

## MJ22100X650X40 Vertical log band saw(with turning function)



### A: Parameter

MJ21100X650X40精密立式往复带锯机 技术参数 (Specification)		
最大锯切尺寸	Max. working size	650mm×650mm×4000mm
最大加工速度	Max. working speed	0-25M/min
最大回程速度	Max feeding back speed	25M/min
锯轮直径	Saw wheel diameter	1000mm
锯轮宽度	Saw wheel width	80mm
工作台进给方式	Working table working way	精密直线导轨 High precision linear guide
夹料方式	Pressure way	气动自动夹料
锯条张紧方式	Saw blade tensioning	气液增压张紧
锯条宽度	Saw blade width	90mm
锯条长度	Saw blade length	6750
锯切电机 (变速)	Saw motor(frequencyinverter)	30kw
定尺 (伺服定位)		0.85kw
工作台进给电机		4kw
工作台进给驱动方式		精密齿轮齿条 High precision gear rack
定尺驱动方式		精密丝杆+减速机+伺服电机 High precision gear rack
电柜尺寸 (长×宽×高)	Cabinet size (L×W×H)	900mm×700mm×850mm(100KG)
机头尺寸 (长×宽×高)	Head size (L×W×H)	1100mm×840mm×2900mm(2200KG)
机身尺寸 (长×宽×高)	Dimensions (L×W×H)	9000mm×2000mm×2500mm(6800KG)
总重量	Total weight	9000kg

### B、Machine main part brand:

Transformer	JUCHE	Button switch	Siemens
Shutdown switch	Schneider	a.c. contactor	Schneider
Bearing	NSK	Transducer	Delta
Guide strip slide	Rexroth	Ball screw	TBI/ABBA
Text display	Delta	Travel switch	TEND
PLC controller	Delta		

### **C 、 Function: Machine profession to cut the rose wood log.**

### **D、 Advantage**

1、 High Speed:Machine feeding speed max 20m/min.Saw kert is about :1.6-1.8mm.High cutting precision result the timber no need go through the thickener and can sanding directly.Machine cut the palisander speed:8-10m/min.cut the Mkuruti speed:4-5m/min.

2、 Location in High precision:Compare with the tradition vertical band saw,our machine can save 4-5mm saw kert.

(1) Servo motor for location:Machine Y Axis use Delta high precision and High torque servo motor.the tolerance is 0.01mm.make sure the machine location accurately and save materials.

(2) Y axis precision ball screw:Machine use the ABBA brand  $\phi 32$  precision ball screw.40m/min process speed and accurate location.

(3) Y axis high Precision guide rail:Machine use Germany brand Rexroth high Precision guide rail.the sliding block gap smaller 0.05mm.stable for cutting.

3、 Intelligence: Our machine use Taiwan Brand

WEINVIEW touch screen.user friendly

features.convenient to adjust the cutting speed

Lifting thickness and cutting length.

(1) 16 group timber cutting thickness set in advance.

(2) 4 group timber cutting thickness Memory

(3) 8group wood log thickness set in advance

(4) Intelligence selected length

(5) selected length detection

4、 Low consumption

(1) Reduce the maintain cost and enlarge the machine life: Our machine Cutting without big water can reduce the corrosion by waste water. Our machine use the heavy duty working table,Except machine using time can be over 10 years

(2) High efficiency: One worker can operate 4 set our machine at the same time.

(3) Reduce saw blade cost: Same saw blade but the quadruple output .

(4) Reduce water cost and the cost to dispose the waste water.

(5) Reduce the material:High location precision,less error save more material.

### **E、 Heavy duty design:**

(1)Machine lathe bed:Machine rack use 100\*100\*5mm thicken square tube and 10mm thicken plate to welding.also go through the heat treatment warping preventing.Make sure the cutting in high precision and working stable.

(2) Heavy duty saw heads:Machine saw heads use 120cm \* 120cm thicken square tube to welding the saw wheel frame and 16mm thick plate to increase the rigidity,also go through the heat treatment warping preventing.

(3)Thicken working table:The working table use 100\*100\*100mm thicken square tube for welding to make sure warping preventing.Can bear 1-2tons impact force when loading the wood log.go through the heat treatment warping preventing.Also can withstand the acidity water corrosion.

(4)Guide rail: we use the Germany brand: Rexroth 45#

Heavy guide rail. Single sliding block can Bear 5 tons weight. It can make sure the Working table not have effect when Load the log into the machine. Also can make sure the working table can remove steadily.

### **F、 Auto Tensioning and high speed saw wheel configuration:**

1、 Saw wheel:Use  $\phi 1000 \times 80$ mm high hardness rolled steel and go Through Ten steps ( laser cutting, heat treatment etc)Process. more stable and more durable. Saw blade is not easy to broken, reduce the Cost of saw blade.

2、 Heave bearing device: Saw wheel use the NSK heavy release bearing .The contact area larger will make sure when the tension is over can bear the force. Also can reduce the saw wheel excircle wear rate, enlarge the saw wheel life and reduce the rate of the saw blade broken.

3、 Saw wheel tension oriented: Use the Germany brand: Rexroth guide strip slide. Saw wheel is not easy to swing, and the saw blade is stable. This have the good effect for the saw wheel life and convenient to install the saw blade.

4、 Auto tensioning system: Our machine have the auto Tension function, worker is Convenient to change the saw Blade. Also this system have the Pressurize function. when the Saw blade fever when cutting It will adjust the pressure Automatic. to make sure the Saw blade in the same location This can make sure the saw Blade not easy to run and Broken. Improve the production Efficiency and reduce the cost.

## **G、 Good electric configuration:**

- 1、 Electric device: we use the Delta PLC ,Siemens/ Schneider Brand contactor/ thermorelay etc. To make sure the electric part durable.
- 2、 Delta frequency changer:
  - A、 working table use frequency changer to control the feeding speed,
- 3、 Infrared ray location:Our machine use the infrared ray to set the first cutting high.Set from the touch screen,convenient and high effect.
- 4、 Taiwan TEND travel switch:Our machine use double limit to protect the X axis sliding block.

## **H、 Machine parts introduce:**

- 1、 X axis:Heavy duty Precision rack.stable and wear-resisting.Working table can feeding 0-25m/min.High effective
- 2、 X axis transmission:4kw motor power + reduction gears and the heavy duty Precision rack to make sure the feeding stable and fast.High precision and effective
- 3、 Oiling function:Our machine have the auto add oil function to protect the Guide rail and sliding block rust.
- 4、 Pneumatic clamp:z axis guide rail guiding,Special air cylinder design to clamping the wood log,the clamping system is independent operate.Convenient for the different shape wood log clamping.
- 5、 Pneumatic clamping switch:Each clamping device have the independent switch,convenient for the wood log is curve or different sizes operate.
- 6、 Pneumatic clamping:When adjust the wood log thickness,can adjust the Pneumatic for the clamping
- 7、 Gasholder:when machine working make sure can provide the air pressure in time
- 8、 Auto Turning Function:When need to adjust the cutting side,the Pneumatic device can turn around the wood log quickly.
- 9、 Auto turning device reduction gears: when operate the turning function,the reduction gears will drive the connecting rod to turn the rear sprockets,and the rear sprockets turn the front gear to realize the wood turning

## **I、 Saw wheel parts introduce:**

- 1、 Saw cramp and guide pulley: The saw cramp use the ceramic Inside .more wear-resisting to Reduce saw blade cost.When the saw blade retreat,the Guide pulley can stop the saw blade Retreat so that can make sure the Saw tooth not touch the saw cramp. Enlarge the saw blade life
- 2、 Saw table:intensive holes table make sure the saw dust can out in time.
- 3、 Multi-azimuth suction inlet:The saw head have 3 suction inlet in different location to make sure the saw dust collect in time.
- 4、 Auto adjust the saw clamp:Machine use the Germany brand Rexroth 25# heavy duty guide rail.Use the motor drive the lead screw to adjust the saw clamp location.So can adjust the saw clamp location according to the wood log sizes.