Fully automatic multifunctional oil press

A. Main technical parameters and performance

1. Technical parameters

型号 Model / 参数 parameter / 名字 Name		YD-1685	YD-1688	Y-120
榨螺直径 Squeezer diameter		Φ80mm	Φ100mm	Φ120mm
榨螺转速 Squeezer speed		60r/min	40r/min	36r/min
榨膛内接园直径 Pressing chamber inscribed diameter		Φ82mm	Φ102mm	Φ122mm
配用动力 With power	主机 The host	Y112M-6 5.5KW	Y132M-6 7.5KW	Y160M-6 11KW
	加热器 The heater	3KW	3.5KW	4KW
处理量 Processing		80-160kg/h	150-260kg/h	260-400kg/h
整体重量 Weight		780kg	980kg	1500kg
外型尺寸 Installation dimensions		1680x1300x1550	1950x1350x1610	2050 x1550 x 1800

2. Oil extraction performance

项目 Project / 参数 Parameters / 原料 Raw Material	出油率 Yield efficiency (%)	饼厚 Cake thickness (mm)	干饼残油率 Dry cake residual oil rate (%)
芝麻 Camellia seed	42-55	1.0-1.5	≤6
花生 Soybean	40-50	0.8-2	≤6
油菜籽 Canopy seed	30-40	1.0-1.5	≤6
油葵籽 Rapeseed	32-40	1.2-1.5	≤6
大豆 Peanuts	11-16	0.8-1.5	≤5
山茶籽 Sesame seeds	26-38	1.0-2.0	≤6

注：由于油料的品种和含油量不同，加上操作技术条件和油料预处理的差异。 以上表中列出的数据只供参考。注意带✡号的必须认真阅读，否则造成的一切后果由客户负责。

Note: due to the variety of oil and oil content, coupled wth differences in operating conditions and fuel pretreatment. The data listed in the table above are for reference only. Note with ✡ must carefully read, otherwise all the consequences shall be the responsibility of the customer.

B. the structure and working principle

1. structure

This series of unit is mainly composed of automatic control section, heat pressing part, adjustment part, transmission part and vacuum filter oil five major components (see figure 1);

① The automatic control part by air switch, ac contactor, automatic temperature control instrument, circuit protection devices, etc;

② Heat squeeze by a heater, squeezer, pressing bar and body assembly, etc (see figure 3);

③ Transmission by the main shaft and the wheel reducer, pulley, motor, etc;

④ Part adjustment by the adjusting screw, the adjusting nut, handle, lock nut, etc (as shown in figure 4, 6);

⑤ Vacuum oil filter consists of a vacuum pump, filter oil pipeline assembly, (see figure 5);

2. working principle

Power after reduction to the spindle, mounted on the spindle squeezer as the rotation, between the threaded oil constantly move forward, due to the space between the pressing chamber with squeezer gradually narrowed, the density of oil increased, so the pressure increased. In the process of crushing, between oil particles, oil and friction between parts, the heat generated. Thus constitute two essential oil process pressure, heat, fuel cells, oil spilled from the oil line, bread is from the head and the discharge port is introduced. When spilled oil through the oil pan into the filter barrel, the vacuum pump

Formed in the air in the barrels, barrels of negative pressure, through the filter doth, oil is pumped into the barrel, and the oil residue was isolated in the filter cloth, then get the pure oil.

C. installation

1. Oil mill installation, set aside enough space, for staff to operate;
2. To adjust the machine, the machine in a horizontal position, and then adjust the filter barrel to the level of state;
3. After installation of machine, from machine for 3 to 5 m, 0.5 1 m deep on the ground before work.

D. operation and use

1. Before use must carefully read the instructions first, familiar with the performance characteristics of the machine and operation method;
2. Before starting, must conduct a comprehensive inspection, various fasteners must not be loose, handle flexible rotation, turn the pulley by hand, all the parts should be normal operation, no abnormal noise, then in deceleration box filling 20 oil;
3. Turn the adjusting screw counterclockwise, make the squeezer cone on the mouth of the cone in cake, then turn the adjustment screw clockwise 2-3 mm, spin lock nut again, ready to start;
4. Users to install a air switch three phase four wire 63 ann, put machine into line connected;

5. Adjust the temperature controller is set to crush the required temperature 120 id to 200 °c (according to oil). Twisting total heating switch on machine heating heating up, then the green light, red light out on the temperature controller, when the temperature rise of the machine to the set temperature, the red light, green light goes out, the temperature of the machine is automatic control and maintain the set temperature 120 id to 200 °c;
6. Push forward button host, the host began to work, should be counterclockwise rotation direction;
7. The new oil press installation should be 2-8 hours after grinding press, method is to use oil has been pressed cake materials (rapeseed, soybean cake, mianbing or cotton shell, rice hull) from slowly feeding hopper, repeated back to squeeze, to press polish, the bread, forming smooth, remember that started grinding press, don't put directly into the hopper;
8. Material should be slowly pour is advisable. Such as feeding too hard, and in the bore squeeze abnormal noise or squeezer shaft jammed, should immediately stop, eliminate the obstruction, assembled again before you start, it is strictly prohibited forcibly trailer or reverse pour material. Normal oil, must maintain the rhythm. A cake thickness 0.5 2 mm, normal control the bread smooth, low pressure section of basic slag, high pressure section has a small amount of sludge, slag but not greater than 10% in oil, squeezed inside the chamber temperature can reach 120 °c to 200 p, the cake mouth emitted smoke should be cover by smoking pipe discharge, squeeze out hot cake to spread out in time, lest produce spontaneous combustion phenomenon. When work continuously for a long time, the engine temperature is too high, the electric fan blowing and other cooling measures should be taken;
9. When the squeeze out the oil into the oil filter, press the pump button, a vacuum pump to run, the air inside the filter barrel is pumped out, form a negative pressure inside bucket, it will naturally flow into the filter barrel of oil, and oil residue was isolated in the filter doth, to squeeze the end, after the oil is pumped, stop the pump running, open the filter drums on the valve (figure 5, 3, 4), dry slag is formed on the filter cloth, with a scraper scrape, can put the filter in the oil from the oil drum at the bottom of the valve is released (fig. 5, 5, 6);
10. Downtime. Stop to stop feeding before, at the same time to loosen the cake mouth, then put into a small amount of bread crumbs, interior material row in cake, the cake mouth no longer out of the cake before downtime. Stop after the adjustment screw clockwise spin out 1- 3, disconnect the power supply again.

E. maintenance

1. Each work 50 hours later check the lubrication situation, reducer oil cup above shall not be short of oil (see chart 1), squeezer shaft adjustment screw bearings should be in the screw hole filling butter at a time, it is forbidden to dry ground;
2. The lubrication parts should prevent dust and other impurities into, every year to check reducer motor oil, metamorphism is found, all the oil should be changed;
3. When production is reduced, the bread or the oil is not normal, should take out squeezer shaft, check squeezer, pressing bar, pie mouth wear, wearing parts to

change in time;

4. Each class after work, the machine should be removed within the residual cake, the surface dust, clean machine oil;
5. The production end of the season during long-term storage, should be a service, and will be squeezer, pressing bar, the cake mouth wash heavy oil, put in dry place;
6. Check, repair, replacement parts should first tum off the total power switch, when charged maintenance are strictly prohibited.

F. Several main oilseed crushing method (for reference)

1. The fuel into the press before the pretreatment process requirements:

① Oil drying, selection. Oil into the press should be dried before, cleanse, make its moisture is not greater than 10%, the impurity is not greater than 0.5%. Special attention should be paid to is, many users ignore the oil selected the necessary pretreatment process, dispensable. Little imagine, not by the selection of oil, dust will plug oil, sand and gravel will speed up the wear and tear of parts, not only affect the normal work of the oil press, but also greatly shorten squeezer, pressing bar, service life of bread. In material selection, can get twice the result with half the effort;

② Shell peeled. For shell oil such as seeds, peanut in shell, can improve the oil mill capacity and yield efficiency of oil;

③ Broken flaking. The machine without the working procedures can be squeezed, especially rapeseed without flaking and had no obvious effect, and other oil after rolling embryo to improve throughput and yield efficiency are good;

④ Fried seeds. Although the machine can adapt to the cold pressed, hot pressing the productivity and yield efficiency were higher than in cold pressed. Moderate oil baked fried, fire, turning even, prevent burning coke, or raw. Recommend using our company products dz - 650, 700, 一一 ΦΦ750 type automatic frying machine.

2. The main oil crops squeezing method:

① Sesame: Involved before will seed to pale gray, have burst phenomenon, use hand to knead seed oil outflow, fry seed in the fierce fire, the fire temperature 120 °c to 150 °c, the cake thickness 0.7 1.5 mm, fry seed right, the smooth flow of oil in cake, basic no residue, oil cakes for strip shape.

② Rapeseed: Because the north and the south the raw materials have different water, fry and water, add 4-6%, north south without (according to raw material itself how much moisture), with the fire fierce to rapeseed hot, first began to have a burst of noise, then switch to low heat and rapeseed on palm red, fried seeds in the process, not add water, the pressed rapeseed temperature 80 °c to 120 °c, and water for about 1-15%, fry seed are appropriate, from the flow of oil, the state observation in cake, fried seeds, the smooth flow of oil in cake, basic no residue, oil cake thickness 1-1.5 mm, a small chip, brownish red .

③ Groundnut kernel: Fried benevolence, the peanut soaked again, fry the kernel process, should also be right amount increase moisture, make benevolence maintain good softness and plenty of water, stir-fry benevolence to 8 mature, use hand to knead benevolence to kernel, separation, hitoshi burst into two disc can be involved and cake

thickness 0.7 mm, is long wrinkles, smooth out the oil;

④ Soy: Into the press before the oil to fry to pale yellow, temperature of 80 °c to 100 °c, the cake thickness 0.7 mm, the drain again. But again sucked dry bread is burnt, make its protein loss is very large. Therefore generally use two squeeze net processing method. Stir-fry soybean to six or seven mature, into the pressing temperature 80 p to 100 p, water 5-6%, the first time 1.5 2 mm thick, the second time cake thickness 0.7 mm, cake for strip crumpled, spiral, processing.

G. General failures and troubleshooting methods

Fault	Reason	Elimination method
Squeezer shaft jammed	① Feeding excessive, especially cold machine ② Heat up; ③ Belt slippage; ④ Press chamber mixed with gravel,scrap iron.	① Open, close the feed plate, stripper plate, tum the adjusting screw clockwise and open the car that spinde inversion, the pressed oil from a discharge opening between the thread, then close the discharge opening, will fuel feeding sbwly, until the load is normal; ② The tightness of the belt can be adjusted; ③ Take squeezer, materials in the bore clear squeeze. Squeezed into the material must be selected at the same time.

No oil or low yield efficiency	① Press the chamber tempeiature is too low; ② Too wet or too dry; ③ Is expected to be affected with damp be affected with damp mildewy, grain is not satisfied, and too many impurities; ④ The cake is too thick or too thin; ⑤ Crush the oil line blocked; ⑥ Squeeze the improper installation, no oil tight, too loose easy slag leakage; ⑦ Cake thickness less than 1.5 mm.	① Heating up; ② Adjust the water; ③ Gdne mouldy oil shall not be involved, even if it can extract oil, after eating harmful to human body health; ④ Adjust the cake thickness; ⑤ Remove the pressing chamber, deaning the cage bar; ⑥ Adjust the firmness of pressing bar installation, in the last article root extract with wooden hammer strength of medium into the advisable, to severe wear of cage bar, shall all be moved around the new; ⑦ Replace the pie mouth and squeezer.
Inside the bucket oil return	① 5,6, 7, the same with the second; ② Too much dust impurities in oil; ③ Fuel oil content is too high.	① Paragraph 2 of article 5,6, and 7 methods; ② Oil extract; ③ Oil infiltration within a certain amount of bread.
The machine load is overweight	① The machine temperature did not reach normal state that a large number d incoming material; ② Gear box oil lubrication; ③ Mixed with foreign body in the material.	① Slowly feed to machine temperature is normal; ② After add engine oil boot; ③ Stop.
After replace new squeezer spiral of decline	The ring wear in cake too bad cooperation with the new squeezer	Replace the pie mouth
Oil is muddy and thick	Raw material is too dirty, too dry, too wet, too Chen, too bad	Cleaning materials, acjusting water

No bread or lower productivity	① Since the oil return phenomenon caused ② The mouth was old residue jams in cake; ③ Use phone without grinding press, old machine without heating up.	① With the exclusion of oil return phenomenon solve; ② Clearing the cake mouth residue or retreating into squeezer shaft reciprocating reset again many times; ③ Press

H. Wearing parts disassembling method

1. The dismantling method

Remove: After parking, extract squeezer shaft, screw out support connected to the body, bracket and base bolt, will stand off, will be stick on the rope fastened jacket ready to lift. Screw out the body linked to supporting two nut (along the longitudinal will body positioning first check out from the mouth from the hole of the positioning plate). You can remove the body;

Installation: The program is the opposite of remove. But should pay attention to the parts of fastening connection, in addition to the body are connected to the support of two bolts to tighten, the rest of the body and the supporting plate, the brackets are connected to the base of temporary don't tighten, tighten fittings are to be squeezer shaft load make squeezer cone to close the mouth after the cone in cake, progressive tighten mounting bolts, nut; positioning plate

Whether the body after installation, the pressing chamber centerline and stents, supporting plate and installation center coaxial reducer, etc. From the squeezer can smooth screwing in turn the adjusting screw to judge. If not smooth, should loosen the bracket and base, reducer, positioning plate adjustment bolt connection;

2. Press the dismantling method

Remove: Carrying the body. With a square iron (or waste pressing bar), and a hammer at one of the four rhombus pressing bar fight to make it fall off, the rest of the pressing bar will fall off, then use the same method to low squeezing is dismantled. Before and after wash good body bearing, heat trap inner hole, pressing bar and pie mouth (see figure 6);

Installation: Pressing bar is divided into high and low pressure section of squeezed chamber. Its shape has a, b, c, d four. A c for six prismatic pressing bar. A (pressing bar oil line drive too deep and long, all in a low pressure stage, and one end of the oil line is deeper shall be installed near the inlet end of body, can not put down. Shallow and short article c extract oil line. Has to be toward the low-pressure oil when assembly line at one end, type b, d pressing bar are square, oil free line. Assembly of attention should be paid to party a and c pressing bar assembly position and direction, shall not be installed wrong and pour (especially oil line can't put down, otherwise the slag oil return) (see figure 7).

Body and bracket, positioning plate installed, assembled press article, six pnsmatic alternating with square pressing bar should be arranged loading, and by tight hole wall body, pay attention to protect press article edge, shall not be damaged, such as side appear bruising can flip over to use. Tightness of pressing bar assembly shall be subject to final a square wooden hammer cage bar medium strength into the advisable (see figure 8), can add adjusting shim too loose. Prevent the assembly when the gasket are squeezed inside the chamber pressure collapse deformation and slag discharge. Pressing bar installed, formation of the inscribed circle should level off, smooth, into the last pressing bar should pay attention to don't make the pressing bar extrusion, scratch the body wall;

3. The squeezer shaft disassembling methods (see figure 4)

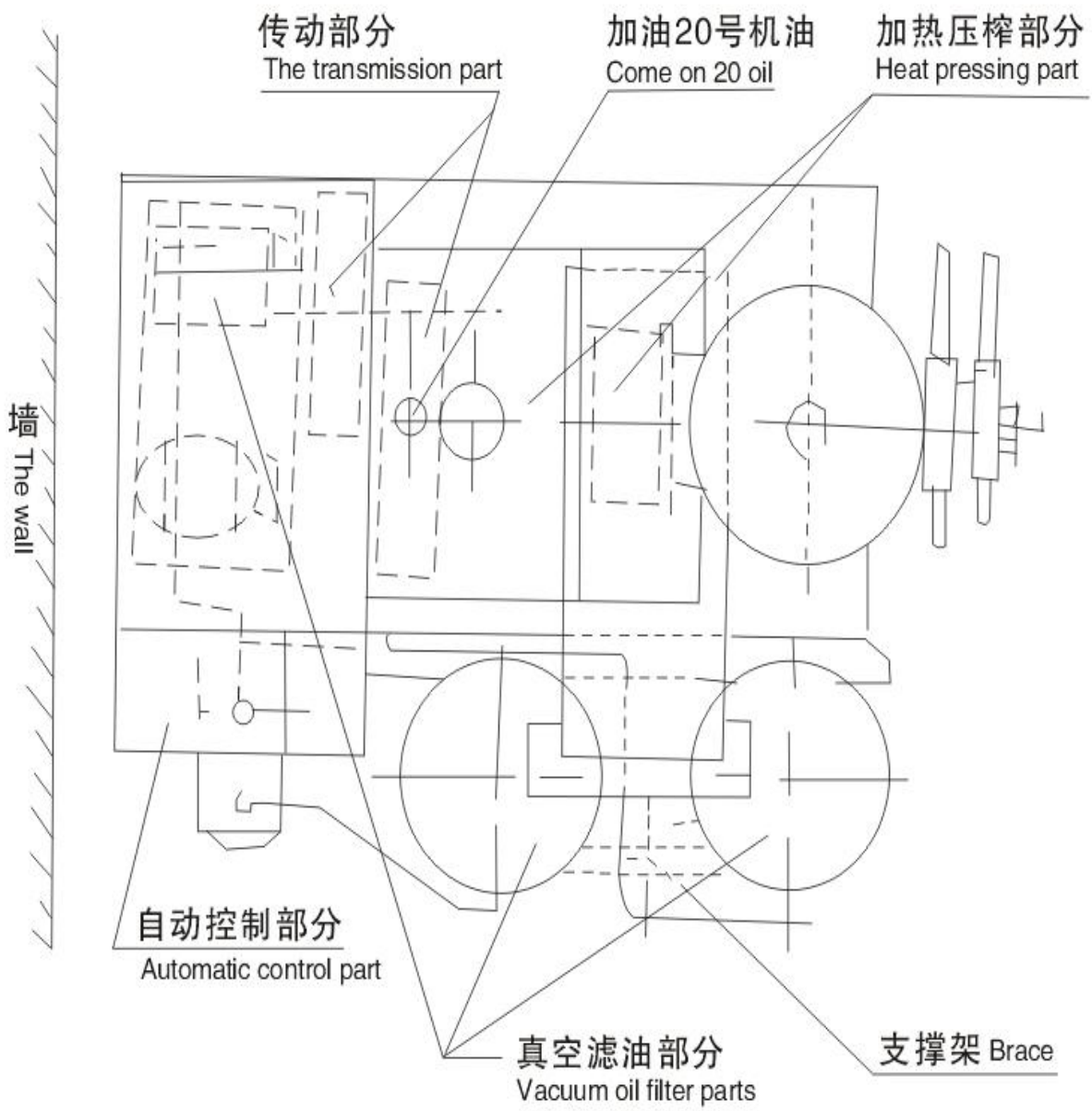
Remove: Loosen the nut, screw squeezer shaft after the adjusting nut, screw the screws, flat key, screw nut, can unload the squeezer, sometimes by untight seal contacts between adjacent squeezer can make the squeezer disassembly difficulty into bread slag, so should strike for removal, two people holding two handle respectively, make the spindle squeezer, down on the ground put a big block, lift the handle down the impact of the squeezer under this loss.

Installation: The main shaft and a squeezer inner hole and keyway hole clean, 4 root 10 mm button installed first, again ordinal loading squeezer, its assembly location and the direction as shown in figure 4. When loading, should with nature in a advisable, must clean up the shaft and when tight squeezer inner hole, check the presence of burrs, cluster, with a sharp knife down before loading. After loading squeezer, tight set screw cap into the screw axis hole top silk, with 12 and screw, flat key squeezer shaft load to the last section squeezer cone to close the mouth after the cone in cake, with torque rod with a single head move hand tighten the nut counterclockwise.

Bearing dismantling method

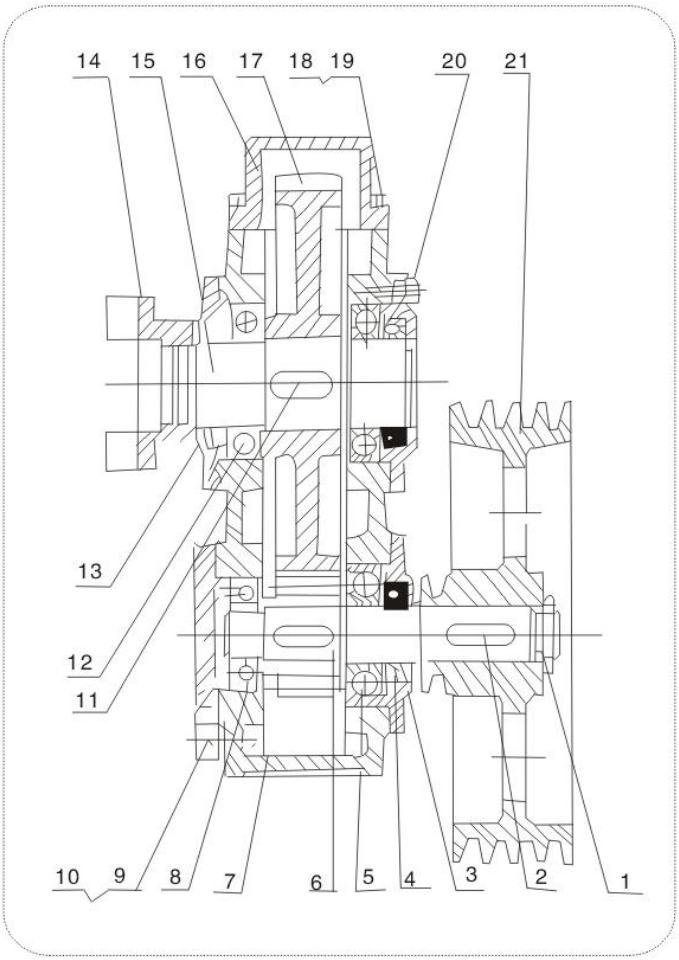
Remove: To remove the cover first, unscrew the handle, press down the cap, with a diameter of 20-30 mm hard stick into the adjustment screw hole, on tightening spindle shaft end, the wood hammer knock at the other end of the stick, exit the adjustment screw make bearing, then pull out the shaft end lock nut in the middle of the washer, screw nut, in turn, remove the bearing and bushing (see figure 4)

Installation: Program instead.



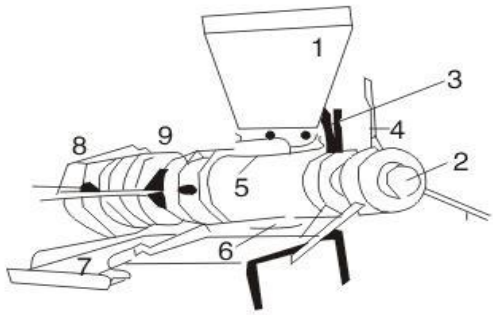
图一 总装示意图

FINAL ASSEMBLY DIAGRAM



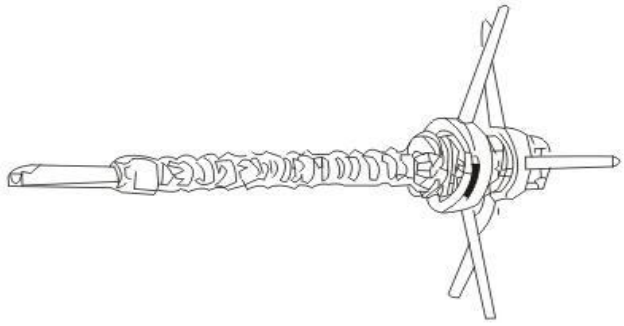
序号 number	名称及规格 Name and specifications	数量 number
21	大皮带轮 The big pulley	1
20	螺栓 Bolt M10 * 30	14
19	垫圈 Gasket ф 6	4
18	螺栓 Bolt M6 x 15	4
17	大齿轮 Big gear	1
16	箱盖 lid	1
15	大齿轮轴 Big gear shaft	1
14	碎饼器 The cake cracker	2
13	轴承透盖 Bearing through cover	2
12	轴承 Bearings 213	1
11	键 Key 16 x 40	1
10	轴承闷盖 Bearing cap	1
9	紫铜垫圈 Copper washer	1
8	轴承 Bearings 208	1
7	箱体 enclosure	1
6	小齿轮轴 Pinion shaft	1
5	轴承 Bearings 208	1
4	油封 Oil seal 40 x ф ф 62 x 12	1
3	轴承透盖 Bearing through cover	1
2	键 Key 10 x 60	1
1	压盖 Gland	1

图二 减速箱装配结构示意图（D－1685型）
Reducer assembly structure diagram

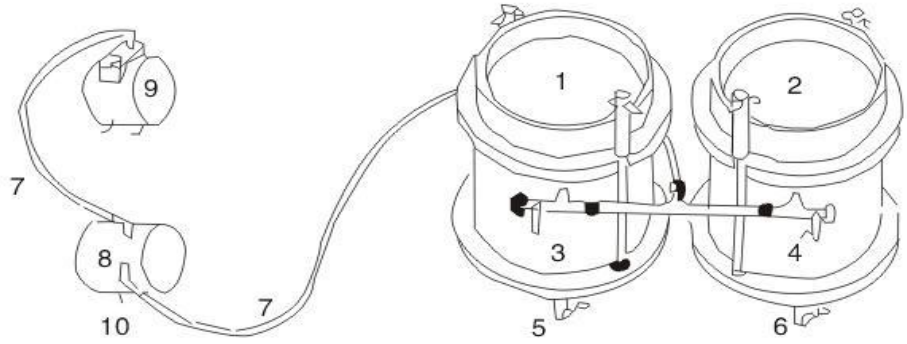


1、漏斗
funnel
2、后压帽
After the pressure cap
3、锁定手柄组件
The locking handle components
4、油渣柄调节手柄组件
Oil residue handle the regulating handle components
5、上板
Upper plate
6、下板
The lower
7、油盘
Oil pan
8、第一加热器组件
The first component of the heater
9、第二加热器组件
The second component of the heater

图三 加热器机体装配图
Heater body assembly drawing



图四 榨螺轴装配图 Squeezer shaft assembly drawing

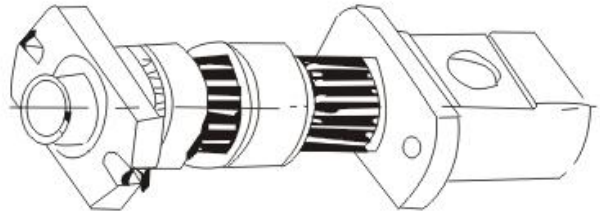


1/2、过滤箱（桶） 3/4、气控制阀 5/6、放油阀 7、气管
Filter tank (barrel) Gas control valves Oil drain valve The trachea

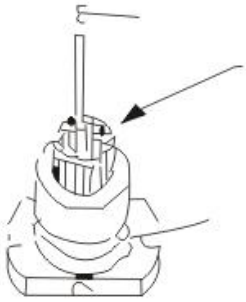
8、气包 9、真空泵 10、储油箱（桶）放油阀
Air bag Vacuum pump Oil storage tank drain valve (barrels)

图五 真空滤油器示意图 The vacuum oil filter

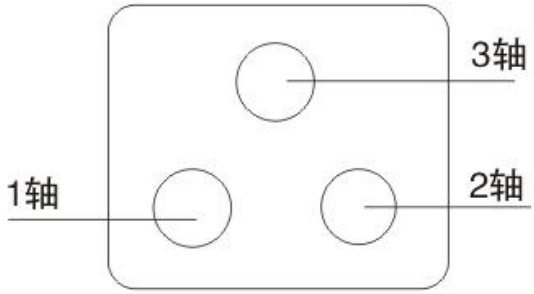
图六 榨条拆卸图
Squeeze the disassembly graph

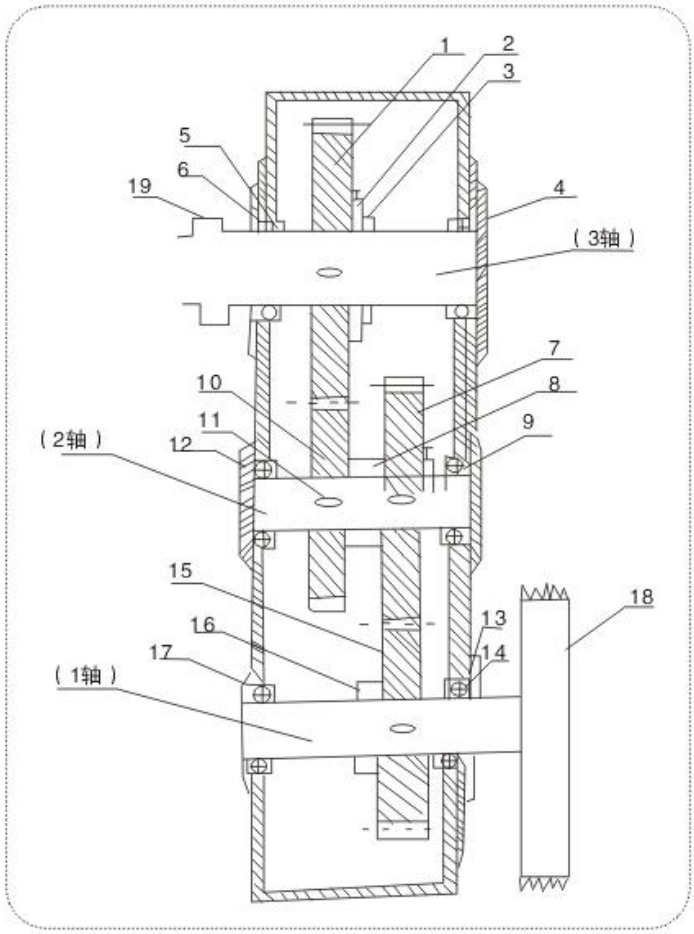


图七 榨条安装示意图
Squeeze the installation diagram



图八 榨条安装方法图
Pressing bar installation method

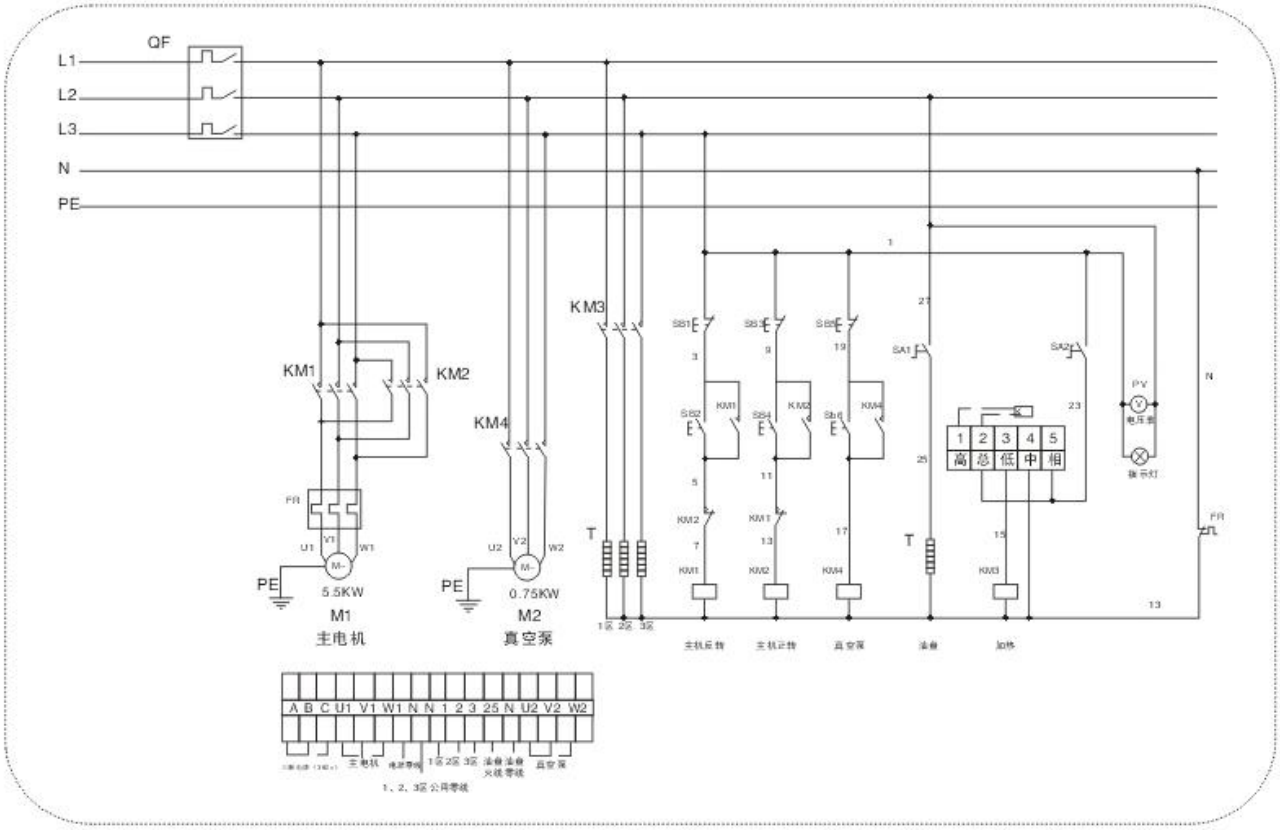




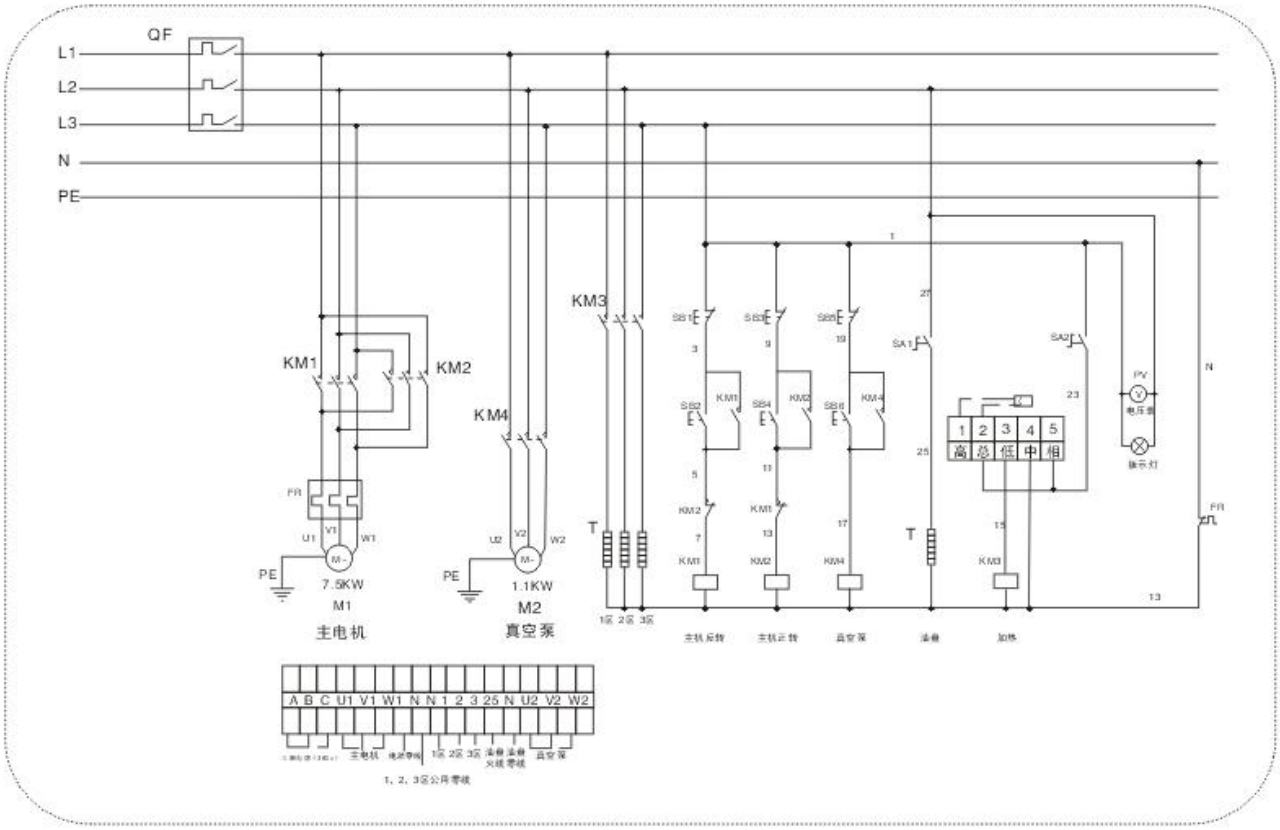
1	51牙齿轮	Gear
2	锁片	Lock plate
3	锁紧螺母	Lock nut
4	211轴承	Bearing
5	218轴承	Bearing
6	轴承盖	Bearing cover
7	34牙齿轮	Gear
8	台阶	The steps
9	309轴承	Bearing
10	17牙齿轮	Gear
11	键	Key
12	309轴承	Bearing
13	209轴承	Bearing
14	70x45x12油封	Oil seal
15	17牙齿轮	Gear
16	台阶	The steps
17	211轴承	Bearing
18	直径400皮带轮	Pulley
19	波饼器	Wave bread machine

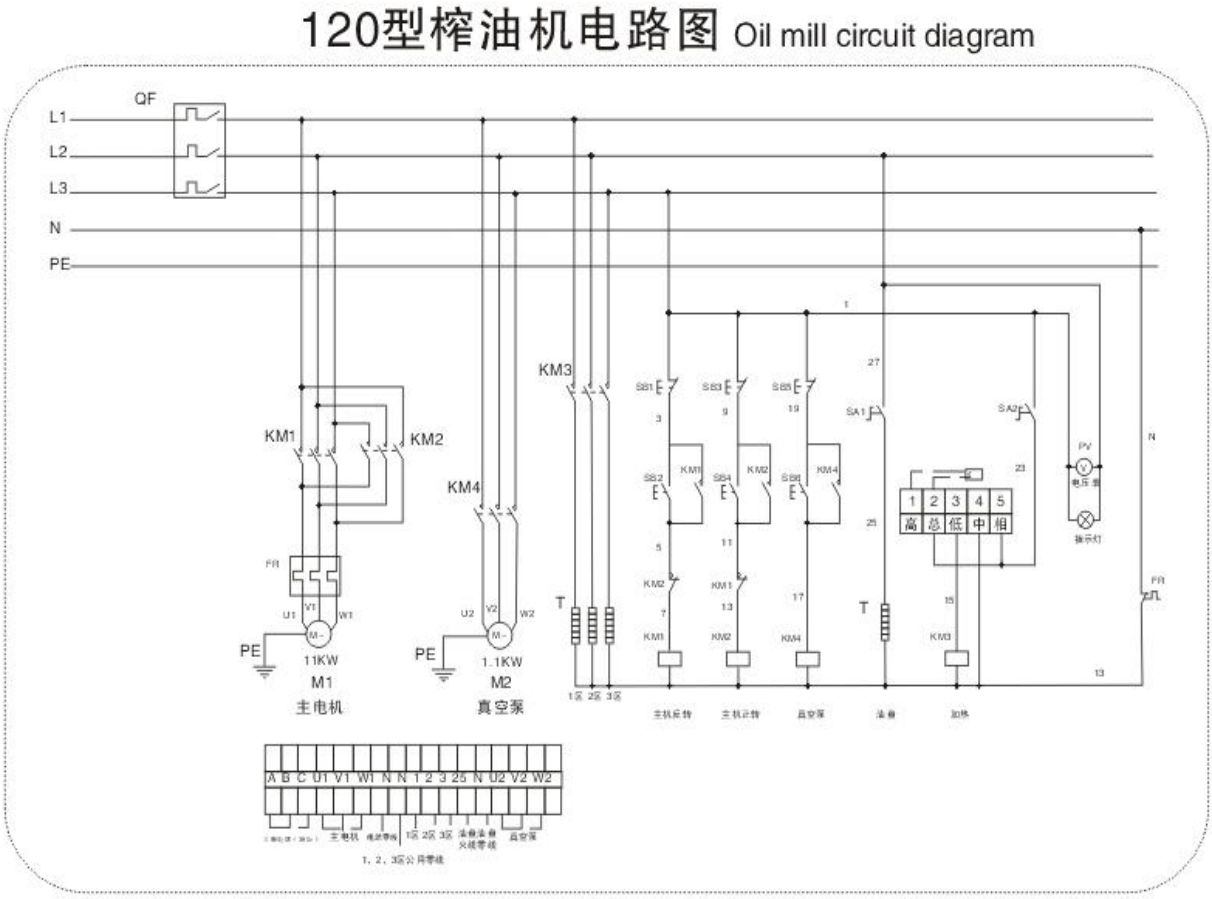
减速箱装配示意图
Reducer assembly diagram
（D-1688型 ZL-120型）

1685型榨油机电路图 Oil mill circuit diagram



D-1688型榨油机电路图 Oil mill circuit diagram





After crushing leaching of wool cotton oil and other plant hair oil contains a variety of impurities, make oil with different kinds of color, smell and toxin (e.g., gaa, meson, etc), to improve the quality of oils and fats to expand oil use, easy to fat storage for a long time, the oil should be refined processing, we put forward the following methods for reference.

1.hydration method: (recommended) will be filtered oil heated to 90 t) in cylinder, (hot oil temperature may be higher than 90 t), it needs to be appropriate for some time to make the oil temperature down to about 90 t), mixed with 4% with warm boiled water, mixed while fully stir 2 to 3 minutes until the yellow oil slurry, cover with lid stuffy about 15 minutes, then the surface of the oil floating foam mixing fully, make its sinking, let stand for about an hour after can get net oil.

2.boiling method: will the filtered oil heated to boiling point, with a small amount of water, bubble to the surface, remove foam, treat water vaporized into a cylinder in the precipitation for several hours later, is the net oil. This processing of aromatic oil, aqueous of low, color good, convenient for storage.