

MDXZ-24 Model

Electro thermal Pressure Fry

INSTRUCTION MANUAL

Read this manual carefully prior to use.

Technology is subject to change without notice.

Character and usage

The series of MDXZ-24 American style pressure fryer that my plant produced absorb the advanced technique from abroad; it is the first company which has the CE certificate in domestic. It has the characteristics of stainless steel material, use the electronics to adjust time, control temperature and expel the air automatically; it is used to fry chicken, fish, sparerib, mutton, and all kinds of meat and vegetable. This machine is applicable for hotel, guest houses, restaurants, factories, dining room. It has the advantage of low energy consume, free from pollution, convenient usage and high efficiency. It is indeed the newest food machinery equipment in domestic. The machine the oil filter can filter the dirty of the oil efficiently; it is useful to improve the quality of the fried food.

I. Main Technical Parameters

1. Rated Voltage: 3N~400V
2. Rated Frequency: 50/60Hz
3. Rated Input Power: 13.5Kw
4. Rated Working Pressure: 0.085MPa
5. Output: $\approx 25\text{kg/h}$
6. Range of Temperature Control: 50-200°C (adjustable)
7. Electronic Timing: 0-99 min (adjustable)
8. Oil Capacity of the Fry: 24kg
9. Weight: 110kg
10. Overall Dimensions: 980×560×1150mm

II. Installation and Debugging

1. The machine shall be placed at a dry clean and ventilated place. At operation, cushion the movable castor horizontally, make it balanced, and fasten it. The relative humidity of indoor environment shouldn't be too high, otherwise it will decrease the electricity insulation. When necessary, there should be an exhaust device to be installed.
2. This machine adopts ~3N400V power supply. When connection, please connect the neutral conductor (N) carefully, otherwise the machine will be damaged. There shall be a special purpose cutoff installed on the input line front end, and its accessional facilities shall conform to the requirements of the electricity capacity of the machine and ask the eligible technician to install.
3. The grounding terminal of the machine shall be grounded reliably, its section $\geq 2.5\text{ mm}^2$.
4. During the conveyance of the machine, the vibration will cause the loose or removal of the spare parts, so when installation and debugging, please tighten

each loosening parts.

5. Pour oil before heating, and its oil level can't be lower or higher than the oil level line. It is forbidden to heat if there is no oil in the boiler, otherwise the electro thermal pipe will be burned out.
6. The temperature is set between 150°C and 180°C, the user can set it depending on the production, timing set, cold oil to heat for 20 to 30 min, hot oil to fry 10 to 15 min, before frying the food, the oil temperature must be over 150°C.
7. When cold oil heating, its best not lid the cover. Mix up manually the oil continuously to heat it fast and well-proportioned.
8. When its delivery, the pressure of the automatic overflow valve (21) is usually set at 80KPa, if the indication of the pressure gauge exceeds 90KPa and continues to increase, discharge the air manually, and unbolt moderately the air-release valve (16) to discharge the air, making the air pressure keep at 80KPa.

III. Operation Principle and Process (Refer to the Appendix for detail)

1. Principle about time, temperature, pressure chain safety control:

The rated working pressure of the machine is 0.085MPa, the pressure safety method is to adopt pressure gauge (22) to indicate the pressure. Overflow valve (21) is adopted to discharge the air automatically, when the rated working pressure reaches, it will discharge the air automatically. When the pressure of the safety valve (20) exceeds 1.3 times of the rated working pressure, the safety valve will discharge the air automatically. There are six more chains safety methods such as time relay controlling electricity working time, temperature control meter controlling the temperature, and etc.

2. Fastening method of opening and closing the cover:

Revolve the fastening handle (12) left (counterclockwise), press down the crossbeam (11), pull the crossbeam hook (9), and then you can open the cover. Put down the cover, press down the crossbeam, make the hook hitch the cylinder, revolve the fastening handle right (clockwise), and fasten it with proper strength, then the cover will be hermetic.

3. Preheating and the treatment of raw oil

The universal vegetable oils (except peanut oil) can't be edible until fried well, otherwise there will be a smell of raw oil, so you should preheat the oil each time you pour new oil and you pour oil (cold) for the first time for frying. The method: temperature 140°C to 160°C, time 10-20 min (it depends), making the raw oil in the boiler bubble up. You can't open the cover until you unbolt the air-release valve (16), discharge all the pressure in the boiler, the pressure gauge indicates "0" and wait for 30 seconds. Additionally, for this preheating and the treatment of raw oil, there is no food to fry in the boiler, that is, there is no vapor, no pressure indication for the pressure gauge, so please pay special attention to the heating time and temperature. it

is best for you to open the cover.

4. Operation process of cooking and frying

After heated as the above methods tell, reset the working temperature and time, put the prepared food in the frying basket, put the frying basket in the boiler with a special “handle” fast and balanced, lid the cover quickly, make the cover balanced, fasten the fastening screws, screw them with proper strength, and confirm the air-release valve is closed. At this moment, the pressure indication of the pressure gauge shall increase slowly. When the pressure reaches 60KPa to 80KPa, the overflow valve (21) starts to discharge the air automatically, making the air pressure keep invariant. When the temperature reaches the invariant value, the time reaches the **set value, and closes the power supply. Wait for a moment, and turn on the air-release valve (16) to discharge the air manually.** When the air in the boiled is discharged completely and the pressure gauge (20) indicates “0”, loosen the fastening screw (13), press down the crossbeam (11) with hand, loosen the crossbeam hook (9), and open the cover (23), otherwise there will be a danger. When opening the cover, the operator should be best stand side face, in case the hot air shall emit to scald his wrist. The operator must have a good knowledge of how to operate the machine to ensure the security. The workers are forbidden to leave the working scene, they should supervise the production process, if any abnormal situation, stop the machine immediately, find out the cause, and operate again after the troubles are got rid of.

5. Method of adding oil and filtering oil

When the oil in the boiler needs replacing and filtering, you can't open the cover until there is no pressure. After the oil temperature cools completely, revolve the handle of the oil drain valve (3) vertical, and pour the oil into the storage tank (2). **Clean away all smear and pour in new oil.**

IV. Safety Points for Attention

In order to protect people from hurt, an electric shock or fire, and the machine from troubles, please comply with the following points for attention:

Please read thoroughly and understand fully the signs and caution signs marked on the machine and observe them rigorously.

The interpretations about the caution, warn and attention signs in the operation manual and on the machine:

Caution	It means if you ignore this mark to operate wrong, human casualty will occur.
Warn	It means if you ignore this mark to operate wrong, human casualty will occur.
Attention	It means if you ignore this mark to operate wrong, it will lead to troubles to the machine, hence affect its performances.

Caution

- Please use a power line of three-phase five-wire~3N400V, among which the yellow and green wires must be grounded reliably.
- Don't touch the power line with wet hand, in case of an electric shock.
- Don't put the power line to a place where the power line will be pressed by a table, chair or any other device, and especially where there are metals with sharp angles and edges extruding, because they will damage the power line. Don't put the power line across route-way.
- The food must be airing before fried, and pour it in the boiler slowly after there is no water drop on the food, otherwise the water drop into the hot oil will hurt people if it sputters.

Caution

- The food one-off added can't exceed 8kg to prevent the oil from causing a fire caused from its overflow.
- Once there is any damage or scratch found to the power line, replace the power line immediately, otherwise an electric shock or fire will probably occur. When replaced, you must choose No. IEC245-57 oil-resistant flexible cable with the section not less than 2.5mm².
- Power supply input line must comply with the electricity power requirements of the machine, and confirm whether the power supply tie-line can bear the maximum electric current of all equipment, otherwise a fire or danger will probably occur.
- If it is necessary to open the apparatus cabinet, please ask an eligible technician to operate it, otherwise there will be a danger of casualty.
- This equipment is a common waterproof apparatus, so it is forbidden to rinse the equipment. Don't immerge or cleanse it with spray, otherwise human casualty or severe damage to the machine will occur.
- The oil temperature can't exceed 200°C, otherwise it is apt to a fire.

Warn

- After the boiler gets through the power supply to heat, you are forbidden to touch the heating pipe in the boiler with hand, in case you shall be burned out. Don't just burn without any food, either.
- Prevent this equipment from drenching or being affected with damp.
- Don't put it to a corrosive place, and prevent it from any severe vibration.
- Keep away from the flammable and explosive articles, and from the place where there is a fire.
- Don't use any used oil with impurity, in case the boiling point shall fall, because it is more apt to cause excessive intumescence or too thick smoke.

Points for attention during operation

Attention

- The machine should be operated by the appointed person who masters skillfully how to operate the machine.
- The customer isn't allowed to touch the fry when the fry is at work, in case he should be scalded.
- Be careful when you move the machine, and don't beat it when there is trouble but find out the cause carefully.
- Don't heat the fry when there is no oil poured (used oil forbidden) and the oil level doesn't reach the requirement (the minimum liquid level mark line), otherwise the heating pipe will be burned out. However, don't pour too much oil, the added oil can't exceed the maximum liquid level mark line, otherwise excessive oil will overflow, dangers will occur, hence more attention to this. In addition, the heating pipe can't be rinsed with cool water if it is not cooling, otherwise the heating pipe will crack.
- Fasten the cover before heating, and it is forbidden to screw the fastening handle forcedly and discharge the oil when it is at work. You can't open the cover until the pressure in the boiler discharges completely; the pressure gauge indicates to "0" and wait for 30 seconds, in case the oil with pressure shall burst out to cause danger.
- In order to keep good hermetic performance of the boiler and the cover, don't use the handle or other hard apparatus to knock the cover or the edge of the boiler.

- At work, the rear cover of the machine can't be dismantled without permission, in case the vapor and condensation water shall go into the components of the electric appliance, hence decrease its insulation.
- The cover weather stripping of the boiler can't be dismantled without permission, in case the hermetic performance shall be damaged. When it is not at work, lid the cover, but don't fasten it, in case the sealing ring shall be aging and distorted because of long-term pressure.
- Cut off the power when it don't work to avoid a accident.

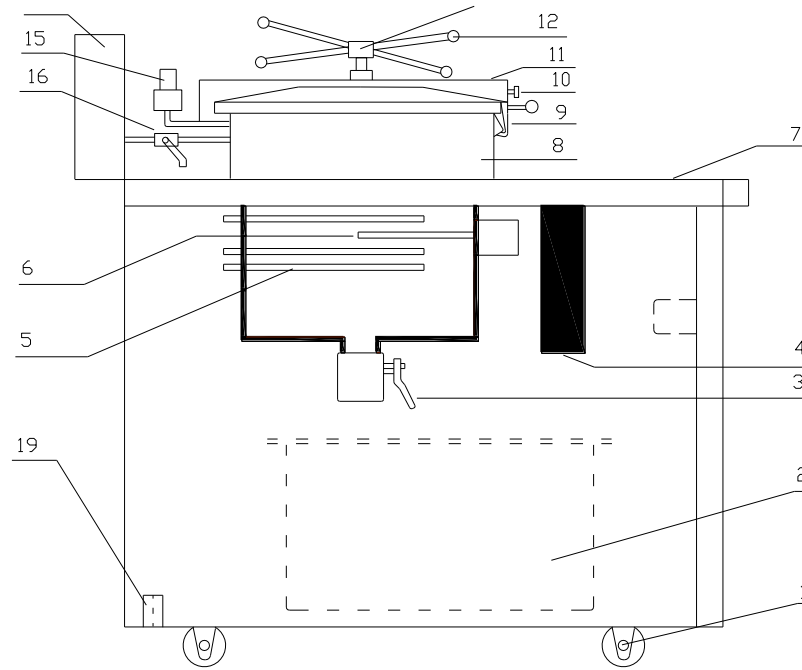
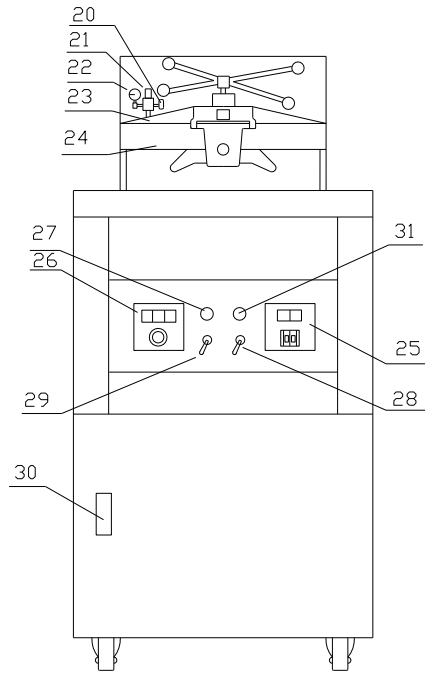
Points for attention when there is trouble or abnormal situation

Warn

- Please don't use the machine when it is at abnormal state, don't dismantle, or repair it without permission, except the daily upkeep specified in the operation manual, for other repair and debugging, ask an eligible technician to operate the machine, in case of an electric shock or severe damage.
- Stop using the machine immediately if any oil leakage, and contact the franchiser soon.

V. Maintenance and Upkeep of the Machine

1. Clean the overflow valve twice weekly, screw the screw lid, and clean the gravity block, making it jump freely and open and close flexibly. Check the general electricity and screws of power line, and joints monthly. If any loose, fasten them to make them contact well and control sensitively.
2. Clean the smear away from the electro thermal pipe in the boiler and cabinet after daily work is over to keep clean and sanitary and enhance the use life span of the machine.
3. After a relatively long time use, the rubber gasket shall be replaced in time if it is found aging and ineffective. Loosen the glue bar fastening screws of four sides on the cover, take out the glue bar from the groove slowly, put new sealing rings into the groove, and fasten the screws.



20. Safety Valve 21. Automatic Overflow Valve 22. Pressure Gauge
 23. Pressure Cooker Cover 24. Rubber Sealing Ring 25. Time Relay 26.
 Temperature Control Meter 27. Power Supply Indicator
 28. Heating Switch 29. Switch of Power Supply 30. Door Lock
 31. Heating Indicator

1. Castor 2. Storage Tank 3. Oil Drain Valve 4. Heat Insulation Layer 5. Heating Pipe
 6. Temperature Sensor 7. Heat Insulation 8. Pressure Cooker Cylinder 9. Crossbeam
 Hook 10. Crossbeam Spring Key 11. Crossbeam 12. Fastening Handle 13. Fastening
 Screw 14. Vapor Segregator 15. Automatic Discharge Valve 16. Air-release Valve 19.
 Grounded Safely

Electrical Principle Diagram of MDXZ-24

