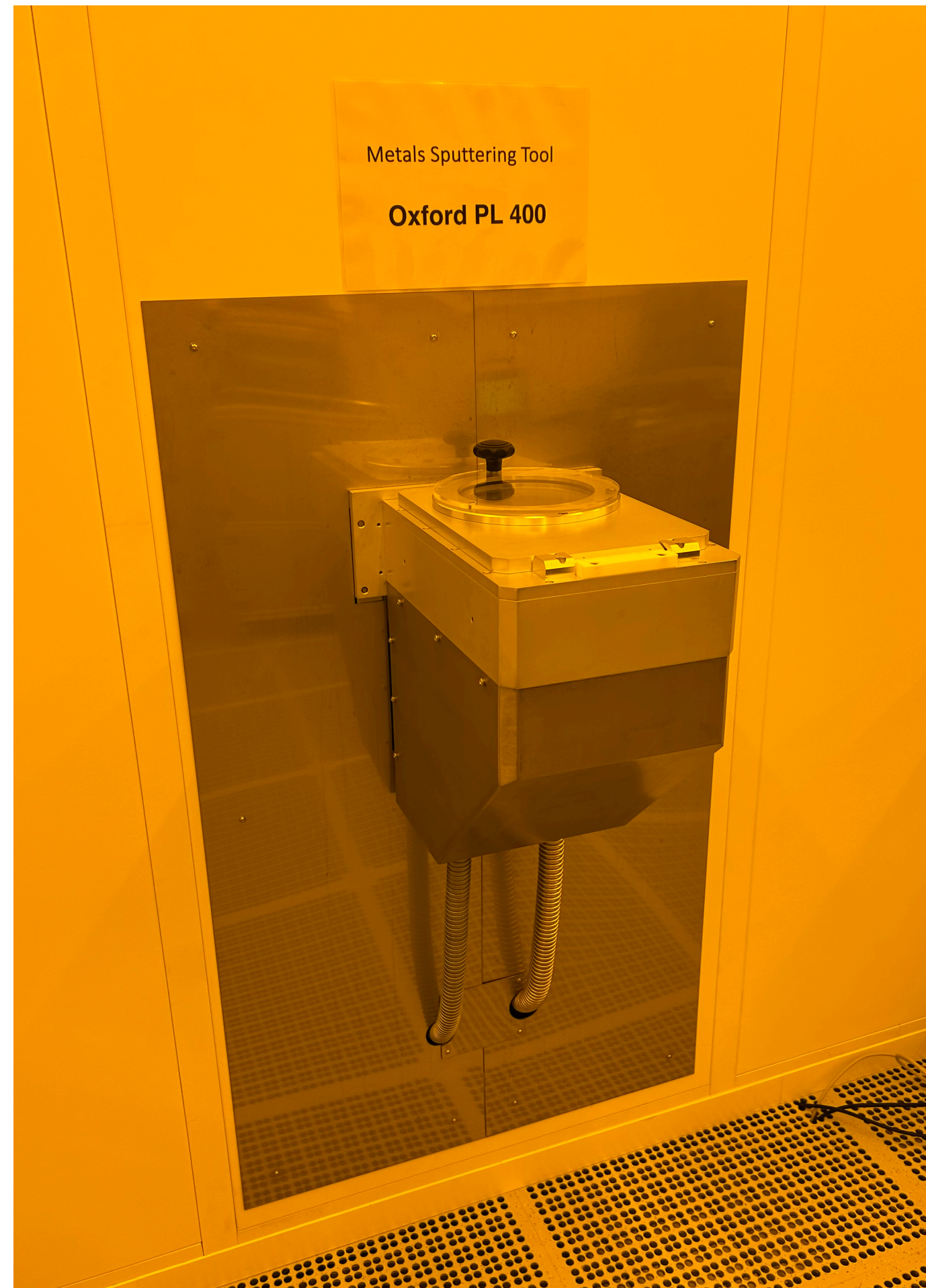


Oxford PL 400

The Burn In process of the new Aluminium targets

PL 400 Setup



Loadlock from yellow ISO 6

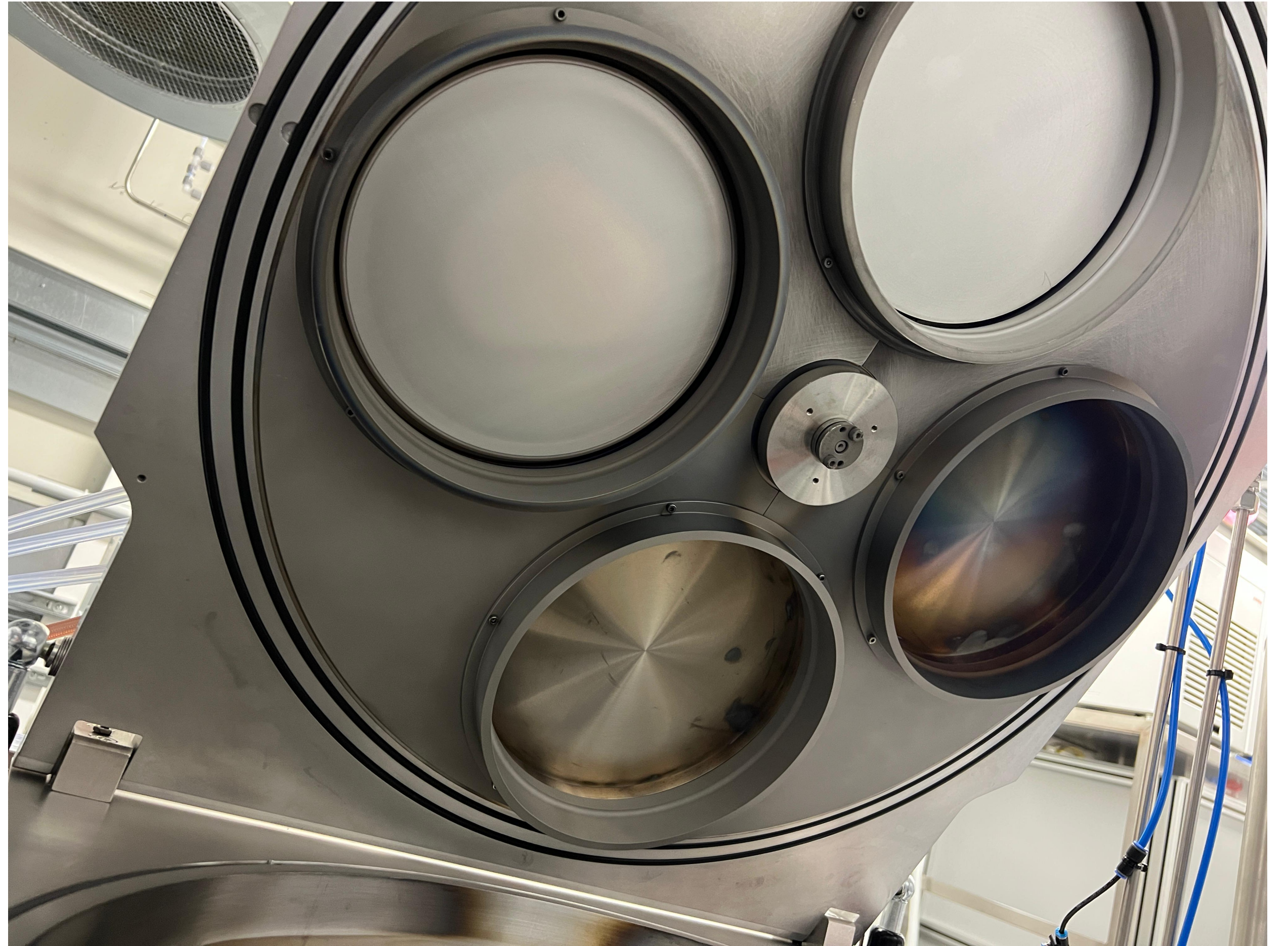


Rest of machine in technical corridor

Targets

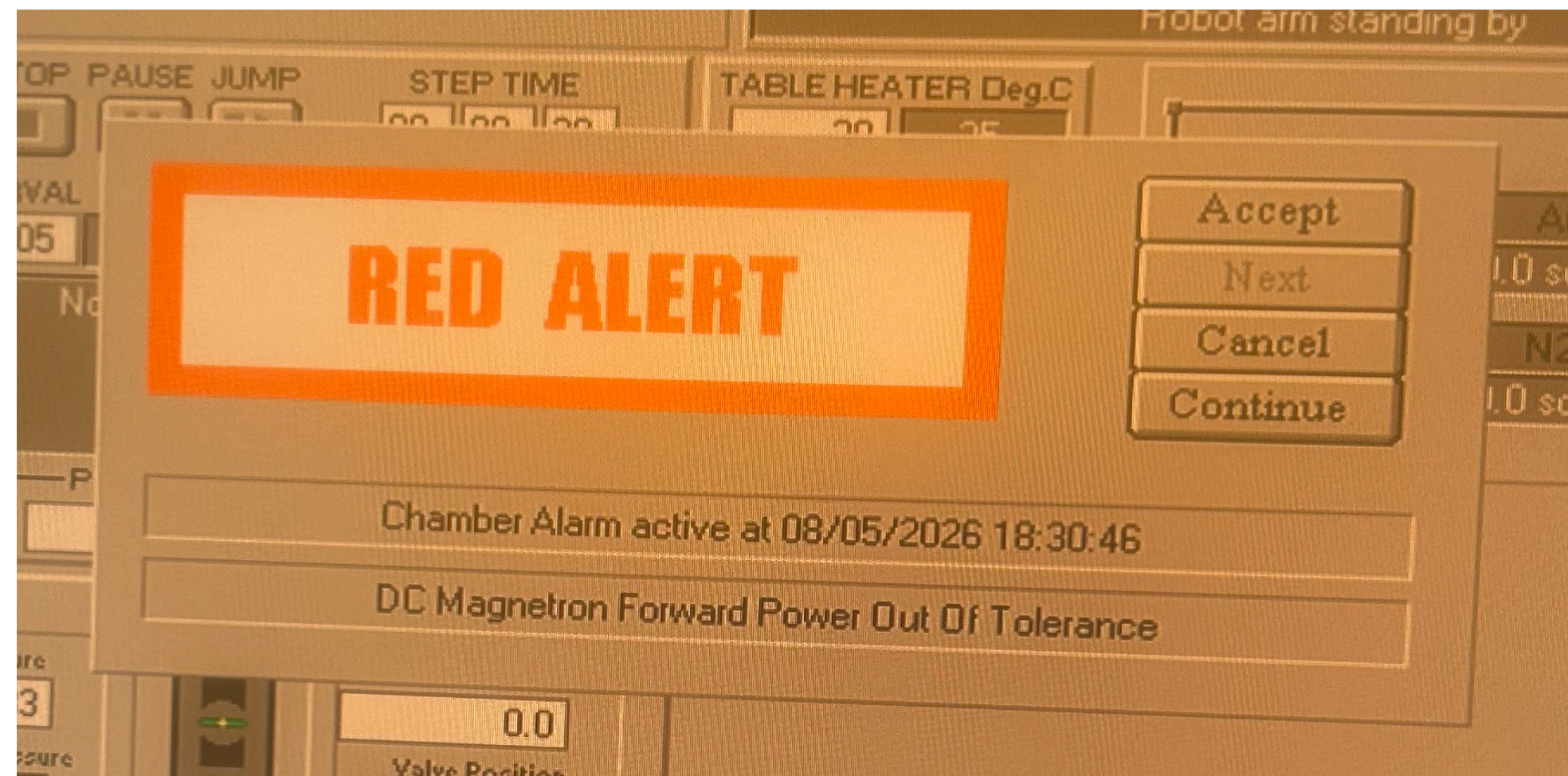


Used up target



New targets

First Try to burn in new targets



Magnetron power didn't reach the set value or plasma wouldn't ignite at all

A lot of trouble shooting...

Unsuccessful tries to ignite the plasma:

Also use bottom electrode

Increase pressure in chamber

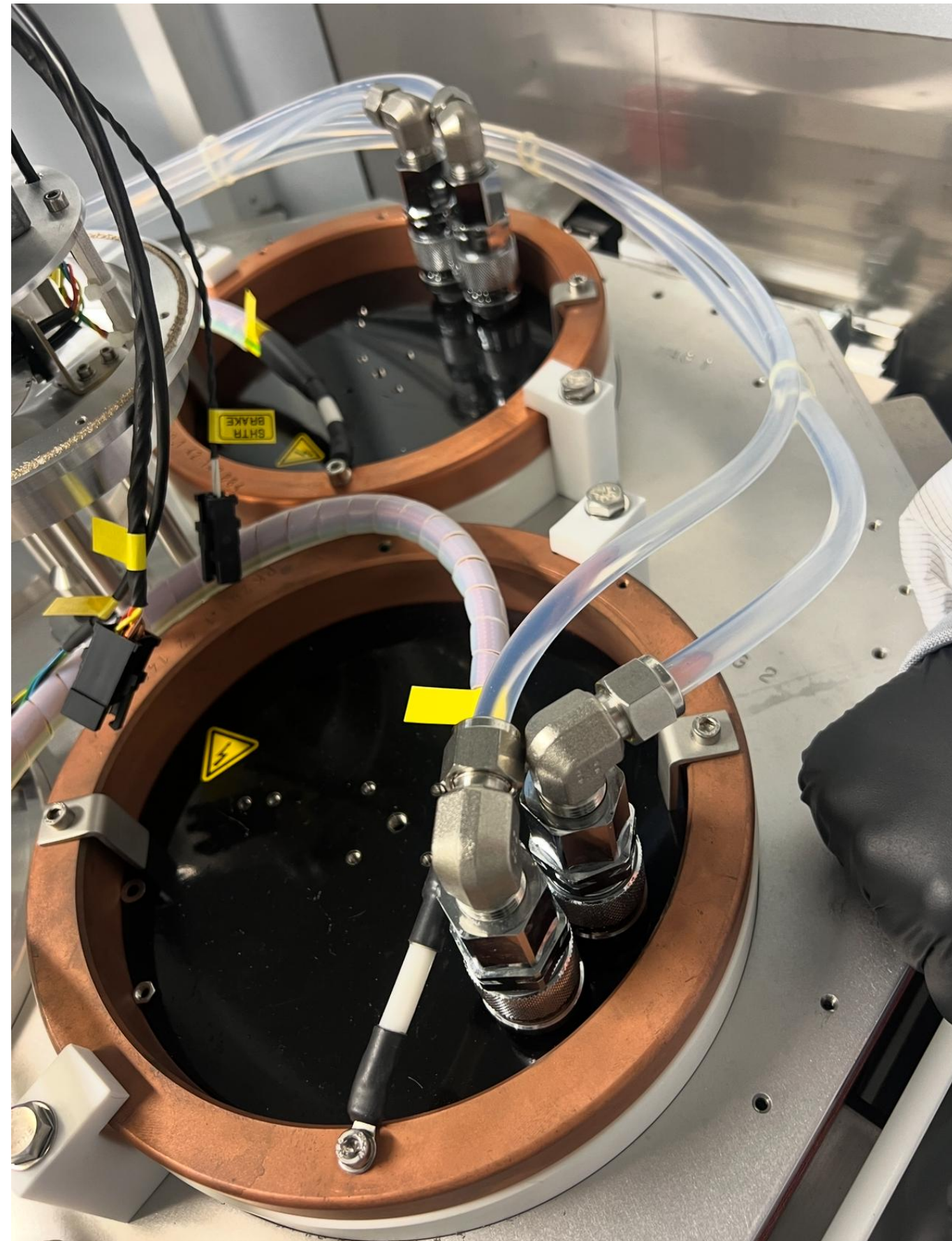
Continuously changing magnetron power up and down

...

→ Problem must be from the machine itself...



Realization: Magnetrons are upside down!

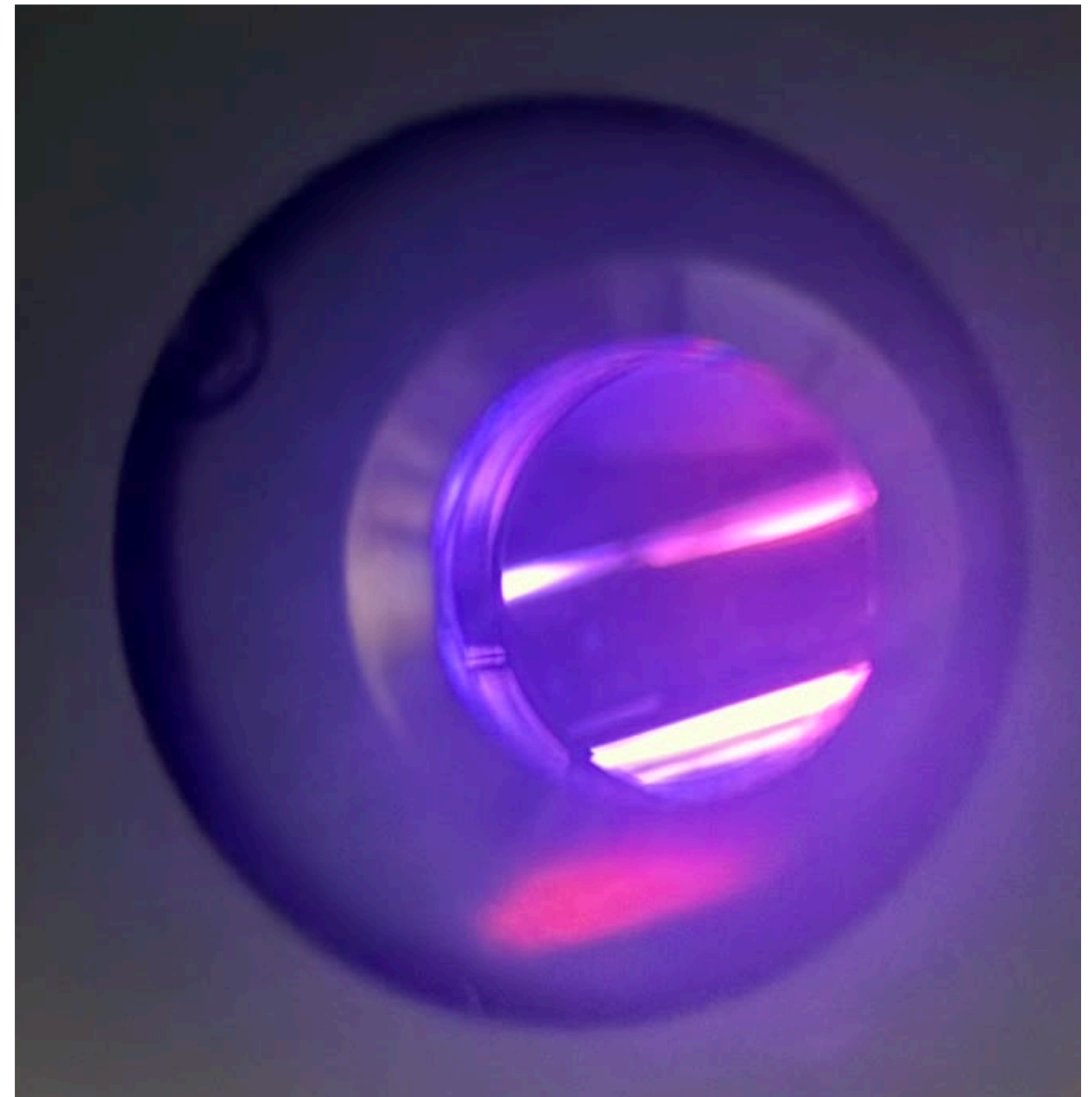
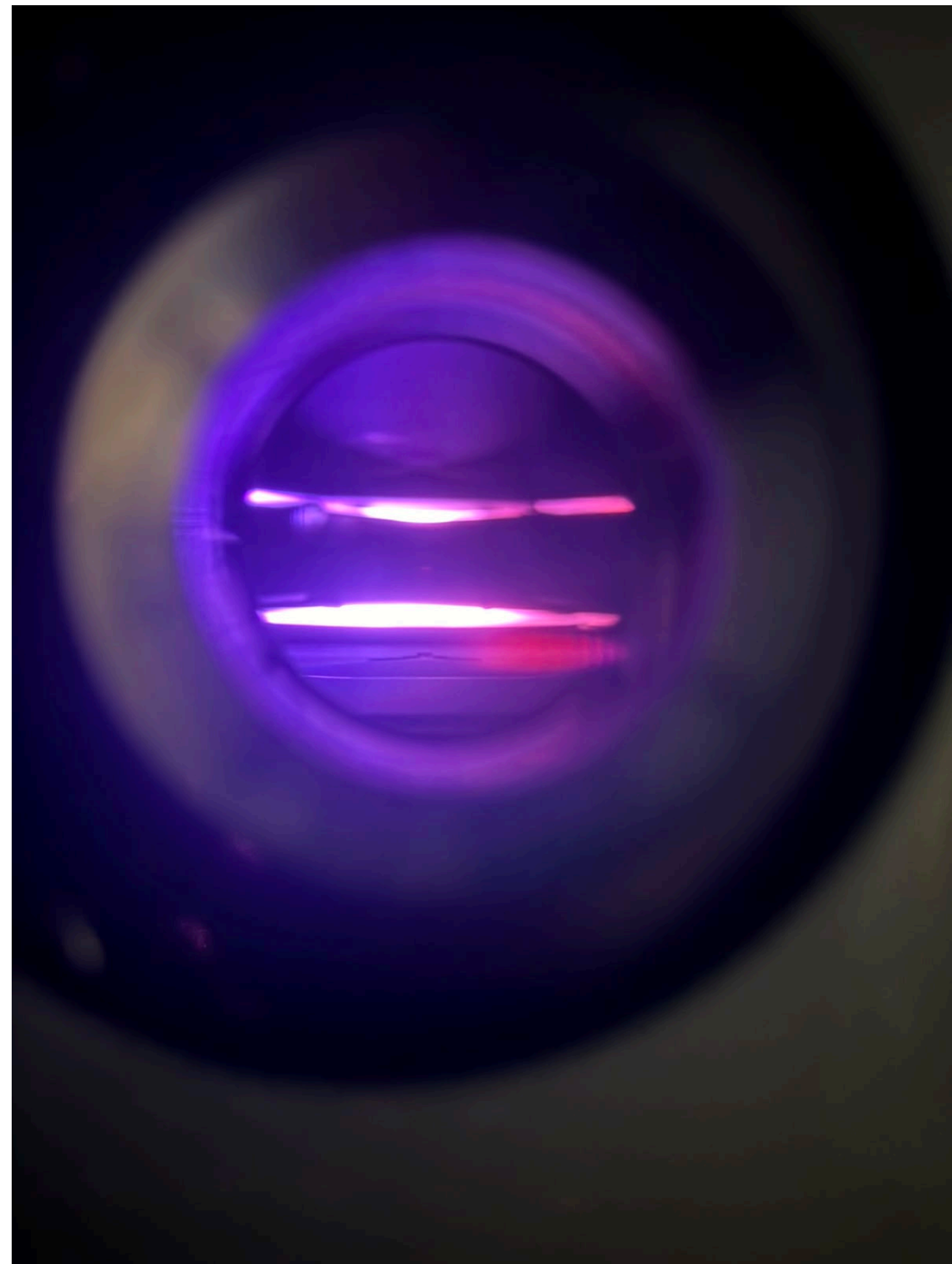
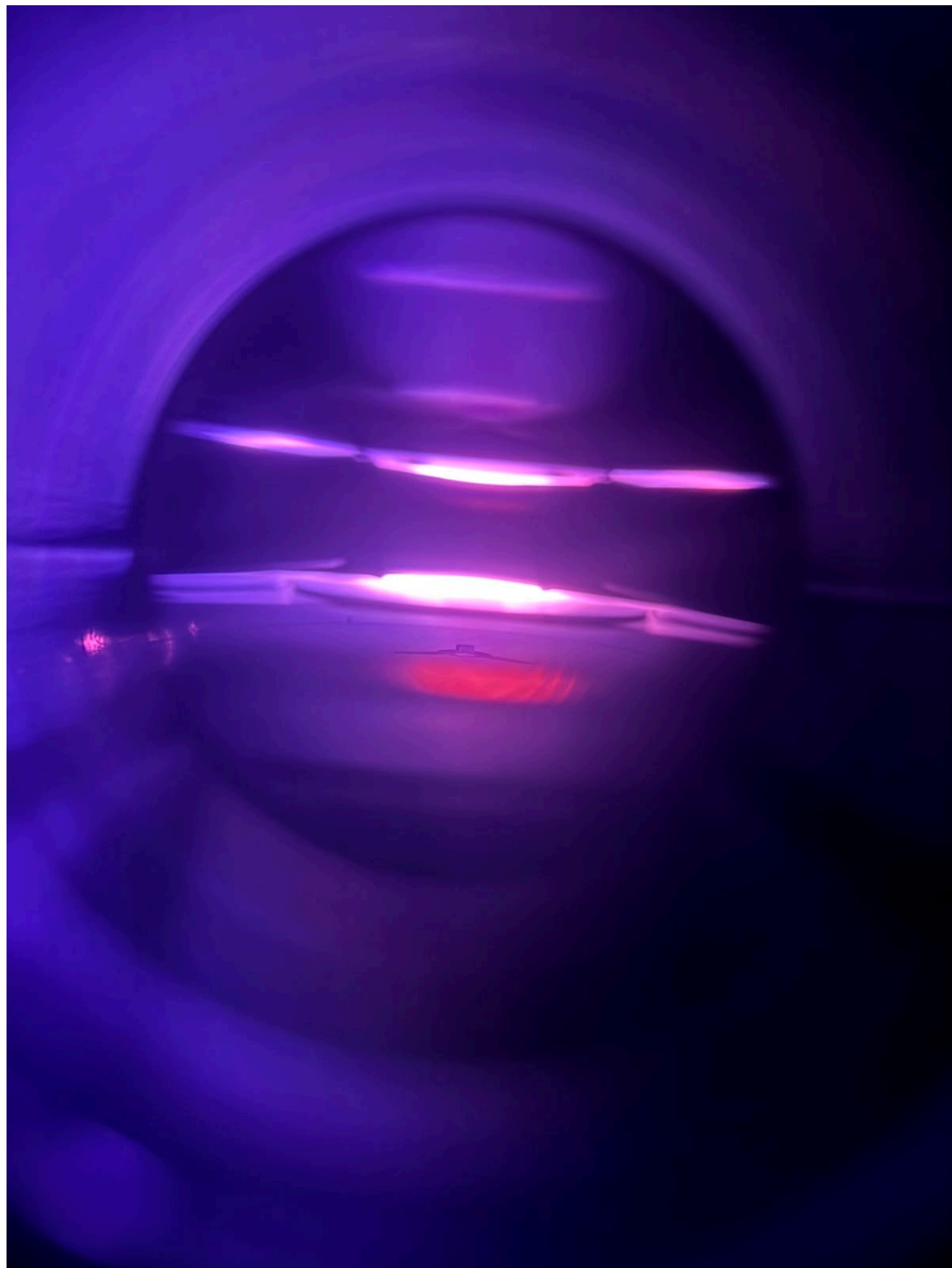


Magnetrons before disassembly



Magnetrons after reassembly

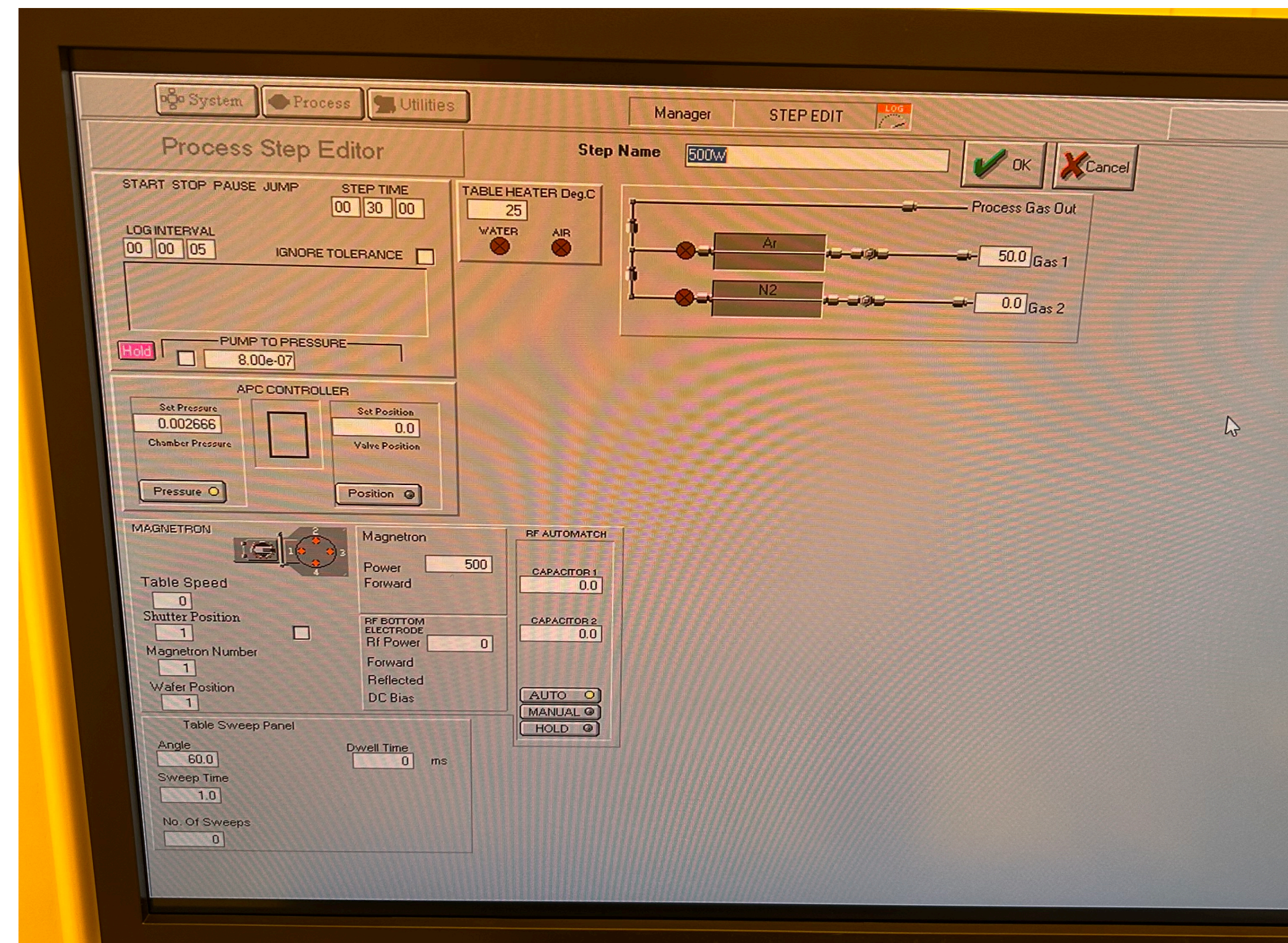
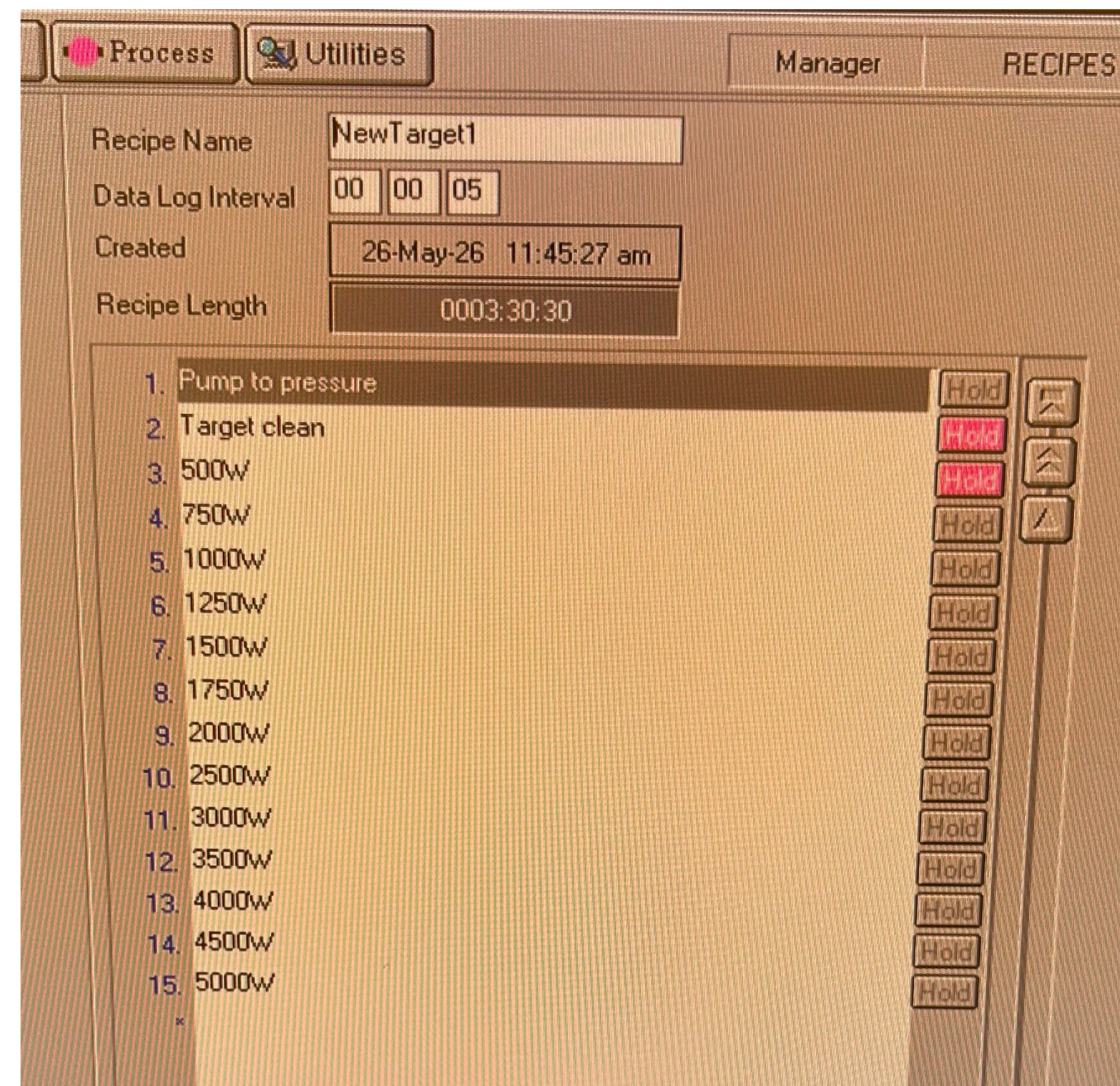
The plasma finally ignites!



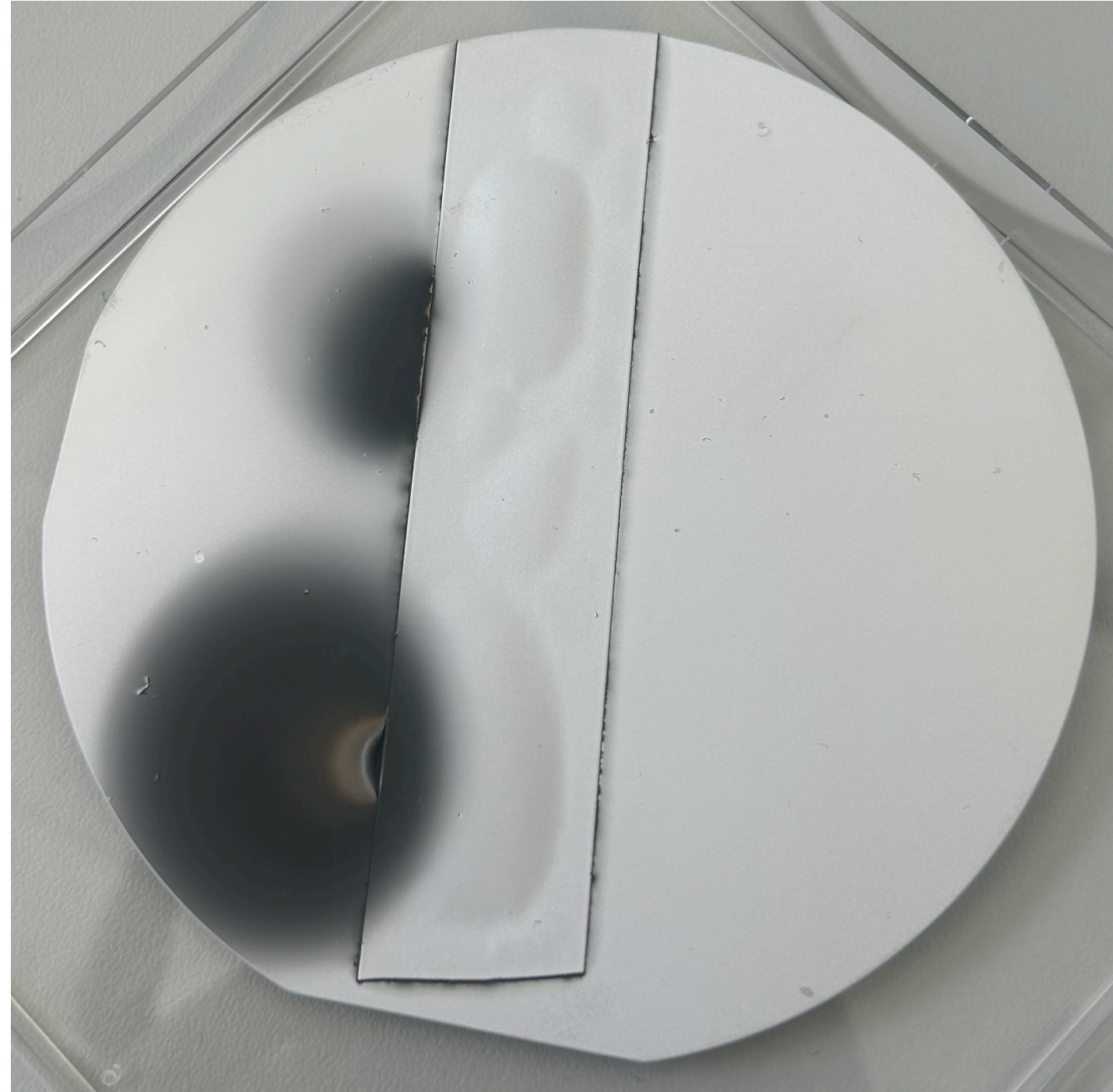
Burn In of Targets

First Target Burn In: Increase magnetron power, wait and ,play with it‘

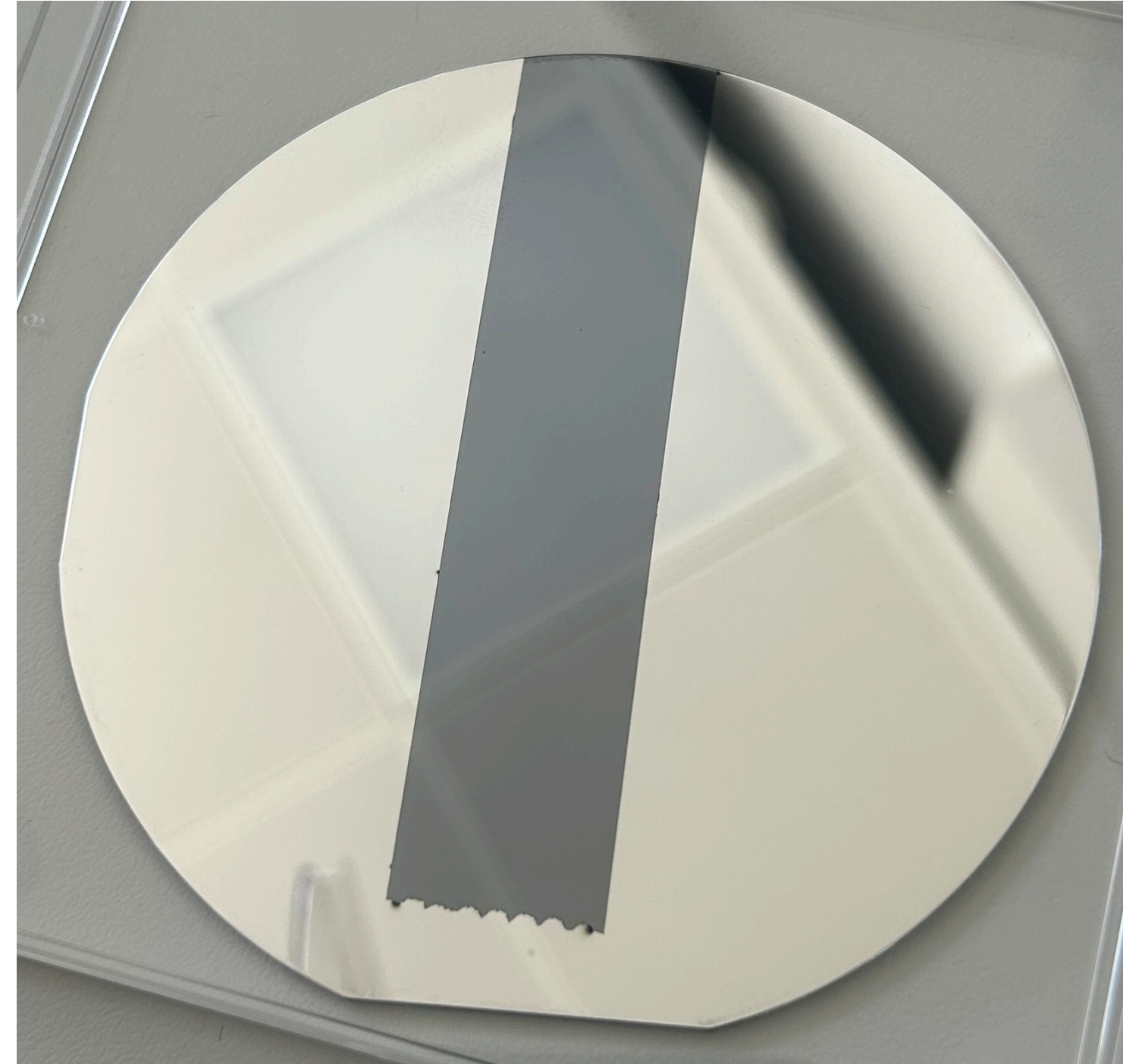
Second Target Burn In: Use that data and create a recipe



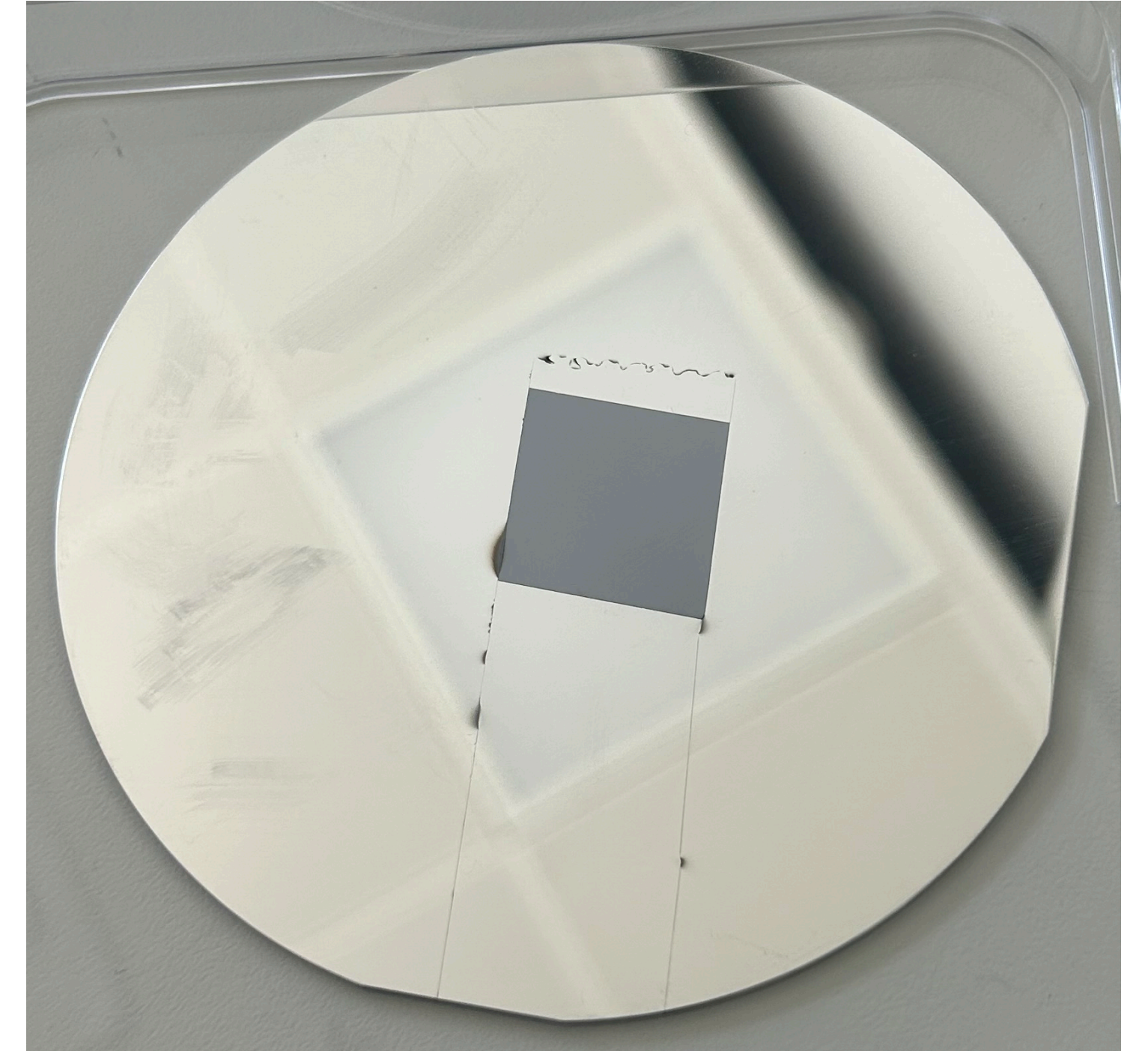
First Wafers



Result of burn in



Al layer after burn in (Mag1)



Al layer after burn in (Mag2)