

# Oil Press/Oil Expeller/Screw Oil Press

#### **AGICO PDF**

Established in 1992, Anyang General International Co., Ltd (AGICO) deals principally in manufacturing and exporting complete plants and equipments, importing and exporting various mechanical products and engaging in external economic and technical cooperation.

With high efficiency administrative system and professional experiences, AGICO has exported complete plants and general machinery to over 50 countries and regions involving projects in such diverse fields as Agricultural, Cereals, Edible Oil, Energy-Saving, Bio-Diesel, Construction, Machine Tools and Other General Machinery etc.

We respond to all customers' inquiries, questions and requirements promptly.

Best Service, High Quality, Competitive price, Timely delivery is our philosophy, we are to fully cooperate on the basis of equality and mutual benefit with partners from abroad. We hope sincerely we become your Chinese supplier and partner in the mechanical field.

**Anyang General International Co., Ltd (AGICO)** 



## 1. Oil Press

AGICO screw type oil presses are advanced oil processing machinery, characterized by their high oil output rate with good quality, simple design, easy to use and continuous operation. They can use for various raw materials, such as peanut, beans, rape seeds, cotton seeds, sesame, sunflower seeds, copra, grass seed and etc.

#### **Main Technical Data of AGICO Oil Press**

MODEL	CAPACITY(KG/H)	POWER(KW)	NET WEIGHT(KG)	PACKING(MM)
6YL-68	40	5.5	130	1050*660*760
6YL-80	80-125	5.5	330	1320*440*695
6YL-95	160-200	11	420	1910*610*765
6YL-100	160-200	7.5	400	1860*550*695
6YL-120	200-300	11	700	2060*610*770
6YL-130	375-500	18.5	700	2320*700*780
6YL-160	550-700	18.5	920	2020*700*780
6YL-165	620-830	22-30	1600	2120*800*980
ZX-78A	42-65	5.5	210	1000*550*580
ZX-95A	150-210	7.5-11	520	1600*700*1350
ZX-105	200-300	11-15	560	1825*700*1350
ZX-130	420-500	18.5	820	2010*800*1380
200A-3	330-500	18.5	5000	2850*1850*3270

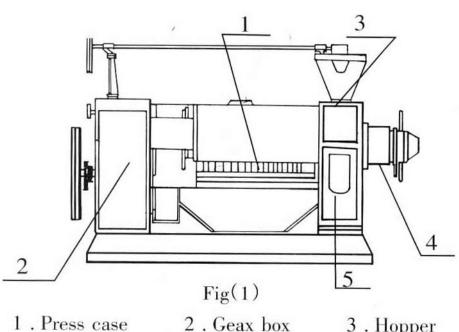
# 2. Photo Display

- 2.1 6YL-80/100 Oil Press
- 2.2 6YL-95/120/130/160/165 Oil Press
- 2.3 Integrated Model Oil Press
- 2.4 Oil Press with Heater





#### 2.1 6YL-80/100 Oil Press



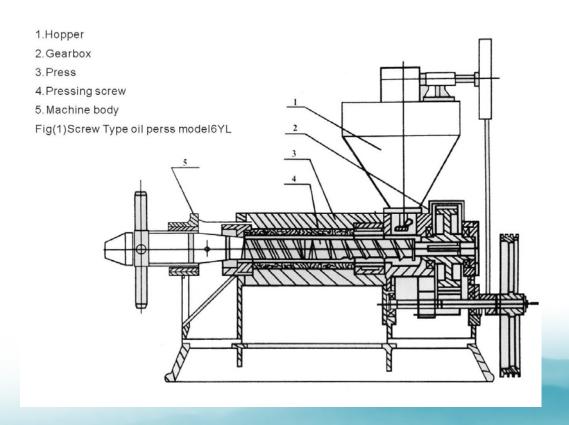
- 4 . Press screw
- 2 . Geax box
- 3 . Hopper
- 5. Machinery body

#### 2.1 6YL-80/100 Oil Press





#### 2.2 6YL-95/120/130/160/165 Oil Press

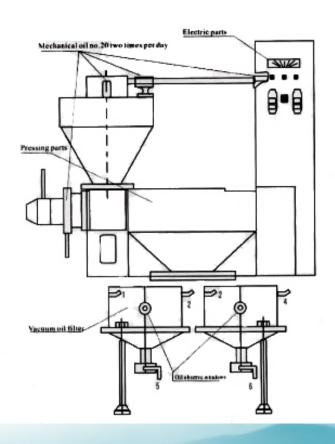


2.2 6YL-95/120/130/160/165 Oil Press





#### 2.3 Integrated Model Oil Press

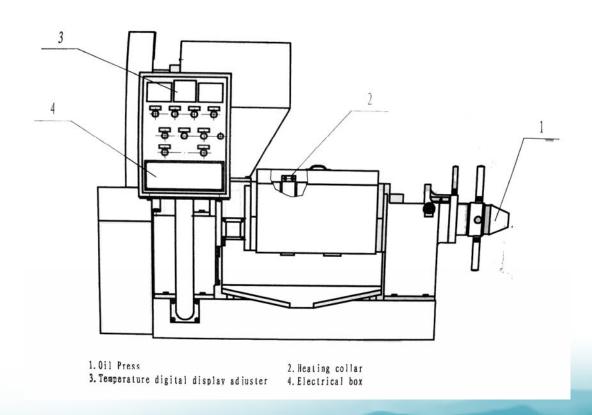


2.3 Integrated Model Oil Press





2.4 Oil Press with Heater

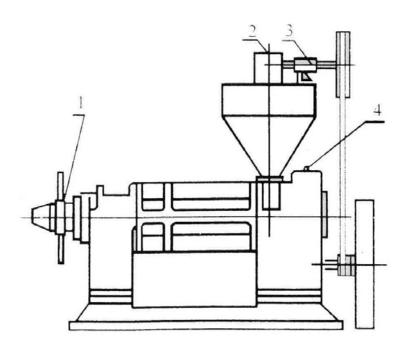


2.4 Oil Press with Heater



# 3. Lubrication

Oil press is lubricated by lubricating oil and grease.



No	Lubrication points	Lubricant	Time span	Lubricant replacement period
1	Adjusting bolt	Lubricating oil	1-2time/day	
2	Bevel gear	As above	As above	
3	Bearing bush	As above	As above	
4	Gear box	Mechanical oil NO.20		Every 6 months
5	Bearings	Grease		Each year



## 4. Preparation before Operating

- 4.1 8-15kg of lubricant needs to be filled into the gearbox.
- 4.2 Before operating, mix dry cake residue with 6-8% of water and then feed it into the hopper to grind the chamber. Feeding must be slow at first then gradually speed up. Meanwhile, water needs to be added properly. Over dried cake or too quick the feeding might cause the pressure increasing rapidly and blocking the chamber, which might damage the machine
- 4.3 Adequate temperature inside the chamber will result in prefect extruding. Hence, increasing the temperature before pressing is necessary. It is recommended to feed hot material onto feed dry cake slowly, which have been mixed with hot water into the chamber repeatedly to increase its temperature

### **5.** Operating the Machine

- 5.1 After installing the machine, check whether lubricant has been filled in, bolts have been tightened, and handles are operable.
  - 5.2 Check large pulley whether it is loose or blocked, repair it if necessary
- 5.3 Adjust the tightness of the belt. Switch on the motor and check its rotation direction.
- 5.4 Loosen the lock nut, rotate the adjusting handle and tighten the screw to its end, then loosen it for 3-4 circles and tighten again for half circle to assure the gap of the residue cake outlet.
  - 5.5 Feeding must be steady and slow at the beginning to avoid blocking.
- 5.6 In case no cake is extruded outward, return back the screw for 1-2 circles. If there is still no cake being observed, machine needs to be shut sown and checked. However, in any case, operating the machine backwards is absolutely prohibited. Normally, cake looks like tile but not sticky; thickness is 1-2mm inner side is smooth, outer side creases and no oil on the surface is allowed Cake thickness adjustment: Rotating the adjusting handle clockwise will make the cake thicker, anticlockwise, thinner. Each circle of adjustment will change the thickness 0.4-0.5mm





- 5.7 When machine is operating, oil extruding and residue outlet need to be checked frequently .Normally, most of oil will flow outwards from square rods and several front round plates. Broken cake residue indicates the material is too dry; steam emerging from the cake residue indicates that it is too wet; In any case, water content in the raw material must be adjusted from time to time. Slag ice emerging indicates high water content; powder-like slag, low water content. Loose round plates will cause too much slag flowing outwards .However, adequate water content will not cause slag flowing outwards from square rods. Yet, little slag from round plates is allowed. In a word, water content affects oil output rate, so it needs adjusting properly
- 5.8 Stop the machine: Repeatedly move screw forwards and backwards for several times and let all material resided in the chamber go out and adjust the cake to a thickness as thin as possible, then stop the machine. When machine stops by any accident, power supply must be shut down first, then rotate large pulley manually backwards to let the material turn out. Then pull out the shaft and clean it in case the shaft couldn't be pulled out, remove the upper case and loosen lock nut, separate round plates and clean them one by one

### 6. Factors Affecting Oil Output Rate

Following factors may affect oil output rate

**6.1** Water content: This is the critical factor, as a matter of fact, water content directly affects oil out put rate.

However, users usually have no proper inspection equipment. Hence, water content of some main raw materials may be detected as follows,

- (1)Bean, If teeth beating could crack it, flat pieces accompanied with light sound, the water content is suitable. Flat piece without cracking means too wet. Heating or sunshine may drive water off. However, cracking accompanied with loud sound indicates too dry. In the case, adequate water need be added,
- (2)Cotton seeds. Shell and kern may be separated by teeth beating. Shell breaking may be accompanied by sound, which means water content is suitable. Shell being flatted indicates too wet. Shell being splitted into powder means too dry



(3)Rape seeds. They can be pressed either at hot or at cold state.

Cold pressing, extruding by finger, if they are splitted into two pieces, accompanied by sound and oil, this implicates water content is adequate. Otherwise, if extruding makes powder, it indicates the seeds are too dry; Flat slice, too wet

Hot pressing(after heating) Scratch seeds by two s1ices of wood if shell and kern could be splitted, water content is adequate; if kern becomes powder, it is too dry, fn the case that shell and kern can be splitted, it is too wet.

6.2 Cake's 2hickness reflects the pressure inside the chamber. Thicker cake indicates lower pressure inside the chamber: thinner cake. higher pressure inside. If raw material has less oil content, chamber pressure should be higher, cake will be thinner, round plates need to be tightened, in the case of high oil content material, pressure in the chamber should be lower. Then circular plates need to be loosened, resulting in thicker cake. Recommended thickness of cakes will be:

Bean:1.1-1.5mm for the first pressing; 0.5-1 mm for the second pressing, Cotton seeds: Only one pressing,1-2mm

Ground nuts kern: Normally cold pressing for 2-3times, I-2mm

Important Note: Cake's thickness may vary according to different factors to achieve highest oil output rate .Hence, above figures will only be for reference.