

Safety

1.1 Environmental conditions

In order to operate this equipment safely, please install it according to following operating conditions.

(1) Please install this equipment indoors according to following conditions:

- . Ambient temperature range: $-5 \sim +40^{\circ}\text{C}$.
- . Relative humidity range for normal use: within $35\% \sim 85\%$.
- . Altitude: less than 1000m
- . Guarantee indoor cleaning and ventilation
- . Guarantee that the equipment is far away from the corrosive gas, inflammable and explosive gas as well as steam

(2) Power source: as for Voltage and Frequency, please refer to the nameplate; pressure $\geq 0.4\text{Mpa}$.

(3) For easy use, operation and maintenance, please check this equipment and reserve enough space for it.

(4) Please place the equipment horizontally.

(5) The vibration to be borne under effects of many complicated environments may not exceed $12\text{ mm}\cdot\text{s}^{-1}$.

1.2 Description of warning marks

(1) In order to well understand this operation Manual, the safety warning marks are divided into following kinds.

(2) These warning marks have been worked out according to the operating regulations and safety attention points for this equipment. In order to avoid dangerous accidents, this Operation Manual also includes concrete preventive measures. Please operate this equipment according to the instructions based on sufficient understanding of warning marks.

 DANGER	This mark expresses that in order to avoid death and serious injury accidents, please be sure to operate this equipment according to relevant stipulations of safety attention points.
 WARNING	This mark expresses that in order to avoid potential dangerous accidents and serious injury accidents, please operate this equipment according to relevant stipulations of safety attention points.
 WARNING	This mark expresses that in order to avoid slight wound and potential moderate injury accidents, please operate this equipment according to relevant stipulations of safety attention points.

1.3 Description of safety marks

- (1) Relevant safety marks are pasted on different corresponding positions of this equipment, which are properly dangerous to personal safety.
- (2) Please carefully understand this safety marks.
- (3) Please place these safety marks near the equipment.
- (4) When these safety marks have fallen off or been damaged, please replace them with new marks.
- (5) If you want to order new marks, please contact our company.

- ① Safety marks: Do not open the junction box until the power supply is cut off.



- ② Carry out repair and maintenance according to the Operation Manual.



- ③ Beware of Mechanical injuries: Do not open the operating gate when the machine is running and until it has not been completely stopped.



④ Beware of scalding: Do not touch the machine with bare hands when it is normally working.



⑤ Do not remove the guard shield when the machine is running



⑥ Do wear protective gloves when inspecting and repairing the equipment.



⑦ Do not climb or stand on the equipment.



1.4 Attention points

(1)The here said equipment operators refer to all personnel who participate in operation,inspection and maintenance etc.

(2)The equipment operator must carry out the operation on the basis of sufficient understanding on the Operation manual.

(3)For safety attention points, the owner has the duty and obligation to convey the

contents of the Operation Manual for the equipment to all working personnel.

(4)At the same time when obeying all the safety attention points, the users also must obey the safety regulations and stipulations to prevent accidents.

(5)All related employees should receive safety education. The enterprise management should be in charge of it and respect the national, local and the other enterprise's safety regulations of the users.



DANGER

(6)All the responsibilities for any accidents or damage to the equipment shall not be borne by manufacture and commission agent if the equipment is not operated according to the stipulations.

(7)Please install, use and operate the equipment correctly. Whoever takes off guard or makes it dysfunctional should be responsible for the safety result.

(8)Any reformation of the equipment may not affect the functions and safety performances of the equipment.

(9) Be sure to run the Pellet Mill under strict obeying all regulations for prevention of accidents.

(10)If any accidents are caused due to not obeying the stipulations in the Operation Manual and the control system for Muyang equipment is not used as per the conditions mentioned above, the Muyang will refuse to take any responsibility. If Jiangsu Muyang Holdings Co., Ltd is required to take responsibility, the Company will reserve the right to investigate and affix the responsibility of the operator.

1.5 Safety attention points in transport, storage and installation



DANGER

(1)The equipment must be placed and handled by professionals.

(2)Please use designated tools (steel cable, crane, hoisting machine etc.) for hoisting, and carry out the hoisting according to designated sequence and method.

(3) Staff only when carrying out hoisting.

(4) In order to prevent serious injury accidents, no one is allowed to be under the equipment when carrying out hoisting.

(5)The permissible load of hoisting tools should be more than total weight of the

equipment.

(6) When the equipment is stored temporarily, please place the equipment horizontally and keep a normal temperature and clean indoors.

(7) For transportation and handing, it is not allowed to damage the equipment by binding. It should be reported to the manager immediately in case of any machine damage and missing of parts in transporting.

(8)In installation, enough space should be reserved for future maintenance and replacement of the equipment.

(9)Prior to installation, all machine parts must be kept in their original package. The machine parts and packing boxes should be properly covered and stored in places sheltered from rain, sunning and damp.



WARNING

(10)The cover plate, protecting hood or guard grating are usually installed and delivered together with the machine. They can only be disassembled with tools. And the machines with such kind of devices can never be put into work until the above-mentioned devices have been properly installed.

1.6 Safety attention points in operation, inspection and maintenance



DANGER

(1) The operation, inspection, repair and maintenance of the equipment shall be carried out only by the trained technical personnel according to different specifications provided together with the equipment. Electric installation shall be carried out only by professional persons according to relevant electric safety standards.



WARNING

(2)Whenever maintenance or repairing is to be done the power must be cut off so as to prevent the motor from accidental starting.

(3)Operation and installation should be done after shutdown. Please be sure to cut off and lock the main supply switch, and place the execution mark plates on the workshop gateway, in front of the electric control cabinet in the control room and near the pellet mill respectively, so as to prevent the motor from accidental starting.

(4)In operation, a special attention shall be paid to the positions with attached safety

marks.



ATTENTION

(5) Do not operate when the safety protection device and operating gate are open. It is prohibited to open the operating gate until the machine has been fully stopped.

(6) If any troubles occur in the operating gate and safety protection device, please repair or replace them at once.



WARNING

(7) The safety protection devices can never be dismantled, covered or overlapped at will. It can never be opened until the machine has completely stopped. And the machine can only be started when these safety protection devices are in good order.



DANGER

(8) The security mechanism of the operating gate is equipped with the travel switch for opening, it must be correctly wired as per requirement to ensure the power-off when the access door is opened, and additionally in such case the machine cannot be started. Owing to the fact that this safety mechanism is related to life safety, it can never be removed or discarded! Whenever there is anything wrong with this mechanism, it should be repaired or renewed promptly.

(9) When the machine is under stoppage, attention must be taken to prevent the pellet mill from being started by any accidental starting mode.

(10) Except the maintenance of the equipment, it is not allowed to take off the guard shields of the belt pulley.



WARNING

(11) When the safety guard shields or operating gates have to be opened or the safety devices have to be disassembled in order to inspect, adjust, repair and maintain the equipment or replace the parts, please well negotiate about the required safety attention measures and work out the safety countermeasures prior to the operations and then carry out the inspection work.



DANGER

(12) When the machine is running, it is strictly forbidden to put fingers near the running components, such work as inspection, maintenance and cleaning etc cannot be done until the principal machine have been completely stopped.

(13) In case maintenance and inspection work should be done with a welder or other tools that can generate sparks, strict safety precautions must be taken against

dust explosion and combustion (see "Explosion protection").

(14) If the parts are damaged, please repair or replace them immediately.

(15) Guarantee the safety of the electric system. Before the electric circuit is cut off, it is strictly prohibited to open the junction box for avoiding electric shock.

(16) The electric control system of the pellet mill must follow the following points. Otherwise, the technical safety responsibility of the supplier will be canceled.

① The electric control system of the pellet mill must be supplied by Jiangsu Muyang Holdings Co., Ltd.

② The equipment must be checked up by an expert from Muyang Holdings Co., Ltd before commissioning.

③ The electric control is a component part of the safety regulations for accident precaution.

④ Prior to commissioning the control system must be tested by an expert from Muyang Holdings Co., Ltd in light of the testing list and a permit will be signed by him.

⑤ If the control system for Muyang Holdings Co., Ltd machinery equipment is not used as per the conditions mentioned above, the Muyang Holdings Co., Ltd will refuse to take any responsibility. If Jiangsu Muyang Holdings Co., Ltd is required to take responsibility, the Company will reserve the right to investigate and affix the responsibility of the operator.

1.7 Personal protection



DANGER

(1) All the mechanical equipments manufactured by Jiangsu Muyang holdings Co., Ltd are equipped with safety devices, which are consistent with modern technical level and universally effective safety rules prior to ex works, so that the customers can use the machines in accordance with the regulations.

(2) If the operators employed cannot read or write, the owner has the duty to explain to them clearly where dangers exist and warn them that special attention should be paid.

(3) In order to guarantee the safety and health of labors during production process, it is necessary to use labor protection articles (such as gloves, breathing masks and labor shoes) during operation.



ATTENTION

(4) Please execute the special regulations on accidents prevention in the operation manual provided by us.

(5) The enterprises are obligated to execute following regulations to guarantee operators' safety.



DANGER

① The coupling shield should be amounted and keep close at any moment. It is very dangerous when they are opened or disassembled. It may cause casualty accident. This is also applicable for the preventive device of the manipulator.

② The safety limit switches should always be kept in good order. Overlap or discard of the safety limit switches is not allowed.

③ The driving motor must be switched off completely to make the machine stop when carrying out inspection, commissioning, repair and maintenance. This can be done through a full-phase separating and lockable switch which is installed near the machine or on the operation desk, or the control panel on the site. It is not enough only to screw off the fuse wire!

④ If the machine needs other energy like pneumatic, hydraulic, steam and hot water energy, it is necessary to cut off their energy supply or turn off the switch, and eliminate the pressure in the internal pipeline system of the machine.

⑤ As for handling heated or cooled parts and components of the machine, especial care should still be taken for the danger of burning, to prevent any scald.

⑥ If you have pressed the emergency stop switch to stop the machine and you want to reset the switch, so it is not permissible to only re-press this button to restart the machine.

⑦ If some machines are equipped with a local shutdown system, especial care should be taken. Read the instruction manuals attached with the machine carefully. In such machines with a local shutdown system, temperature will rise because pressure or vacuum will occur after they have been used for a period.

⑧ The cleaning, lubricating and oiling of the machine or its parts and components may be carried out only when the machine is stopped. If you have to climb on or enter the machine to do such work, the mandatory provisions shall be made without exception: the power supply of motors must be cut off completely and the switch must be locked. Attention must be paid to safety measures for climbing.

⑨ Be careful, sampling from inside the machine can never be carried out unless there is not any danger. Usually, the samples can be taken from the pipe under the machine instead of inside machine.

⑩ Clear off the deposited dust, dirties and materials frequently. Keeping the machine clean can enhance production safety and the cleaning level of workshop, and is also beneficial to prevent dust explosion.

⑪ If oil (grease) leakage occurs, clean it immediately and seal well the place where leakage occurs. For oil or grease leaked on the floor will easily bring about hazards to the operators.

⑫ In production operation, the machine must be equipped with safety devices, which may be neither removed and abandoned nor reduced in functions. Otherwise, we are not responsible for any accidents resulted here from, and reserve the right to ascertain where the responsibility lies.

1.8 Explosion Protection: Countermeasures against dust explosion and fire hazard

(1) Common cleaning work

① Keeping the working site with combustible dust clean is an important condition for safe production.

② Try not to pile bagged or bulk materials between machines.

③ In order to reduce dust emission to surrounding areas, all conveying devices, air pipe, filtering bag should be kept in good condition. Especially, the unsealing of pipes or top covers should be avoided.

④ In order to reduce dust explosion hazard, dust everywhere must be cleaned out frequently and effectively.

⑤ Keep all motors free of deposited dust.

(2)Regular inspection and maintenance

- ① Check the safety devices such as speed monitor or the like regularly, at least once a week.
- ② Check and clean magnetic separators, at least once a day.
- ③ In order to avoid heat generation, it is necessary to regularly check the functions of all main shafts and bearings, at least once a week, and to regularly fill up lubricating oil.

(3)Electric apparatus

Regularly check the electric apparatus and articles, and special attention should be paid to the following points:



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- ① It is forbidden to use any flashlights and other lamps without shielding or explosion-proof glass.
- ② It is forbidden to use any lengthened cable or electric furnace.
- ③ It is necessary to immediately repair or replace the electric apparatus and equipment if any failure occurs.
- ④ The cables without conduits are not allowed to be installed on the floor.
- ⑤ Cut off the power supply of the machine after work.
- ⑥ An electrician should be assigned to check the insulation of all the lines of electric network according to relevant regulations on heavy current, at least once a year.
- ⑦ The machine should be grounded so as to avoid static sparks and the leakage resistance from all components to ground should not exceed $10^6\Omega$.
- ⑧ Power supply connection
 - a) The related regulations of local safety authorities department should be obeyed. For example, a breaker for circuit protection should be installed on power wire according to local regulation.
 - b) Check whether the operating voltage and frequency are in line with the data displayed on the machine nameplate and control cabinet.
 - c) All power wires of control system should be connected as per schematic diagram, so as to realize actual switch of the phase line when using a single-phase source.

(4)Smoking and welding



DANGER

① Smoking is forbidden, which is applicable to all workers and staff of the enterprise as well as guests, customers, foreigners and drivers visiting the factory.

② If the tools such as welding machine or soldering lamp (flame soldering lamp) etc. are required for repair or installation, do as best as possible to arrange the work in a special workshop or on a special site.

③ If it is necessary to carry out welding or the like directly in production area or storehouse once in a while, written applications must be submitted to a related supervisor in advance for written approval. The above mentioned operations can be carried out only when special safety measures have been taken, such as laying pieces of water soaked canvas or canvas special for covering on the surrounding area and preparing fire extinguishers. After completion of the operation, the welding site and the surrounding area are to be monitored at least for 10h.

④ The gas cutting sparks are very dangerous, for people can't see where they will fly on earth. They can cross through the narrow clearance of walls and drop downstairs or to the next rooms, or even fly off 10m away in distance. If the sparks drop in dusts, fire accidents may occur at any time.

⑤ Welding is prohibited on a running conveyor. If the welding work is necessary, shut down the machine first, and then make a thorough cleaning and isolate both sides of the welding site tightly with materials like mineral wool to avoid connecting with other conveying devices, silos or tanks. If the work is to be done on the chutes or conveying pipes, it is necessary to disassemble them or divert their lower ends and seal them to avoid welding sparks entering the conveying pipes or silos.

(5) Effect of static electricity



DANGER

① In order to ensure the safety of electric circuits and avoid explosion resulted from spark discharge.

② The paint coat at the electric connections must be removed.

1.9 Other attention points (environmental protection measurements)

If you decide not to use the machine any longer after it is used for a certain number of years (about 8-10 years), the measures for environmental protection and reutilization should be taken.



ATTENTION

(1) Drain the liquids inside the machine (like motor oil, gearbox oil, brake oil and coolant etc.) into special containers and send them to the preparation workshop.

(2) The plastic parts shall be picked out for reutilization.

(3) The metal parts shall be sorted out so as to be ground or scraped.

General

Muyang MUZL600 Pellet Mill is an advanced machine for producing pellet feed. The entire manufacturing process is fully in line with international technical standards.

Application and adaptability

(1)Application: This pellet mill is specially used for animal feed processing, generally for processing powdery, flowable and easily pelletized materials into feed pellets for poultry, livestock, fish and special aquatic feed.

(2)To ensure the efficient operation and safe use of the machine, the pellet mill should be installed at a region that, altitude is less than 1000m, temperature range is within $-5^{\circ}\text{C}\sim 40^{\circ}\text{C}$, and air relative humidity range is within 30%~ 85%.

(3)Do not use it for food processing.

(4)If the environment of the region to be served does not accord with the above conditions, please specify when ordering.

Main features and functions

(1)Double-motor , V-belt and synchronous cog belt step-driving system is adopted for this machine type, which is characterized by ideal drive ratio, great driving moment, smooth rotation, simple structure, small occupation, high output, low noise, and easy operation and maintenance.

(2)MUZL600 Pellet Mill is configured with three rollers or two press rollers(MUZL600TA), and each of them is equipped with scraper for material distribution and clean ,which has even feedstock,high output,good quality of the pellet mill.

(3)The hydraulic clamping type overload protection device and automatic belt tensioning mechanism as well as automatic lubricating device are optional if required., which allow for faster, easier, safe and reliable operation.

(4)This pellet mill can be fitted with ring dies of die holes ranging from $\phi 1.2$ to $\phi 12$ with different thickness, so that customers can select them as per practical requirements to achieve optimum technical and economic efficiency.

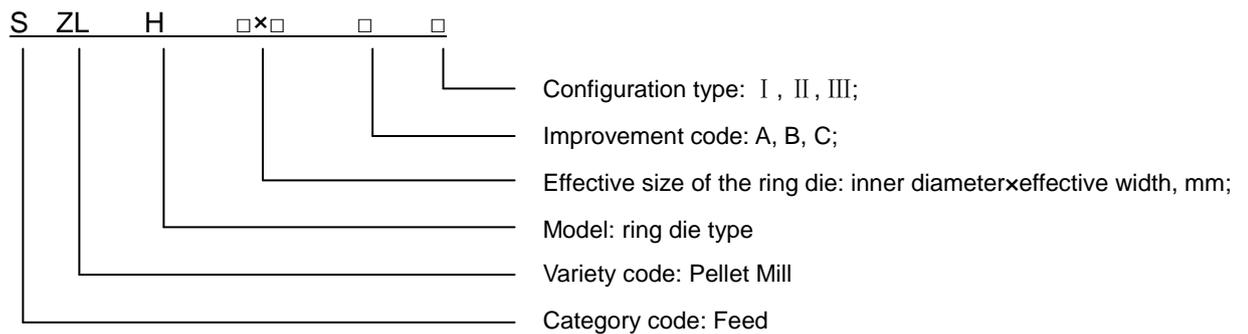
(5)Advanced frequency control motor is adopted for this machine type to feed material, also it is equipped with overload protection devices, outside discharging mechanisms and speeding measuring to detect motor load.

(6)The configuration of reinforce conditioner with steam adding function,can be double-pass or triple-pass, or jacket-type according to customers' needs.

Main structure of the pellet mill

The pellet mill consists of a feeder, a conditioner and a principal machine(mainly include main motors, driving counter shaft assembly, rotor assembly, ring die, press rollers, cutter assembly, lifting device of ring die, hydraulic system, etc., the hydraulic system is an optional piece for MUZL600 Pellet Mill)

Meanings of the model



Transport, installation and adjustment

Transport



DANGER

- ① Hoisting rope shall be used for unloading and transporting of the pellet mill.
- ② For the sake of safe hoisting, steel rope with proper bearing capacity should be used for hoisting the pellet mill.
- ③ Before ex work, whether to use a packing case or not can be determined according to actual conditions.
- ④ If a packing case is not used, rain-proof measures shall be taken and it shall be prevented against collision and overturn of the equipments during transport.
- ⑤ If a packing case is used, the complete machine and accessories shall be fixed

securely in the case and a certain distance shall be reserved from the plate of the packing case, so as to avoid collision and damage in transport.

⑥ During transport, any overturn, intense pressure or collision is not allowed on the machine body.

Storage

① When the machine equipment is to be stored in the open air, the facilities for prevention of rain, sunshine and water accumulation should be available; When the machine equipment is to be stored indoors, the measures for ventilation and damp proof shall be taken.

② The equipment should be stored in ventilated, dry and cool place for long-time storage, and damp proof measures should be taken, the exposed surface without painting should be painted with rust-proof oil.

Attention points for inspection, repair and maintenance

Besides those mentioned in Chapter 1, following attention points should be obeyed when carrying out inspection, repair and maintenance.



DANGER

(1) Whenever inspection, commissioning, repair and maintenance is to be done the power must be totally cut off first.

(2) Directly open operating gates and air inlet only can be done when the power is off and the machine is completely stopped.

(3) Only trained technical personnel are allowed to do works with danger-potential such as parts replacement and repair.

(4) The replacement or maintenance of electric elements, circuit and electric control system should only be done by trained personnel.



WARNING

(5) The machine can only be started when all protection devices, including cover plate, protecting hood, guard grating, etc., are installed and in good order functionally.

(6) When the safety guard shields or access doors have to be opened or the safety devices have to be disassembled in order to inspect, adjust, repair and maintain the

equipment or replace the parts, please well negotiate about the required safety attention measures and work out the safety countermeasures prior to the operations and then carry out the inspection work.



ATTENTION

(7) Be sure that the above said safety devices and guards are installed to their positions after inspection, adjustment, repair and maintenance.



DANGER

(8) When operation, installation, repair and maintenance, please be sure the execution mark boards [In Process of Maintenance and Inspection] are placed on the workshop gateway, so as to let other people know about it.



DANGER

(9) Attention! Improper operation and maintenance may cause accident.

Note: The machine must be operated in the light of operating requirement, and necessary checking and cleaning should be conducted for each working shift.

Cleaning

To keep all rotating components clean is very important, so it necessary to thoroughly clean following components regularly:

Table 6-1 Cleaning positions and cleaning methods

Cleaning position	Cleaning method
Press roller, front plate, deflecting scraper, main shaft disc, cutting knives, ring die, die drive rim and pelletizing chamber of pellet mill.	Cut off the power whenever checking or replacing the components or assemblies in the pelletizing chamber or making maintenance is a necessary, and then clean these components, especially the ring die, die drive rim, press rollers and the cone matched surface of main shaft disc.
Feeding chute and by-pass gate	Use proper tools to clean away hard material deposited here weekly.
Hydraulic device	Thoroughly clean the hydraulic system with jet airflow every week.
Pellet mill body (front part, fastener of ring die, rotor, the place where the flanges enter)	Clean away dirt, material or fat that possibly dropping into the chamber monthly.
Pellet mill body (middle part, the place from where can access to the timing belt)	Cleaning once every six months
Inner chambers of conditioner and feeder	Open the access doors of conditioner and the repair gate of feeder to carry out checking and maintenance works once a month.
V-belt hood	Clean away dirt or material on the hood monthly.

Lubricating

Selection of lubricating grease

Lubricating grease selected shall be fit for the working conditions of pellet mill since it is working with great load, severe vibration, high temperature and in corrosive environment.

List of daily inspection items (prior to each running or during each running)

No.	Position	Inspection item	Cycle	Method	Solution
1	Steam	Check whether the pressure is higher than 0.6Mpa before passing through pressure reducing valve	Everyday	Inspection	Increase steam supply pressure
		Check whether the steam pressure is about 0.4Mpa after passing through a pressure-relief valve	Everyday	Inspection	Adjust the pressure-relief valve
		Check for liquid leakage	Everyday	Inspection	Exhaust steam and repair
		Check the drain valve for normal working condition	Everyday	Inspection	Exhaust steam and clean
2	Machine	Check for any abnormal noise	Everyday	Listening	Checking
3	Pneumatic assembly of by-pass	Make sure air supply is above 0.6Mpa	Everyday	Inspection	Adjust the air pressure
4	Bearing	Check whether the temperature rising is lower than 45°C	Everyday	Thermometer	Checking
5	Motor	Check whether the temperature rising is lower than 45°C	Everyday	Thermometer	Checking
		Check whether the current value is in rated range.	Everyday	Ammeter	Checking
		Check for the amount of lubricating grease and the abnormal noise	Everyday	Inspection	Checking
6	Temperature sensor	Check for any abnormality	Everyday	Inspection	Replacing
7	Cutting knives	Check for abrasion condition of cutting knives	Everyday	Inspection	Replacing
8	Ring die	Check whether the conic surface of ring die is installed correctly.	Everyday	Inspection	Checking
		Check for the working condition of die hole.	Everyday	Inspection	Cleaning
		Check if centering pins and bolts of ring die are working properly	Everyday	Inspection	Inspection and replacement
9	Roller	Check whether the position of roller	Everyday	Inspection	Checking

		is moved			
		Check the wear part for any abnormal condition	Everyday	Inspection	Checking
10	Tail locknut	Check for any loosening	Everyday	Inspection	Checking

List of regular inspection items

No.	Position	Inspection item	Cycle	Method	Solution
1	Belt	Cleaning	Once a half year	Cleaning	
2	Filter	Cleaning	Once a half year	Cleaning	
3	Bearing	Cleaning and adding lubricant	Every month	Cleaning and adding lubricant	(see Fig.6-1)
4	Belt and belt pulley	Check whether chain is in good tensioning condition	Once everytwo weeks		Adjusting
5	Sealing elements	Cleaning and aging conditions	Every month	Cleaning	Replace it if failure
6	Safety device	Check the warning marks for missing or abrasion	Every month	Inspection	
		Safety switch and safety pin	Every month	Cleaning	

Note1: The above-mentioned cycle applies 12h a day and 25 days a month. Customers can adjust it by themselves according to actual conditions.

Tools for repair and maintenance

Common Tools

No.	Tool name	Spec.	Function
1	Screwdriver		Tightening bolts
2	Ammeter		Measuring the current of motor
3	Thermometer		Measuring the temperature of motor and bearing
4	Knife		Cutting
5	Vernier caliper		Length measuring
6	Flexible ruler		Length measuring
7	Long straight ruler		Length measuring
8	Oil gun		Filling oil
9	Iron hammer		Knocking
10	Rubber hammer		Knocking
11	Portable electric driller (0~13mm)		Drilling hole
12	Electrical heating device for bearing		Heating bearing
13	Retainer pliers		Retaining rind disassembling
14	Scissors		Cutting
15	Multimeter	Resistance, voltage	Measuring
16	Hearing needle		Checking
17	Scraper		Cleaning
18	Metal bush		Cleaning
19	Air gun		Cleaning
20	Barrel	20L/piece	Cleaning (bearing, etc.)
21	Dial indicator		Measuring the clearance of roller bearings and main shaft bearings
22	Oiler		Filling lubricating grease in Main shaft bearing and roller bearing

Malfunction and troubleshooting

No.	Trouble	Cause	Solution
1	Feed cannot enter ring die.	<ol style="list-style-type: none"> 1. Feeding inlet is clogged. 2. The conditioner is clogged 3. Failure of the feeder driving device 	<ol style="list-style-type: none"> 1. Clean the feeding inlet 2. Clean the conditioner 3. Check the driving device of feeder
2	Material can enter the ring die, but cannot be pelletized.	<ol style="list-style-type: none"> 1. The press rollers and ring die are worn out. 2. Too many die holes are clogged 3. The feed formula is changed 4. The clearance between the press rollers and ring die is too large 5. Improper moisture content in feed 	<ol style="list-style-type: none"> 1. Replace the press rollers and ring die with new ones. 2. Remove the feed and impurity in die holes. 3. Install the proper ring die according to feed formula. 4. Readjust the clearance between the press rollers and ring die. 5. Adjust steam adding amount correctly.
3	The pellet mill can't be started up.	<ol style="list-style-type: none"> 1. The press rollers and ring die in pelletizing chamber are clogged. 2. Travel switch can't touch the brake disc or the operating lever on door. 3. Circuit failure 	<ol style="list-style-type: none"> 1. Remove feed mash in pelletizing chamber. 2. Check the limit switch for mounting status. 3. Check the electric circuit
4	Load on pellet mill fluctuates unreasonably or the pellets quality is nonuniform.	<ol style="list-style-type: none"> 1. Steam supply is not enough or the pressure is changed. 2. Unstable feeding. 3. Deflecting scraper is worn out resulting in uneven feeding. 	<ol style="list-style-type: none"> 1. Check the steam pipelines 2. Adjust the feeding speed 3. Replace the deflecting scraper
5	Pellet mill is stopped during working.	<ol style="list-style-type: none"> 1. Tension of V-belt is not enough which makes the speed controller act on. 2. The parameter setting for speed control instrument is unreasonable. 3. V-belt is worn partially or completely or broken. 4. The main shaft is rotated due to overload or impurity blocked 	<ol style="list-style-type: none"> 1. Readjust the tension of V-belt or check the pressure value on the pressure gauge of hydraulic system, reset the pressure value if necessary (Take care when adjusting). 2. Reset the parameter. 3. Replace the V-belt completely as a group instead of partially. 4. Reset the main shaft and limit

		<p>between press roller and ring die, which makes the limit switch released.</p> <p>5. Insufficient pressure from anchor ear, or brake disc splashed with oil causing skid and making the main shaft rotate and the travel switch released.</p> <p>6. Circuit failure</p>	<p>switch.</p> <p>5. Reset the oil pressure of hold-hoop or clean the brake disc</p> <p>6. Check the electric circuit</p>
6	The pellet mill is clogged frequently.	<p>1. Deflecting scraper is worn out and feed mash is unevenly distributed into the ring die.</p> <p>2. Press roller is worn out.</p> <p>3. More than one press roller get stuck.</p> <p>4. The installation position of deflecting scraper is incorrect.</p> <p>5. The moisture content of feed is too high.</p>	<p>1. Replace with a new deflecting scraper.</p> <p>2. Replace with a new press roller.</p> <p>3. Check the press rollers.</p> <p>4. Reassemble the deflecting scraper.</p> <p>5. Decrease the moisture content if feed mash.</p>
7	Pellet mill is smoking.	<p>1. The scraper is worn and there is a hard layer forming by feed mash accumulation between the supporting plates rotor and press rollers.</p> <p>2. Tension of V-belt is not enough.</p> <p>3. Hard material deposited behind the back supporting plate, which makes the main shaft lack of lubrication.</p>	<p>1. Install a new scraper.</p> <p>2. Tighten the V-belt.</p> <p>3. Clear away hard material and lubricate the main shaft till lubricating grease overflows from the back supporting plate.</p>
8	Ticks are heard when the pellet mill rotates every circle.	Metal impurity in the ring die	Check the inner surface of ring die and clear away metal impurity.
9	V-belt is slipping when under full loading or slightly overload a bit	<p>1. Tension of V-belt is not enough.</p> <p>2. The length of V-belt in a group is different.</p> <p>3. V-belt is contaminated by grease.</p> <p>4. Wrong location of V-belt</p>	<p>1. Tighten the V-belt as required.</p> <p>2. Replace with a group of belt in the same size.</p> <p>3. Clean the V-belt and belt pulley.</p> <p>4. Correct the motor and the middle</p>

		5.The external form of V-belt is incorrect	pulley. 5. Use qualified V-belts.
10	Output of the pellet mill is not enough, but the main motors have already worked in full load.	1. Too much steam (only refer to feed materials that are sensitive to temperature and humidity) 2. The ring die is too thick 3. Bad steam quality and too much moisture content 4. Feed mash is not sufficiently conditioned 5. The clearance between press roller and ring die is too big 6. The press roller and ring die are over worn 7. Bad formula or too big grinding granular	1. Reduce the steam adding amount 2. Use ring die with a depth proper for material 3. Readjust the steam supply system 4. Increase the steam adding amount or prolong the conditioning time. 5. Readjust the clearance 6. Replace the press roller and ring die 7. Adjust the formula or replace with a sieve of small apertures
11	The ring die is broken when worn to a certain degree.	1. Foreign material in press die 2. Ring die is too thin. 3. The fixing of ring die is failure.	1. Perfect the cleaning of material. 2. Use a thicker ring die with shoulder holes. 3. Check whether the driving rim and the fixing bolts are locked firmly, and replace the driving rim if necessary.
12	The bearing of the press roller is vulnerable.	1. There are hard foreign materials mixed in feed. 2. The clearance between the press roller and ring die is too small. 3. Improper lubricating grease is used. 4. Lubricating grease applied for press roller is insufficient. 5. Bad bearing end cover and seal ring are used. 6. Unqualified press roller bearings provided by other manufacturers are used.	1. Perfect the cleaning of material. 2. Adjust the clearance between the press roller and ring die. 3. Apply lubricating grease as designated (Section 7.2.1). 4. Apply enough lubricating grease as designated (Section 7.2.2). 5. Replace the end cover of bearing and seal ring. 6. Use the bearings offered by Muyang Holdings Co.,Ltd

Spare parts

Important note:

Our works is responsible for repairing or replacing parts (exclusive wearing parts) which are faulted due to manufacturing quality within one year from the date of leaving the factory(subject to the invoice date)under normal use and safekeeping by the customer, excluding the operations not in accordance with the operating instructions and human factor. Our works continues to undertake maintenance and repair after one year from the date of leaving the factory, to ensure normal use of the customer, but the expenses shall be borne by the customer.

Spare parts

Some parts and components in this equipment are worn off gradually when in use. If these parts are still used after worn to a certain degree, the property of equipment will be affected and dangerous accidents will occur probably. Therefore, these parts and components shall be replaced timely after used for a certain period. The spare parts in this Operation Manual is also called wearing parts.