



CALIBRATOR SELECTION GUIDE FOR HELIUM LEAK DETECTORS and SYSTEMS

VTI manufactures four models of Calibrated Leak Standards for calibrating Helium Leak Detectors and Leak Testing Systems so that one is sure to meet your particular requirements. Many other models of Leak Standards are made by VTI, including some that are specifically for calibrating Sniffer-type Leak Detectors, as detailed in other brochures and a Selection Guide. As the major manufacturer of Calibrated Leaks for all gases and all leak rates for calibrating leak detectors, leak testing systems and various other applications, VTI supplies them worldwide to users, distributors and other manufacturers.

The GPP, GPPT, GPC and CLP Model Calibrators compared here have different types of Leak Elements to control the flow rate of Helium, and this results in different features as shown below. Another difference is that the GPP, GPPT and GPC Leaks are “general purpose” models for calibrating leak detectors and systems, and the CLP Leak is a “high-precision” model with an all-metal valve for use in critical applications, use with UHV systems, and use as a Calibration Transfer Standard. It is to be noted, however, that all four models demonstrate long-term flow rate stability, have low depletion rates and last for years without refilling. As an exception, the 10^{-3} and larger GPC Leaks have higher depletion rates and, therefore, are designed to be conveniently refilled by the user. Also, all four models are simple to operate and are provided with Certifications of the NIST-traceable A2LA-accredited Calibrations.

The differences among these four Helium Detector Calibrators are highlighted in the comparisons below. VTI's experts are always eager to help you select the best model – technically and cost – for your application. Without obligation, of course.

CHOOSING A CALIBRATOR FOR HELIUM LEAK DETECTORS

Choose the GPP Model when: ▶

- You need a Calibrator in the leak rate ranges of 10^{-6} to 10^{-9} , especially 10^{-7} and 10^{-8} .
- You want the glass-permeation leak element that will not clog.
- It will not be subjected to rough handling that would break the glass leak element.



◀ **Choose the GPPT Model when:**

- You need a Calibrator in the leak rate ranges of 10^{-4} to 10^{-8} .
- You want the Teflon[®]-permeation leak element that will not clog.
- You want a Calibrator that is unbreakable.

Choose the GPC Model when: ▶

- You need a leak rate in the range of 10^{-6} to 10^{-3} and larger, especially 10^{-5} and larger.
- Your clean environment or large leak rates avoids clogging of the capillary leak element.
- You want a Calibrator that is unbreakable.
- Your facility has wide temperature fluctuations so that the very low temperature coefficient (0.2% per °C) is a significant benefit.



◀ **Choose the CLP Model when:**

- You need a Calibrator in the leak rate ranges of 10^{-6} to 10^{-12} , especially 10^{-9} to 10^{-12} .
- You want the glass-permeation leak element that will not clog.
- It will not be subjected to rough handling that would break the glass leak element.
- You need a model to use as a Transfer Standard for calibrating other Test Leaks.
- You need a Premium model with an all-metal valve that can be used for critical calibrations and can be baked for UHV applications.



Helium Leak Detector Calibrators

WARRANTY

VTI warrants that calibrated leaks manufactured by VTI, and all calibration services, shall be free from defects in materials and workmanship under normal use and service for a period of twelve (12) months from date of shipment from VTI's plant. This warranty is subject to the equipment being installed, maintained, and operated in accordance with the operating and maintenance instructions provided with the item. Warranty shall be void if the equipment is modified by the Customer or used in other than the intended manner or application. Purchased equipment incorporated into any item supplied by VTI will be covered by the original manufacturer's warranty. Failures of calibrated leaks resulting from vacuum deposited materials and/or contamination during the customer's use of the leaks are not warranted.

The foregoing warranties are in lieu of and exclude all other warranties not expressly set forth herein, whether expressed or implied by law or otherwise, including without limitation any warranty of merchantability or fitness for a particular purpose. In no event will VTI be liable for consequential damages.

In the event of VTI's liability, whether based on contract, tort (including but not limited to negligence and strict liability) or otherwise, VTI's sole and exclusive remedy will be limited, at VTI's option, to the repair or replacement of any nonconforming item for which claim is made by. VTI will not be liable for any other damages, whether direct, incidental, consequential or otherwise.

TERMS OF SALE

FOB: All Material FOB Oak Ridge, Tennessee, USA

Terms of Payment: NET 30 days, 1/2% 10 days

Return Materials Authorization: Returns are accepted only upon prior approval. Please call (865) 481-3342. Return Materials Authorization (RMA) numbers issued by our Customer Service Staff should appear on all packages and shipping documents, including those for re-calibration orders.

Prices and specifications are subject to change without notice.

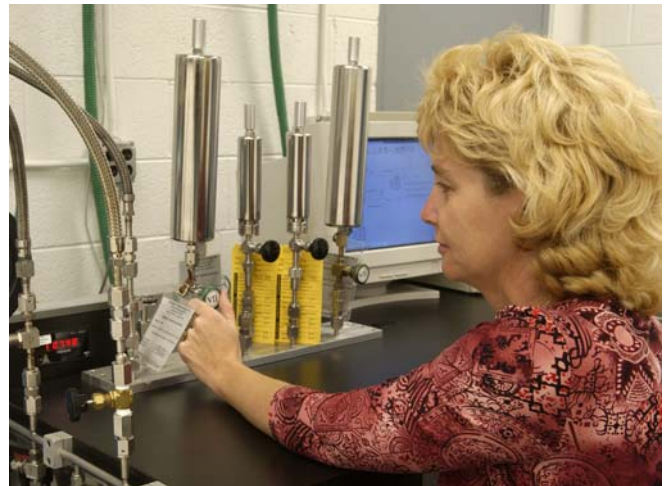
RECALIBRATION SERVICE

VTI offers a convenient recalibration service to help users of calibrated leaks to maintain all of their Leaks in Certified and peak condition, regardless of the original manufacturer. All makes of Leaks for all makes of Leak Detectors can also be repaired if required.

Because of their rugged design, VTI's Calibrated Leaks will rarely, if ever, require refurbishment. However, annual recalibration will maintain the full benefits of their high precision performance.

In original production, VTI goes to extraordinary efforts to ensure the highest degree of reliability and precision in calibration. These same careful procedures are used when recalibrating Customers' leaks.

All recalibrations are NIST-Traceable and A2LA-Accredited.



One of VTI's A2LA accredited Calibration Stations

