

Mirror Coating Updates

Nov 16, 2023

Where are we? How ready are we?

- **Water cooling system Stability** ✓

- 24 hour continuous operation

- **Vacuum quality** ✓

- 3×10^{-6} Torr (current configuration limit)

- **Tape stability** ✓

- Stickiness and outgassing test

- **Rotation Motor** ✓

- Continuous 1 hour operating ~ 1 rev/s



Documentation

- **Coating Documentation:**

<https://docs.google.com/spreadsheets/d/1qd2DJs3Ms1QuVJTnB4B2kjaajST8t2qY7ZGq4mlvHr0/edit?usp=sharing>

- **Coating Plan:**

<https://elog.cfnsbu.physics.sunysb.edu/SoLID/17>

- **elog to keep track of the progress:**

<https://elog.cfnsbu.physics.sunysb.edu/SoLID/>

- **First coating preparation:**

<https://elog.cfnsbu.physics.sunysb.edu/SoLID/>

Next Step

- **First coating projected at Friday morning Nov 16th.**
- **Reflectivity measurement at BNL will follow.**
- **Tighten up the protocol on “clean” coating condition.**
 - We are coating in a dirty environment
 - Requested PED fund to help with this.
- **Practice and optimize the coating parameter**

Sincere Gratitudes for SPhenix Colleagues

- To **Ross Corliss** and **Vassu Doomra** for their patience and guidance in preparing and setting up the evaporator.