Nut butter grinding machine

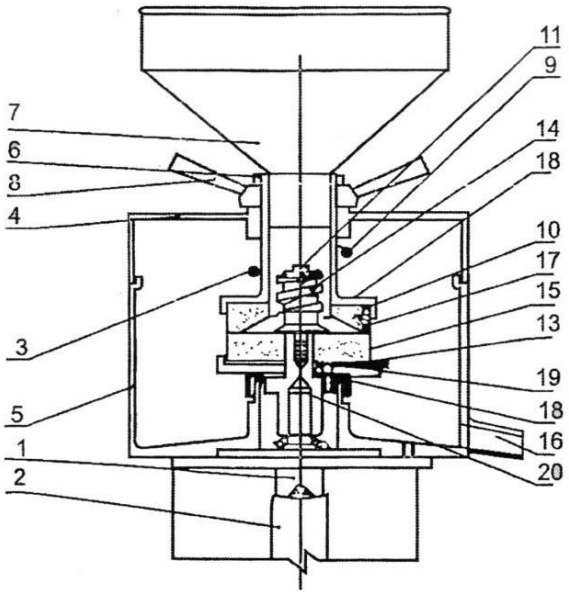
DH-100	DH-160	DH-200

Parameters				
Model		DH100	DH160	DH200
Capacity	KG/H	15	25	45
Grinding wheel diameter	MM	100	160	200
Motor power	W	1100	1500	2200
Voltage	V	110/220~240	110/220~240	110/220~240
Electric current	A	5.5	9.6	15
Speed of mainshaft	R/MIN	2850	1450	2850
Dimension	MM	240×240×600	340×320×760	610×500×900
Weight	KG	20	43	70

Safety Precaution

1. Connect earth wire before first operating.
2. The current of transmission line must be 6~10 times higher than the rated current stated on the rating plate. The larger diameter of transmission line is better. The shorter of transmission is better.
3. Do not open the machine unless the machine is stop completely.
4. Do not touch the grinding wheels when they are operating.
5. Do not leave the working machine alone when it is working.
6. Cut the machine power before cleaning, repairing or doing maintenance.
7. Switch and adaptor should be at least 1.2 meter from the ground.
8. Protect the switch and adaptor with cover.

Schematic diagram of machine structure



1	Motor	2	Capacitor shell	3	Pressure spring
4	Top cover	5	machine cover	6	Lock Nuts
7	Hopper	8	Regulating handle	9	Gasket
10	Fastening screw	11	Acorn nut	12	Grinding wheel base
13	Gauge point	14	kick-out device	15	Dynamic grinding wheel
16	Discharge hole	17	Static grinding wheel	18	Dynamic seat
19	Positioning screw	20	Coupling		

Operation Manual

1. Lose the nuts (6)
2. Adjust the regulating handle (8) to the bold arrow direction until grind wheels detach from each other.
3. Start the engine (Make sure the three phase engine working direction same as the label, otherwise, stop engine and swap two of wires out of three, then re-start the engine)
4. Adjust the regulating handle (8) to the thin arrow direction until you can hear the scratch of grind wheels. Please note that the louder the scratch, the lower production and will cause more electricity consumption.
5. Ready to make nut butter.

Process of making peanut butter

Roast peanut—cool down & peel the peanut—Sieve peanut skin—remove rotten peanut—Homogenization—Packing—Frozen—Room temperature storage

1. Material: Use the ripened peanut, and remove rotten ones and impurities.
2. Roast Peanut:
   - Roast peanut in a 160°C oven for 40~60 minutes, until peanut become brown inside and outside, but not over roasted;
   - Remove peanut from heat and cool it down cold air as soon as possible;
   - Peel peanut by peeling machine, then Sieve the peeled peanut;

   Remark: Peanut's temperature can't be too low.
3. Make peanut butter
   - Lose the nuts (6)
   - Adjust the regulating handle (8) to the bold arrow direction until grind wheels detach from each other.
   - Start the engine (Make sure the three-phase engine working direction same as the label, otherwise, stop engine and swap two of wires out of three, then re-start the engine)
   - Adjust the regulating handle (8) to the thin arrow direction until you can hear the scratch of grind wheels. Please note that the louder the scratch, the lower production and will cause more electricity consumption.
   - Feed peanuts to the funnel with even speed. Can add 2~3% sugar, 0.5% salt and 0.05% Vitamin E during making peanut butter.

4. Homogenization:
   - Place peanut butter into mixer and heat it to 60~70°C, then put 2% Monoglyceride and 1~5% soy protein powder mix with peanut butter together
5. Packing & Frozen:
   - Pack peanut butter into bottle and put into 0°C freezer until it is frozen completely.
   - Removed frozen peanut butter from freezer and keep it under room temperature.

Process of making sesame butter

1. Clean ripened sesame:
   - Remove rotten sesame and impurities, then dry sesame;
   - Pour dried sesame into water tank and fill with water. Stir the sesame with stick, then fish out blighted sesame and impurities;
   - Soak sesame for 15 minutes;
   - Fish out sesame and place it on micro mesh sieve to drain excess water;
   - Place the drained sesame flat to dry.
2. Roast sesame:
   - Pour sesame into wok and roast with gentle heat until it become brown. If the sesame can be pinched to powder means it is ready.
     Note: Dissolve 1kg salt in water, mixed with appropriate amount of pepper, anise and fennel powder, then soak 50kg sesame with it for 2~3 hours. You can make unique flavor sesame butter through this recipe.
3. Make Sesame Butter:
   - Lose the nuts (6)
   - Adjust the regulating handle (8) to the bold arrow direction until grind wheels detach from each other.
   - Start the engine (Make sure the three-phase engine working direction same as the label , otherwise, stop engine and swap two of wires out of three, then re-start the engine)
   - Adjust the regulating regulating handle (8) to the thin arrow direction until you can hear the scratch of grind wheels. Please note that the louder the scratch, the lower production and will cause more electricity consumption.

- Pour roasted sesame into funnel. Adjust the iron rod from the funnel to make sure sesame feed with even speed.
- Pack sesame butter with glass bottle or ceramic tank while it's still hot.

Remark: Generally speaking, 100kg sesame can produce 90~95kg sesame butter.

Wearing parts replace instruction

1. Fixed grinding wheel replace:
   - Remove the top cover (4);
   - Loosen three acorn nut (11) from grinding wheel holder (12);
   - Remove screws then replace the grinding wheel with new one.

   Remark: Acorn nut should be with appropriate tightness to avoid grinding wheel damage or nuts fall off.
2. Moving grinding wheel replace:
   - Loosen fastening bolt (10) and remove kick-out device (14);
   - Remove moving grinding wheel (15) and replace with new one;
   - The locating screw must be fixed into the hole from back of grinding wheel when install the new one.
3. Parallel grinding wheels: Paralleled fixed and moving grinding wheel is the crucial factor to ensure good working condition of the machine.
   - **Solution 1:**

   a) Chalk on the edge of fixed grinding wheel (17), lock the machine top cover (4), but don't connect to the power;
   b) Adjust the regulating handle (8) to thin arrow direction until both fixed and moving grinding wheel contact each other slightly;
   c) Twist the middle screw from moving grinding wheel clockwise 2~3 circles by wrench;
   d) Remove machine top cover (4) and check moving grinding wheel (15) chalk.
   e) Use the worn grinding wheel remove the chalk from moving grinding wheel. Then repeat the process c & d until all edges of moving grinding wheel are chalked;
   f) Chalk the moving grinding wheel with other color, check the fixed grinding wheel color situation by using the c & d process; can adjust three acorn nuts

(11) to color the whole fixed grinding wheel

- **Solution 2:**

a) Assemble the machine start engine;

b) Pour small amount of water into funnel and adjust the regulating handle (8) to thin arrow direct at the same time until hear the scratch;

c) Adjust the regulating handle (8) to bold arrow direction.

d) Repeat a & b process until moving and fixed grinding wheel paralleled.

Remark:

a) Water is necessary while using the solution 2;

b) Adjust regulating handle (8) must be with even speed and slightly.

Trouble shooting

No.	Trouble	Reason	Solution
1	Machine vibrating after feeding material	1. Uneven peripheral clearance around grinding wheels 2. Nuts under machine holder are loosened.	1. Parallel grinding wheels 2. Tighten the nuts
2	Engine work unproper after feeding material	1. Motor auxiliary winding is damaged 2. Capacitor burn out 3. Gap between fixed and moving Grinding wheel is too small	1. Replace or repair engine 2. Replace capacitor 3. Adjust the regulating handle (8) to bold arrow to enlarge the grinding wheel gap
3	Engine overload, overheat or low rotating speed	1. Feeding speed to fast; 2. Low voltage 3. Electricity wire to thin or poor contact of connectors 4. Gap between fixed and moving Grinding wheel is too small 5. Adaptor or plug damaged	1. Slow the feeding speed 2. Avoid peak electricity consumption 3. Change to thick wire and ensure good contact of connectors 4. Adjust the gap between grinding wheels 5. Check or replace adaptor or plug
4.	Motor leakage	1. Maybe water in the motor 2. Power connector contact with water 3. Capacitor breakdown or motor damage	1. Disassemble motor and dry it with light bulb 2. Re-wrap the connector 3. Replace new capacitor or repair the motor
5	Whole machine electrified	Neutral wire and live wire connect wrongly	Swap the neutral wire and live wire

Maintenance

1. Whole machine maintenance
   - Apply cooking oil to all parts which contact with raw material to prevent getting rusty;
   - Apply lubricating oil to all threaded connection points.
2. Engine maintenance
   - Clean the engine spindle once a year;
   - Lubricate the engine spindle with high melting point lubricant;
   - Store the machine in cool dry place;
   - Check the working parts regularly.

Warranty

1. 6 months warranty start from the day of purchase, excluding wearing parts (Grinding wheels).
2. The warranty covers defects in material and workmanship.
3. Warranty applies based on normal usage.
4. Warranty doesn't apply to engine burnt out. User bear for engine repair or replace fee.
5. Warranty doesn't apply to modified machine.

Special note:

1. Grinding wheels are the crucial parts of the nut butter machine;
2. The quality of grinding wheels affect the technical functions of the machine directly;
3. For replacing grinding wheels, please contact us directly;
4. We don't take any responsibility for machine damage by using other non Daohang made grinding wheels.
5. Do not start engine with load.