



# Automotive Brake High Pressure Test Rig

## Description

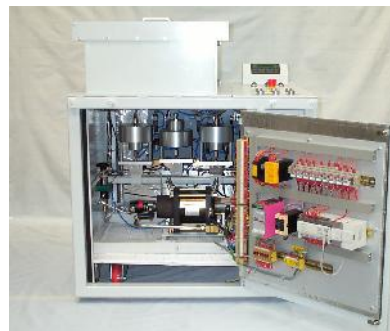
Design and manufacture of pressure test equipment for a variety of brake caliper bodies. Factory air is used at 5.5 bar and 170 bar (via a 30:1 intensifier) for leak tests, low pressure and high pressure.

A high accuracy pressure transducer was used to monitor pressure decay over a 4 second period. Each test type is individually selected and automatically controlled using a PLC and output data from various flow-meters and pressure transducers.

All pressure testing is undertaken in a containment box, in case of component failure, with the appropriate safety interlocks.

## Disciplines Used

- Mechanical, electrical, pneumatic & hydraulic design
- Stress & vibration FEA
- Project management
- Manufacture & assembly
- Test & commissioning



*Control Cabinet*



*Installed Unit Under Test*

## Specification Summary

- Low pressure 6 bar air supply, 240VAC
- Max output pressure 170 bar via high pressure ratio air amplifier
- Multiple test sequence for low pressure and high pressure testing
- Pressure measurement accuracy better than 0.1%
- Leakage pressure detection down to 0.0025 bar
- Mitsubishi PLC controlled
- RS232 and RS485 computer link options
- Operator instructions on display



*Test Rig*