

Case Study: CTS Cincinnati Test Systems, Inc.

Background

Cincinnati Test Systems (CTS) is a world leading designer and manufacturer of leak test systems and leak detection equipment. CTS manufactures leak test machines for every industry, from medical to automotive, defense to aerospace, and beyond. For their customers leak testing is critical to ensuring proper product quality, safety, and performance.



The Challenge

CTS needed to increase their production volume and decrease the calibration cycle times in order to meet customer demand, while manufacturing a very low leak specification (0.5 scc/m), at large volumes (10,000 to 15,000) per year. This challenged CTS to search for solutions so they could outpace their competitors and become the manufacturer of choice in the marketplace.

The Solutions

CTS determined that Mesa Labs' DC-800-3 DryCal Series flow cell from 0.5-50sccm was the best choice of high-precision primary flow standards to help them increase their efficiency and calibration speed, and improve their testing process' accuracy.

The DC-800 offers exceptionally low uncertainties and a wide flow range to meet the most stringent laboratory and industrial process control requirements. The DryCal 800 Series combines Proven DryCal Technology with interchangeable flow cells to achieve precise, primary measurements over an incredibly broad flow range; from 0.5 sccm up to 100lpm. The real data of time savings per calibration can be seen below in the tables provided by CTS. These drastic savings have allowed CTS to be more flexible for their customers, and expand their capabilities to a wider range of clients and industries.

Calibration Time Table

CTS Leak Rate (sccm)	Calibration Time (sec)
0.61	21.9
1.37	20.1
2.05	16.1
2.9	18.3
4.2	16.9
5.7	19.7
7.87	15.6
18.34	18.0
24.95	18.1
50	16.0



"Calibration Time" is the time to get one reading on the ML-800