

MJ21100X650X40 Precision Vertical Reciprocating Band Saw



1. Technical parameters

MJ21100X650X40 Precision Vertical Reciprocating Band Saw Technical Parameters (Specification)		
Maximum sawing size	Max. working size	650mm×650mm×4000mm
Max processing speed	Max. working speed	0-25M/min
Maximum return speed	Max feeding back speed	25M/min
Saw wheel diameter	Saw wheel diameter	1000mm
Saw wheel width	Saw wheel width	70mm
Table feed method	Working table working way	High precision linear guide
Clamping method	Pressure way	Pneumatic clamping
Saw blade tensioning method	Saw blade tensioning	Gas-liquid boost tension
Saw blade width	Saw blade width	80mm
Saw blade length	Saw blade length	6750
Sawing motor (variable speed)	Saw motor(frequencyinverter)	30kw
Fixed length (servo positioning)		0.85kw
table feed motor		4kw
Table feed drive mode		ChainHigh precision gear rack
Fixed-length drive		Precision screw + reducer + servo motor High precision gear rack
Cabinet size (length × width × height)	Cabinet size (L×W×H)	900mm×700mm×850mm(100KG)
Head size (L×W×H)	Head size (L×W×H)	1300mm×800mm×3300mm(2600KG)
Body size (length × width × height)	Dimensions (L×W×H)	9000mm×2000mm×2500mm(5800KG)
gross weight	Total weight	8500kg

2. Function: It is professionally used for the cutting of precious wood such as mahogany.

3. Performance advantages

1. High speed: The sawing path is small, the precision is high, the feed speed is 25 m/min, and the process of pressing and planing is omitted later, and it is directly dried and sanded.

2. High-precision positioning: Compared with the traditional vertical saw, each board can save 4-5mm of sawing road difference.

(1) Servo precise positioning: The Y-axis screw adopts high-precision and high-torque Delta servo motor, with a positioning accuracy of up to 0.01mm, accurate positioning of incoming and outgoing materials, and material saving.

(2) Y-axis precision ball screw: $\phi 32$ Taiwanese brand ABBA precision screw is used, with an advance and retreat speed of 40 m/min, and accurate positioning;

(3) Y-axis precision guide rail: the international first-line brand German Rexroth heavy-duty 30# precision guide rail, the slider clearance is less than 5C, and the sawing is stable and will not vibrate.

3. Environmental protection: the outer circle of the saw wheel is designed with a belt, water-free (spray) dry sawing, and only vacuuming is required to comply with the concept of environmental protection:

(1) Reduce pollution: solve the pollution problem of waste water discharged from traditional gantry saws and water saws, and pass environmental protection acceptance.

(2) Increase the value of waste products: water sawdust is treated as waste, and dry sawdust can be sold as raw materials.

(3) Ultra-quiet design: more in line with environmental protection noise requirements.

4. Intelligence: Delta controller: start a more user-friendly operating system, which is convenient for adjusting the feeding speed, lifting thickness, sawing length and other operations.

(1) 16 groups of plate thickness preset quick selection.

(2) 4 groups of high memory.

(3) 8 groups of height presets.

(4) Intelligent fixed length.

(5) Intelligent fault detection.

5. Low consumption

(1) Reduce maintenance costs and prolong the life of machine tools: water-free dry saws reduce the corrosion of machine tools by waste water, and the expected service life of super-heavy sawing machines can reach more than 10 years. (The life expectancy of other brands of equipment is only 1-3 years)

(2) Provincial labor space: the production efficiency is increased by 4 times, and one person can operate it and four people can work.

(3) Save the saw blade: the saw blade uses the same speed increase of 4 times, and the 4 times output is 1/4 of the old version of the saw blade cost.

(4) Saving water and sewage treatment fees: dry sawing does not require water or spray cooling.

(5) Material saving: accurate positioning, less error, and more material saving.

4. Heavy-duty design:

(1) Heavy-duty frame design Body: the frame is made of 100*100*5mm thick square tube, high-density skeleton reinforcement design, and welded with 10mm thick plate reinforcing rib plate, the whole machine has good rigidity, and is heat treated to prevent deformation, to ensure accurate sawing and prolong use time.

(2) Heavy-duty main saw frame: the column size is 40cm*20cm thickened square tube, the saw wheel frame adopts a 16mm thick plate full welding design to increase rigidity, and heat treatment prevents deformation.

(3) Thickened workbench: The workbench is made of 10MM thick plate fully welded, and then covered with ribs at the bottom. After passing through, it has good rigidity and can withstand the impact force of 1-2 tons when feeding, ensuring accurate sawing and can withstand Wood is strongly corroded by acidic water.

(4) Heavy-duty guide rail slider: 1. The 45# heavy-duty guide rail of the international first-line German Rexroth is adopted. A single slider can bear a weight of 5 tons. The table moves smoothly and the sawing effect is good.

(Other brands use Taiwan ABBA30# or Guangdong Jiangmen 35# domestically, and are not heavy-duty guide rails).

Five, automatic tensioning and high-speed saw wheel configuration:

1. Oversized saw wheel: It adopts ultra-high-speed saw wheel with $\phi 1000 \times 70\text{mm}/80\text{mm}$ belt, and national standard steel with high hardness. It is precisely processed through ten procedures, with large friction force, ultra-fast speed, good stability, and it is not easy to break strips and sawing. Accurate, double the efficiency.

2. Heavy-duty bearing device: NSK heavy-duty separation bearing 32216 is used inside the saw wheel. The large contact surface of the oblique bead ensures that the saw blade can withstand greater tension when it is tensioned. The 6216 bearing auxiliary force keeps the two saw wheels parallel when they are tensioned. Fully sealed design, smooth and durable.

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, and the saw blade is stable and 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 increases the pressure and maintains the pressure. The saw blade is stable and not easy to break or run the saw. .

Six, high-quality electrical configuration:

1. International first-line brand electrical appliances: Delta PLC/Siemens contactor/Schneider contactor for thermal relay, with low failure rate, and the internal safety voltage of the machine adopts European standard safety voltage of 110V.

(Other brands are all domestic ordinary brands)

2. Infrared positioning: The infrared height is used as the first trial cutting height positioning, which can be set directly on the screen without measuring with a ruler, which is convenient and fast.

3. Taiwan Tiande travel switch: double limit function and double protection to prevent the X-axis slider from rushing out of the guide rail due to too fast advancing and retreating speed to damage the machine.

4. Delta inverter:

(1) Frequency conversion speed regulation of the workbench.

7. Introduction of fuselage accessories:

1. Chain feeding: The chain drives the worktable to feed and feed with good stability, and has low requirements for dust and rust prevention to reduce failures.

2. Frequency conversion motor: Adjust the feed speed of the worktable, stable and precise.

3. Oil filling machine: The oil supply of all the sliders of the whole machine prevents the slides of the guide rails from rusting and keeps them smooth.

4. Pneumatic clamping: Z-axis guide rail guide, extra-long cylinder stretching design to clamp wood, independent operation of clamping, which is more convenient for clamping the deformed, bent and different size of wood.

5. Independent pneumatic clamping switch: each clamping material is equipped with an independent clamping switch, so that the wood can be controlled independently when the size of the head is different or when it is bent, and the operation is more user-friendly.

Eight, the main saw accessories introduction:

1. Saw clip guide wheel: The alloy 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 to the saw wheel. , Sawing precision.

2. Main saw table: densely-shaped openings are designed for powerful dust collection, so that dust can be sucked away in time, which meets environmental protection requirements.

3. Multi-directional vacuuming: the saw head has three vacuuming ports to vacuum from different directions to achieve the effect of cleaning and environmental protection.

4. Automatically adjust the upper saw clip: the 25# heavy-duty guide rail of the international first-line German Rexroth, the motor drives the screw to adjust the height of the saw clip, and the height of the saw clip can be adjusted freely according to the size of the wood, and the saw clip is close to the wood for more accurate sawing.

Nine, the main accessories brand:

Transformer Jiuchuan Electric Push Button Switch Siemens Second Industry

Circuit Breaker Schneider AC Contactor Schneider

Saw Wheel Bearings NSK Inverter Delta

Guide rail slider German Rexroth ball screw TBI/ABBA

Text Display Delta Travel Switch Taiwan Tiande

Triplet Fangda PLC host Delta

Main motor Jiang Tian