



- Leak Testing -

# **INTEGRATED SYSTEMS FOR: MEDICAL PACKAGES**

Specialist in leak testing since 1973



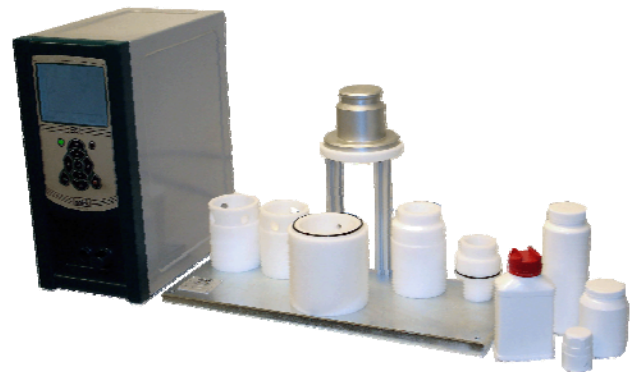
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# TESTING MEDICAL PACKAGES

Nolek has extensive experience constructing systems to leak test a wide variety of packages within the pharmaceutical and medical industry. Our instruments and systems test for closure and seal integrity of packages for example: sterile products that can be negatively affected by oxygen and/or moisture. Our systems ensure the leak tightness of the tested products through repeatable and reliable measurements. Nolek's systems can be used for quality control or online product sample testing. For example, we have a longstanding relationship with AstraZeneca, one of the world's largest pharmaceutical companies. We have built machines that test several different medical packages; including: Blister packages, medicine bottles, medicine cans, sachets, plasma bags, flexible packages / pouches, parental vials and filled syringes etc.



**Measuring method:** Pressure decay  
**Leak rate range:**  $10^{-1}$  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.