

uCut-60 Automatic High Speed Metallographic Precision Cutter



Video



Contact us

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Product Feature& Application



uCut-60



uCut-60R

Product Feature

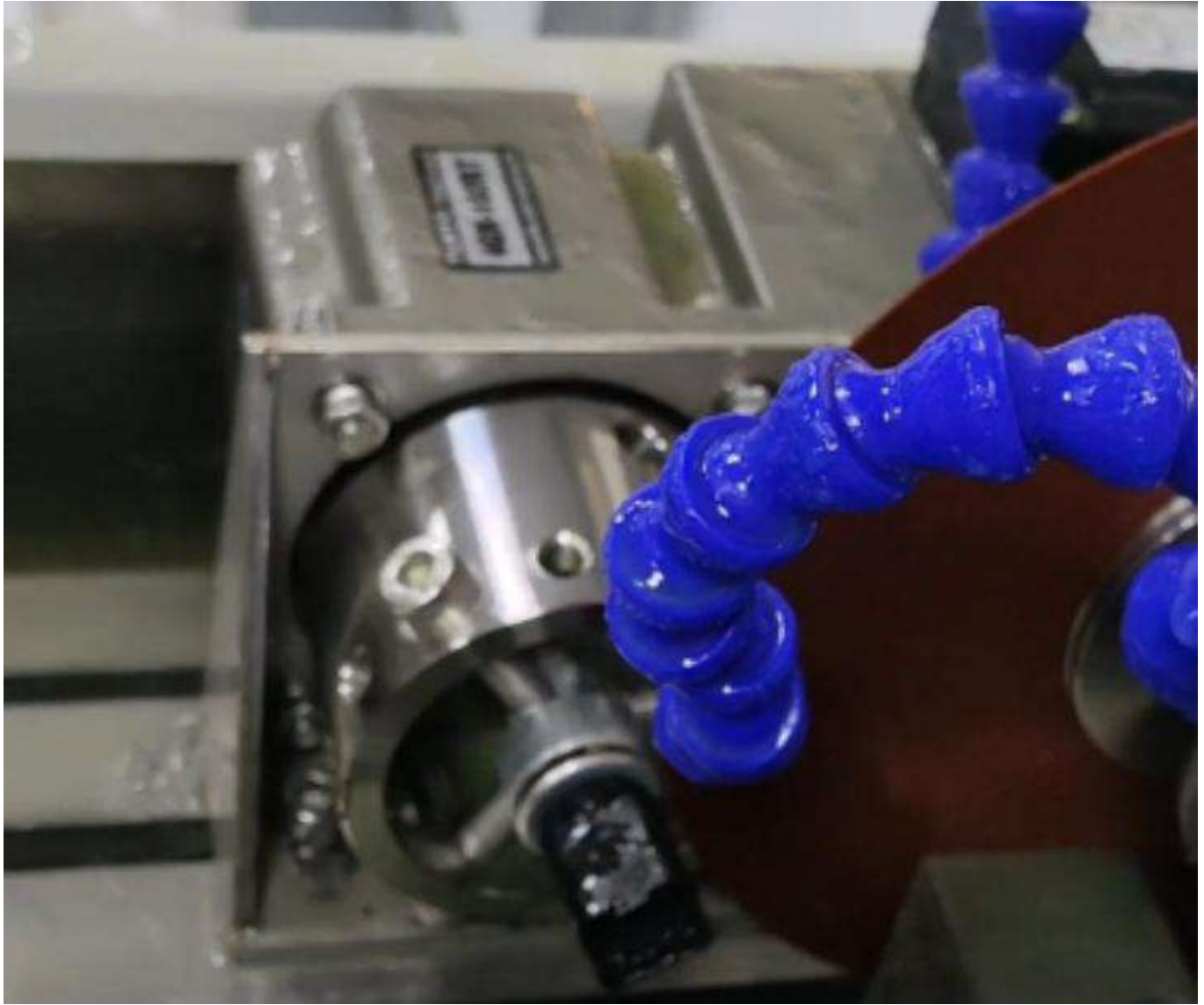
- Automatically detect sample cutting finished time, automatically stop cutting and retract to the initial position, without setting the sample cutting stroke.
- The machine is cleaned fully automatically via the spiral nozzles in the cutting chamber. Cleaning can be switched on individually and, if required, starts automatically after each cut-off. For a clear view, it can also be switched on during cut-off operation.
- In the same process of cutting, it can be carried out according to different feeding speeds and different rotational speeds.
- Parameters can be stored, and up to 99 sets of cutting processes can be saved. The corresponding stored parameters can be called for different material cutting without resetting the parameters each time.
- Adopt man-machine interface, PLC control, intuitive interface, simple operation.
- Customized languages can be realized for user friendly operation.
- Spindle adopts servo motor closed loop control, overload protection.
- The large 7" touch display is ergonomically arranged and easy to operate via the user-friendly software.
- Automatic cleaning function.
- There are two cutting ways to choose cutting, a wider range of materials to adapt to the cutting.
- External circulating water cooling device.
- Closed and transparent protective cover and safety switch provide protection for the operator.
- Automatic sample rotation cutting, effectively reducing sample heating(uCut-60R).
- Sample collection to prevent small samples from falling off.
- Automatic/manual parallel movement of the X-axis to achieve parallel cutting of the sample (optional).

Product Application

uCut60 automatic high-speed precision cutting machine has high spindle speed, thin cut-off wheel and precise cutting size, which is suitable for precision cutting of small parts.

uCut-60R Sample Rotating Cutting

Model uCut-60R Automatic sample rotation cutting, effectively reducing sample heating, user can use this function to cut one sample from different position.



R-axis Rotating

Optional X-axis Movement Design

Automatic/manual parallel movement of the X-axis to achieve parallel cutting of the sample (optional).



Optional X-axis Multiplicity Cutting

User Friendly

The machine is cleaned fully automatically via the spiral nozzles in the cutting chamber. With quick fixture, Man-machine interface, PLC control, intuitive interface, simple operation. The large 7" touch display is ergonomically arranged and easy to operate via the user-friendly software.



Cutting Chamber



Quick Fixture



Cut-off Wheel



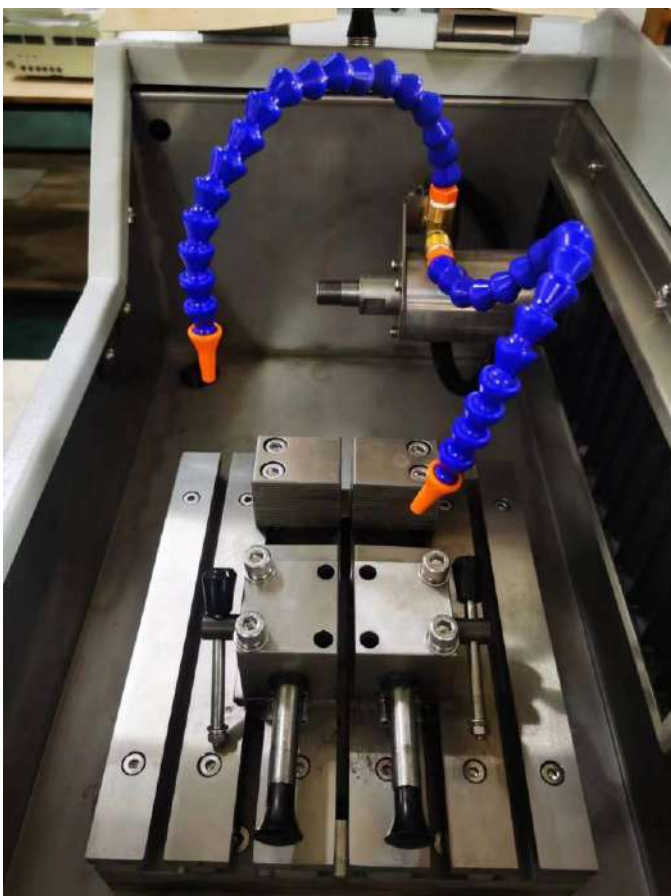
Control System

User Friendly

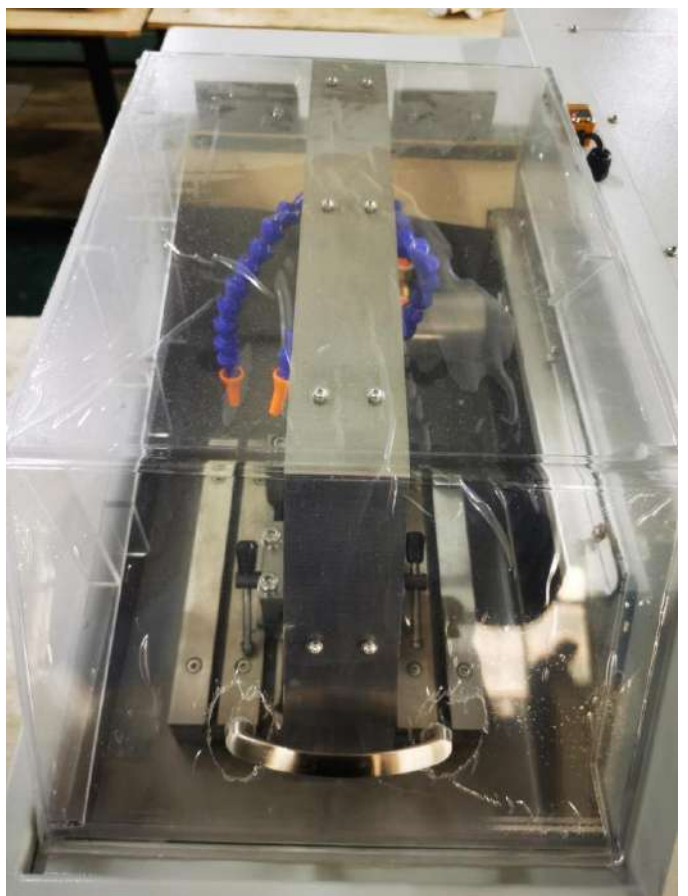
Spindle adopts servo motor closed loop control, overload protection. Closed and transparent protective cover and safety switch provide protection for the operator.



Closed Loop Control Spindle



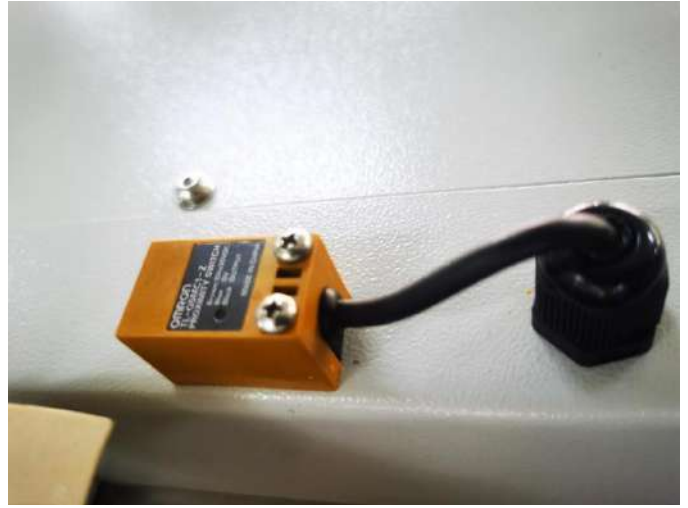
Chamber Under Cover



Protecting Cover



Water inlet/outlet



Safety Switch



Power on/off and Emergency Stop Button

Operation Interface

Manual

Straight

Impact

Device status

Parameter

Cutting

Run

Stop

Wrong

Pump

12.3

RPM

12.34

MM/S

12.34

MM

Motor speed

Cutting speed:

Cutting process:

Manual

Straight

Impact

Device status

Parameter

Forward

Manual speed:

12.34

MM/S

Backward

Wrong

Spindle start

Motor speed set:

12.3

RPM

Spindle stop

Motor speed:

12.3

RPM

Pump

Manual

Straight

Impact

Device status

Parameter

First

Previous

Next

Last

Impact cutting parameter

Factory

Name

ABCD

Number

12.3457

Spindle speed:

12.3

RPM

Spindle speed:

12.3

RPM

Cutting stroke:

12.34

MM

Cutting stroke:

12.34

MM

Advance speed :

12.34

MM/S

Advance speed:

12.34

MM/S

Preservation

Delete

Edit

Download to PLC

Ordering Information

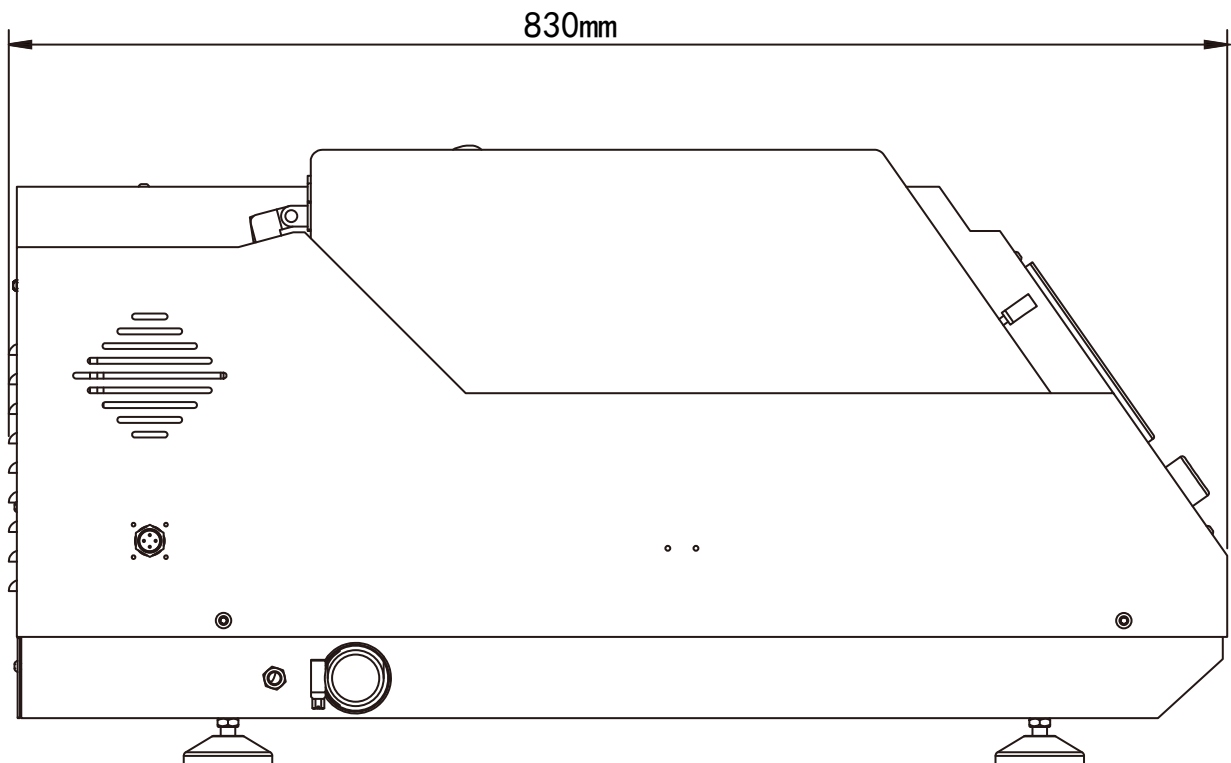
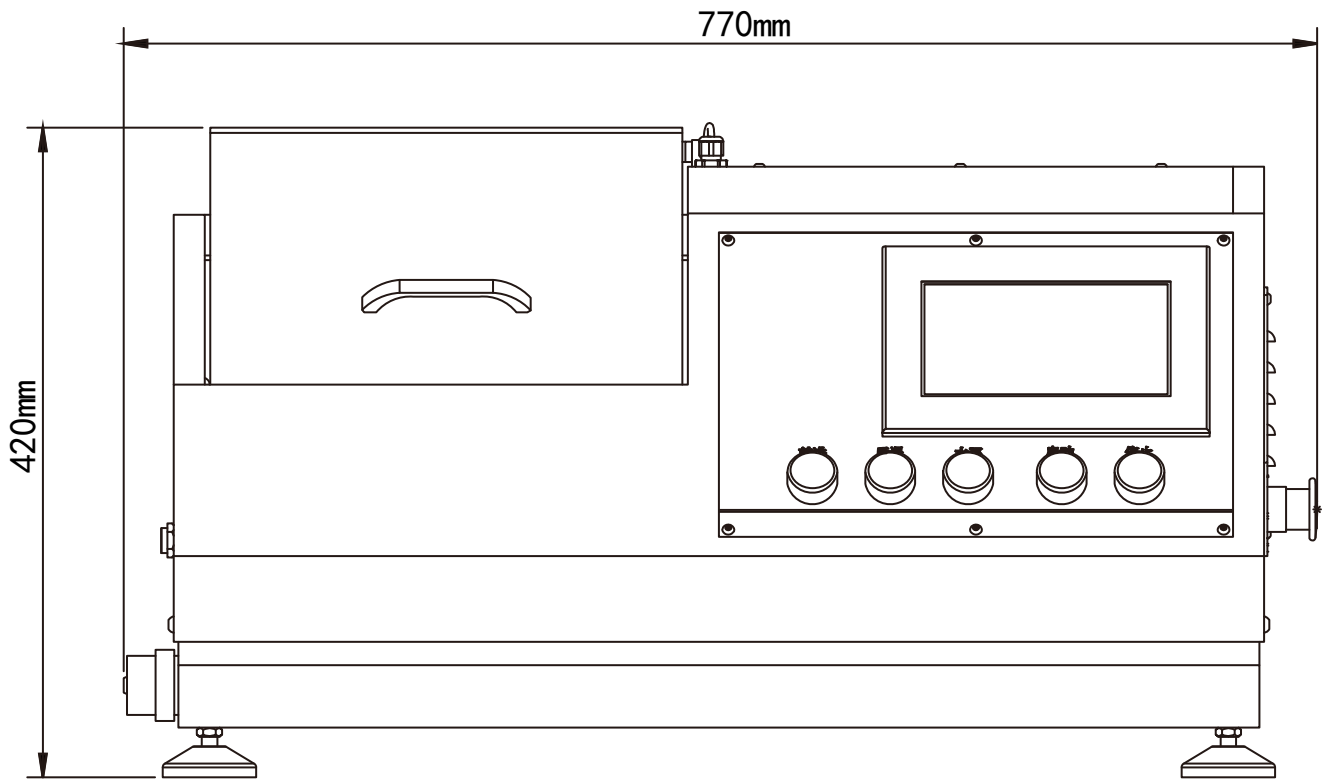


uCut-60 Metallographic Precision Cutter
uCut-60X Metallographic Precision Cutter(With X-axis Movement)



uCut-60R R-axis Metallographic Precision Cutter

Instrument Dimension





Technical Specification

Item	Specification
Cut-off Wheel	Standard Size $\phi 200 \times 32 \times 0.9$ mm, Diamond/CBN/Resin
Spindle Speed	300 – 5000rpm
Feeding Speed	0.01- 3 mm/s
Manual Feeding Speed	0-5mm/s
Backward Speed	0-5mm/s
Impact Cutting Distance	0.1- 2 mm
Cutting Stroke (Y-axis)	200mm
X-stage Movement(uCut-60X)	Precision:0.01mm, Range:40mm
Maximum Cutting diameter	$\Phi 60$ mm
Cutting Table Size	216x240mm(X*Y)
Maximum Clamping Length of Fixture	150mm
Maximum Clamping Width of Fixture	215mm
Servo Motor	1.5 kw
Usage Method Data	12 kinds can be Stored
Power supply	AC220V 50HZ
Mainframe Dimensions	750 * 870 * 455 mm
Net Weight	126KG

Packing List

Item	Quantity	Item	Quantity
Open end spanner (22-24, 17-19)	Each 1	Cooling system (including water tank, water pump, water inlet pipe and drainage pipe)	1 set
6mm inner hexagon wrench	1	1L Cutting fluid	1 bottle
5mm inner hexagon wrench	1	Hose hoops 13 to 19	2
Power cord	1	Hose hoops 40-63	2
Φ200mm Diamond Cut-off Wheel	1	External Water Tank	1



External Water Tank



Diamond Cut-off Wheel



Cutting Fluid