



# SHANGHAI CHIDAN

## TECHNOLOGY & ENGINEERING CO.,LTD

### SHANGHAI CHIDAN TECHNOLOGY & ENGINEERING CO.,LTD

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Shanghai Chidan Technology & Engineering Co.Ltd is located in Shanghai, which is the financial center and commercial center of China. It is the complex of agricultural products trading and related machines manufacturing.

Agricultural products trading covers sesame, peanut, maize, soybean, flax seeds, green mung beans, soybean meal, rapeseeds meal, peanut meal, chilly and so on.

Agricultural machines, we are professional in manufacturing cleaning lines for all types of cereals, pulses and oil crops, such as wheat, sesame, peanut, rapeseeds, corn, soybean, green mung beans etc.; processing lines for wheat flour and starch; processing line for all the types of vegetable oil; Chemical and mechanical peeling line for sesame seeds to prepare the semi-finished products for tahini halva and a kinds of sesame sweets process.

We have many years of experience in processing the said machines with careful design and precise manufacture to satisfy the demand of our clients, ensuring maximum efficiency, productivity, and profitability.

Our machines are ideal both for small workshop and large factories, and also it can be customized to meet the specific needs of our clients.

We have dozens of professional engineers and technicians to ensure that we are dedicated to staying at the forefront of technology and innovation. We invest heavily in research and development, by building the cooperation channels with professional institutes and research centers as well as self-innovation research and study, to guarantee that our products are always up-to-date and in line with the latest industry trends. Our team works closely with our clients to understand their specific needs and develop customized solutions to meet their requirements. Besides, we are also proud of our after-sales services. Our team with experienced technicians and engineers provide you detailed instructions to ensure that your machines are installed and commissioned correctly.

We are committed to building long-term relationships with our clients, and we believe that this is best achievements through open communication, transparency, and a willingness to listen and adapt to their needs. The satisfaction of client is always our pursuit.

المقر الرئيسي لشركة شيدان للتكنولوجيا والهندسة يقع في مدينة شنغهاي وهي المركز المالي والتجاري لدولة الصين. كما أن مدينة شنغهاي تعتبر مجمع لتجارة المنتجات والمحاصيل الزراعية وتصنيع الآليات والماكينات الزراعية. تشمل تجارة المحاصيل الزراعية منتجات عديدة أهمها السمسم، الفول السوداني، الذرة، فول الصويا بذور الكتان الماش أو الفاصوليا الخضراء بالإضافة للفلل الحار وكل أنواع العلف الحيواني من الفول السوداني وفول الصويا. نحن في شركة شيدان محترفون في تصنيع خطوط غربلة ومعالجة جميع أنواع الحبوب والبقوليات والمحاصيل الزيتية. الخطوط المنتجة مخصصة لغربلة القمح والذرة السمسم الفول السوداني فول الصويا والفاصوليا الخضراء بالإضافة لبذور العنب وبذور القطن. تشمل الآليات التي نصنعها خطوط عالية الجودة لمعالجة وطحن دقيق القمح، وخطوط إنتاج زيوت الطعام النباتية بالإضافة لخطوط مخصصة لتقشير محصول السمسم باستخدام التقنية الكيميائية أو الميكانيكية. لدينا سنوات عديدة من الخبرة في تصنيع الماكينات وخطوط الإنتاج مع تصميم دقيق وجودة في التصنيع لتلبية طلب عملائنا الكرام لنضمن لهم أقصى قدر من الكفاءة والإنتاجية والربحية. منتجاتنا الصناعية مناسبة لكل من الورش الصغيرة والمصانع الكبيرة كما يمكننا تخصيص تصاميم حسب رغبة العملاء وطلباتهم.

لدينا العشرات من المهندسين والتقنيين المحترفين لضمان التزامنا بالبقاء في طليعة التكنولوجيا والابتكار. في شركة شيدان نحن حريصين على الاستثمار في مجال البحث والتطوير من خلال بناء قنوات تعاون مع معاهد ومراكز بحثية محترفة بالإضافة لجهودنا في البحث والدراسة لضمان أن تكون منتجاتنا الآلية محدثة دائما ومواكبة مع





ومراكز بحثية محترفة بالإضافة لجهودنا في البحث والدراسة لضمان أن تكون منتجاتنا الآلية محدثة دائما ومواكبة مع التطور الصناعي.  
يعمل فريقنا عن كثب مع عملائنا لفهم احتياجاتهم التصميمية وتطوير حلول تقنية تلبي متطلباتهم بالإضافة لما سبق نحن في شيدان مشهود لنا بجودة خدمات ما بعد البيع من صيانة ومتابعة حيث يعمل فريقنا المختص من الفنيين والمهندسين ذوي الخبرة بتزويد العملاء بتعليمات مفصلة لضمان تركيب ماكيناتك وتشغيلها بشكل صحيح  
نحن دائما نطمح لبناء علاقات طويلة المدي مع عملائنا ونعتقد أن أفضل طريقة لتحقيق ذلك هو استمرار التواصل المفتوح المبني على المصادقية والشفافية.

Компания Shanghai Chidan Technology & Engineering Co.Ltd расположена в Шанхае, который является финансовым и торговым центром Китая. Это комплекс по торговле сельскохозяйственной продукцией и производству соответствующих машин. Торговля сельскохозяйственной продукцией охватывает кунжут, арахис, кукурузу, сою, семена льна, зеленые бобы мунг, соевую муку, рапсовую муку, арахисовую муку, чили и так далее.

Сельскохозяйственные машины, мы профессионально занимаемся производством линий очистки для всех видов зерновых, бобовых и масличных культур, таких как пшеница, кунжут, арахис, рапс, кукуруза, соя, зеленые бобы мунг и т.д.; линия обработки пшеничной муки; линии обработки для всех видов растительного масла; линия химической / механической шелухи кунжута.

У нас есть многолетний опыт в обработке указанных машин с тщательным дизайном и точным производством, чтобы удовлетворить спрос наших клиентов, обеспечивая максимальную эффективность, производительность и рентабельность.

Наши машины идеально подходят как для небольших мастерских, так и для крупных заводов, а также могут быть настроены в соответствии с конкретными потребностями наших клиентов.

В нашей компании работают десятки профессиональных инженеров и техников, что позволяет нам оставаться на переднем крае технологий и инноваций. Мы вкладываем значительные средства в исследования и разработки, создавая каналы сотрудничества с профессиональными институтами и исследовательскими центрами, а также проводя самостоятельные инновационные исследования и разработки, чтобы гарантировать, что наша продукция всегда актуальна и соответствует последним тенденциям в отрасли. Наша команда тесно сотрудничает с клиентами, чтобы понять их конкретные потребности и разработать индивидуальные решения, отвечающие их требованиям.

Кроме того, нас также ценят за послепродажное обслуживание. Наша команда опытных техников и инженеров предоставит вам подробные инструкции, чтобы обеспечить правильную установку и ввод в эксплуатацию вашего оборудования.

Мы стремимся к построению долгосрочных отношений с нашими клиентами и считаем, что это лучше всего достигается за счет открытого общения, прозрачности, готовности слушать и адаптироваться к их потребностям. Удовлетворение клиента всегда является нашей целью.



## DRYING TOWER

### Product Features:

1. It adopts rotary heating devices that generates a large volume of hot air in a short period, effectively killing insect eggs through high-temperature treatment while completely solving the problem of color change during the drying process.
2. The equipment has strong applicability. The specially designed grain discharge system can accommodate a wide range of grain sizes, providing excellent drying treatment for crops such as corn, rice, wheat, and others.
3. It offers a wide drying range with uniform drying results.
4. It consumes low energy, exhibits high thermal efficiency, and requires minimal floor space.
5. Materials that can be processed include corn, wheat, rice, sorghum, cereals, peanuts, and other grains.







## STORAGE SILOS

Outdoor large silo mainly consists of storage silo and feeding, unloading, control, metering, distribution and dust removal system. It is widely used in the material management of large companies, which can greatly improve the utilization rate of the site, facilitate the production site management and material statistics, and save the storage cost and human and material resources.



The plate thickness of the outdoor large-scale storage silo tank body gradually increases from top to bottom to enhance its strength. The seams are staggered and welded to form a mesh structure, significantly improving the silo's strength, wind resistance, and earthquake resistance, thereby ensuring its safety and reliability. The silo body is fully sealed with welded installations, guaranteeing excellent airtightness and preventing rainwater leakage.





## CLEANING PRODUCTION FOR GRAINS/OLL SEEDS/PULSES

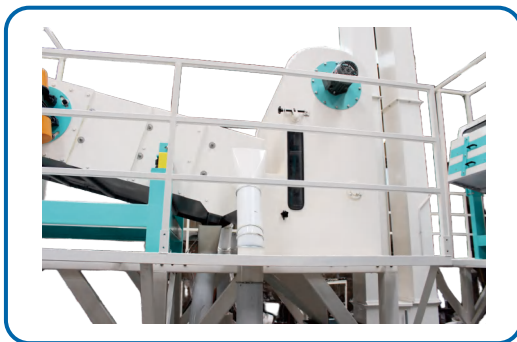
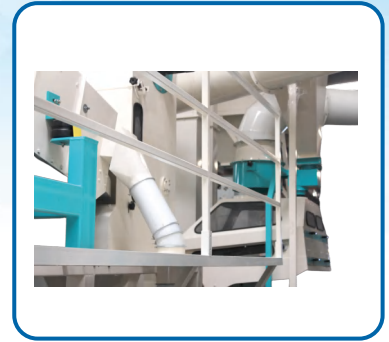
This cleaning line is used to clean all kinds of cereals, oil seeds and pulses, such as wheat, rice, sorghum, corn, maize, oats, barley, rapeseeds, peanut, sunflower seeds, soybean, sesame seeds, coffee beans, chick peas, lentils, pigeon beans, green mung beans, kidney beans Etc. with micro adjustment. The line includes feeding system, cleaning system, dedusting system and packing system. Hand picking system, gravity separation system, deshelling system and color sorting system is for option, which depending on the detailed requirement of the customers. The most welcomed capacities are 3/6/10/15 tons per hour specifically for sesame cleaning. The capacity of cleaning will change as the raw materials varies.

### Features:

- ⊙ The line is versatile, allowing for easy adaptation of screens to cater to different pulses, grains and oil seeds.
- ⊙ All bucket elevators are designed to be break-proof, ensuring smooth and reliable operation.
- ⊙ It can reduce the 15% impurity in raw materials to less than 1% in finished products for one time cleaning.
- ⊙ Dust collectors are integrated into the line to minimize flying dust during processing. Additionally, the feeding dump pit is equipped with a suction system to reduce dust as well.
- ⊙ Operator Requirement: The line requires a maximum of two operators (excluding feeding workers) – one for panel control and supervision, and another for packing.
- ⊙ The line is modular and easy to assemble. Only the first elevator requires a dump pit for feeding, while all other elevators do not need holes. All necessary parts are included within the line.
- ⊙ A double-needle sewing machine is provided for efficient packing.





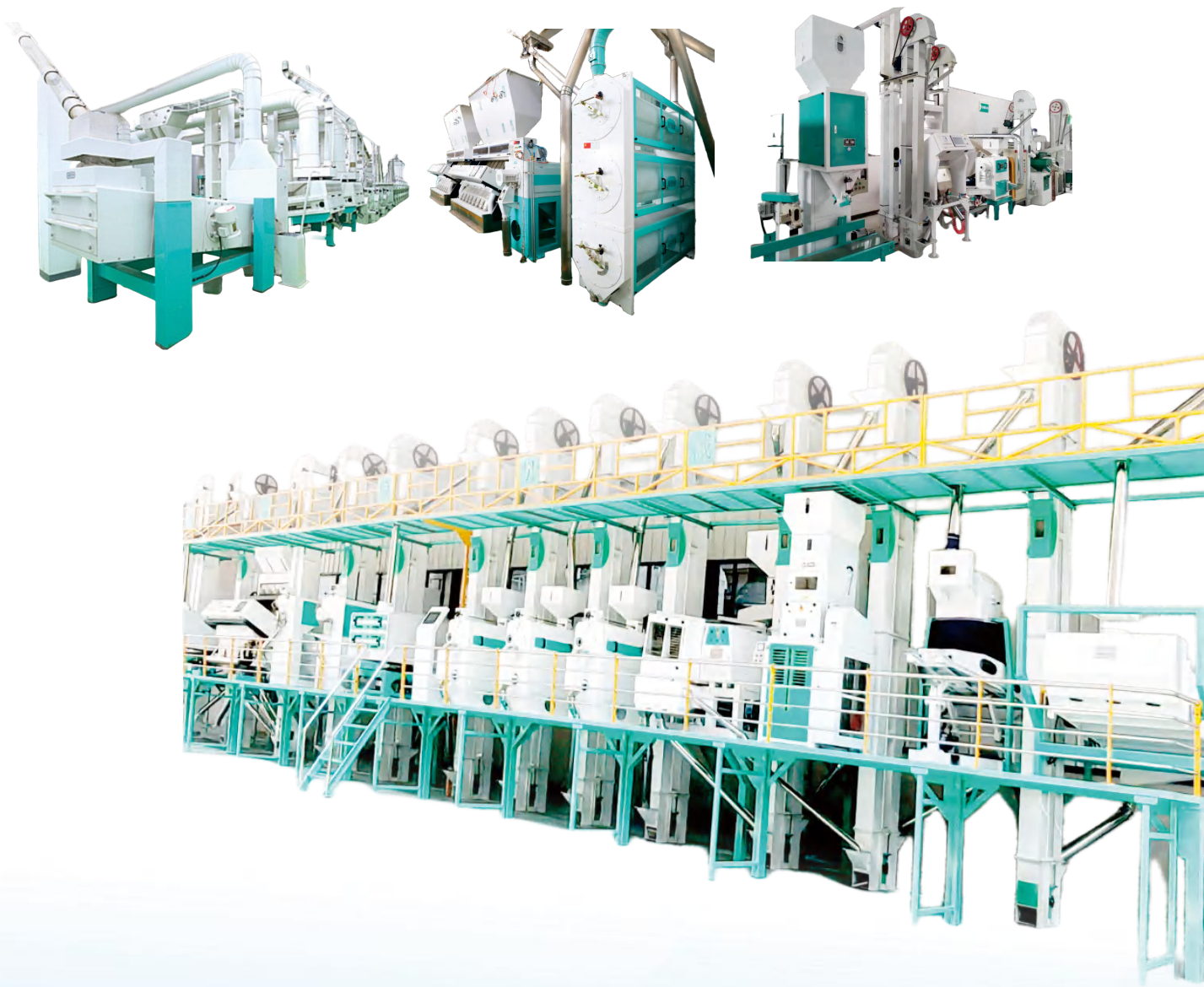


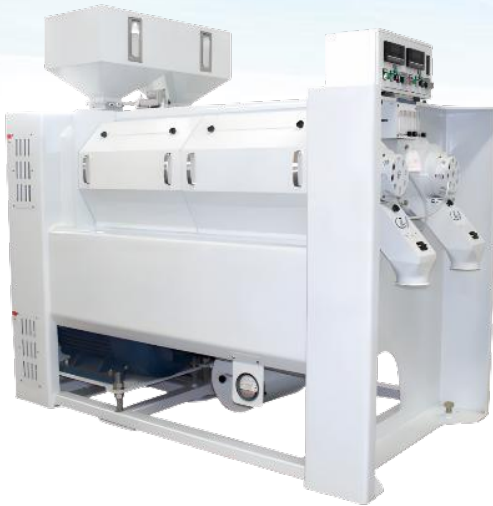


## RICE PRODUCTION

The brown rice obtained by the above steps needs to be further processed. The rice mill will remove the bran of the rice through friction between rice and roller. It will increase the quality of rice and make it looks white and shiny. The rice then will be graded and polished, increasing its quality, appearance and shelf life. After all these processing, the rice will be finally sorted and packed.

Our rice production line can be customized according to the demand of our customer. It has the advantage of high capacity, flexible configuration, and high degree of automation. Besides, we are trying to keep all the nutrient composition in the rice.







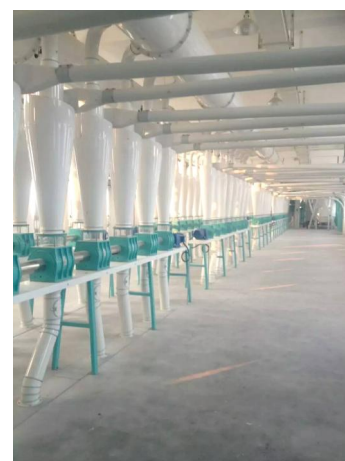


## FLOUR & STARCH PRODUCTION



BL Series Flour production Line adopts mature milling technology and sophisticated grinding equipment to provide turn-key projects for processing a range of graded flour with capacities of 10 to 500 tons per day. Depending on user requirements, both dry and wet cleaning processes can be selected.

The cleaning process of our flour production line involves screening, destoning, washing, wheat hitting, magnetic separation, and aerosolized wetting. For flour milling, it adopts the separation of bran and endosperm (core), with various configurations such as five bran milling, seven endosperm milling, two residue milling, and four flour cleaning. Precisely configured according to the wheat quality and requirements of customer, it allows for the composition of different wheat varieties and multiple flour types.

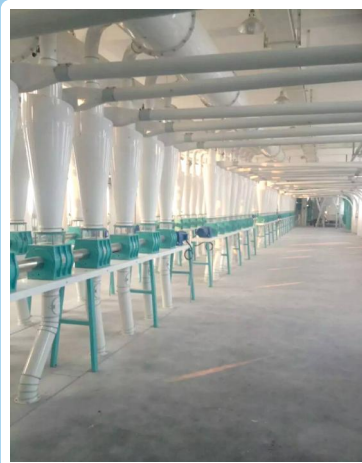


Our production line is equipped with precise process control and advanced detection technology, ensuring that every stage reaches optimal conditions, thereby guaranteeing the consistent quality of the final product. Every step has been meticulously designed and optimized to reduce impurity incorporation and nutritional loss, enhancing the purity and nutritional value of the flour to make it more competitive in the market and meets consumers' demands for healthy and high-quality food. It adopts advanced energy-saving technologies and materials such as high-efficiency motors and energy-saving grinding components, effectively reducing energy consumption. Additionally, by optimizing the production process, raw material waste and by-product generation

were minimized, improving resource utilization. We have multiple specifications available for users to choose from, and there are also mobile flour milling units for customer selection.







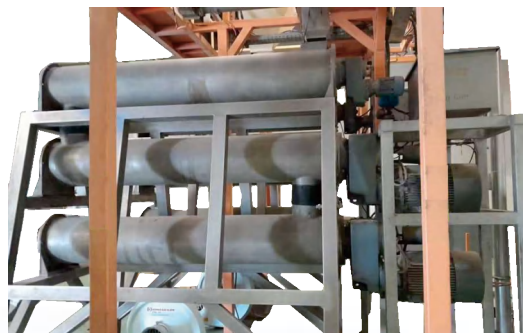
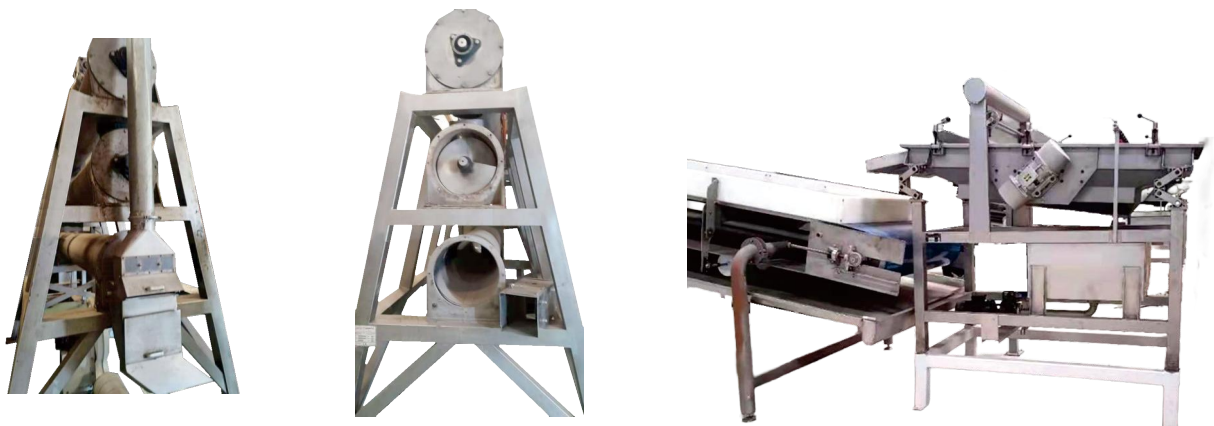


## HULLED SESAME PRODUCTION

Here this sesame cleaning line especially desinged for mechanical peeling, without adding any chemicals and salt. Which is the best for preparing for organic food. As the raw materials difference, we can guarantee the yield of hulling to be 82%-88% with the raw materials has the max 1.5% impurity (immature seeds is counted into impurity). Depending on the water source of the clients, we have the air drying system for separating the sesame kernels from the husk. While we have the water washing system to separate the sesame kernel and husk. Also as the heating source cost of the client, we have either electrical drying system or steam drying system. As the final prodcuts, the client can choose to be connected to the tahina process or halva process directly, or packed as the hulled sesame for marketing.

This line keeps the natural flavouring of the sesame to satisfy the tongue sensitivity of the people and make them enjoy the natural food.

This line has fixed capacity with 800-1000kg/h in production.









## PREPARATION PRODUCTION FOR EDIB OIL (including the cleaning & crushing):

This plant for the beginning of the edible oil processing.

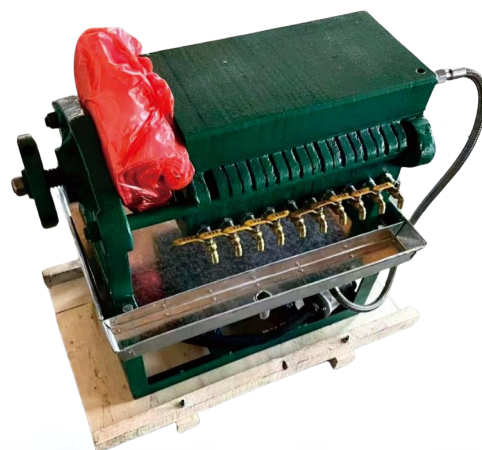
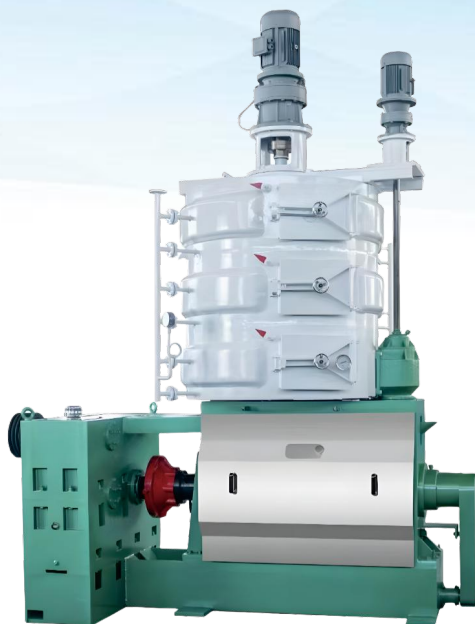
Before changing the oil seeds into the oil, we need to clean the seeds to be with reasonable percentage of impurity, to reduce the process cost in the next step and keep hygiene of the food. Cleaning Stage : cleaning system to take out impurity and stones, mud and metals.

Crushing stage: the necessary preparation are requested to be done after seeds cleaned. Crushing, flaking, cooking, softening , extruding, pressing, filtering, then after filtering, the oil will be sent for refinery plant. And while the cake is sent to the extraction plant for further processing or send to the packing plant for directly selling.

It can do with rapeseeds, peanut, cotton seeds, sunflower seeds, tea seeds, flax seeds, soybean, olive with some technical adjustment. Any oil seeds with oil content more than 15% can be produced.









## Oil Extraction

Edible oil extraction is a process of extracting oils and fats by utilizing the property of mutual dissolution of oils and fats and organic solvents. It can be used for all kind of materials containing reasonable oil, including pre-pressed oil seeds cake of peanut, rapeseed, sunflower seed, cotton seeds, and other kinds of extruded material such as soybean and rice bran. After materials entering the solvent extract, organic solvent will be contacted with the oil seed flake in a extractor to extract and dissolve the fats and oils. By this method, the oil left in the residue can be reduced to less than 1%. Then the solvent will be separated and removed from the oil by heating and vaporizing to be circulated for using in the plant. Its advantages are less residual oil in the meal, and to reach oil yield in the whole processing system as high as possible. It can also produce high quality oil seeds meal, which is used in the feed industry.



**Hildebrand extractor**



**Hildebrand extractor**



**Extraction plant corner**



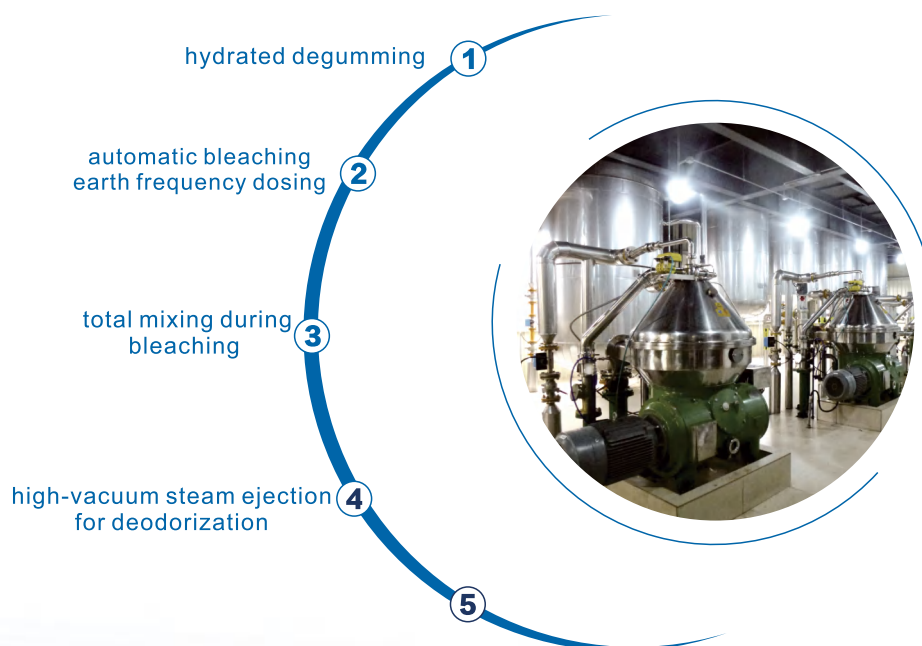






## REFINERY PRODUCTION

Edible oil refining is a synthetic process that combines physical and chemical procedures. In this process, impurities accompanying the oil are selectively acted upon, weakening their bond with the oil and separating them from it. Our company specializes in the development and research of refining technologies that build upon conventional methods, and holds original perspectives on hydration, neutralization, bleaching, and deodorization. By combining the multi-plate deodorization technology with both physical and chemical bonding refining technology, we can cater to any type of crude oil. Considering the variety of oils and customers' requirements, we can select the best technology, superior equipment, and automatic control systems, providing perfect techniques and services to meet customers' refining needs and create top-class refining sytem.







**Physical refining technology:** The FFA in crude oil is removed through vacuum steam distillation, rather than through neutralization. This method is suitable for oils with high acid values. Compared to conventional chemical technology, its advantages include: fewer auxiliaries, less pollution, simpler technology, smaller investment, higher refining efficiency, and better quality.

**Chemical refining technology:** Chemical refining refers to the process of oil refinement where free fatty acids are removed through acid and alkali neutralization. During this process, lecithin gum and soap stock can be separated using a centrifuge. The advantages of chemical refining include good adaptability, low demands on crude oil quality, stable refined oil quality, and reduced bleaching earth dosing compared to physical refining.

**Flexible neutralization, degumming, and washing technology:** Based on different customer requirements and oil types, we add varying doses of alkali, water, and other agents to the oil to remove free fatty acids, crude lecithin, water, and other impurities as much as possible.

(1) The technology is flexible. Depending on the oil type, we can select a reasonable technology and flow diagram that is suitable for different crude oils.

(2) This technology employs imported centrifuges for separating oil and soap, resulting in high yields, excellent separation efficiency, and good stability and reliability.

(3) The performance of the refined oil is stable.

We have been constantly pursuing exploration and innovation, and have already developed many new technologies, including low-temperature, long-time mixed alkali refining technology, which reduces oil refining losses and improves oil refining yields. The vacuum freeze system consumes low steam and produces no odor. All these factors contribute to providing higher-quality refining projects.





## FRACTIONATION & DEWAXING PRODUCTION

Dewaxing and defatting by winterization are the procedure of crystallizing the high freezing point waxes during falling of temperature. After degumming, deacidification, bleaching and deodorization, there exists the phenomenon that a small amount of solid fat separates out appearing wadding form in winter for sunflower oil, corn germ oil, rice bran oil, camellia seed oil, which influences the appearance and application. So it is necessary to add the winterization procedure in order to avoid the above phenomenon. The procedure of winterization to separate solid fat and liquid oil includes slowly stirring, cooling, and forming larger crystals, lastly separating and filtering. After winterization, the oil needs to be not turbid for a while and maintain transparency and liquidity in the refrigerator, improving oil quality and appearance.

Oils and fats are mixtures consisting of a variety of triacylglycerols. Fractionation, which is a physical modification procedure, is designed to separate the various triacylglycerol fractions based on different crystallizing temperatures without expensive or dangerous chemical additive, resulting in no chemical side-product, consumption and waste water.

New fractionation technology developed uses advanced crystallization equipment, filtration & pressing technology, and accurate temperature auto-control software, which keep paces with the word. The new technology is especially applicable for the palm oil fractionation, which can get different melting-point fractionations, including 8°C, 10°C, 14°C, 18°C, 24°C, 33°C, 44°C, and 55°C. Meanwhile, we can control and change the filtration mode by regulating crystallization rate, crystallization temperature and maturing time. The above technology is suitable for the fractionation of cottonseed oil and animal oil, such as fish oil, lard, etal, thus raising the added value and increasing enterprise economic benefit.





**The vegetable oil dewaxing and fractionation technology is well developed. The advantages are as follows:**

All computer-controlled automation



Technology has advanced crystallization system



Quality of product is stabilization. The freeze test for 24 hours at 0°C showed that the product is transparent and bright with high added value.







## Edible oil Filling Line

### ■ Configuration and performance, features:

01

Adopt PLC control to ensure the performance stability of the system.

02

Select imported electrical and pneumatic control components, with stable performance.

03

Photoelectric detection system adopts German products, with reliable quality.

04

Adopt PLC control to ensure the performance stability of the system.

05

For step-by-step delivery, the primary-section delivery adopts variable frequency control, of higher efficiency, while the next process adopts special double dislocation connection, allowing the whole production line more accurate and smooth.





06

High and low speed filling can avoid the overflow phenomenon, and can significantly increase the production efficiency.

07

Single-machine is adapted to multiple varieties, quick and easy adjustment.

08

The humanization control system has intelligent protection functions. In case of fault alarm, it will display the reasons for faults to ensure the safety of production process.

09

Electrically adjustable capacity system has real-time data tracking function, which allows touching the screen setting to realize the replacement of species, accurately, and conveniently and quickly.

10

According to users' demand, automatic covering machine, automatic continuous capping machine, labeling machine, leak detection machine, aluminum foil sealing machine, ink-jet printing machine, laser printing machine automatic unpacking machine, packing machine and pack - sealing machine can be affiliated to be used to form full automatic operations.









