Manual Instructions

Thank you for using the woodworking machinery series produced by Shandong Zouping Shuanghuan Machinery Manufacturing Company.

This manual provides you with detailed safe operation methods, precautions and maintenance methods. Be sure to read and understand this manual carefully before use to ensure the safe operation of the
machine and the personal safety of the operators.

The company is a production base integrating R&D, manufacturing and marketing of multi-blade saw machines and supporting equipment for woodworking machinery. The company's products have the advantages of beautiful appearance, good stability, strong safety, high production efficiency, high technical content, low energy consumption, and environmental protection. They are ideal equipment in the board production industry.

If you find any problems during use, please contact your local dealer or directly
Contact our company. We will solve the problem for you as soon as possible.

Note: The company reserves the right to modify and interpret this manual. As the product is constantly updated, if there is any discrepancy between this manual and the actual product, the actual product shall prevail.

Appearance

Product Description

Uses and features

This product longitudinally cuts the planks/ boards into slabs or wood strips with multiple saw blades, feeds the whole process, and completes the sawing of logs at one time.

This product has the characteristics of strong safety, high production efficiency, high yield rate and high plate thickness accuracy rate. With sawing instead of planing, the surface of the processed wood board is smooth and flat. It is an ideal equipment for producing blockboard, finger-joined board, wood thread, board and square material.

Preparation before Operation

1. Before operating the machine, you must read this manual carefully to understand its performance and correct operation methods.
2. A reliable grounding device must be installed before the machine is operated, and other safety protection devices must be checked for normality.
3. Before starting the machine, make sure that the nuts of the saw blade and the conveying device are tight, and whether the conveying device will rub against the saw blade.
4. Ensure that the direction of the saw blade and the tooth are the same in the rotation direction of the spindle, and tighten the nut.
5. Ensure the normal operation of the transmission system of each part.
6. Ensure that there is no debris in the machine table and no sawdust on the saw blade.
7. Make sure that the top cover of the machine is closed.
8. When adjusting the machine, the power must be turned off to avoid accidental injury.
9. It is strictly forbidden to operate the machine after being in poor physical condition or drinking alcohol.
10. When the machine breaks down, the power supply should be cut off immediately, and the operation should be stopped, and a special person should be assigned for maintenance or adjustment. It is forbidden to work with the machine.
11. The tools and accessories used must be correct. It is strictly forbidden to use tools and accessories beyond the design function of the machine, or to process materials beyond the capabilities of the machine.

12. The machine must be designated to operate, maintain, adjust and repair the machine, and those who are not familiar with the machine are prohibited from operating, disassembling and installing the machine.

Operation method

1. Clean up the debris near the feeding port and discharge port.
2. Turn on the power supply.
3. Turn on the emergency stop switch => start the host power supply => start feeding.
4. Feed the wood that does not exceed the processing capacity of the machine from the feed inlet.
5. When feeding, the wood must be fed to the corresponding size to maximize sawing and increase the yield rate. Each piece of wood can be placed connected or indirectly. Put the large area of the board face down when unwinding.
6. The plates of the discharge port should be taken out in time to prevent the subsequent wood discharge from being blocked.
7. Clean up the sawdust under the saw blade in time.
8. If there is a material jam during use, press the emergency stop switch to stop the operation. After the standby device stops running, remove the jammed wood.
9. The jammed wood can be withdrawn by jog return. When returning the material, pull up the bulletproof sheet first, and then press the jog to return the material. After being dealt with by the maintenance worker, there is no problem before starting the machine and continuing to work.

Precautions after operation

1. After finishing the work, turn off the water source and cut off the power supply
2. After cutting off the power, use an air gun to clean all the sawdust and dust on the machine to keep the equipment tidy
3. Remove the debris attached to the pressure wheel, saw blade, and thorn wheel
4. Remove debris on the feeding and discharging device

Daily maintenance

1. Regularly inspect, adjust and lubricate the conveying device (press wheel, supporting wheel, conveyor belt, etc.) and transmission device (chain, sprocket, gear, etc.).
2. Regularly check whether the belt length of the main motor is tight or not.
3. Regularly check the water circuit of the water spray device. When the spindle core is replaced with the saw blade, use water to align the hole once a day, or use an air gun to aim at the innermost water outlet to blow out the stolen goods and ensure the smooth water outlet.
4. The oil cup of the tank body should be filled with oil regularly, and whether the oil pipe is properly connected to the port.
5. The cushion cover and saw blade should be cleaned with diesel fuel on a regular basis (3-5 days), wiped with a clean machine cloth. There should be no debris during installation, and then cleaned with a cloth.
6. Regularly check whether the spindle nut is loose.

Saw blade use

Installation of saw blade

1. Check whether the equipment is in good condition, the main shaft has no deformation, no diameter jump, the machine is installed firmly, and there is no vibration.
2. Check whether the saw blade is damaged, whether the tooth profile is complete, whether the saw blade base is smooth and clean, and whether there are other abnormal phenomena to ensure

safe use.
3. When installing the saw blade, make sure that the positions of the spacer sleeves of each shaft are parallel, otherwise the saw blade is likely to burn or be damaged.
4. When installing the saw blade, use a clean cloth to wipe the saw blade, cushion cover, and spindle clean. Ensure that there is no debris between the saw blade, the cushion cover and the spindle, and the contact surface between the cushion cover and the saw blade must not be present. The phenomenon of bruising, otherwise it will cause the sawn board to be uneven and burn the saw blade.
5. When assembling, make sure that the rotation direction of the saw blade is consistent with the rotation direction of the equipment spindle.
6. Before starting the equipment, confirm whether the saw blade nut is tight and whether the conveying device will rub against the saw blade.
7. Before the equipment is started, if it is safe to ensure the safety, there is a single person to operate the equipment, jog idling, and check whether the equipment is turned correctly and whether there is vibration. After the saw blade is installed, it should be idle for a few minutes, and it can work normally after it has no slip, swing, or jump.

Saw blade use requirements

1. During work, if abnormal sound or vibration, rough cutting surface, or peculiar smell is found, the operation must be terminated immediately, and the fault must be checked in time to avoid accidents.
2. The equipment chip trough and slag suction device ensure unobstructed operation to prevent the accumulation of slag and block, which affects production and safety.
3. When cutting wood, you can spray water properly (beware of leakage) to prevent the saw blade from overheating, make the cutting effect more ideal, and extend the service life of the saw blade.

Saw blade maintenance

1. If the saw blade is not used for the time being, use the inner hole to hang it to avoid laying it flat for a long time, and not to put objects on it. The blade should be protected from collision, and it should be protected from moisture and corrosion.
2. The reprocessing of the saw blade (inner diameter correction, positioning hole processing, etc.) must be carried out by the manufacturer. If the processing is improper, it will affect the product use effect and may be dangerous.
3. When the saw blade is no longer sharp, the cutting surface is rough, fluffy, or misaligned, it must be re-grinded in time. Otherwise, the use effect will be affected and the saw blade may be scrapped.
4. Re-grinding must be carried out by a reliable professional manufacturer. When sharpening, pay attention to the original geometric design angle to be sharpened. It is recommended to sharpen the front or back angle to ensure the longest use. life.
5. The choice of alloy grinding wheel.

1) The bonding strength of the village fat bond diamond grinding wheel is weak, so the self-sharpening property can be good during grinding, it is not easy to be blocked, the grinding efficiency is high, the grinding force is low, and the grinding temperature is low. The disadvantages are poor wear resistance and abrasive tools. Large loss, not suitable for heavy-duty grinding.

2) The wear resistance and bonding ability of the ceramic bond diamond grinding wheel is better than that of the resin bond. The cutting is sharp, the grinding efficiency is high, it is not easy to generate heat and blockage, the thermal expansion is small, the accuracy is easy to control, the disadvantages The grinding surface is relatively machine, and the cost is higher .

3) The metal bond diamond grinding wheel has high bonding strength, good wear resistance, low

wear, long life, low grinding cost, can withstand large loads, but has poor sharpness and is easy to block.

4) The degree of abrasive inspection has a certain effect on the clogging and cutting amount of the grinding wheel. Compared with the fine sand, the cutting edge wear of the abrasive particles with a large cutting depth increases, and the grinding wheel is easy to block.

5) The hardness of the grinding wheel has a great influence on the blockage. The high hardness of the grinding wheel has a high thermal conductivity, which is not conducive to surface heat dissipation, but it is beneficial to improve the processing accuracy and durability.

6) The choice of grinding wheel concentration is an important feature. It has a great impact on grinding efficiency and processing cost. If the concentration is too low, it affects the efficiency. On the contrary, the abrasive particles are easy to fall off, but the optimal bond concentration range is also the best.

Saw blade replacement method

1. Turn off the power of the main machine before replacing the saw blade. After the main machine completely stops running, clean the sawdust in the machine and clean the dirt on the pressure roller and supporting roller.

2. Open the upper cover or the upper pressure cover where the saw blade is installed

3. First unscrew the fixing nuts on both sides of the main shaft, lift up the main shaft on the side without the pulley or lift the main shaft to take out the bearing seat on the side without the pulley, and then take out the saw blade to be replaced for grinding.

4. Reinforced, circulating type edge cleaning machine, directly unscrew the fixed nut on the spindle, and then the saw blade can be taken out for grinding.

5. When installing the saw blade, pay attention to the original position of the pad set when replacing the saw blade, and can not be misaligned to ensure the shaft pad
The specifications are the same.

6. Install the main shaft as it is, and tighten each nut to ensure the firmness of each component.

Installation and transportation

1. After receiving the equipment, if serious damage is found, please contact the dealer or manufacturer in time.

2. This machine is a small device and is suitable for handling by forklift or crane. Please keep the mechanical balance when handling, and be careful during handling to avoid collision or tilting of the machine.

3. The machine must be placed on a solid concrete floor, and the mechanical workbench should be placed horizontally.

4. During installation, the saw blade and all accessories must be tightly installed on the machine body. All guard devices and safety devices should be installed in corresponding positions. The machine can be turned on only when it is in a safe and normal state.

5. Connect the power supply according to the electrical principle of the machine tool, check whether the jog feed and return are normal, and check whether the spindle rotation direction is correct.

Daily maintenance

1. Regularly inspect, adjust and lubricate the conveying device (press wheel, supporting wheel, conveyor belt, etc.) and transmission device (chain, sprocket, gear, etc.).

2. Regularly check whether the belt length of the main motor is tight or not.

3. Regularly check the water circuit of the water spray device. When the spindle core is replaced with the saw blade, use water to align the hole once a day, or use an air gun to aim at the

innermost water outlet to blow out the stolen goods and ensure the smooth water outlet.
4. The oil cup of the tank body should be filled with oil regularly, and whether the oil pipe is properly connected to the port.
5. The cushion cover and saw blade should be cleaned with diesel fuel on a regular basis (3-5 days), wiped with a clean machine cloth. There should be no debris during installation, and then cleaned with a cloth.
6. Regularly check whether the spindle nut is loose.

Failure and troubleshooting

Item	Problem	Details	Analysis	Solution
Main Shaft	High noise (empty shaft)	Bearing damage	Bearing reaches the end of its service life, naturally damaged	Change the bearing
			Bearing water enters, causing esterification	
			Bearing quality problem	
			The bearing is not installed properly	
		Inner circle of walking shaft	Problem with tolerance fit	
			Problem with concentricity	
			Overheating locks the bearing	
			Too cold	
		Take the outer circle of the bearing	Problem with tolerance fit	
			Problem with concentricity	
			Overheating locks the bearing	
			too cold	
			Spindle bending and deformation	Change shaft

	Loud noise (with saw blade cushion cover)			
			The inner hole of the cushion cover is too large, resulting in weight loss	Change cushion cover
			The inner hole of the saw blade is not round, and the concentricity of the saw blade is problematic	Change saw blade
			The pulley is damaged and out of balance	Screw the broken place
Chain	fracture		The reference surface is not flat and the chain scratches something	Weighing
			Chain trip (connecting buckle)	Clean up the datum
Chain	fracture		The reference surface is not flat, and the chain is scratched, such as welding slag	Clean up the datum
			Chain trip (connecting buckle)	Replace with a new connection buckle
	lengthen		product quality problem	Replace the new chain
			End of life (normal wear and tear)	Replace the new chain
Motor	burn	Short circuit	Appears as three sets of only one set of line circle partial hits	It is a quality problem of the manufacturer, With warranty
		Lack of phase	Wear, the color of the three sets of coils is normal	
		Overload/over heat	It appears as blackening of 1-2 groups of electric circles	With overload protection, reduce Number of saw blades
		Power configuration	Appears as three groups of electric circles are all black	
	power decline		There is a problem with the insulating paint, and the non-insulating electric energy is consumed	Re-cast insulating paint
Electrical appliances	Not send material		The two hosts are not fully started, the feeding system The system needs to be turned on after both hosts are turned on Move, the purpose is to protect the saw blade	Turn on the two hosts first (Two contactors), Turn on feeding again
	Does not	Voltage	Incorrect voltage, under voltage	Check voltage

	attract	frequency	Wrong frequency	Convert voltage and frequency, Chinese voltage and frequency are: 220V /50HZ 380V/50HZ
		Contactor	The contactor contact is damaged, the contactor is burned out	Replace the contactor
	Burn head		Poor contact between wires and electrical components	Tighten the fastening screws of the electrical components
electric	Unable to start		If the piano wire is not connected, we use the 22OV/380V voltage to start, but press five wires, 3 live wires, 1 ground wire, and 1 neutral wire.	Connect to neutral
Wood	Not level up and down		Cushion cover table is not flat	Smooth with sandpaper
			Cushion cover surface damage	Smooth with sandpaper
			Cushion cover specifications do not match	Replace with gaskets of equal thickness
			The upper and lower axes are not on the same level	Adjust the spindle to a plane
			The quality of the saw blade is problematic and shakes a lot	Replace a good quality saw blade
			The upper and lower saw blades do not match (different specifications of saw blades have errors in thickness, and different brands of saw blades have errors in thickness)	Replace with a saw blade of the same brand
			Spindle bending	Change shaft
			Inner circle of walking shaft	Change shaft
	Flat on the top, uneven on the bottom		The spindle moves forward and backward, and the bearing is broken	Change the bearing

	The top is not flat, the surface is flat			
	Nibble		The feeding chain plate and the discharging chain are not on the same side (for the case of the chain plate discharging)	calibration
			The navigation blade and the saw blade are not on the same plane (for the situation where the navigation blade is discharged)	calibration
Wood	Nibble		Navigation slice deformation	Change navigation
			The feeding system (chain frame) and the saw blade are not on the same plane	calibration
			Navigation axis bent	Change the shaft.
			Bent shaft	Change shaft
			The bearing of the 5th generation presser wheel is broken	Change the bearing
			The navigation sheet is severely worn, thinning and not jamming the wood	Replace with new navigation sheet
			The navigation blade and the saw blade are not on the same plane	Aligned on the same plane
	Wood rebound		The wood is too short, and the navigation sheet cannot hold the wood	Do not cut short material
			Navigation slice deformation	Replace with a new navigation sheet
			Navigation axis bent	Change the navigation axis
			The pressing thorn wheel is entangled with bark	Cheli Crushed Slag
loud noise	Big vibration		Saw blade eccentric	Replace with new saw blade
			The inner hole of the cushion cover is too large	Replace with a new cushion cover
			Broken pulley	Replace the pulley
Saw blade	Burn the saw blade		Saw blade quality problem	Replace high-quality saw blade

			The saw blade is too thin and does not match the hardness of the wood	Replace the adapted saw blade
			Unbalance between feeding system and saw blade	Calibration, loose or falling chain
			Water shortage	Check the water spray system