

**World Leader in
Leak Detection
Technology**

**ISO 9001 Registered
ISO 17025 Accredited**

**Turnkey, Single
Source Capabilities**

InterTech has the in-house resources required to assume single source responsibility for its products while maintaining outstanding quality and meeting delivery commitments.

Instrumentation

Air Leak Test Systems

Helium Leak Test Systems

Assembly and Test Systems

Functional Test Systems

**InterTech Development
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Our diesel engine mass flow technology shortens test cycle time by finding leaks faster to enhance manufacturing efficiency and process – significantly.

InterTech M1075 – for unsurpassed leak testing speed and accuracy.



InterTech M1075 is engineered to improve productivity by reducing bottlenecks.

The Challenge

Develop a production line solution to detect and repair leaks prior to hot testing. Eliminate the possibility of leak-associated defects getting through the system. Deliver accurate results in seconds, while not wasting time and money on hot test repeats.

The InterTech Mass Flow Technology

The InterTech testing system admirably resolves each of these in-line challenges.

Fast fill, better stabilization and the fast response time of patented InterTech mass flow technology combine to deliver short test cycle time and significant time-cost savings.

Our versatile and interchangeable instruments can be used for all three circuits.

The InterTech Solution

InterTech M1075 dry air tests both the water side and the oil side of an engine block at the same time, up to twice as fast as other available options.

The water side includes engine block passages, water pump, heater housing, thermostat housing, associated hoses and the coolant half of the lube-oil cooler, creating a cavity of about 12 liters.

The oil side includes engine block passages plus, front and rear gear flywall housings, crankshaft seals, oil pan, intake manifold and the oil half of the lube-oil cooler.

This creates a cavity of up to 180 liters depending on engine model.

The InterTech testing system avoids problems of pressure fluctuation in the supply line by using isolated air reservoirs. Because it is independent of plant air supply, it provides a direct and stable measurement of leakage.

The InterTech system simultaneously pressurizes both cavities and the reservoirs: the oil cavity to 2.5 psi with a reject limit range of .2 lpm to 1.4 lpm (user selectable); and the water cavity to 10 psi with a reject limit of 25 sccm. Any leakage causes the leaking cavity to lose pressure and the InterTech mass flow transducer reads the flow rate.

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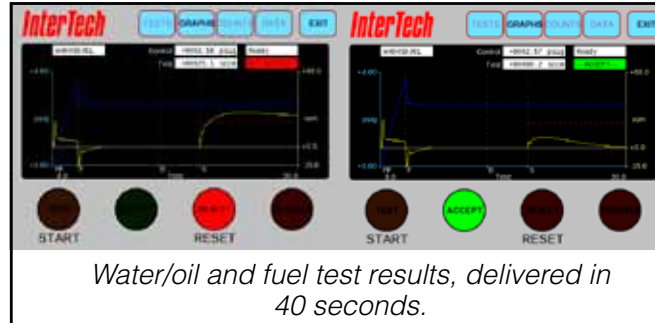
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Testing both cavities simultaneously at different pressures verifies the integrity of the critical oil/water seals. The independent circuits maintain pressure to enable rework and confirm that defects have been repaired.

The fuel circuit representing a volume of 2 liters is tested to a 20 sccm user selectable reject limit at a pressure of 22 psig.

The customer reported that the InterTech Test System reduced hot test repeats by 50% and paid for itself in a few months.



The M1075 Diesel Engine Tester

InterTech M1075 offers the flexibility of selecting up to 99 different test programs available for instant recall, which eliminates wasted time associated with complex changeover procedures.

The unit keeps a running count of accept/reject results, causes of rejects, along with date and time of test. Its barcode scanner interface importantly allows tracking of test data by part and serial number.

Among the many user-friendly features, a real-time graphic display of each test cycle is useful for troubleshooting and analyzing the cause of defects. Other features include simplified calibration, a 6.5" color screen with touch screen prompts for ease of use, and much more.