



ATTENTION: Quality Control and Engineering Managers

SUBJECT: RADIFLO® LEAK DETECTION & FAILURE ANALYSIS

IsoVac Engineering, Inc. has been in the leak detection business since 1969, is the owner of the **Radiflo®** trade name for Krypton85 leak detection and several Radiflo patents.

IsoVac maintains a Radiflo® "*Leak-Testing*" service laboratory that has provided leak detection services to industry for over four decades. We are very quick, and certainly competitive. We perform both Gross and Fine leak testing for you on small as well as large lots of hermetic devices. IsoVac has tested almost every type of hermetic device for NASA, the Military Agencies, the Space and Aerospace Industries, and Commercial Manufacturers, to the requirements of the MIL-STDS, as well as Specific Company Specifications.

We have many customers who overnight their parts to us, we leak test the devices, certify and return ship in 72 hours. If you require faster turnaround, we can expedite the testing in 24 hours, for most standard test conditions. Standard Radiflo tests are to a leak rate sensitivity from $\sim 10^{-1}$ to 1×10^{-8} atm cc/sec, and are run in a single test. Higher sensitivities are also available to as high as 1×10^{-13} atm cc/sec.

In addition to the leak testing of your devices, IsoVac also provides "*Failure-Analysis*" services for the determination of the location of the leak, as well as, hopefully, an indication as to the cause for the leakage. Some typical leakage problems are shown below.



The Radiflo® leak test is a nondestructive test that has been included in Military Standards for approximately 40 years. It is commonly applied to all types of electronic parts and explosives, such as are used in air bag components. It is the only leak test reliably applied to hermetic plastic devices to a sensitivity as high as 1×10^{-7} atm cc/sec. The Radiflo process is also the only test that can be reliably used to test devices with a 'Zero-Cavity', (no internal void). This test is coupled with a patented Krypton85 "Gettering" technique that is being successfully applied to millions of devices per year.

IsoVac manufactures, installs, calibrates and maintains the Radiflo leak detection equipment in manufacturing facilities throughout the world, where it is used to test 3,000 to 10,000 parts per hour *for both gross and fine leaks*. It is faster and cheaper than any other leak detection process, and can be run manually or automatically. Over forty years of use has shown it to be absolutely safe to both people and the environment.

Visit our web site @ www.isovac.com, or send your request directly to IsoVac for a price quotation for Radiflo leak testing, or equipment.