



Systems, a capability overview for the
new Millennium

CUSTOM LEAK DETECTION SYSTEMS



“With many years of experience gained in numerous industrial fields, VTI offers extensive and complete product design, fabrication and support capability all under one roof.”

Systems, a capability overview for the new Millennium



CUSTOM LEAK DETECTION SYSTEMS

Applications include:

- ▶ Air Conditioning Manufacturing
- ▶ Semiconductor Manufacturing
- ▶ Refrigeration Manufacturing
- ▶ Battery Testing
- ▶ Automotive Industry
- ▶ Research and Development
- ▶ Chemical Industry
- ▶ Aeronautics/Aerospace

About VTI ... The Company:

With many years of custom system design and fabrication as a backdrop, a staff with many man-years of knowledge and experience in Vacuum, Leak Detection, System design and Production Management, VTI offers an unparalleled capability to customers requiring Custom Leak Detection System packages.

Product quality, reliability and consistently high standards of service and support are all elements of the core company philosophy demonstrated by the NIST and A2LA accreditation standards the company maintains.

All this is set in a 60,000 square foot facility in Oak Ridge TN where state-of-the-art tools from CAD to CNC machining are used to produce leading-edge systems.

Essential Foundations:

Successful custom system manufacture is only possible when core competencies and components are available. VTI has invested significantly in technology and people to build on and develop these foundations:

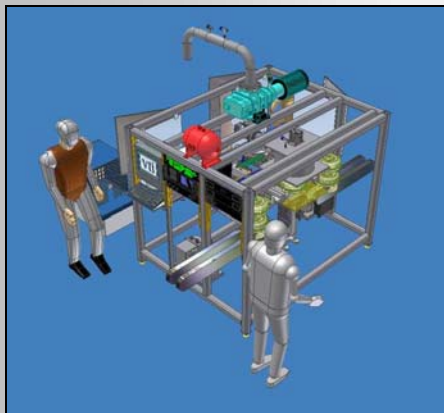
**System Design ▶ Fabrication Facilities
Sensor Technology ▶ Calibrated Leaks
Software ▶ Peripheral Instrumentation**

It is the combination of these **'Essential Foundations'** that sets VTI apart from the rest. We believe that the delivery of any instrument, workstation or custom system signals the beginning of an on going, long term, customer relationship.

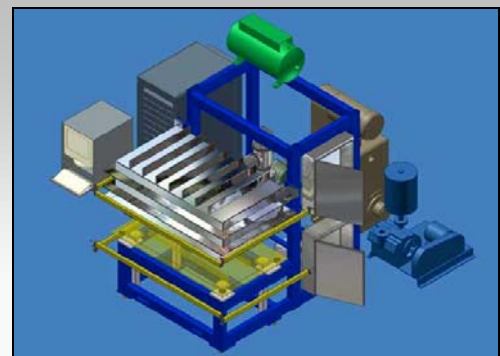
System Design ...

VTI has long been known for offering quality system design with attention to detail. Today, this is taken to the next level with the implementation of the most advanced 3D mechanical design software available.

The ability to design the system and display the 'assembly' in full color 3D format as shown here greatly facilitates communication of the design and design issues to the customer. This both saves time and provides the customer with a clear picture every step of the way. Customers have commented when they see a system for the first time, "No surprises, that's **exactly** what I thought it would look like".



**Automated System for Leak Testing
Torque Converters**



**Large Chamber System for Leak Testing
Fuel Tanks prior to assembly**

But this is only one of many advantages....

VTI's goal of meeting the customer's requirement at the lowest cost, often less than the cost of an 'off-the-shelf' solution that may not even fit the application, is addressed with this software.

CAD techniques enable VTI to reduce its concept-to-manufacturing time, visualize and 'tweak' designs quickly and inexpensively before any metal is cut and achieve faster delivery times due to less shop rework / fitting. A greatly enhanced capability **and** cost savings for the customer!

Call Toll Free 1-800-704-4774 – www.vacuumtechnology.com

SMARTSTATION Peripheral Workstations ...

Custom system operation can be enhanced by the selective implementation of peripheral workstations to streamline the production process. For example, pressure decay can identify units with large leaks such that more sensitive systems do not waste time testing these. Sniffing at a repair station allows leak sites to be located without halting the main production line. VTI SMARTSTATION Leak Detector workstations are designed to cover these needs.



SMARTSTATION PD
Pressure Decay



SMARTSTATION HS
Helium Sniffer



SMARTSTATION RS
Refrigerant Sniffer



SMARTSTATION
Repair Station

Custom System Examples ...

Integration into the manufacturing regime is illustrated below and shows the selective use of automation (to enhance throughput) and combination testing. More comprehensive information is available on each of these (and many more) installation on the Leak test Systems web pages.



A-COIL STATION
Integration of a "Gross test" and final Helium leak test minimizes production delays identifying large leaks early in the process



AIR-BAG INFLATOR TESTER
Essential in providing critical test for safety component with confirmed disposal of parts that fail the test



A/C COMPONENT TESTER
System design with automated turntable system provides a cost effective solution to meet the throughput required by production

More Information – Suggested Reading...

A wealth of further information is available on the VTI web-site. We suggest you download:

- ▶ Principles of Leak Testing
- ▶ SMARTSTATION Leak Test Systems
- ▶ LEAKSEEKER Custom System Software Brochure
- ▶ AERO VAC Odyssey Mass Spectrometer Brochure
- ▶ Encounter Software Brochure
- ▶ Many Custom System Example Data Sheets

LEAKTESTSYS-PRINCIPLES
SmartStationSYS-DATA
LeakSeeker-DATA
ODY-DATA
ENCOUNTER-DATA
EXA01, EXA02, EXA03, etc.

Also available is a corporate video which visually explains more in 5 minutes than can be said in an hour! Ask for your copy on CD ROM.



VACUUM TECHNOLOGY
I N C O R P O R A T E D

1003 Alvin Weinberg Drive
Oak Ridge, TN 37830 U.S.A.

Tel +1 865 481 3342
Fax +1 865 481 3788

E-mail sales@vacuumtechnology.com
www.vacuumtechnology.com

Contact: