Curing Batch Oven

Fluorochemical Job Profile



Requirements

The US facility of a worldwide developer and manufacturer of fluorochemical products required an additional electrically heated batch style, dual chamber curing oven due to increased demand.

Requirements included:

- Process product on racks with 40 shelves
- Product to be cured uniformly at various dwell times between ten and fourteen hours
- Required curing to be completed while pulling a vacuum, within the airtight dryer.

Solution - Curing Dryer with advanced design updates

ITS engineered and manufactured a custom curing dryer with upgraded design features. In addition to the dryers stainless steel internal and external structural, the complete interior and exterior was constructed with polished 316 stainless steel. The dryer also incorporates ITS's proprietary airflow design to ensure the tight temperature uniformity. The ductwork and return air close-offs are easily accessible for maintenance and cleaning. The front access doors were designed with airtight seals to ensure there was no outside air infiltration when the vacuum was pulled during the curing process. The one-hour cooling cycle allows for fast product turnover.

Results

With ITS's enhanced process driven air flow design and custom door seal design, ITS was able to supply this customer with a curing dryer which reduced cycle times as well as keeping outside contaminants out of the work chamber. The dryer operates at 470° F under vacuum, meeting the tight uniformity specification, and then cools the work chamber to the customers specification in one hour.

Summary

ITS worked with the customer to become partners in this project. We listened to their concerns and requirements and addressed the application with state-of-the-art engineering and manufacturing practices.

We look forward to partnering with you. Contact ITS for a product proposal sales@itsllcusa.com · 414.672.7700



- Improved the customer's process through optimal airflow design and elimination of air infiltration from the existing front access doors.
- Delivered specified process temperature uniformity
- Built to be operator and maintenance friendly, allowing the entire dryer to be washed down and cleaned per specification after each use.