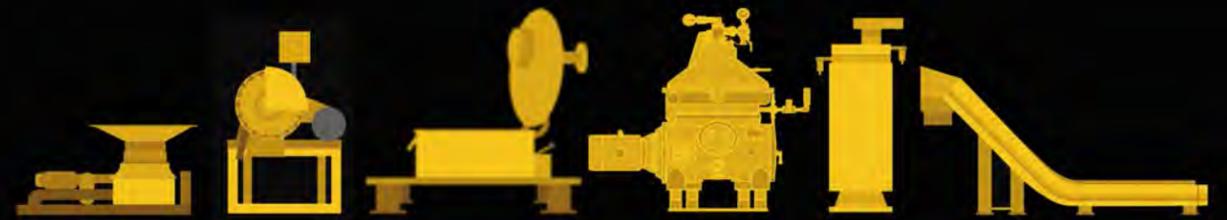




# CROWN MACHINERY



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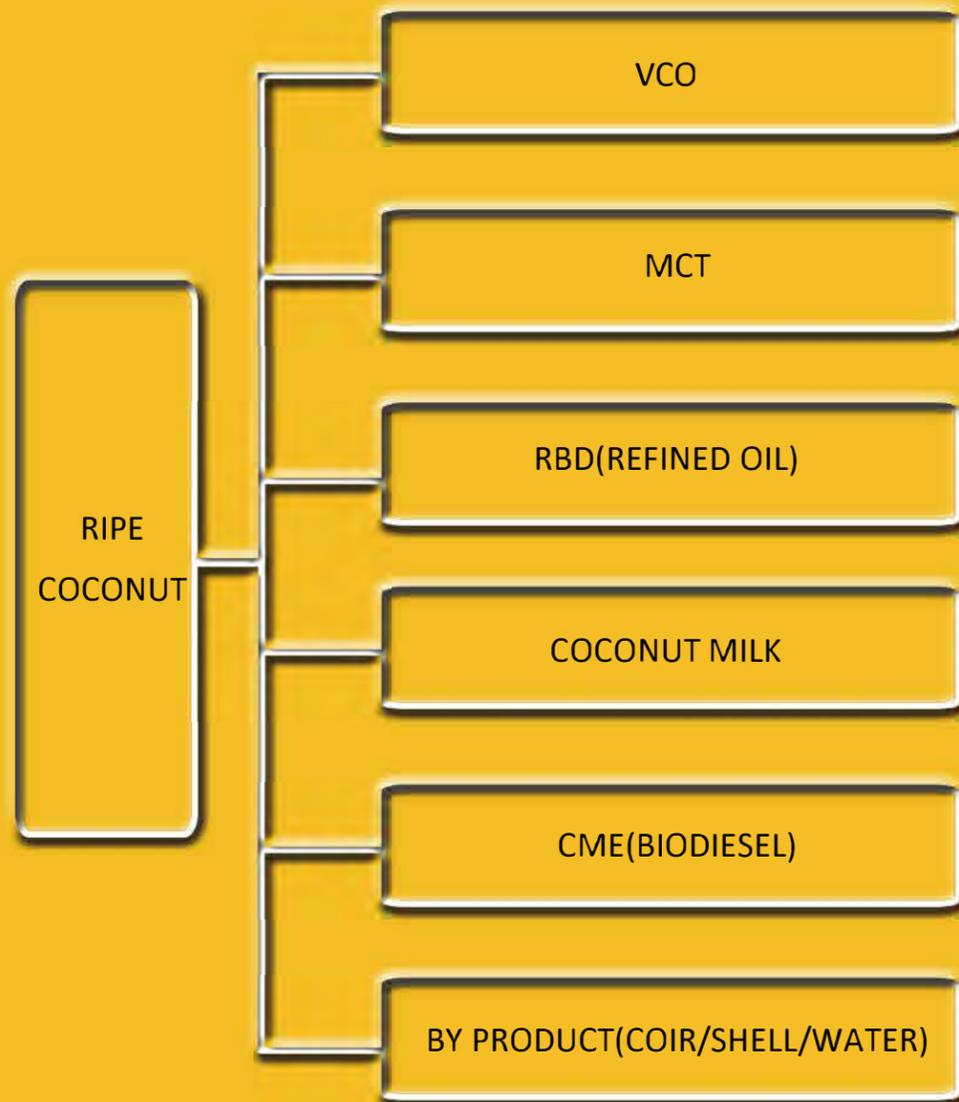


**CROWN**  
MACHINERY

[www.crown-machinery.com](http://www.crown-machinery.com)

Coconuts can be processed into a large variety of products: milk, oil, powder, water, copra, dessicated flakes, activated carbon, coir brick and more, each product has great economic value which can create more profit for the manufacturer.

**Crown Machinery** supplies quality equipment and processing line for producing VCO, MCT Oil, RBD Oil, CME, and Coconut Milk and Water.



## COMPANY PROFILE

Over the years Crown Machinery Co., Ltd. strategically located in China and together with an extensive network of branch office and warehouses around world, provides technical service and spare parts. We had achieved CE, ISO9001, QS certifications.

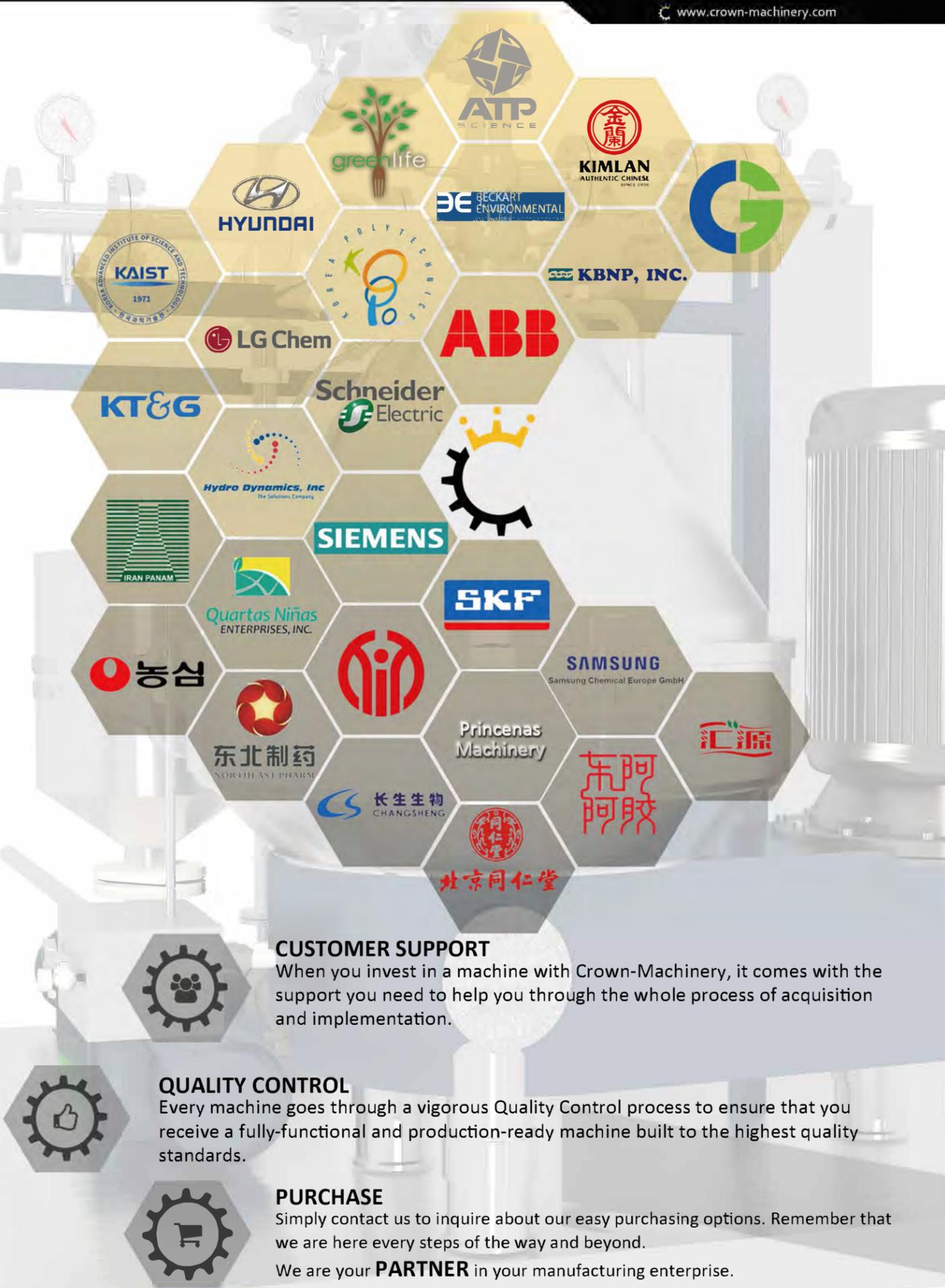
Crown machinery has developed a great experience and a strong know-how in the most important worldwide coconut oil and by-products market. We developed a broad selection of production line and machinery of VCO/ MCT Oil/RBD Oil/CME/Coconut Milk and Water etc.

In order to provide better service to the manufacturer of coconut products at Asia-pacific market, we established a new branch office in Manila took in a group of experienced personnel for serving local market. Granting them the most advanced technologies with the highest quality level equipment.

Now we are participating in Philippine Government funded project like Department of Agriculture, Department of Trade and Industry and Department of Science and Technology.

We support our customers with specific competences for each market, country and application of coconut oil products.

*" The strength of our company has allowed us to always be there for our clients and communities - in good times and in bad times - and this strength enables us to continually invest in building our businesses for the future. "*



**CUSTOMER SUPPORT**

When you invest in a machine with Crown-Machinery, it comes with the support you need to help you through the whole process of acquisition and implementation.

**QUALITY CONTROL**

Every machine goes through a vigorous Quality Control process to ensure that you receive a fully-functional and production-ready machine built to the highest quality standards.

**PURCHASE**

Simply contact us to inquire about our easy purchasing options. Remember that we are here every steps of the way and beyond.

We are your **PARTNER** in your manufacturing enterprise.

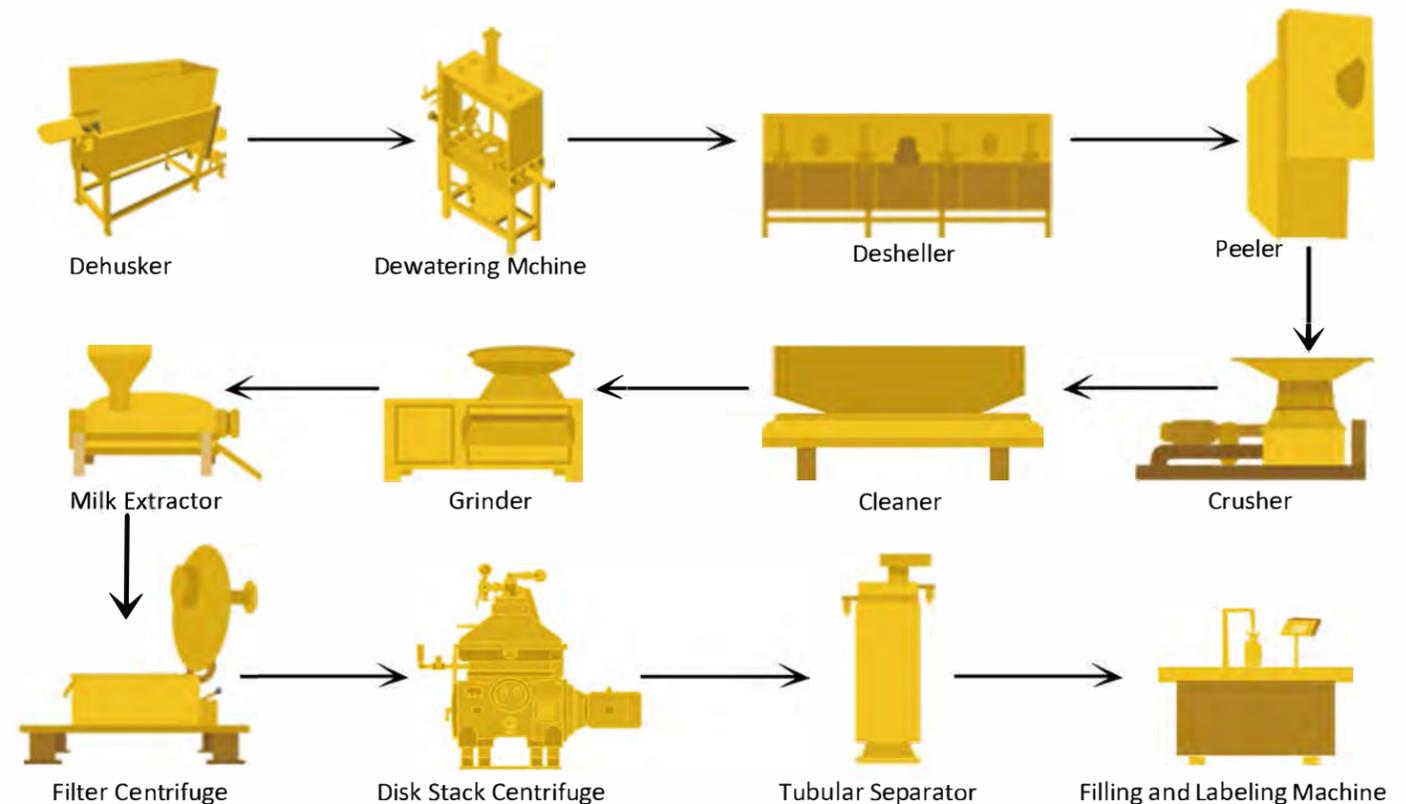
**VIRGIN COCONUT OIL**  
The Most Valuable Coconut Product

For more than 10 years, Crown Machinery has committed to developing various kinds of centrifuge for virgin coconut oil (VCO) manufacturing and processing. There are 3 ways to produce VCO: the dry process, the wet process and fermentation process. The wet and fermentation process is done by treating coconut milk which is extracted by squeezing the coconut meat while in the dry process, dried coconut meat or copra is processed to extract the VCO. Crown Machinery has mastered all 3 processes and supplies relevant equipment for a complete processing line.

**Our Recommendation**

For VCO manufacturing, we recommend “Cold press centrifuge extraction wet process” as the first choice, because it maintains the processing temperature below 60 degrees Celsius and efficiently preserves the organic and natural components in the final product which is colorless, sediment free and has a natural coconut scent. It also tastes much lighter than the oil extracted from a dried coconut. The process does not add any chemicals which bring about the best product with the highest economic benefit.

**Crown Machinery is your reliable friend, our VCO processing line will create more economic benefits for your company.**



### REFINED COCONUT OIL(RBD Oil)

Refined oil is the most widely used form of coconut oil worldwide. It is also known by the name of RBD Coconut Oil, which stands for Refined, Bleached, and Deodorized Coconut Oil. Actually, the oil that is expelled directly from copra is not fit for consumption. This oil is expeller pressed, extracted and refined, bleached and deodorized (RBD) in a process that does not involve solvents or other chemical processes.

#### Features of RBD Oil and Processing Line

- Higher yield than other forms of coconut oil
- Raw material is dried meat or copra which is a pretty cheap bulk
- longer shelf life
- No coconut scent or taste in oil



We Crown Machinery can supply the complete RBD Oil processing line not only for the coconut oil, but also for other vegetable oils.



### MCT Oil

Medium Chain Triglycerides (MCT) are mixed triglycerides of saturated fatty acids with a chain length of 6 to 12 carbon atoms, mainly C8 (caprylic acid) and C10 (capric acid). MCT Oil can be obtained in two ways, by chemical recombination of refined fatty acids coming from coconut oil with glycerine, or directly by molecular distillation of virgin coconut oil. The first product is a synthetic vegetable based ester, and as such is subject to REACH registration. The second one is a 100% natural product, processed with physical treatments only, without any chemical residues, and as such is exempt from REACH.

MCT oil finds many applications in cosmetics. It functions as a skin conditioning agent - occlusive, since it slows the loss of water from the skin by forming a barrier on the skin's surface. One of the major advantages of MCT is that, being a fully saturated oil, it is an inert and stable emollient. It finds application in Aerosols, Creams, Ointments, Lotions, Lipsticks.



Vacuum distillation evaporator

We Crown Machinery recommend molecular distillation technique as your first choice for producing MCT oil.

### COCONUT MILK POWDER

We're engaged in offering our clients the turn key project of coconut milk powder. The plant contains pretreatment, standardization, concentration, spray drying and packing. The control, fault protection, cleaning and other parts are all operated automatically.

The processing of coconut milk powder is from liquid coconut to solid powder. And fragrance, flavor, protein, fat, carbohydrates, vitamins, minerals and other important nutrient are retained in the powder.

Furthermore we can also provide installation and training abroad to meet the needs of our clients.



## COCO METHYL ESTER (COCO-BIODIESEL)

CME is the acronym for Coconut Methyl Ester or Coco-Biodiesel. Biodiesel is typically made by chemically reacting lipids like vegetable oil with an alcohol producing fatty acid esters. On the other hand, it is the international name for methyl ester when used as diesel fuel or enhancer, (CME is not the same as the coco-diesel used in the 70's. Coco-diesel pertains to the use of crude coconut oil. Unlike Coco-Biodiesel this crude coconut oil did not undergo esterification.)

**Crown Machinery** has rich experience and successful cases in CME projects. We also provide techniques and equipment to process other types of oils, like soybean oil, animal fat, palm oil, etc., for biodiesel production.



## TZM300 Coconut Dehusking Machine



Model	TZM300
Capacity	300-360 pcs/H
Motor Power	1.5kW
Operation	Auto
Material	Q235A

TZM300 coconut dehusking machine removes husk or coir from raw coconuts with spike roller. The machine has advantageous high performance, easy maintenance and robust construction.

## QSZ400 Coconut Dewatering Machine



Model	QSZ400
Capacity	400 pcs/H
Motor Power	1.5kW
Operation	Auto
Material	SUS304

QSZ400 coconut dewatering machine is used for coconut water extraction. It drills a hole on the surface of the coconut shell in which a tubule is inserted. A vacuum pump sucks out the coconut water. The whole process is completely automated.

## TKM Series Coconut Deshelling Machine



Model	TKM 500	TKM 1000
Machine Construction	Steel Structures	Steel Structures
De shelling Capacity	500 Coconuts per hr	1000 Coconuts per hr
NO.of De shelling Stations	2	4
NO.of Coconut Cutting Stations	1	2
NO.of Operator	2	4
Motor Rating	1HP	1HP

The TKM series coconut deshelling machine detaches the hard coconut shell through a rotating disc cutter. The blades are specially designed to remove the inner shell with outstanding precision. It requires an operator to hold the coconut in position while the machine is deshelling. Ease of operation and safety are the salient features of the TKM deshelling machine.

### XPM300 Coconut Paring Machine



Model	XPM300
Capacity	100-350 pcs/H
Motor Power	0.75kW
Operation	1 person
Material	S US 304

XPM300 coconut paring machine serves the purpose of peeling the brown and soft outer seed coat or testa from the inner coconut meat. The rugged blade peels off the testa with minimal wastage. It is required an operator to hold the coconut during the process as well.

### YMZ Series Coconut Meat Grinding Machine



Model	YMZ-0.5	YMZ-2.5
Capacity	0.5T/H	2.5T/H
Motor Power	4kW	7.5kW
Operation	Auto	Auto
Material	S US 304	S US 304

The application of YMZ series grinders are grinding crushed coconut meat into 2-3 mm small granules under centrifugal force of the serrated rotor which works for preparing for milk extraction.

### PSZ Series Coconut Meat Crushing Machine



Model	PSZ-1000	PSZ-2000
Capacity	1.0T/H	2.0T/H
Motor Power	4kW	7.5kW
Operation	Auto	Auto
Material	S US 304	S US 304

PSZ series coconut meat crushing machine is a hammer mill which continuously crush the entire coconut into small pieces for ease of further grinding. All wet parts are made of SS304 stainless steel which is corrosion resistant and food-safe.

### YLZ Series Coconut Milk Extracting Machine



Model	YLZ-2	YLZ-3
Capacity	0.5T/H	1.0T/H
Motor Power	4kW	15kW
Operation	Auto	Auto
Material	S US 304	S US 304

YLZ series extractor squeezes the coconut meat with a rotating screw to extract the coconut milk. The liquid milk flows out from the bottom hopper and the dried coconut meat slides out from the spout. The dried coconut meat by product or the desiccated coconut offers a commercial value since it is used as an ingredient in food manufacturing and in baking.

### LQX Series Roller Type Coconut Meat Cleaning Machine



Model	LQX-3	LQX-5
Capacity	1.0T/H	2.5T/H
Motor Power	3.3kW	4.5kW
Operation	Auto	Auto
Material	S US 304	S US 304

LQX series are also designed for washing coconut meat. The roller grinds the coconut meat and wash them with high pressure nozzle. Main structural parts comprise drum, water recycle tank, filter, water pump and motor.

### HDS/HDC Series Coconut Oil Decanter Centrifuge



Model	300x1200	355x1600	450x2000	530x2280
Bowl Diameter(mm)	300	350	450	530
Production Capacity(L/H)	1000-3000	3000-5000	5000-7000	10000
Bowl Length Diameter(mm)	1200	1600	2000	2280
Bowl Speed(r/min)	4200	3650	3450	3000
L&D Ration	1:4	1:4.5	1:4.4	1:4.3
Screw Differential(r/min)	5-30 stepless Adjustable	2-20 stepless Adjustable	4-28 stepless Adjustable	5-25 stepless Adjustable
Motor(kW)	Main 11 Vice4	Main 15 Vice7.5	Main 30 Vice11	Main 45 Vice15
Noise db(A)	≤85	≤85	≤85	≤85

HDS/HDC series decanter centrifuge are used for the coconut paste clarify and coconut oil paste and milk separation, which it is our new innovation for coconut industry with automatic running and discharging performance.

### FSS Series Coconut Milk Centrifuge



Model	450	600	800	1000
Volume	22L	55L	90L	180L
Motor Power	3kW	4kW	7.5kW	11kW
Operation	Batch	Batch	Batch	Batch
Material	SUS304	SUS304	SUS304	SUS304

FSS series are used for filtering the coconut milk paste. The filter bags are placed in the bowl which is customized with different mesh. After centrifugal filtration, the coconut milk paste can now be fed into the disc centrifuge for further processing.

### GZM Series Filling Machine



GZM series automatic filling machine have many types and models for different oil container materials, shape and size, such as 50ml square plastic bottle, 250ml circular glass bottle etc. The machines are capable for filling 40-1000ml finished oil, and specific model is chosen by client's production requirement.

### DGS Series Coconut Oil Disc Stack Centrifuge



Model	300	400	500	550
Capacity	500L/H	1500L/H	3000L/H	10000L/H
Motor Power	4kW	7.5kW	15kW	22kW
Operation	Auto	Auto	Auto	Auto
Material	SUS304	SUS304	SUS304	SUS304

DGS with CIP and automatic discharging system is working as the separator for extracting coconut oil from coconut milk. After that, the coconut oil will go through tubular separator for further clarification.

### TBZ Series Labeling Machine



A wide range of labeling machines which help you to label square and circular bottle with different label dimensions, functions and label materials( paper or plastic). The machine can install coding/ink jet printer, ease of operation and continuous stable running are the salient features of this equipment. The specific model and function will be confirmed by client's demand.

### TS Series Coconut Oil Tubular Separator



Model	105	125
Capacity	200L/H	350L/H
Motor Power	2.2kW	3kW
Operation	Batch	Batch
Material	SUS304	SUS304

The purpose of designing TS is for further purifying coconut oil to meet the follow-up processing of disc stack centrifuge. By TS series, the final moisture content of the oil can be lower than 0.03%. Fine solid particles will be discharged by scraping the bowl manually.

### BZM Series Case Packer



BZM series automatic case packers have various types and models for different packing method and bottle materials, all the process is controlled by PLC system and all the element use the best quality and brand products. The client's requirement determine the model.

### FXZ Series Sealing Machine



FXZ series sealing machine have the function of sealing the carton with scotch tape for moving and transporting conveniently, the model is adapted by the carton size.

## TSZ Series Hoist



Varieties of hoists have the function of hoisting and transporting the raw coconut, coconut meat to next section. Usually, the plate type can be used to transport the complete fruit or big bulk flesh, and the screw type is used to convey the ground fine flesh. The length and height are designed based on the workshop dimension or customization.

## CSD Series Conveyor



The conveyors transport all the raw coconut, processed coconut flesh, removed coir and hard shell to other sections or to collection areas. The length and height can be manufactured according to production line or client's demand.

## HCG Series Holding Tank



The HCG series holding tank has a variety of models for dispensing and storing fluids such as coconut milk, coconut oil, etc. The tank has two types, the single layer and the double layer with heating function. Both can be fitted with a blender. The entire tank is made in SS304 and the volume may be customized.

## WLB Series Sanitary Centrifugal Pump



The WLB series pump is used to pump fluids to adapt the flow rate range from 1 to 400 M<sup>3</sup>/H while taking into account the fluid properties. All the pumps are made in food grade SS304.



## SERVICE

Crown Machinery has established a worldwide service network which all the service area show on the maps consisting of its own branch offices, and representatives to provide our customers with localized service and spare parts, repair and maintenance which we also provide products testing to ensure that the machines that we provide will be best-fitted for your need.

All machines have 18 months warranty assuring you of our confidence on our product quality. Our service engineers and technicians are qualified for any kind of installation, commissioning, However, if further assistance is needed, Crown Machinery will arrange technician visits on your site.