



Model 77
A-B Plate Leak Detector

TURBINE ENGINE COMPONENTS

Leak Detector

PRODUCT REQUIREMENTS

Textron Lycoming—currently known as Honeywell—contacted CCDI for the development of a leak detector. The system was required to detect leaks in A-B Heat Exchanger plates for fuel/exhaust sections on engines of the M1 Abrams Tank. Since then, various companies have needed similar fixtures or services that require leak detection.

FLEXIBLE SOLUTION

CCDI developed the Model 77 Leak Detector for Textron Lycoming (Honeywell). The fixture tests high and low pressure sections (oval and circular shapes) for leaks in the welds to prevent fuel from leaking into exhaust section. It pressurizes the part under test and measures 0-50 sccm airflow leakage. The unit is comprised of 20 Mass Flow Sensors, calibration reference orifices, a pneumatically controlled ram for the pressure chamber, a transport unit, and a guard door. The loading and unloading sequence is computer controlled and can store results on a network-ready computer.

Many variations of the Model 77 can be manufactured to fit your company needs. From manual operation to full automation, CCDI can work with you to form a similar fixture and stay within budget.

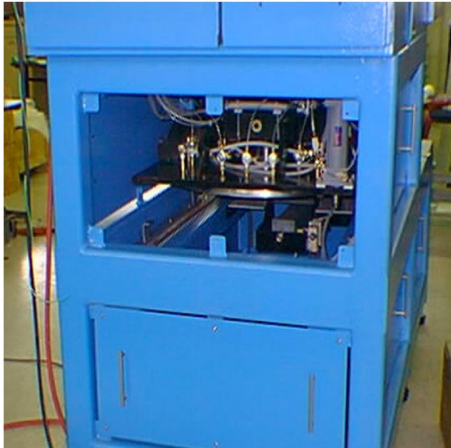
FEATURES

- Accuracy: 0.25% FS 0-50 sccm
- Repeatability: +/- 0.25% Standard
- Simple WYSIWYG Windows Based Software
- Manual or automatic loading control
- EDI feature for piping data to network systems



Seal Interface for Plate Detector

The seal plates (as shown on left) put air pressure into the oval and triangular shapes and detect airflow movement across the welds.



Back View



Side View

SPECIFICATIONS AND ADDITIONAL INFORMATION AVAILABLE UPON REQUEST.

Note: The Model 77 was created based on Textron Lycoming testing requirements. Variations of the Model 77 can be manufactured based on specific company requirements.