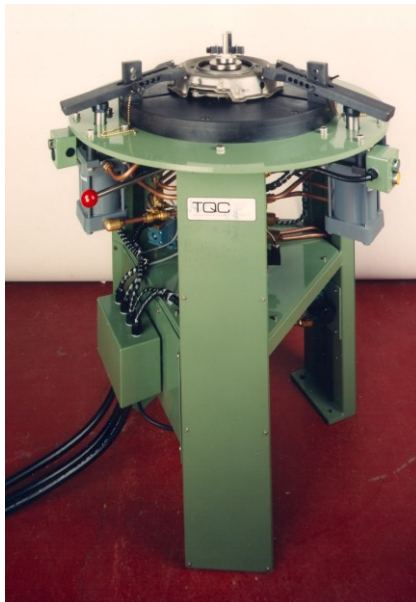
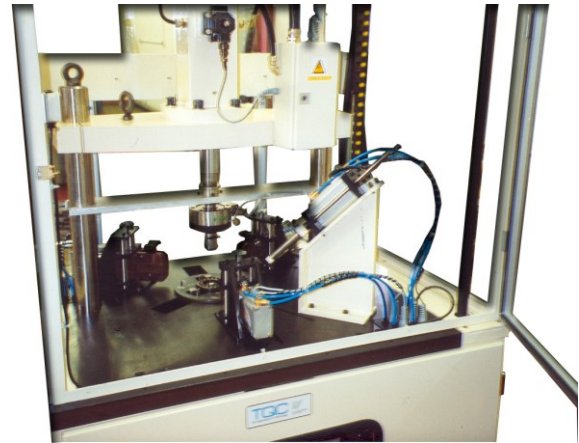


Clutch Testing – Various Tests performed on Clutch Covers

TQC have produced a variety of bespoke test machines for automotive clutch covers for both OEM and aftermarket suppliers.

The machines are manually loaded and unloaded with the option of manual or automatic clamping. The performance test is fully automatic with the operator protected by fixed guarding or a safety light guard.

The machines are designed to perform a variety of tests to verify the performance characteristics of the clutch covers.



Tests & Functions Available

- Pressure plate clamp load - total force & evenness of force, 3 positions, 3 x 10kN load cells
- Diaphragm spring force versus distance curve - peak & valley loads
- Pressure plate lift & evenness of lift, 3 positions, 3 x 20mm linear potentiometers.
- Pressure plate release load versus distance curve - bi-directional, 1 x 10kN load cell up to 50mm stroke
- Hysteresis - load - distance
- Losses due to cover distortion & incorrect components
- Diaphragm spring finger end setting / bending
- High & low diaphragm spring fingers
- Actuation stroke, 1 x 75mm linear potentiometer
- Simulated pressure plate wear

Other features

- Pneumatic, hydraulic & hydropneumatic clamping & actuation
- Simulated cover bolt clamping
- Variable actuation speeds (nominally 0.2m/sec)
- Rivet presence detection
- Reverse acting clutch covers
- Interchangeable tooling - spacer rings, release bearings, location rings
- Pass marking - centre pop, laser, dot matrix or ink jet
- Serial numbering with attribution of test results
- Calibration routines
- Data management PC

