

All standard part numbers and special assemblies are 100% Helium Leak tested and guaranteed to Ultra High Vacuum (UHV) standards.

Helium mass spectrometer leak detection is the most common form of leak detection used to qualify assemblies for high vacuum and ultra-high vacuum applications. Helium is one of the smallest and lightest molecules - perfect for detecting micro leaks. Helium is also a safe gas which is widely used in the industry. The testing is accurate, quantitative, and repeatable.

MPF employs several leak detection systems. We primarily use the UL 1000 manufactured by Inficon.

MPF leak tests individual part numbers and assemblies multiple times before shipping the final product. We measure to  $<1 \times 10^{-9}$  atm cc/sec He. This leak rate is equivalent to a release of 1 cubic centimeter of Helium gas over a period of approximately 30 years. We can provide a Leak Test certificate upon request.

$1.0 \times 10^{-9}$  atm cc/sec Helium is **equivalent** to:

$2.6 \times 10^{-7}$  torr cc/sec He

$1.0 \times 10^{-4}$  Pa cc/sec He

$1.0 \times 10^{-7}$  kPa cc/sec He

$1.013 \times 10^{-9}$  mbar l/sec He

$1.0 \times 10^{-10}$  Pa m<sup>3</sup>/sec He

$7.6 \times 10^{-10}$  torr l/sec He