

Praecis Demonstrates Greater than 215:1 Improvement Over Ambient Room Temperature.



Objectives:

- Achieve temperature control in the enclosure at least 50 times better than surrounding environment.
- Improve diamond turning accuracy by reducing errors from temperature variations.

Systems:

- Praecis ATCU-9™.
- Fabric air distribution system; porous fabric creates laminar air flow.
- Precitech Freeform® 700.

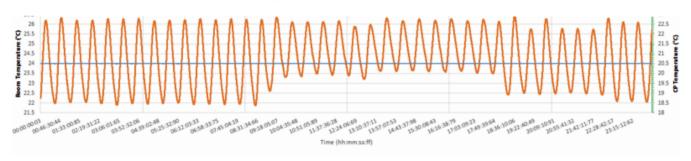
Results:

- Over 24-hour testing period, the ATCU maintained temperature within ±0.01 °C at Critical Point while operating in a ±2.25 °C environment.
- Improvement of 215:1 over surrounding room temperature.

Results Accommodated:

- Room temperature cycling with an amplitude of almost 5 $^{\circ}\text{C}.$
- · Diurnal cycle that changed the mean room tmperature by almost 1 °C.

Temperature Variation in Room



Temperature Variation in Enclosure

