

## MJ3180AX900 High efficiency environmental protection heavy gantry saw



### 1. Technical parameters:

MJ3180AX900 Gantry Saw Technical Parameters (Specification)		
Maximum processing size (L×W×H)	Max.working size(L×W×H)	4000×900×900mm
Table size (L×W)	Table size(L×W)	3500×700mm
Number of fixed wood fixtures	Clamp fittings	4
Table feed speed	Worktable infeed speed	0.3-25m/min
Table feed motor power	Worktable infeed motor	1.5KW
Saw wheel diameter	Diameter of saw wheel	800mm (environmentally friendly)
Saw Belt Speed	Saw blade speed	31m/s
Saw blade size	Size of saw blade(L×W×H)	6400×60×1.1mm
saw road	Saw kerf	1.4-2.0mm
Saw wheel motor power	Saw wheel motor	22kw
Saw wheel lift motor power	Saw wheel elevation motor	1kw
Saw blade to table distance	Distance from saw blade to worktable	20-850mm
Saw blade tensioning pressure	Blade tension pressure	70kg/cm2
Dimensions (L×W×H)	Orerall dimensions(L×W×H)	9000×2660×3000mm
net weight	Net weight	5800kg

**2. Function:** It is professionally used for square wood or log open plank, especially for the processing of mahogany which is more expensive.

### 3. Performance advantages

1. High speed: The speed improvement of the upgraded version is 4 times that of the old version.

boost project	old version	New upgraded version	Remark
Saw blade lift speed	0.5/min	2.0 m/min	The new one is 4 times the old one
Table retraction speed	8.7 m/min	35 m/min	The new one is 4 times the old one
Effective sawing speed	0.5-1 m/min	2-5m/min	(Refer to 400mm wide mahogany)

### Five, the main accessories brand:

Transformer Jiu Chuan Electric  
 Button switch Siemens second industry  
 Circuit Breaker Schneider  
 AC Contactor Schneider  
 Saw Wheel Bearings NSK  
 Inverter Delta  
 Rail slider Germany Rexroth  
 Ball screw TBI/ABBA  
 Touch screen Weiluntong  
 Travel switch Taiwan Tiande  
 Triplet Fangda  
 PLC host Delta  
 Servo Motor Delta  
 Main motor Jiang Tian

2. High precision: The upgraded version adopts high-precision and high-torque Delta servo motors, and the positioning accuracy is as high as 0.01mm, which is more than 10 times that of traditional gantry saw asynchronous motors (0.1~0.2mm), ensuring more accurate sawing.

3. Environmental protection: water-free (spray) dry sawing, just vacuuming is in line 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: Smart man-machine interface for mobile phone, more user-friendly operation experience.
  - (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.  
(Other brands of equipment have a life expectancy of only 1-3 years)
  - (2) Provincial labor space: the production efficiency is increased by 4 times, and one person can operate it and can equal the output of four people.
  - (3) Save the saw blade: Under the same service life of the saw blade, increasing the speed by 4 times and outputting 4 times the finished product can produce 4 times the same output, and the relative cost of the saw blade is 1/4 of the old version.
  - (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.
- 6. Heavy-duty design: the weight of the whole machine is 5200kg for the 650 model and 5800kg for the 900 model;  
(Other brands generally only have more than 3 tons, and the weight difference is 1000-2000kg)
  - (1) Heavy-duty frame design Body: the frame is made of 100\*100\*5mm thick square tubes, high-density skeleton reinforcement design, and welded with 10mm thick thick plate reinforcing rib plates, the whole machine has good rigidity, and is heat treated to ensure the machine The body is not easily deformed, ensuring accurate sawing and extending the service life of the entire body.
  - (2) Super large column and thick plate saw frame: the gantry frame column size is 40cm\*20cm with thickened square tube to reduce the force and vibration of sawing; the saw wheel frame adopts a 16mm thick plate all-welded design to increase rigidity and reduce deformation to ensure sawing. The cutting effect is precise and the life of the saw blade is prolonged.  
(The column of other brands is only 30cm\*10cm square tube, the body only uses 3mm small square tube and thin plate, and the saw wheel frame is a 14mm plate)
  - (3) Thickened workbench: The workbench is made of 10MM thick plate fully welded, and then covered with ribs at the bottom to prevent deformation under force, and may withstand 1-2 tons of impact force when loading, heat treatment to prevent deformation from affecting sawing High precision, can resist the strong corrosion of wood acid water.
  - (4) Heavy-duty guide rail slider: 1. The 45# heavy-duty guide rail from Rexroth, an international first-line brand, is adopted. A single slider can bear a weight of 5 tons. The worktable moves smoothly and the sawing effect is good.  
Other brands use Taiwan ABBA30# or Guangdong Jiangmen 35# domestic, and not heavy rail).
  - (5) Heavy-duty lifting system: the ball screw adopts  $\phi 32$  Taiwan brand ABBA precision screw, with a lifting speed of 2 m/min, and the international first-line brand German Rexroth 45# guide rail slider as the guide, with the servo positioning, the lifting height can be freely set , accurate positioning and stable sawing. (Other brands use  $\phi 25$  diameter lead screw and 30# Taiwan or domestic guide rail).

#### **Fourth, the introduction of high-quality accessories:**

- 1. Saw wheel: high-speed saw wheel with  $\phi 800 \times 61$ mm belt wrapping, high-hardness national standard steel, precision processing through ten procedures, increasing friction, good stability, not easy to run saw, not easy to break, accurate sawing, improve speed and efficiency doubled.
- 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 reduced. Wear, not easy Broken bar.
- 3. Saw wheel tensioning guide: The international brand German Rexroth 35# guide rail slider is used for guidance. When the saw wheel is tensioned, the slider gap is small, the saw wheel does not swing, and 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 complete the replacement of the saw blade. The system has an automatic pressure maintaining function, which automatically boosts the pressure and maintains the pressure when the saw blade heats up during sawing. The saw blade is stable and not easy to break or break. run saw.
- 5. Control display screen: Taiwan Weiluntong touch screen, more user-friendly operation, easy to adjust the feeding speed or lifting thickness, sawing length, etc., easy to learn and easy to operate, Siemens secondary buttons, international famous brand electrical appliances quality assurance.
- 6. 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)
- 7. Chain feeding: The chain drives the worktable to feed the material, and there will be no loose phenomenon, which makes the feeding more stable and reduces the failure rate.
- 8. Frequency conversion motor: The feeding of the feeding table adopts chain drive, and the frequency conversion motor adjusts the speed, which is convenient to control the speed of advance and retraction, and is more stable in use.
- 9. Servo motor: The lift setting adopts the precise positioning of the servo motor to ensure that the error of the plate thickness is reduced after multiple lifts.
- 10. Infrared positioning: When starting to set the wood height, you can refer to the infrared height as the first trial cutting height and set it directly on the screen, without measuring with a ruler.