

MJ3980AX650 Horizontal Band Saw



1. Technical parameters:

Technical parameters of MJ3980A×650 high-speed heavy-duty horizontal band saw machine (Specification)		
Maximum sawing size	Max. working size	650×200mm
Distance from saw blade to table	Distance from saw blade to worktable	3 ~ 200mm
Belt width	Width of conveyer belt	635mm
Saw wheel diameter	Diameter of saw wheel	800mm
Feed rate	Feed speed	0 ~ 5.5 m/min (deceleration configuration increases the pulling force)
Saw wheel lift motor	Saw wheel elevation motor	1KW servo motor with brake
Saw Wheel Motor	Saw wheel motor	22kw
hydraulic pressure	Hydraulic pressure	55kg/cm ²
Vacuum pipe diameter	Dust outlet diameter	102mm×2
Saw blade size (length × width × thickness)	Size of saw blade (L×W×H)	6000×50×0.9mm (1.3" saw wheel)
saw road	Saw kerf	1.2 ~ 2.2mm
Dimensions (L×W×H)	Overall dimensions(L×W×H)	3000×2300×2200mm
net weight	Net weight	2300kg

2. Function: It is professionally used for (pine, fir, oak, poplar, etc.) finger-jointed splicing panels and then sawed into thin boards, and two pieces are assembled into a 1220*2440 large splicing board.

3. Performance advantages

1. High speed: the diameter of the saw wheel is 800mm, and the outer circle contact surface of the saw wheel greatly increases the friction force, which is 50% faster than the conventional horizontal band saw machine.
2. Low consumption
 - (1) Labor saving: The production efficiency is increased by 50%, and the relative labor is reduced by 1/2.
 - (2) Save the saw blade: the same saw blade can be used to increase the speed by 50% and save 1/2 the cost.
 - (3) Material saving: the sawing road is small, the board surface is smooth, and the finish is good. Compared with the traditional vertical saw, each board can save 4-5mm of sawing road and work difference materials. Light or dry after sanding to save material.
3. Special for high material: the range of saw blade lifting height is large 0-300mm, which can open small logs.
4. Digital display to determine the thickness: the number keyboard keys to set the thickness of the plate, the operation is fast and convenient, and the positioning is accurate.
5. Intelligence: The intelligent positioning of the worm gear reducer is more accurate and reduces errors.

4. Heavy-duty design: The heavy-duty structure of the gantry can lift freely within a height of 300mm (generally horizontal band saws can freely lift within 200mm).

1. All-welded frame: The frame is welded by 100*100*5mm thick square tube with seamless all-welding method. The whole machine has good rigidity, the bottom frame is stable, and the equipment will not vibrate when running at high speed.
2. Gantry structure: The column gantry structure is adopted, and the lifting height of the saw wheel frame can be arbitrarily set within the range of 300mm. The strong frame can ensure stable lifting, accurate sawing effect and prolong the life of the saw blade.
3. Saw wheel bottom plate: The 16MM thick saw wheel bottom plate is laser cut, the square tubes are reasonably distributed vertically and horizontally as reinforcing rib plates, and then welded by all-welding method. The saw wheel frame has good rigidity and is not easy to deform, which affects the service life of the saw blade.
4. Thickened workbench: The workbench is made of 10MM thick plates covered with ribs at the bottom to prevent long-term stress deformation and affect the sawing accuracy.
5. Heavy-duty lifting system: The precision ball screw adopts $\phi 32$ Taiwan brand ABBA precision screw, with a lifting speed of 2 m/min, the lifting height can be arbitrarily set within 300MM, the positioning is accurate, and the sawing is stable.
6. Lifting guide rail: The international first-line brand German Rexroth 35# precision guide rail slider is used as the guiding function. The screw rod drives the saw wheel frame to rise and fall smoothly and smoothly, and it is not easy to swing and affect the work difference.

5. High configuration constant temperature hydraulic system: stable oil temperature, smooth and smooth conveying, smooth sawing of plates, wide plate deceleration and increased torque design, speed regulation range 0-5.6 m/min:

1. Valve imported from the United States: control the hydraulic oil flow output smoothly and stably, there will be no fast and slow oil circuit or continuous heating and heating, ensuring stable feeding without shaking, smooth sawing of plates without vibration lines, large speed adjustment range can be matched with various Wood cutting speed.

(Other brands use the motor to drive the material, the speed adjustment range is small, and the motor is easily damaged when the adjustment range is exceeded)

2. Sino-Italian joint venture hydraulic motor: It is specially customized with imported technology from Italy, which drives the feeding wheel to drive the power of the feeding belt. The oil flow adjustment range is large. The hydraulic motor ensures stable power and rotational speed when switching between high and low speeds. The feeding belt drives smoothly and does not vibrate. .
3. Taiwan gear pump: The hydraulic motor drives the gear pump to output hydraulic oil, and the oil pressure is smooth and stable when it is turned on for a long time, and it will not heat up at high temperature.
4. Hydraulic feeding device: The hydraulic motor drives the feeding wheel to drive the in-line belt feeding, and the curved feeding wheel prevents the feeding belt from swinging and deviating, the conveying is stable, and the sawing plate is smooth and accurate.
5. Hydraulic feeding device: The hydraulic motor drives the feeding wheel to drive the in-line belt feeding, and the curved feeding wheel prevents the feeding belt from swinging and deflecting to the side, which is especially suitable for the process of cutting multiple pieces of one plate.

6. Automatic tensioning and saw wheel configuration:

1. Wear-resistant steel wheel: 45# national standard carbon steel with high hardness is precisely processed into a saw wheel with a diameter of 800mm and a thickness of 42mm through ten processes. , wear-resistant, larger diameter than the traditional horizontal band saw saw wheel, larger saw blade contact surface, faster speed, and more durable saw blade.
2. Heavy-duty bearing device: NSK heavy-duty release bearing 32013 is used inside the saw wheel. The large contact surface of the inclined bead ensures that the saw blade can withstand greater tension when it is tensioned, so that the deformation of the two saw wheels is small when the two saw wheels are tensioned, and the outer circle of the saw wheel is wear-resistant and stable. Smooth and uninterrupted.
3. Saw wheel tensioning guide: Adopt international brand German Rexroth 35# guide rail slider guide, the slider gap is small when the saw wheel is tensioned, the saw wheel does not swing, the saw blade has good stability and is not easy to break.
4. Fully automatic tensioning system: Using the fully automatic tensioning function, one person can quickly replace the saw blade. The system has an automatic pressure maintaining function. When sawing, the saw blade heats up and automatically boosts the pressure and maintains the pressure. The saw blade is stable and not easy to break or run the saw. .

7. Introduction of high-quality accessories:

1. Front pressing material: The inclined pressing plate is designed to facilitate continuous feeding of materials of different heights, and the aluminum wheel is light to facilitate the feeding and lifting of the pressing plate; the rubber layer prevents the material from slipping and jamming, and it can be adjusted slightly when the height of the wood is different, and the air pressure of the cylinder is adjusted according to the thickness of the material. , Squeeze the wood to prevent deviation and ensure accurate sawing. The three rows of pressing materials can independently adjust the pressure, and the slightly bent and deformed sheets can be pressed straight, and the sawing is more accurate.
2. Vibration reduction of the front pressing material: The vibration reduction function can buffer the vibration of thick wood when it exits the front pressing material, so as to ensure the working difference to reduce the vibration pattern.
3. Back-pressing material: the inclined platen design will not block back the material to be fed, the glue layer will prevent slipping, adjust slightly when the height of the wood is different, the cylinder adjusts the air pressure according to the thickness of the material, and presses the wood to prevent deviation to ensure sawing. Precise.

The three rows of pressing materials can independently adjust the pressure, and the slightly bent and deformed sheets can be pressed straight, and the sawing is more accurate.

4. Water storage device: It is used to store water or diesel oil. When the saw blade is heated, the saw blade is cooled and lubricated by spraying water or diesel oil.
5. Water spray device: The saw blade heats up during sawing. The water spray device sprays water on the saw blade in the form of spray to cool and lubricate the saw blade. The saw blade is stable and not easy to run and break.
6. Saw clip guide wheel: The wear-resistant special ceramic is used as the clip, and the saw blade will not vibrate up and down to affect the work difference. The 10,000-turn high-speed guide wheel prevents the saw blade from retreating and ensures that the saw teeth are exposed on the saw wheel. The combination of the two is not easy to break. , running saw, sawing precision.
7. International first-line brand electrical appliances: Siemens/Schneider contactors/thermal relays have good durability for frequent starts. The phase sequence protector can automatically protect the voltage when the voltage is unstable. The failure rate is low. The internal use of the machine European standard 110V safety voltage. (Other brands are all domestic ordinary brands)

Eight, the main accessories:

Transformer Jiuchuan Electric Push Button Switch Siemens Second Industry
Circuit Breaker Schneider AC Contactor Schneider
Saw wheel bearing NSK guide rail slider Germany Rexroth
Ball screw TBI/ABBA triplet Fangda
Speed control valve American imported valve hydraulic motor favorite