V6 Engine Leak Test Machine

This system was designed and manufactured in order to give the customer the ability to 100% leak test engines within their production environment. TQC developed this system alongside the client to allow them to leak test the water jacket and oil gallery within a fully assembled engine. In addition, a rework system was supplied for leak location using tracer gas.

- Simultaneous Leak Testing of water and oil systems.
- Internal Leak Testing of oil and water cavities.
- Automatic Sealing of Assembled Engines.
- Nolek TS600 Leak Test Instruments
- Palletised conveyor system with individual engine bar codes.

- Programmable Leak Rates and Test Pressures to suit different engine variants.
- Typical leak limits are:
  - Water System: 10cc/min @ 1bar
  - Oil System: 25cc/min @ 0.3 bar
  - Internal Water to Oil: 10cc/min @ 0.7 bar differential
- Throughput:
  - One 2.5 or 3.0 litre engine every 50 seconds.

- Tracer Gas Charging and purging console for use with helium or hydrogen.
- Quick Connect Sealing Plug.
- Hand held sniffer probe for leak area location.
- Automatic Reject conveyor loop with manual leak location station.
- Office-based data management computer (DMC) connected to the leak test system via a local area network.
- The DMC allows selection and viewing of historical test results and the ability to edit test limits. A facility is provided to export data for processing by other spreadsheet and database software.