

INTEGRATED SYSTEMS FOR: AUTOMOTIVES

Specialist in leak testing since 1973



TESTING AUTOMOTIVE PARTS

Nolek has extensive experience constructing systems that test leaks in a wide variety of different parts and products within the automotive industry. For example, we have a close relationship with Scania (a leading truck supplier) testing numerous parts of their manufactured vehicles. The machines we have built test, for example: engines, engine blocks, engine assemblies, clutches, transmissions/gear boxes, transmission/gear box houses, intake manifolds, intake manifold gas channels, exhaust pipes, exhaust valves, clutch plates, cylinder heads, retarder houses, crank pits, valve bodies, valve housing covers, common rail systems, all types of bearing houses, retarder bearing houses, cylinder blocks, fuel channels, fuel pipes, fuel tanks, fuel rails, fuel valves, fuel injectors, radiators, brake cylinders, calipers, fuel systems, steering servos, size controls, bedplates, pressure tanks, tank couplings, water pumps, clutch covers, pressure cap, air pipes, filler caps, oil coolers, oil pipes, oil tanks, connectors, headlights, transmission assemblies, ac-pipes and ac-systems etc.





Measuring method: Pressure decay Leak rate range: 10⁻¹cm³/sec to 10⁻⁴cm³/sec Cycle times: from 8 seconds and up Automatic calibration Compact design Available with single or double tooling

Description of procedure:

- 1. The part to be tested is manually or automatically loaded in the test chamber and is connected with the fixture.
- 2. The test chamber is then closed.
- 3. Then we pressurize the test part to specified pressure. If we do not reach the pressure in a specific time it is declared as having a "Gross leak".
- 4. Then we stabilize. The stabilization time is dependent on the volume and the pressure.
- 5. Next is the measuring sequence. The measurement time is dependent on the leak rate.
- 6. If the test is ok, we evacuate the product and open the fixture.
- 7. If there was a leak with a manual system, the chamber will stay closed until the operator has pressed the reset button. If the system is automatic the machines separates leaking products from not leaking ones.
- 8. All machines that Nolek produce have adjustable calibrated leak. This can be operated automatically.