



CSZ builds Liquid Calibration Bath for the Electronics Industry

What was sold?

A leading manufacturer of temperature control devices approached CSZ with a need to calibrate a large number of different temperature sensors with capillary tube and/or bulb elements. Each sensor was filled with a variety of different hazardous fluids. Their customer's specification required that they calibrate the sensors in the same fluid used in the sensing element of the control devices.

To meet the customer's need, CSZ designed a liquid bath that would accommodate many different hazardous and/or corrosive fluids such as alcohol, toluene, and other proprietary mixtures. The liquid bath was designed to meet Class I, Division I hazardous location electrical requirements. Since each sensor required calibration over a range of different temperatures, CSZ designed the liquid bath with a range of -80°F to 80°F.

In order to fully utilize the bath space and temperature condition the maximum amount of product, this bath was designed with four different product baskets, each holding approximately 10 lbs. of product. Sensors were placed into the temperature conditioned liquid bath until they reached temperature. After devices were conditioned, each basket was raised and placed onto hook a hook for individual sensor calibration. The unit was also designed to interface with the customer's ventilated hood, which removed harmful fumes from the environment.

Special Features

- Remote instrumentation located on the customer's exhaust hood for easy access
- Stainless steel interior and exterior to withstand corrosive fluids
- Casters with foot brake for mobility and ease of maintenance
- Pneumatically operated split lid for convenient access to devices being calibrated
- Designed to meet Class I, Division I requirements for operation in a hazardous environment

