



TME

WORKER[®] *Integra*

TME's New Advanced Leak Test Instrument

The **Worker Integra** is a bench-top, high-resolution (as low as 0.0001 psig) leak test instrument with a small footprint and user-friendly ease of operation. The system can be configured to perform pressure or vacuum decay leak testing, flow testing and occlusion testing on non-porous, flexible or rigid products. Models are available for pressure ranges from 15 to 150 psig, or vacuum, and flow rates from as little as 10 sccm to as much as 10 lpm.

Icon-Based Touchscreen Color Display



The touchscreen display provides easy, clear navigation through the wide variety of data handling and review screens. Clearly defined icons make it easy to choose test modes, select parameters, and view test results with an interactive graph that makes it easy to view the pressure or flow during the test.

Programs

The **Worker Integra** allows users to input test settings using a touchscreen menu and parameters that can be stored as programs, while tracking lot codes, operator names, and other vital information. Programs can be associated with specific items under test to maximize operator efficiency and accuracy when a variety of products are being tested. The instrument can store over 100 programs in memory, to be recalled at a touch by the operator.

Test Results

All test results stored in the data log can be navigated and reviewed with ease. The advanced communications functions include an RS-232 port and USB slave serial port that log test results and can accept remote start commands. Data may be exported to USB storage devices and are accessible over the LAN using any web enabled browser. The **Worker Integra's** data storage meets FDA CFR 21 Part 11 standards for security.



The **Worker Integra** is a completely integrated process control tool. With repeatable and quantitative results, it is an affordable unit for everyday leak, flow and occlusion testing requirements.



Standard Test Modes:
Pressure or Vacuum Decay Leak,
Backpressure Occlusion,
or Flow Rate (Optional)

Standard I/O Functions:
USB connection to PC
USB ports for keyboard, mouse,
printer, or bar code reader
USB storage support for program
data and datalog record export
LAN remote instrument control,
data transfer, and operation
Web Interface for datalog review

**Meets FDA CFR 21 Part 11
NIST Traceable Calibration**

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PS-356 Rev. B



SPECIFICATIONS: WORKER Integra

Dimensions 10"W x 10"D x 9"H
 Power Universal 90-240V @ 50-60 Hz (60Watt max)
 Storage/operating... 10-30°C (50-90°F) RH < 80%, non-condensing environment
 Controls LED Start/Stop Button, Key Lock, Power Button
 Test Channels Single Channel
 Display 5.7" QVGA Color Touchscreen
 Pressure Control... Manual adjustable precision regulator or E/P Automatic regulator
 Pressure Units Psig, InH₂O, mBar, kPa, inHg
 Flow Units ccm, sLPM, scfm
 Test Modes Leak, Flow, Occlusion, and up to 3 linked tests
 Memory Capacity... 128 Mbytes (Expandable internal option 512 Mb)
 System CPU 32 bit floating precision
 LAN (Network) RJ45-LAN (Remote VNC, Telnet, Web-browser)
 Peripherals (I/O)..... USB Host Port (1 front, 1 rear)
 HID interface: mouse, keyboard, bar code reader
 Mass Storage: Export data to USB flash memory
 Printers: Output results and test parameters
 USB Device Port (Virtual COM port control)
 Serial RS-232 (DB9)
 Accessory I/O: 8 Opto Outputs, 8 Inputs, 3 Digital I/O
 Input for remote start/stop, Output pass and fail
 Calibration NIST Traceable
 Test Time 0 to 1000.0 Sec. (resolution 0.1 sec)

Models	Leak	Leak + Flow	E/P Regulator
Test Modes By Model	Leak Occlusion Link	Leak Flow Occlusion Link	* Same as Leak with automatic electronic regulator

Pressure Specifications

PRESSURE AND VACUUM MODELS

Model	Vacuum	Pressure/Vacuum	15 psi	50 psi	100 psi	150 psi
Range (Psig)	-13.5 - -0.5	0 - 30 (PSIA)	0.5-15	1.0 -50	2 - 100	2 - 150
Resolution (Psig)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Pressure Accuracy +/- 0.5% FSD (Psig)	+/- 0.068	+/- 0.075	+/- 0.075	+/- 0.25	+/- 0.50	+/- 0.75
Repeatability (6 sigma/FSD)	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%

Flow Specifications

FLOW MODELS ONLY

Flow Ranges (SCCM)	0.1-10	10- 500	20 - 1000	100 - 5000	200 - 10,000
Accuracy +/- 2% FSD	+/-0.2	+/- 10	+/- 20	+/- 100	+/- 200
Resolution (SCCM)	0.1	0.1	1	1	1

LEAK TESTING with the WORKER Integra is simply pressure sensing, with its high performance resulting from our proprietary sensing technology and low internal volume design. When the tested product is connected to the front panel test port, internal valves allow air (or another gas) to pressurize the part and connect the part to the sensing transducer. Pressure changes as low as 0.0001 psi are detected from leaks in the tested part.

VACUUM DECAY TESTING functions similarly to pressure decay tests; however, vacuum tests are limited to less than one atmosphere test pressure and are usually performed where specifications of the test part demand this pressure differential.

FLOW TESTING uses a precision mass flow sensor to make a direct measurement of air flow through the tested part. A direct flow reading means no separate pressure measurements or special calculations are made in the instrument.

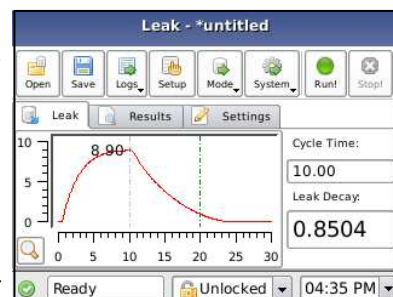
OCCCLUSION TESTING is a special type of flow test in which the instrument measures the backpressure of air flowing through the part to determine the extent to which the part is occluded.

With the Worker Integra Leak Tester, you can create and store test programs associated with your products. The instrument can be locked with a key lock so the parameters cannot be accidentally changed.

When the leak test is run, you can select a real-time graphic display of the ongoing test that will, upon completion of the test, show test results (accept/reject, decay).

A more visible results screen is also available, to give the operator a vivid green (accept) or red (reject) results indicator while still providing the leak decay.

All test records are securely stored in the instrument's memory until the instrument is unlocked and the data are downloaded or erased.



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