



- Adopted fresh avocado fruit pulping and centrifuging
- Low temperature cold pressing, low degree of oil oxidation
- No chemical additives, Natural food favor



C A T A L O G U E



AVOCADO OIL TURNKEY PROJECT



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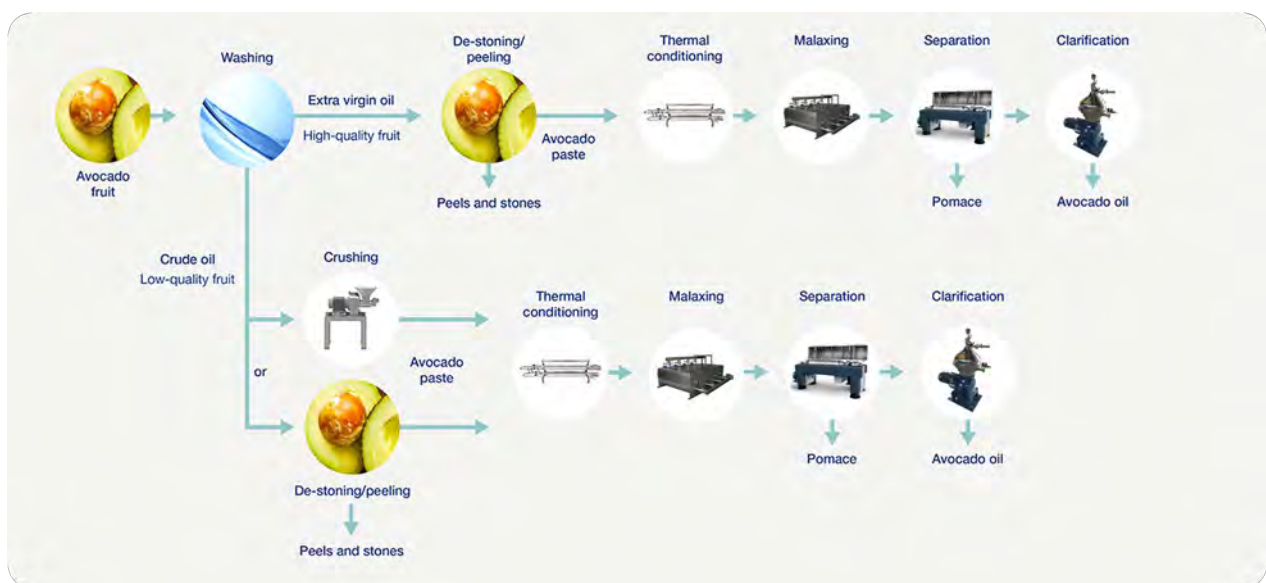
Introduction of Cold - press Avocado oil (CPAO)

In the late 1990s, a processing company in New Zealand began to produce cold pressed avocado oil (CPAO) for sale as salad and cooking oil.

CPAO uses cold pressing technology to produce as naturally as possible, without hexane and other chemical solvents used in other oil production methods. Pressing at a lower temperature can make avocado oil maintain its nutrients, expressive aroma, emerald color, excellent flavor.

Avocado fruit are hand picked, sorted, washed, and then processed through a nuclear peeler. Once the fruit is separated from the peel and core, it will soften at low temperature and begin the process of oil separation. Continuous temperature monitoring of softeners is carried out to reduce oxidation. Fruits only need to be softened in the shortest time to prepare extra virgin avocado oil.

After metamorphism, the fruit is separated from oil by a two-part centrifugal system. Finally, a polishing separator refines all remaining particles to create a truly unique smooth, emerald extra virgin oil.



Oil extraction

The separation of oil from solid and liquid phases is done using a decanter centrifuge corporate with disc centrifuge. Those machinery exploits the centripetal acceleration to separate continuously a mixture of particulate solids and liquids with phases having different densities.

Our equipment range for Avocado oil process

Pre-treatment selection

Model	capacity	Dimension(L*W*H)	Material
Belt fruit elevator	1 ton/h	3000*500*2000 mm	Main body 304 stainless steel, Food grade plastic belt conveyor, with lifting hopper
Transport raw material/ avocado fruit to the pre-cooker.			
Bubble fruit washing lifting machine	1 ton/h	3800*1200*1650 mm	304 stainless steel
Washing avocado meat under the combined operation of air bubble, surfing, hoisting and spraying. Forced gas-boiling cleaning with low-level lifting			
Brush cleaning machine	1 ton/h	2500*800*1700 mm	304 stainless steel
Brush with spray head for avocado fruit cleaning.			
Chain plate pre-cooker	1 ton/h	5500*800*1500 mm	304 stainless steel
By screw feeding, steam by side to preheat and soften fruit.			



Belt fruit elevator



Bubble fruit washing & lifting machine



Brush cleaning machine



Chain plate pre-cooker

Our equipment range for Avocado oil process

Pre-treatment selection

Model	capacity	Motor power	Material
Fruit destoner	1 ton/h	4 kW	304 stainless steel
Auto de-stoned, High efficiency, without waste. Adopted 14 mm sieve, customize as ordered.			
Colloid mill	500 l/h	11 kw	304 stainless steel
To mill meat into pulp.			
Malaxer	1 ton/h	7.5 kW	304 stainless steel
By screw to max blending the liquid Heating by steam			



Fruit destoner



Colloid mill



Malaxer

Other equipment

Centrifugal pump

Pumping the fluid to tank, which is capable to adjust the flow rate from 1 ~ 400³ ml/h.

Screw pump

Pumping the pulp to tank, which is capable to adjust the flow rate.

Holding tank

Storage the final Virgin **Avocado oil** product.

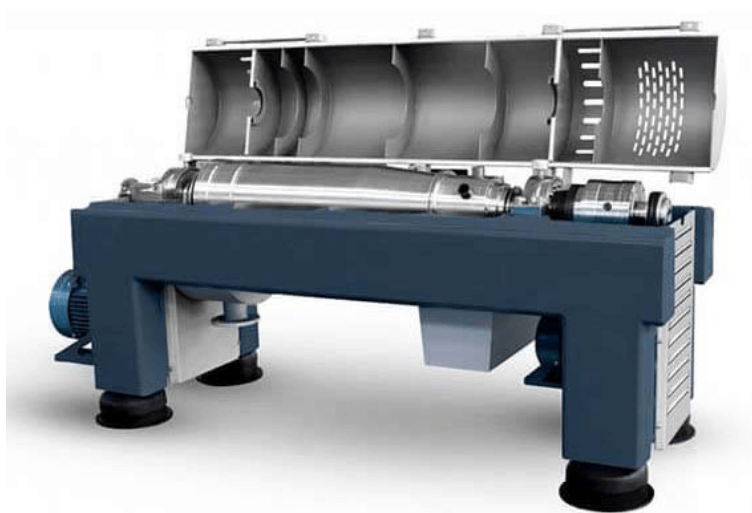


Our equipment range for Avocado oil process

Oil separation selection

DECANTER CENTRIFUGE

Decanter Centrifuges applied in the selection by goals of separators of liquid phase (contain oil) and solid phase. Decanters are used for the extraction of liquids from large proportions of solids as pre-process equipment. It makes use of medium-low speed suspension to process larger capacities of solids as compared to a Basket Centrifuge.



HDC Decanter centrifuge

DISC STACK CENTRIFUGE

Disc Stack Centrifuge is a high-speed, mechanical centrifuge used for the separation and purification of mixtures comprising of light liquids, heavy liquid and solid, as of oil, water and residue of pulp.

Used in a wide range of applications. For example, it can be used in extracting procedures for oil, for basic oil and water separation, and for filtration or the removal of impurities of any solid or liquid product.



DGS Disc stack centrifuge

Decanter Centrifuge Specification

Series **HDC**

Parm/Model	250*1000	355*1460	450*1800	500*2000	550*2200	650*2800
Bowl Dia. (mm)	250	355	450	500	550	450
Bowl Length (mm)	1000	1460	1800	2000	2200	2800
L&D Ratio	1:4.0	1:4.1	1:4.0	1:4.0	1:4.0	1:4.3
Bowl Speed (r/rim)	4800	3800	3500	2500	2400	2400
Throughput (m³/h)	1~5	1~20	3~35	5~35	5~40	20~110
Motor power (kW)	Main motor 11 Vice motor 4	Main motor 15 Vice motor 7.5	Main motor 37 Vice motor 11	Main motor 45 Vice motor 15	Main motor 55 Vice motor 22	Main motor 75 Vice motor 22
Weight (kg)	1500	2500	3200	3500	3500	8500
Dimension L*W*H (mm)	2400*750*960	2790*1300*880	3300*1600*920	3469*1600*1120	4395*1370*1655	4300*1900*1350

* Throughput indicate the water output and it may change depending on the dealing material and configuration

HDC : Two Phase

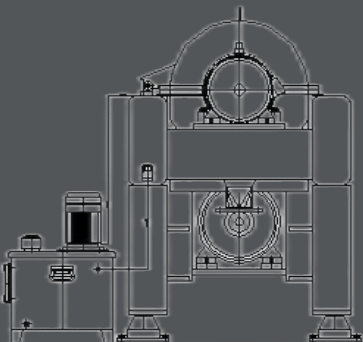
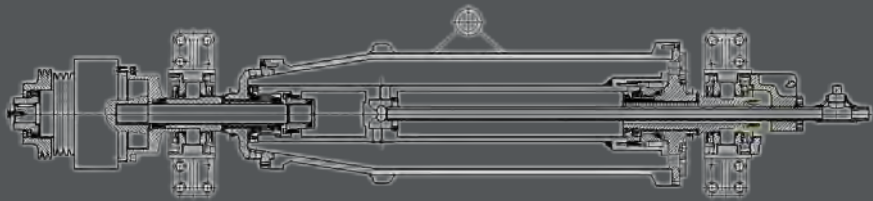
Scroll discharge Decanter Centrifuge

Front



Scroll discharge Decanter Centrifuge

Bowl



Oil centrifuge Specification

Series DGS

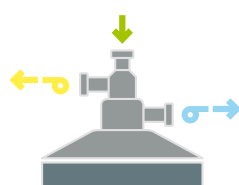
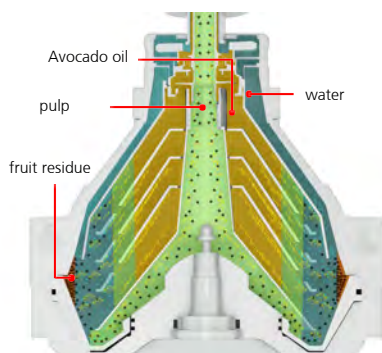
Parm/Model	300	400	500	550
Bowl Dia. (mm)	270	360	470	550
Bowl Speed (r/min)	7302	7070	6600	5800
Capacity (T/D)	10~12	30~50	100~150	200~350
Motor power (kW)	4 (Y112M-4-B5)	4 (Y132M-4-5B)	15 (Y160L-4-B5)	22 (Y180M-4-B5)
Weight (kg)	550	1200	1600	2300
Dimension L*W*H (mm)	950*950*1250	1530*1150*1500	1800*1200*1750	1965*1550*2045

* Capacity indicate the water output and it may change depending on the dealing material and configuration

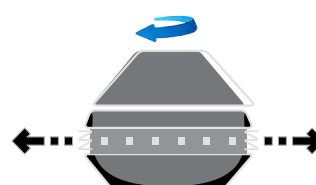
DGS : Three Phase

Oil Separation centrifuge - oil-water-residue

The oil centrifuge is used to separate liquid and solid mixtures with different densities, such as avocado oil products, separate the mixture into water, oil and residue.



DGS



Automatic discharge

● Pulp ● Avocado oil / light phase ● Water / Heavy phase

Accessory equipment



Electric Cabinet

Monitoring and adjustment of power, parameters setting and safety devices.



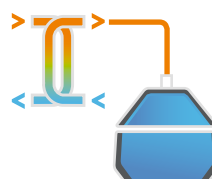
CIP System

Control the system clean the separation components automatically.



Counter pressure valve

Controls the pressure of the liquid phase outlet and of separation interphase.



Heating System

Regulates the temperature of inlet product.

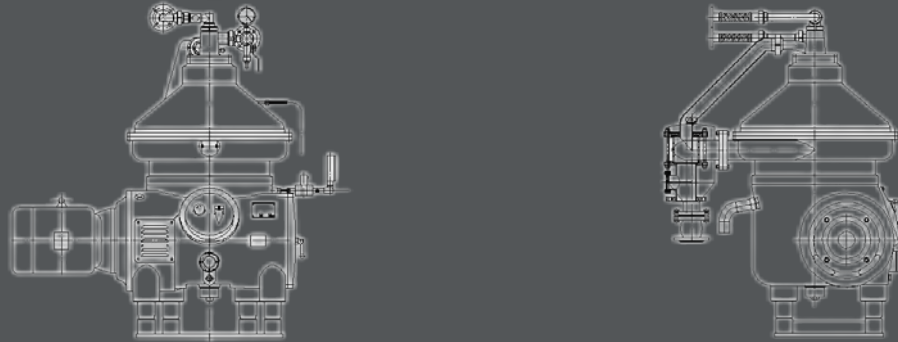
Figure

Oil Centrifuge

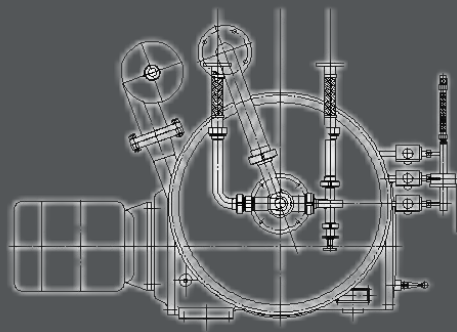
Type

DHS 500 Oil clarification type

Front

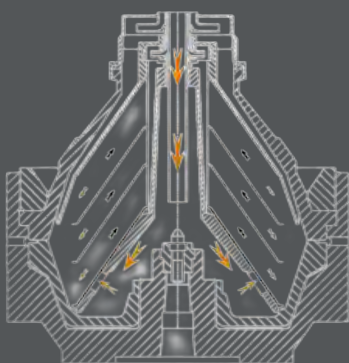


Overhead



Oil Centrifuge

Bowl



Working Principle

- Disc centrifuge has a main frame that consist a horizontal drive shaft with clutch and brake, worm gear, lubricating oil bath and vertical bowl spindle in the lower position.
- The bowl is mounted on top of the spindle, fixed by the upper parts, the gasket, the collecting parts, and frame hood. The material feed into the bowl, by the effects of centrifugal force the liquid phase pumped out of machine through outlet pipe, meanwhile the solid phase adhere on the bowl wall, then were discharged automatically by operation water. The electric motor is of the variable frequency drive type or of controlled torque type. All parts in contact with material are made of stainless steel.