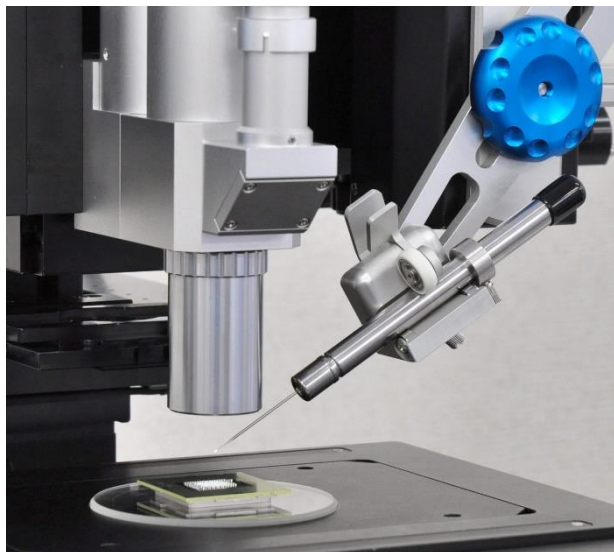


Smooth tool rotation  
to ensure particle placement  
on bottom of tool

# Super fine pitch rotator HPR-2

A highly accurate posture control can be operated  
by a smooth tool rotation !!



- ◆ Very useful for lifting out of a foil made by FIB or particle isolation
- ◆ Samples and foil may be easily released because of the three axis control of the manipulator and the rotation of the probe
- ◆ Easy installation on Axis Pro micromanipulator or QuickPro manipulator arm
- ◆ Glass tools may be used for lift-out. Tungsten and super hard probes can also be used with the tool

## 《Application》

- Lift out a foil made by FIB (Delivery to TEM grid)
- Accurate placement of particle on AFM cantilever
- Precise direction and angle control of particle delivery to analysis surface

## 《Lineup of tools》

- FIB liftout
  - Sampling probe (MST-007,005,002)
- Foreign substance sampling
  - Tungsten probe (TP-0005,001,005,010,030)
- Milling or Cutting
  - Tungsten carbide tool (MPE-1,2,4 /CP-005/KE-1,2)

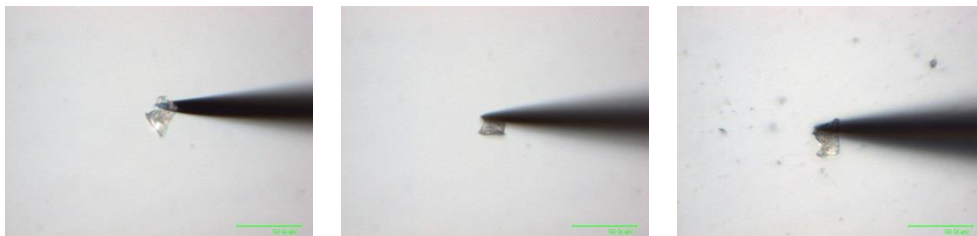


## 《Super fine pitch rotator 》 HPR-2 (for either right and or left hand)

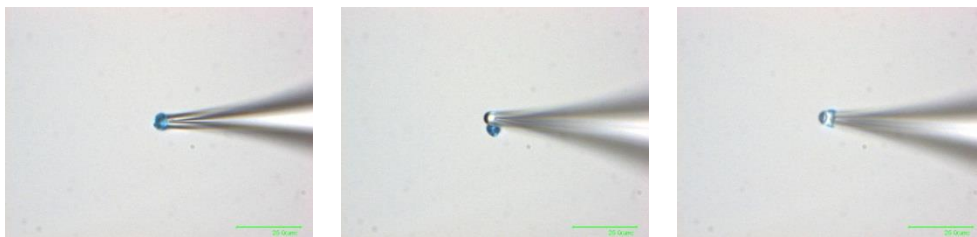
- ① Rotator handle ※including Inner chuck
- ② Rotator arm (for either right and or left hand)

## Rotation control of gathered substance

Picking up and transferring  
30 $\mu$ m foreign substance  
(using 0.5 micron tungsten  
probe)



Picking up and transferring  
5 $\mu$ m toner  
(using 5 micron glass probe)



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