



- Leak Testing -

# **INTEGRATED SYSTEMS FOR: CASTINGS**

Specialist in leak testing since 1973



- Leak Testing -

# TESTING CASTINGS

Nolek has extensive experience constructing systems to leak test a wide variety of parts and products within the casting industry. Important experience has been accrued through our longstanding relationships with Ljunghäll and Brabant, who are leading suppliers to the Scandinavian automotive industry. The machines we have built test, for example: different types of housing and covers, oil sumps, gear box houses, bearing box covers, clutch housing, range housing, engine blocks, coolers etc.



**Measuring method:** Pressure decay  
**Leak rate range:**  $10^{-2}$  cm<sup>3</sup>/sec to  $10^{-4}$  cm<sup>3</sup>/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.