

**Warning:** It is recommended to use a voltage stabilizer with the equipment to prevent the impact of voltage fluctuations, which may lead to damage to electrical components, requiring paid repairs.

**Daily Check**

**Check Water Level**

The water level should be above the screen of the filter box. When adding water, please follow the standard mixing ratio to add cutting fluid accordingly.

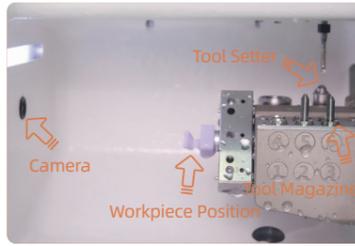


water tank water level

**Daily Maintenance**

**Cleaning work chamber**

Use a rinsing bottle to flush and wipe the following parts, clean with a clean cloth. (If not cleaned for a long time, use the brush for cleaning).



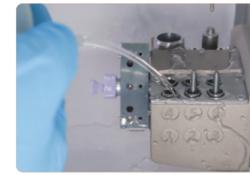
- ① Tool Setter
- ② Workpiece Position
- ③ Tool Magazine
- ④ Camera
- ⑤ Observation Window



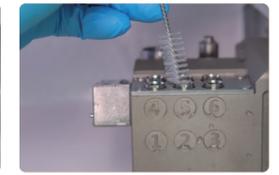
wipe the camera



wipe the observation window



flush the tool magazine



brush tool magazine's pipe



flush the Tool Setter



Flushing of work bins



Flush the work area



Clean the work area with a pipe brush

**Maintenance Every 4 Weeks**

**Replace and Clean the Coolant Circulation**

Empty the old coolant from the machine and clean the coolant tank. Pour 2L-2.5L of water into the tank, and then add the cutting fluid in a 15:1 ratio. After completing the replacement, click on "Maintenance" -> "Coolant" to activate the coolant circulation for 2 minutes.



1 Empty the old cutting fluid



2 Rinse the coolant filter box



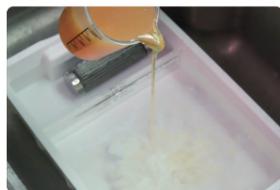
3 Use clean water to flush and clean the coolant tank



4 Fill the coolant tank with water up to the 2.5-liter mark



5 Pour 250ml of cutting fluid into coolant tank



6 Mix thoroughly



7 Place the coolant tank back into the machine and tighten it securely



8 Click on "Coolant" to check if the coolant is spraying properly, then the machine is ready

- Note:** It is recommended that you replace the fastening screws in the work area every 3 months.
- Note:** It is recommended to clean the filter box with ultrasonic vibration every three months and use alcohol treatment to ensure the best filtering performance.

**Maintenance every 2 weeks**

**Spindle Chuck Maintenance:** To ensure smooth machining, we recommend maintaining the spindle chuck every 2 weeks. Use the spindle maintenance kit provided with the machine to clean the spindle chuck.

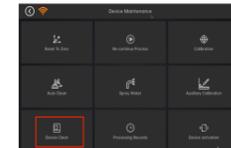
1 Prepare the spindle maintenance tools.



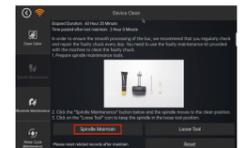
2 In the UPCNC interface, click on "Equipment Maintenance" -> "Device Clean" -> "Clean Spindle" to move the spindle to the cleaning position.



Click on "Maintenance"

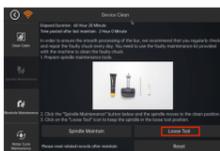


Click on "Device Clean"



Click on "Clean Spindle"

3 Click "Loosen Chuck" to keep the spindle in a loose chuck state.



Click on "Loosen Chuck"

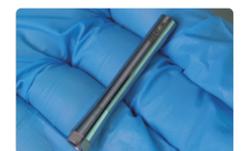
4 Take the black chuck wrench and insert it into the spindle chuck. Turn the chuck wrench clockwise to loosen it.



Take out the black chuck wrench



insert it into the spindle chuck



Loosen the chuck

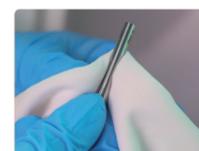
5 Take out the cleaning brush and clean the inner wall of the chuck. Use a conical sponge to clean the spindle after removing the chuck. Then use a clean cloth or tissue to wipe the inner and outer walls and both ends of the chuck. Apply lubricating grease mainly to the tapered transition part of the spindle chuck, make sure to avoid grease entering the gaps and inner walls.



Clean the inner wall of the chuck



Clean the spindle with a conical sponge



Wipe the chuck with a clean cloth or tissue

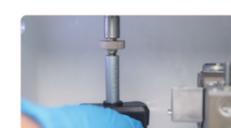


Apply lubricating grease

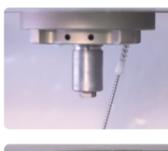


Apply lubricating grease to the tapered part of the spindle chuck

6 After cleaning the chuck, follow the original procedure to place it back in the spindle in a loose chuck state, and tighten it in a counterclockwise direction. Note: After pre-tightening, use the provided special tool for locking to prevent overtightening or uneven force during tightening.



**Coolant Nozzle Maintenance:** clean the coolant nozzles every time after clean the chuck



1 Prepare a brush, and clean the coolant nozzles synchronously with cleaning the spindle chuck.



2 When the spindle moves to the cleaning position, insert the brush into each of the four coolant nozzles and rotate it to clean.

3 After cleaning, in the UPCNC interface, click on "Maintenance" -> "Coolant" to check the cleanliness of the coolant nozzles.

4 If the coolant flow is normal, then the maintenance is complete.