

MJ3971CX150 Horizontal band-sawing machine



I .Technical specification

MJ3971C×150卧式带锯机（数字式） 技术参数（Specification）		
最大锯切尺寸（锯条升至150mm）	Max. working size (Saw blade to 150mm)	150×300mm
锯条到工作台的距离	Distance from saw blade to worktable	3 ~ 200mm
输送带宽度	Width of conveyer belt	135mm
锯轮直径	Diameter of saw wheel	711mm
进料速度	Feed speed	0 ~ 18 m/min
锯轮升降电机	Saw wheel elevation motor	0.18kw
锯轮电机	Saw wheel motor	15kw
液压压力	Hydraulic pressure	55kg/cm²
吸尘管直径	Dust outlet diameter	102mm×2
锯条尺寸(长×宽×厚)	Size of saw blade (L×W×H)	4572×27×0.9mm(1"锯轮) 4572×41×1.27mm(1.3"锯轮)
锯路	Saw kerf	1.2 ~ 2.2mm
外形尺寸(长×宽×厚)	Orerall dimensions(L×W×H)	3000×1950×1850mm
净重	Net weight	1500kg

II. Function:

This machine is professionally used for sawing rubberwood into thin boards before the board is assembled. It has the characteristics of high sawing efficiency, small saw kerf, smooth board surface, small tolerance, labor saving, material saving, and safety.

III.Performance and advantage

- 1.High efficiency: Hydraulic feeding, the opening speed can generally reach 18 meters / minute.
- 2.Low consumption:
  - 1)Save saw blades: Narrow material and fast sawdust removal. Opening the board at a high speed of 18 m / min, the saw blade is very durable and low cost.
  - 2)Save material: The sawing board has a narrow surface and small work difference, so it saves material.
- 3.Intelligent: The intelligent positioning of the worm gear reducer is more accurate and reduces the opening error.
- 4.Digital display thickness setting: Use the numeric keyboard keys to set the plate thickness, the operation is fast and convenient, and the positioning is accurate.

#### **IV. Heavy duty design:**

1. Rugged all-welded frame: The frame is welded by 100 \* 100 \* 5mm thick square pipe. The whole machine has good rigidity and stable chassis, and the equipment will not vibrate when working at high speed.
2. Thick workbench: The workbench uses 8MM thick plate, and the bottom is full of ribs. Prevent deformation due to long-term use, to promise it sawing accuracy.
3. Bold lifting shaft: The load-bearing column of the upper saw wheel frame adopts  $\phi 65$ MM diameter 45 # carbon steel. Deformation can be prevented by heat treatment. The extra-thick 8C hard-chrome plating layer is not easy to rust and dechrome, smooth movement, load-bearing wheel frame is not easy to deform, less vibration, and sawing will be accurate.
4. Lifting system: using Taiwan brand ABBA precision screw, the lifting height can be set freely within 200MM, which is convenient for adjusting the thickness of the plate and positioning accurately.
5. Thickened saw wheel bottom plate: 14mm thick national standard steel plate is laser cut, square tube is reasonably distributed in vertical and horizontal directions to reinforce steel bars, and fully welded, which has good rigidity, is not easy to deform, and the saw blade is more durable.

#### **V. High configuration constant temperature hydraulic system:**

stable oil temperature, smooth conveying, smooth sawing of boards, speed regulation range is 0-18m / min:

1. Imported valve from the United States: Control the flow of hydraulic oil, the output is smooth and stable, and it does not appear to be fast or slow or continuous heating. Ensure the feeding is stable without jitter, the sawing board is smooth without chattering, the speed range is wide, and the speed can be adjusted according to woods. (Other brands use motor drive to feed, the speed adjustment range is small, and the motor is easily damaged when the adjustment range is exceeded)
2. Chinese-Italian hydraulic motor: Specially imported technology from Italy, which drives the power of the feeding belt. The oil flow adjustment range is large. When the hydraulic motor is switched between high and low speeds, the power and speed are stable.
3. Gear pump in Taiwan: The hydraulic motor drives the gear pump to output hydraulic oil. Power on for a long time to ensure smooth and stable oil pressure without high temperature heating.
4. Hydraulic feeding device: the hydraulic motor drives the feeding wheel to drive a single-slot belt feeding. The curved surface feeding wheel prevents the feeding belt from swinging and deviating, the feeding is stable, and the sawing plate is smooth and accurate.
5. Hydraulic returning device: the hydraulic motor drives the feeding wheel to drive the belt feeding. The curved surface feeding wheel prevents the feeding belt from swinging and deviating, which is particularly suitable for the sawing process where one board opens multiple pieces.

#### **VI. Automatic tensioning and saw wheel configuration:**

1. Wear-resistant steel wheel: 45 # national standard carbon steel with high hardness. Through ten processes, it is precisely processed into a 710mm diameter and 32mm thick saw wheel. The design of the outer arc surface is good for the stability of the saw blade, and it is not easy to drift and break. Therefore, the sawing is accurate and wear-resistant.
2. Heavy-duty bearing device: NSK heavy-duty release bearing 32013 is used inside the saw wheel. The large bead contact surface ensures that the saw blade can withstand greater tension when tensioned, so that the two saw wheels are less deformed when tensioned. The outer circle of the saw wheel is wear-resistant, stable and smooth.
3. Tensioning guide for saw wheel: Guided by the international brand Germany Rexroth 35 # slide block. When the saw wheel is tensioned, the slider gap is small, the saw wheel does not oscillate, the saw blade has good stability and is not easy to break.
4. Fully automatic tensioning system: Using the full-automatic tensioning system, one person can quickly change the saw blade. The system has an automatic pressure holding function. When sawing, when the saw blade is hot, it will automatically increase the pressure. Ensure the saw blade is stable, not easy to break or deviate.

## VII.Introduction of quality accessories:

1. Front pressing: the inclined pressing plate is designed to facilitate continuous feeding of materials at different heights. Gear pressing is suitable for cutting wood square or plank with 45 degree beveled edge.
- 2.Vibration reduction of the front press: The vibration reduction function can buffer the thick wood from vibration when exiting the front press, reducing work errors and reducing chatter marks.
- 3.Back pressing: the inclined pressing plate is designed to facilitate continuous feeding of materials at different heights. Gear pressing is suitable for cutting wood square or plank with 45 degree beveled edge.
- 4.Water reservoir: It is used to store water or diesel oil. The saw blade will be cooled and lubricated with water mist or diesel oil, when it is overhot.
- 5.Water spray device: The saw blade generates heat during sawing. The water spray device sprays water on the saw blade in the form of spray to cool down and lubricate the blade. The saw blade is stable and is not easy to drift or break.
- 6.Saw clip guide wheel: Special wear-resistant ceramics are used as clips to prevent the saw blade from vibrating up and down. The 10,000-speed high-speed guide wheel prevents the saw blade from backing up and ensures that the saw teeth are exposed to the saw wheel. Therefore, the saw blade is not easy to break and deviate, and the cutting is accurate.
- 7.International first-line brand electrical appliances: Siemens / Schneider contactors / thermal relays, which are more durable for frequent startup operations. Phase sequence protectors can automatically protect the voltage when the voltage is unstable, and the failure rate is low. The machine uses European standards. 110V safety voltage. (Other brands are all domestic brands)

## VIII.Main parts:

Transformer	JUCHE
Push button switch	Siemens
Short circuit switch	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	Chinese-Italian