

WIDE BELT SANDING MACHINE

R-R-RP1500

USER MANUAL

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First, the machine uses, specifications and main technical parameters.

The machine is the double sanding-wide-belt sander, can be used for solid wood, plywood, particle board, fiberboard, veneers and decoration as well as a variety of wooden plates. Thick fine surface sanding and sanding, replace two different sets of belt, can be one time to meet the requirements of precision.

The main parameters of the machine

Model	R-R-RP1500
Max.working width	1500mm
Min.working length	300mm
Max.working thickness	3-110mm
Speed of conveyor belt	6-30m/min
Total motor power	45kw
No.1 abrasive belt power	37kw
No.2 abrasive belt power	22kw
No.3 abrasive belt power	5.5kw
Power of conveyor belt	0.55kw
Power of lifting	240mm
Diameter of No.1 abrasive belt	240mm
Diameter of No.2 abrasive belt	210mm
Diameter of No.3 abrasive belt	1520*2200mm
Size of abrasive belt	0.6Mpa
Working pressure	8m ³ /h
Consumption of Compressed air	2700*2600*2100mm
Overall dimensions	4700KG
Net weight	R-R-RP1500

Second, installing and leveling.

Lift machine tool using the top 4 lug screws, please use the enough long steel wire, to keep the machine hanging balance.

Machine tools need to in stall on the hard concrete floor, can be placed in the four corners of the machine tool 150*100 thickness 15 blocks of iron, 0.03/1000 box type level meter on the plane to the right machine tool, adjustment of adjusting corners of spiral, machine leveling in vertical and horizontal direction.

1, purpose and specifications

This machine uses the wide belt, to the plywood, fiberboard, man-made marble flooring, artificial marble and so on. Thickness sanding, fine sanding and polishing, can produce the desired surface.

This product certificate of division of family property granulated substance, double granulated substance, double tailing and three granulated substance four forms.

2, Main structure

The machine is the series product, this product certificate of division of family property granulated substance, double granulated substance, double tailing and three granulated substance four forms for users to choose. This machine design advanced technologies from foreign countries. Parts of the electric mechanical integration control. Main sand cut part of this unit (heavy rollers, sanding pads, tight roll, sand, etc.) Transmission parts (transportation accountability, work), Transmission parts, electrical control, pneumatic parts and vacuum devices. Sanding cut parts are the main working parts of the machine, depending on the raw materials for processing several forms; 1050mm wide belt, heavy rollers, driving rollers, tension roller bearing, through V-belt for high speed rotation. Abrasive belt tension rollers would rise, removing tension when downtime, tension rollers would rise, removing tension when downtime, tension roller bearing on the cylinder piston rods for lifting movements, when rise tightens the emery tape, falling sand with relaxation and with manual control valve control.

Sanding pad at work plays an increasing role of sand cut contacts, pad to sand when it's working with control wedge on the shaft axial displacement, inclined connection under compressive pressure of sanding pad, mat cutting pressure to produce on the wood surface. First of three sanding and sanding thick rolls of abrasive cutting pressure, adjust the amount of sanding cut worm rotation size, and thick roll and second matches the amount of sanding cut size. Rotation implemented by the worm wheel, worm drive boom.

Sand cut motion due to the sand with perimeter joints at both ends in error, cutting easily at the same time in a fixed location on the sand surface unevenness, cutting and product quality to ensure normal, tension roller is equipped with rectification and swing device. Reciprocating cylinder rod affects roller, adjust belt location at any time, and

constantly changing location. Cylinder rod reciprocating motion, photoelectric control to the right by the belt, and are controlled by the solenoid valve to complete.

In front of with a thick roll and spring roller for feed at boot, and have some pressure on them, to ensure the quality of products.

Feeds loosens with the work table rises and falls

Feed body is made up of rubber conveyor belt width 1000mm and its transmission. Before and after delivery with two roller supports. Driven roller by screw before adjusting belt tension force, left end with the roller conveyor belt adjusting device and control method for automatic adjustment.

When the conveyor belt during driving when the rod moves the plates touches the stem, so that one end of the cylinder rod rollers pull the strap to the other side to offset, turning on the conveyor belts are always in the right position, ensure the normal transportation of timber.

Conveyor belt in an active roll right-side, by the direct turbine motor, worm gear box and the CVT transmission roller, its speed can be determined by hand wheel speed.

Work table elevating mechanism

It is made if a small motor drag through worm gear deceleration turn the nut screw the table lifting motion, and the sprocket at the same time turning the remaining three screws up the table smooth up and down, connection tale in the measurements of the table detection rate and represented through the digital display on the machine panel, display a minimum of 0.1mm.

Machine tool equipped with vacuum cleaner device (user-owned), through the dust points often inhale dust filter bag for wood dust, to keep the environment clean and safe production, is strictly prohibited without vacuum power.

Through a variety of buttons on the operator panel.

For safety, the machine is equipped with the following safety devices:

2.1, artificial emergency stop button, installed in front of the machine, press when in an emergency stop.

2.2, Work tables rise and fall the position spacing, the work table rise and fall the peal and the perigee have the limit switch respectively, makes the excessive fluctuation to guarantee the conveyor belt to exempt is damaged.

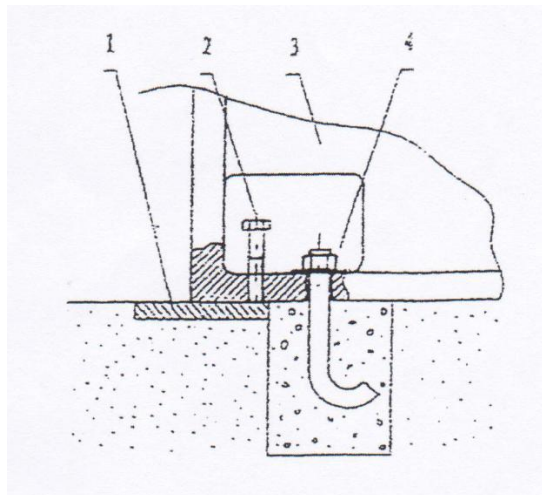
2.3, belt running deviation limit switches, when the belt when it does happen when you deviate from the rollers, touch switch to stop protection of the belt and rollers are not damaged.

Third, Installation and adjustment

3.1 Machine tool installation

Machine lifting using the screw ring on top, to allow the machine to maintain balanced, consistent wire rope length should be long enough.

When the machine ground hard , the machine can be directly placed in the four 100*200 20mm thick iron, with the adjustment screw to adjust the machine, vertical and horizontal level, the determination of the level of degree $<0.005\text{mm}$ level meter on the machine rack plane regulation screw the level of the machine to be the four corners of consistent secure. Such as: ground pine is not easy to withstand tool pressure, you need to water the cement foundation(see below) . Machine the first time an adjustment, it should re-examine whether the level of machine precision changes, check the adjusted every three months in once, in order to ensure the machining accuracy.



Installation of anchor

1, pad 2, adjusting bolts 3, rack 4, anchoring screws

3.2 Connecting machine tool power, it should be noted:

- 1, should be determined according to the total power cable dimensions.
- 2, must be grounded well.
- 3, check the motor turn is correct

3.3 Connect the compressed air tool over

Its diameter is not more than 16mm, pressure to maintain 0.6-0.8MPa, vacuum pipe connection good no air leakage, interface with an average wind speed of not less than 25m/min.

3.4 Abrasive belt installation methods:

- 1, check the belt should be wrinkle-free, no taper, no waist.
- 2, turn off fan vacuum device.
- 3, close the pneumatic valve, tight roll down.
- 4, open position fastening handle and belt sets in.
- 5, push position on arms, tighten the handle.
- 6, the rising tension roller opening pneumatic valve, belt tension.

3.5, Machine adjustments

3.5.1, processing and cutting of plate thickness correction

Adjusts the work table according to the processing board thickness and the cutting quantity size highly with to decide the thick roller, the polishing pad adjustment quantity, press table lift switch on the panel, panel digital displays the distance between the conveyor belt and belt, turning the thick roll, hand sanding pad position adjustment wedge on roller shaft for axial displacement and pressure against the slope of rod displacement in vertical direction, sanding pad moves up and down with the strut, resulting in changes to adjust the amount of sanding cut, thick roll by the eccentric shaft rotate the rollers move up and down to increase or decrease the amount of sand cut.

3.5.2, belt to adjust

When emery tape revolution, each emery tape possibly produces flees not equally moves the speed(the note: because the emery tape attachment has the error), when each time starts the machine must observe the emery tape working condition, specially when replaces each emery tape should perform to pay attention.

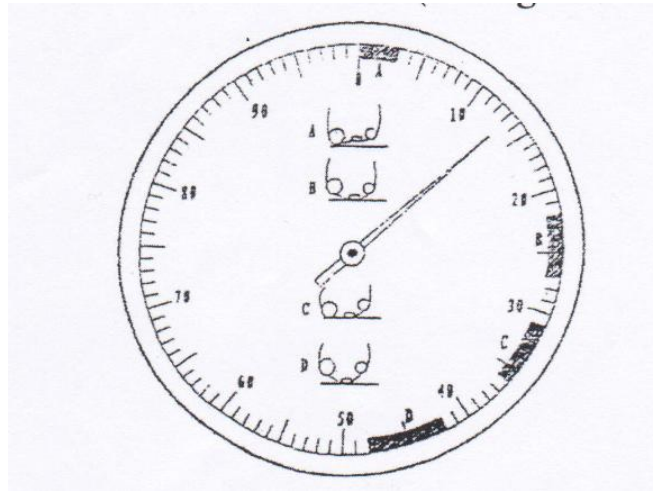
The adjustment air cylinder both sides bolt close support center position, cause the emery tape normal working.

Control principle of abrasive belts: block sanding belt -photoelectric switch-electrical signal-timing relay- solenoid valve- change the rotary cylinder position control of belt run.

3.5.3, choice of feeding speed

Depending on the amount of cutting the size and surface quality requirements, selecting the right feed rate is very important, method for rotation variator hand wheel (attention: must adjust in the machine operation) then changes the transportation the speed, achieves the reasonable input speed.

Selection of machine tool works(see figure weight tables)



Steelyard weight table

As shown in the figure, the pointer pointed out that three different aspects of the machine:

A, B , C, the three red sectors meaning respectively are:

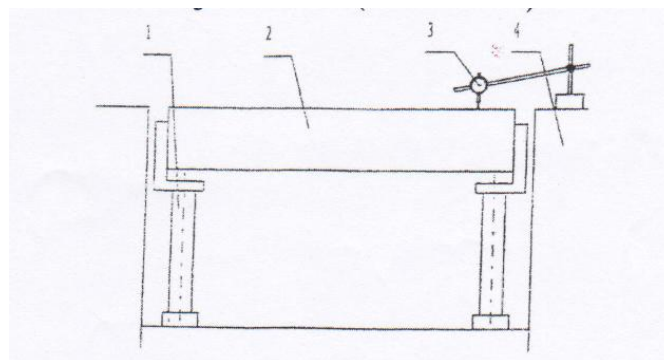
A (sector): Decides the thick roller work;

B (sector): Decides the thick roller, the polishing pad works;

C (sector): Polishing pad work.

According to job needs to go hand-wheel to select a machine tool works, and when the pointer rotates clockwise in the b, c band, sanding pads work pressure increases.

3.5.4, table flatness adjustment(see below)



Plane of table adjustment

1, lift lever 2, table 3, dial indicator 4, on the base plane

Such as long-term working conveyor table flatness change and machine tools, testing tools (dial indicator)plane at machine tool control lift screw (pay attention to eliminating thread clearance), again based on the same measurement at the other (a total of four corners of the measuring machine) so that the table corresponds to the value qualified.

3.5.5, leveling of before and after sanding pad , follow these steps:

(1), Rotates hand-wheel 1, cause indicator 6 to aim at the A sector;

(2), Removes the emery tape;

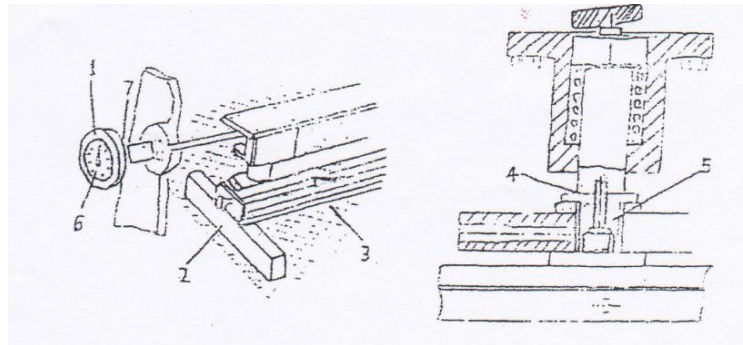
(3), small flat foot 2 is placed on the conveyor belt, rising to the workbench, know for thick roll gently discharged with flat feet;

(4), turn hand wheel 1, will fall under the sanding pad to gently touch flat-foot 2, sanding pad flat feet from one end to another end, check the level of sanding pad;

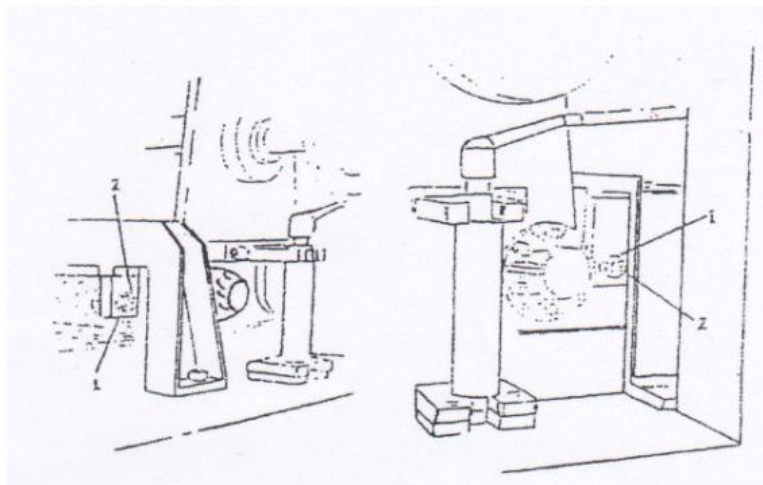
(5), If there are errors, remove the sanding pad 3, 4 remove screws, with Hexagon socket wrench turn the set screw 5, and then fitted with screws 4, final install 3 sanding pad;

(6), Again using a small flat ruler 2, check the level of sanding pad, (repeat the above steps until the level reaches requirements)

(7), Loosen the set screws with 7, go start round 1 until 6 in the 32nd on the grid (zone c) position, screw tight the screws 7, and then go do rounds 1, 6 pointer points to zero.



3.5.6, after the roller and roller adjustment (see below)



The drag roll and the latter drag roll separately make on an eccentric shaft, the adjustment step is as follows:

- (1), Rotates hand wheel 1, causes indicator 6 to aim at the A sector;
- (2), Removes the emery tape;
- (3), rising to the table that it is thick gently touch the roller conveyor belt, and then follow the display readings table down 1 mm thick;
- (4), loosen nut 1, hex wrench inserted in 2 turn eccentric shaft end until the roller gently contact;
- (5), tighten the contacts.

3.5.7, Tension force adjustment

(1), conveyor belt tension adjustment: twist the driven roller adjustment screws on either side of, and you can adjust conveyor belt tension force, be aware of tension is not too large, so as to avoid deformation of the conveyor belt;

(2), the main motor belt tension adjustment: loosen the bolts on the motor fixing board, twist the tension bolt to V-belt up should fit tightly, allow the bending of the triangle with a 20mm;

(3), the table lifting chain tension adjustment: top tight tension through the log bolt sprocket chain tension, but should be appropriate not carried in case the chain sprocket shaft of domestic fault-bend.

Fourth , operation revolution

1, the operator panel buttons

2, action steps

First, before the first departure check to determine property is no different from working station, and then start dusting wind machine, and at the same time, and then manually switched over compressed air power switch (under the pressing materials using different options) - workstations landing-start up pressurized knob switch (sand with boot- brush rollers start-feed start up.

During the course of processing should be ready to take note of all ethnic groups, and current valve instructions during the course of processing he most size tie in with the 3300 inspection, such as whether there should be any improper to thick roller and sanding pad for high or low position adjustment.

After completing the first processing check that the cutting surface is uniform, such as left and right are not uniform should adjust the rollers or the levels of the sanding pad as follows:

Thick roll simply go hand- wheel, worm gear to adjust their level.

Sanding pad should open the bezel, rotate left and right column on the connection screws and sanding pads adjust up and down.

Fifth , Maintenance and repair

5.1, In accordance with the following requirements of machine tool on a regular basis for maintenance.

5.1.1, after each half-work

(1), uses the compressed air thorough cleaning up which purifies after the filtration to put in order the Taiwan engine bed, should pay attention to above especially the conveyor belt internal surface and the work table should not leave leeway the dust, in order to avoid reduces the polishing precision;

(2), cleans up the engine bed to adapt the start dust exhaust apparatus;

(3), inspection should the air strainer, eliminate the coagulum which the filter plant;

5.1.2, each after 40 hours of work:

(1), inspection compressed air filter, eliminate the coagulum which the filter plant;

(2), inspection compressed air oil mist, note full lubricating oil;

- (3), Check the bottom sanding pad, graphite cloth, if necessary, be replaced;
- (4), Check for sanding advance screw is loose, if loose tighten immediately, otherwise it will create heavy rollers of the conveyor belt is damaged.

Speed Reducer

Installation, use and maintenance

First, Installation

- 1.1, the key on the input shaft and output shaft axis with round-flat key, the join size should be consistent with the “GB1096-79” standard common flat key provisions;
- 1.2, when the input shaft and output shaft in conjunction with other components, (connector and pulleys, key wheel, etc), do not hammer;
- 1.3, at the time of installation, regardless of the different angle of horizontal, vertical or inclined installation should calibrate, keeps axis concentric, its installation error tolerance value should not be greater than the coupling;
- 1.4, after installation, hand rotation flexibility.

Second, Use

- 2.1, power on the front, be sure to add the specified lubricant (see lubrication section), circular oil height to keep it in middle position;
- 2.2, mechanical step less work environment temperature should not exceed 40 degrees, the whole surface temperature should not be exceed 80 degrees;
- 2.3, adjust the speed at which it is only allowed to run not to shutdown speed;
- 2.4, suitable for continuous work, allow forward and backward operation;
- 2.5, in sue, torque shall not exceed the rated torque;
- 2.6, mechanical step less speed- adjusting set screws factory-adjusted, do not adjusted so as not to damage parts;
- 2.7, when the need to replace the motor, should retain the original motor with oil seal flange to prevent lubricating oil into the motor.

Third, lubrication

- 3.1, step less mechanical variable speed machine must use a special lubricant Ub-1, this oil by the company's marketing department to purchase supplies;
 - 3.2, mechanical continuously variable transmission and gearbox combination, it should raise the gear oil gear box, combined with a worm gear oil lithium grease;
 - 3.3, hard surface reducer, spiral bevel gear reducer, worm reduction gear lubricating oil a reference endorsement of article combination, Cycloid reducer factory has raised special lubricant.
 - 3.4, for refueling system
- After the first issue of 500 work hour, should replace the fresh oil, and flushes the internal greasy dirt only;

Second issue of 1000 work hour;

Each the third issue of 2000 work hour, might later 2000 work hours replace one time,
3.5, poor working conditions, should be appropriately reduced time for oil and the flushing.

3.6, regular inspection oil, make the oil from the oil standard center line location maintained.

Sander spare part maintenance table

Product name	Warranty period	Preparing note
Bearing	Three moths	Except for the lack of oil damage
Solenoid valve	Three months	Due to unstable voltage burnt out except for
Cylinder	Six months	Due to the lack of oil, except for man-made damage
Conveyor belt	One year	Human damage due to the screw is loose except for sanding pads fall damage
V-belt	One month	Are wearing parts
Roller	One year	Except for man-made damage except for sanding pads fall damage
Brush roller	One month	Are wearing parts
Motor	One year	Due to unstable voltage, phase burned out except for
Speed reducer	Six months	Due to unstable voltage, except motor burned out, the lack of oil damage

Electrical parts	Three months	Due to unstable voltage burnt our except for
Chain	One month	Wearing parts
Graphite cloth	No	Wearing parts
Abrasive belt	No	Wearing parts
Blankets	No	Wearing parts
Rubber bar	No	Wearing parts
Slow down oil	No	Wearing parts