

## Praecis Demonstrates a 544:1 Improvement Over Ambient Temperature.



*Praecis ATCU-5 attached to a Precitech diamond turning machine enclosure.*

**Objective:** Ultra-precision temperature controlled environment to diamond turn next generation of space optics.

**Equipment:**

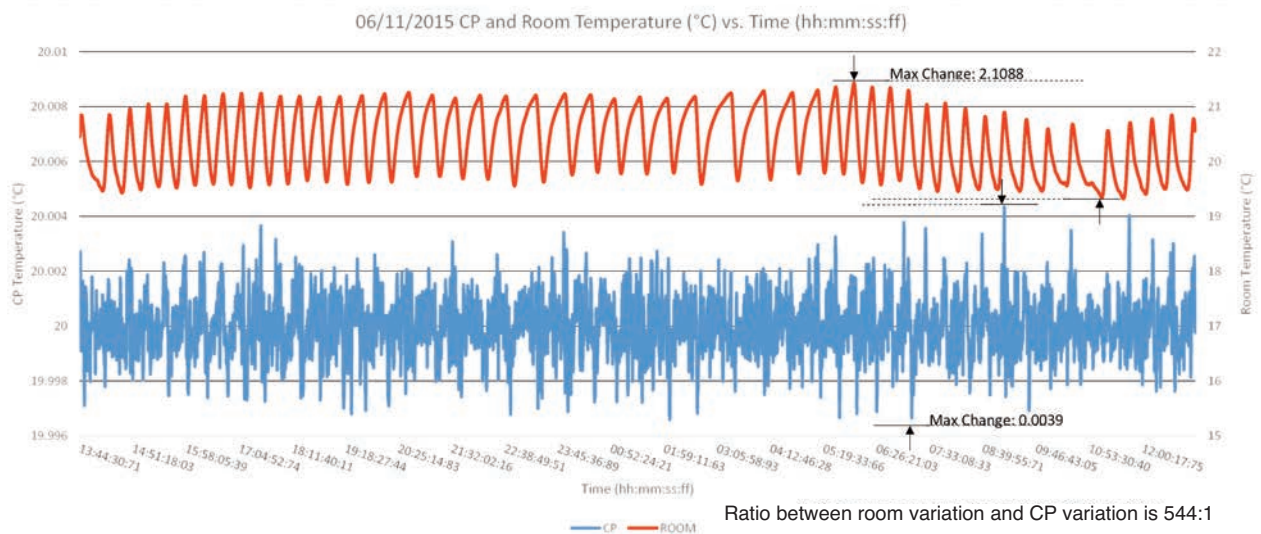
- Praecis ATCU-5.
- Precitech diamond turning enclosure.

**Customer:** European optics research and development facility.

**Result:** Successful diamond turned space optic that met ultra-precision specifications.

**Details:**

- Over the course of a 24-hour testing period, the Praecis ATCU-5 maintained temperature within  $\pm 0.0039$  °C at the Critical Point while operating in a  $\pm 2.1088$  °C room environment.
- An improvement of 544:1 over ambient temperature.
- The room temperature (red) varied by over 2.1088 °C (peak-to-valley) over the 24-hr test cycle. The critical point (blue), meanwhile, varied by only 0.0039 °C (peak-to-valley) for a ratio of 544:1.



Praecis, Inc. headquarters is located at 21 Technology Drive, West Lebanon, N.H., USA.

If you would like more information about Praecis ultra-precision temperature control, please contact Praecis at 603.298.7677 or send an email to [dct@praecisinc.com](mailto:dct@praecisinc.com).