

# **Users' Manual**

Jointer with Spiral Cutterhead

MQ4225 & MQ4230

## I. Machine Tool Introduction:

The machine tool is used for plane planing of wood products.

The machine tool structure is reasonable, with high operation precision, low noise and safety and convenience for operation, which is widely used in all kinds of woodwork processing.

## II. Main technical parameters of machine tools

Technical specification	Model	
	MQ4225 (with spiral cutterhead)	MQ4230 (with spiral cutterhead)
Maximum width of cut	9- 27/32 inch	11-13/16 inch
Maximum depth of cut	13/64 inch	13/64 inch
Cutterhead speed	4000 RPM	4000 RPM
Carbide insert size	15mm x 15mm x 2.5mm 37°	15mm x 15mm x 2.5mm 37°
Cutterhead diameter	3-5/32 inch	3-5/32 inch
Motor	3 HP, 220V, 60Hz, 1-phase, 13.67A, 3420 RPM	3HP, 220V, 3-phase, 60Hz, 8.17A, 3416 RPM

Table Size	9 27/32 × 37-51/64 inch	11-13/16 × 38-37/64 inch
Weight	265 lbs	287 lbs

### III. Working principle and structure:

1: The motor directly increases its speed through a pair of V - type pulley, which makes the cutter shaft rotate at high speed. About the rotational direction, please look at the arrow above the belt cover.

2: The front worktable of machine tool can ascend and descend.

3: The back worktable is fixed, adjusted the front worktable to change the cutting size.

### IV. Operation and adjustment:

1. When processing, the guide plate should be adjusted to the appropriate place, making it possible to set aside an appropriate channel between the guide plate and protective block above the cutter shaft, so as to ensure that the woods can pass through successfully when they are close to the guide plate and guarantee the safety of the operator at the same time.

2. The rise and fall of the front and back worktable is controlled by the joystick at the end of worktable.

### Preparations before starting up:

A. Check whether all the fastening screws and positioning screws

have been tightened.

- B. Machine tool cannot have abnormal sound when it is free-load running.
- C. Check whether the electrical equipment movements are normal or not, and whether the motor is running in the right direction.

### 3. Operation Cautions:

The machine tool can be turned on and start working when all of the above adjustments are appropriately finished. But the following safety precautions must be noted when operating the machine tool:

- A. Keep equilibrium when pushing lumber with both hands, and don't push too fiercely and too fast. This can not only ensure the processing quality but also can prevent the overload of the machine tool.
- B. Self-made push plate should be used when processing the short, small and thin lumbers. And especially for the timbers with knots, the self-made push plate can prevent it from bouncing up and down.
- C. The badly decomposed woods and the timbers with cement, nails and other sundries cannot be processed.
- D. The wood chips accumulated inside and outside of the machine

tool should be removed regularly to prevent fire hazard.

V. The main shaft is spiral cutter shaft. It is recommended that the users should not wear the blade too dull before changing the blade; If used properly, a blade can be polished twice.

The spiral cutterhead use the original blade of  $15 \times 15 \times 2.5$  mm, which has four cutting faces. If a cutting edge of the blade has been used blunt, the user just need to turn the screw counterclockwise, clean up the tool apron and blade, switch to another cutting edge according to the mark on the blade and then tighten the screws clockwise. Some of the woods are high oil-absorbing, which may produce grease sticking to the tool apron and blade. It is suggested to use gasoline and thinner to wash, which can scrub clean easily. When installing, the switchable blades must be put at the uniform direction according to the mark on the blade surface. Otherwise, it will result in uneven timber planning surface.

If the screw is too tight or rusting to be difficult to be loosened, firstly put the screwdriver head in the plum flower mouth, and tap it with a small hammer (Be careful not to break up the blade), then the screw will be easy to be loosened by use of a spanner. In order to avoid such situation that the screw rusts too much to be difficult to be loosened, it is recommended to be sure to clean up the screw hole, and then stick the oil on the screw and screw it into the screw hole when changing the blades.

And this can ensure that the screw is easy to be loosened when changing the blade next time.