integrity records, having not been banned from futures market by any competent regulatory authority, and having not been restricted or prohibited from engaging in futures trading by any laws, regulations, ministry-level rules, or rules of the Exchange; and

(vi) meeting any other conditions required by the Exchange.

**III. Exemptions**

(i) When assessing the eligibility of a Client who meets any of the following criteria, an FF Member may waive the basic knowledge and trading experience requirements. In addition, if the Client is already trading a listed product subject to investor eligibility requirements (“eligibility-restricted product”), and the available funds balance required by that product is no lower than what is required by the product the Client is currently applying for, then the available funds balance requirement may also be waived:

1. having obtained trading access to any eligibility-restricted product listed on another Chinese Mainland commodity futures exchange;

2. having obtained a trading code for financial futures;

3. having obtained trading access to options listed on a Chinese Mainland stock exchange; and

4. having obtained a trading code from the Exchange and trading access to an eligibility-restricted product listed on the Exchange, and currently applying for trading access to another product listed on the Exchange.

The Client needs to provide supporting materials for the above-mentioned qualifications.

(ii) When assessing a Client’s eligibility, an FF Member should make full use of existing information and assessment results. Accordingly, it may skip an assessment item that was examined before and any supporting material that has been submitted before.

(iii) An FF Member may waive the basic knowledge, trading experience, or available funds balance requirements when applying for a trading code or trading access to an eligibility-restricted product on the behalf of a Client, if the Client:

1. is a professional investor as defined in the *Measures for the Administration of Securities and Futures Investors Suitability*;

2. has trading access to an eligibility-restricted product and is applying for access to the same product at a different FF Member (the Client should furnish the corresponding supporting materials);

3. has the records for executing trades in futures, options, or any centrally cleared derivatives at a Mainland trading venue on no fewer than 50 trading days within the past year, or a Recognized Overseas Trading Record (the Client should furnish the corresponding detailed trading records, settlement statements, or similar supporting documents); or

4. is a market maker, Special Institutional Client, or another type of trader specially recognized by the Exchange.

“Special Institutional Client” refers to an institutional Client that is required by laws, administrative regulations, or ministry-level rules to manage assets in segregated accounts. The term includes but is not limited to financial institutions such as futures firms, securities companies, fund management companies, and trust companies; social security funds; and Qualified Foreign Institutional Investors (QFII).

## How Options Hedging Works: Theory and Practice

**I. Options Hedging in Theory**

Hedging with offset paper futures means selling or buying offset paper in the futures market at the same time as buying or selling it in the spot market, with the goal of avoiding adverse price changes in the spot market through an offsetting position in futures.

There are broadly two types of price risk: a future price decrease or a future price increase. Offset paper manufacturers are worried about the former, which will erode their profits; offset paper processors are worried about the latter, which will drive up their costs. Accordingly, the two most basic forms of hedging with offset paper futures are the short hedge and the long hedge.

Futures hedging benefits from its simplicity but also comes with some negatives. For example, when the futures price moves strongly against a trader, the trader faces the risk of margin calls that create financial stress.

Unlike futures hedging, options hedging will not expose buyer to the risk of margin calls, regardless of how the price of offset paper changes. In addition to this protection against price risks, option buyers have the opportunity to profit from a favorable price movement, at the cost of the premium.

**II. Options Hedging in Action**

An offset paper processor enters into an agreement to purchase 1,000 metric tons of offset paper, to be delivered one month later at the then prevailing price. The current spot price of offset paper is 5,500 yuan/metric ton. Worried about a price increase, the processor is motivated to establish a long hedge.

Actions for Futures and Options Hedging

|  |  |  |
| --- | --- | --- |
| **Type** | **Strategy** | **Action** |
| **Futures hedging** | Buying futures contracts | Long 50 lots of offset paper futures contract to be delivered in two months, at the price of 6,000 yuan/metric ton. |
| **Options hedging** | Buying call options | Long 50 lots of call options with the strike price of 6,000 yuan/metric ton and the underlying of offset paper futures contracts deliverable in two months, at the cost of 200 yuan/metric ton in premium. |

**1. Assuming the spot and futures prices rise to 6,000 and 6,500 respectively a month later:**

**Futures hedging:**

Profit or loss from the spot position: 5,500 − 6,000 = − 500 yuan/metric ton

Profit or loss from the futures position: 6,500 − 6,000 = 500 yuan/metric ton

Total profit or loss: 0 yuan/metric ton

Actual buying price: 5,500 yuan/metric ton

**Options hedging:**

Profit or loss from the spot position: 5,500 – 6,000 = − 500 yuan/metric ton

Profit or loss from the options position (upon exercising the options): 5,500 – 6,000 = 500 yuan/metric ton

Total profit or loss: 500 − 500 − 200 = −200 yuan/metric ton

Actual buying price: 5,500 + 200 = 5,700 yuan/metric ton

**2. Assuming the spot and futures prices fall to 5,000 and 5,500 respectively in a month:**

**Futures hedging:**

Profit or loss from the spot position: 5,500 − 5,000 = 500 yuan/metric ton

Profit or loss from the futures position: 5,500 − 6,000 = −500 yuan/metric ton

Total profit or loss: 0 yuan/metric ton

Actual buying price: 5,500 yuan/metric ton

**Options hedging:**

Profit or loss from the spot position: 5,500 − 5,000 = 500 yuan/metric ton

Profit or loss from the options position (upon abandoning the options): premium loss = −200 yuan/metric ton

Total profit or loss: 500 − 200 = 300 yuan/metric ton

Actual buying price: 5,500 − 300 = 5,200 yuan/metric ton

**Futures Hedging vs. Options Hedging**

**Characteristics of Futures and Options Hedging**

|  |  |  |
| --- | --- | --- |
| **Instrument** | **Futures** | **Options** |
| **Rights and obligations of buyer and seller** | Reciprocal | Non-reciprocal, i.e., the buyer has the right to buy or sell the underlying asset at the agreed price, while the seller is obligated to fulfill the option contract |
| **Effect** | Buyer locks in the price but is unable to profit from favorable price movements in the future | Buyer locks in the price and needs to pay a premium, but has the opportunity to make extra profits |
| **Margin** | Required from both the buyer and the seller | Required from the seller only |
| **Profit or loss before expiration date** | Linear relationship between profit and loss | Non-linear relationship between profit and loss |
| **Hedging range** | Perfect hedge | Option combination can offer hedge within a certain price range and reduce the cost of hedging |

