



**iCut-30P**  
**Low Speed Precision Cutting Machine**  
**Instruction Manual**



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## Notice



Please read the manual carefully before installation and operation. Notice the related item in the manual in case that the operator damages the machine and causes the fire;

a. Checking the power is in conformity with the equipment before operation.

b. Make sure whether the surrounding environment complies with installation requirements.

c. Operate the equipment according to the operational regulations.

d. Pull the plug when cleaning the equipment and replacing the blade and don't use the eraser.

e. Check the blade if the locking screw is loose and that there is any breakage on the power cord.

# 1.Preface

I.iCut-30P Low Speed Precision Cutting Machine adopts advanced controller with compact structure, reliability and anti-interference ability. The machine applies to all kinds of materials ,especially suitable for artificial crystals with high values. The equipment is equipped with four fixtures ,such as A,B,C,D device,which can cut the workpiece at the best angle .The shaft has high precision when running and accurately adjust the level of objects .After cutting,the machine will stop automatically.





	Diagram
clamp A	
clamp B	
clamp C	
clamp D	

Chart: fixture a,b,c,d

## 2. Technological Data

### Technological parameter

Cutting Wheel	Size:100x12.7x0.4mm
Travel	25mm
Shaft	Speed:0-600rpm
Dimension Weight	390*325*300mm 19.35Kg
Motor	AC 220V/single phase, 50Hz, 100W

## 3. Installation & Notice

1. The equipment must be well grounded, adopting a standard power.
2. The equipment shall be installed on the firm table without vibration .the temperature is between 10 °C and 30 °C and relative humidity < 85% and there is no corrosive gas and electricity dust.
3. Cut off the power when installing and cleaning the equipment .
4. Firstly clean the clamp holder and blade and so on in order to avoid the cutting accuracy before installing the blade.
5. When the blade are running, fingers are not near to the blade and other hazardous operation.
6. The equipment should be cut off when the machine is not used for a long time.

# 4.Diagram



Chart (1)

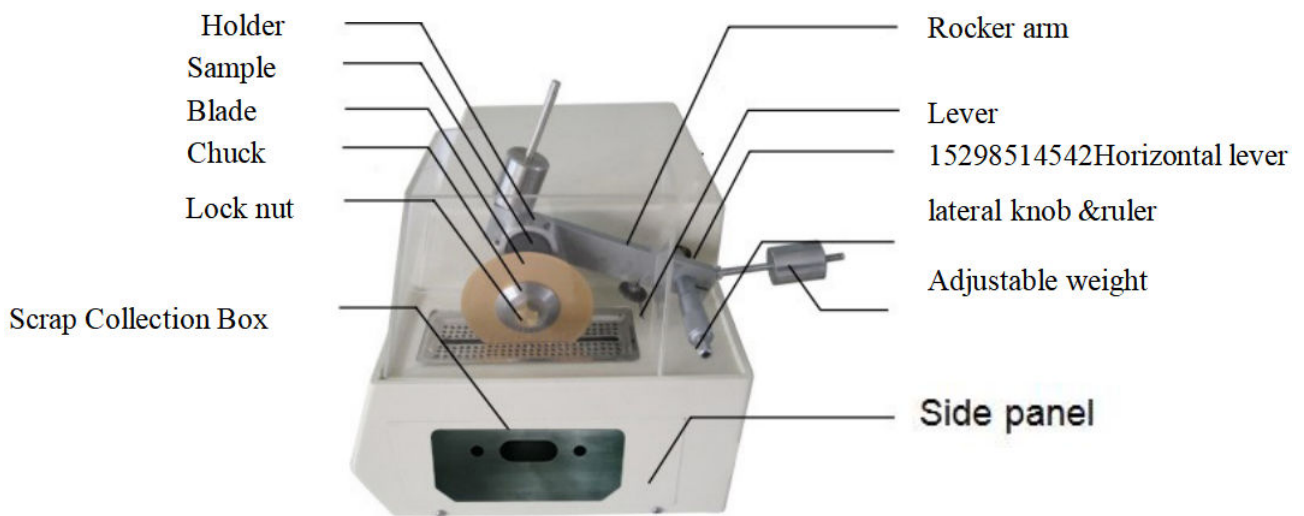


Chart (2)

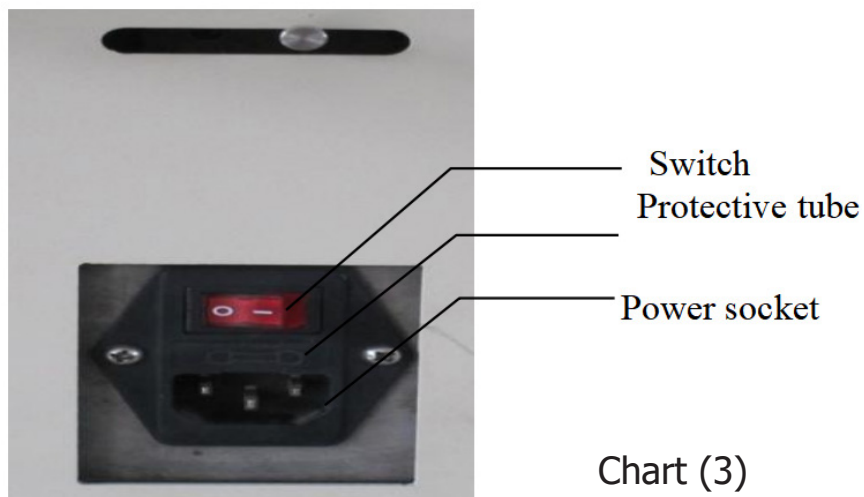






Chart (3)

## 5.Keyboard & Interface

### 1.Operational panel



-  Button: setting the speed
-  Button: setting the speed
-  Stop button
-  Start button

#### 1.1.Stop interface



Indicate the machine is under the stopped condition and the speed is 400rpm

#### 1.2.Running interface



Indicate the machine is under the starting condition and the speed is 400rpm

## 6. Detailed Operation

### 1. Preparation before operation

(1). Regular working table

Check whether the four feet is on the surface so as to prevent the vibration

(2). Clean chuck

Check whether the parts of the spindle, holder and the blade surface are clean ,otherwise they will cause the cutting accuracy of the workpiece.

(3). Examination of the rocker arm and the lateral rod.

Check whether the rocker arm is flexible and when the lateral knob is adjusted ,the lateral rod is running freely.

(4). Hold the samples

When cutting the mounting sample ,please choose the clamp holder a. Firstly the samples are fixed on the clamp holder and the clamp holder will be fixed on the rocker arm with the locking bolts and switch the lateral knob which keeps the blade proper cutting position and then switch the lateral screw.



When cutting the round specimen, choose the clamp holder. the operation is the same as the first operation

When cutting slice specimen, choose the clamp holder b & clamp holder c. For some slice that are not thick or more soft and elastic , choose the clamp holder for cutting big slice. The specimen will be cut from the middle of the clamp holder so

## 6.Detailed Operation

as to avoid the cutting inaccuracy .and others will adopt the slice holder.when fix the specimen,firstly the clamp holder will be fixed on the rocker arm and then release the pressed board and then put the specimen switch the screw.

### (5). Adjust the cutting position of the specimen





Generally the operator uses the dial gauge knob .when adjusting,firstly release the lateral screw at the back of the machine and regulate dial gauge to move on the axle to the proper position and fix the screw.

### (6). Adjust the weight

to be reduced the amount is increased, cutting power. the threads of weights will be needed to achieve the best of the force required.

Change the cutting force through adjusting the weights.there are two fixed weights in the front of the rocker arm.According to the requirement of the cutting force,choose the different weights so that we can realize the slight adjustment through the weight at the back of the rocker arm.it can reduce the cutting force outside and increase the cutting force inside.finally it can reach the best requirement through adjusting the weights.

### (7). Electrical operation

Please read the instructions carefully before operation ,master the method of control panel.Press the button "", and LCD display shows the 400r/min which is used last time. Press the button " " to reduce the speed.Press the button " " to raise the speed. Press the button " " to stop the machine.The new machine may be used for cutting after the above testing without the exceptional phenomenon.

## 6.Detailed Operation

### 2.Operation procedure

- ▲ Determine whether the cutting materials match with the blade.
- ▲ Open the power and check whether it is normal
- ▲ Choose the proper clamp holder
- ▲ Choose the proper motor speed.
- ▲ The rocker arm with the specimen falls down slightly and begins cutting
- ▲ After cutting ,the motor will stopped automatically and stop cutting .



Notice :the weight is not heavy enough to deform the blade.without working,the specimen should not be put on the blade to ensure the accuracy.

## 7.Trouble Elimination

Failure phenomenon	Elimination method
Without display when opening the machine No response when starting the motor	<ul style="list-style-type: none"><li>○ Check the power</li><li>○ Check the socket</li><li>○ Check the protective tube</li><li>○ Whether limit lever is pressed</li><li>○ Whether the display has response.if not ,press the button,if yes,go on check the next step</li><li>○ If the display has the response , check the lighting tube D11</li><li>○ Whether motor DC24V is normal.</li><li>○ Whether the motor is damaged</li></ul>
If the screen is normal,but there is no display,please press the button to keep the motor normal	<ul style="list-style-type: none"><li>○ The voltage is too low</li></ul>

## 8.Packing List

No.	Description	Specifications	Quantity
1	Cutting machine	iCut-30P	1 set
2	Cutting blade	100*12.7*0.4mm	1 pc.
3	Spanner	17-19mm	1 pc.
4	Open Spanner	20mm	1 pc.
5	clamp		3 pcs
6	Operation Instruction		1 pc.
7	Certificate		1 pc.
8	Packing list		1 pc.

## Mikrosize Distributors Worldwide

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