



## HELIUM LEAK TESTING STATION for FUEL FILLER PIPES



This leak detection system designed and built by VTI performs a Helium Mass Spectrometer Leak Test on plastic blow molded automotive fuel filler pipes. The chamber is nominally 48 in. x 48 in. x 12 in. and is designed to test two parts simultaneously. In the event of a failure it performs a "Sort" to determine which part(s) failed the test. The system tests by the "Inside-Out" method and has a fully automated test cycle including the pass-fail decision. The system is capable of detecting a  $1 \times 10^{-4}$  atm-cc/sec leak of Helium flowing into the chamber from the pressurized part in a 60 second cycle. Smaller leak rates can be found using longer cycle times. Bar code scanner input to the PC control system allows tracking of product leak test results. The system includes an ink stamp marker to identify parts that have passed the leak test.