

Bombing

If hermetically sealed parts are to be leak-tested using a test gas method (e.g., with helium), a method must be found to fill them with test gas.

Typically, this is only possible with leaky parts. For this purpose, the test specimens are first exposed to a vacuum atmosphere in a vessel. Leaky test specimens are thereby evacuated.

Afterwards, the vessel is filled with the test gas, which can then penetrate the previously evacuated leaky test specimens.

The test specimens can now be examined for escaping traces of test gas using one of the known test methods under a bell jar.

Since no gas could penetrate sealed components, these test specimens are also rated as “good”.

Leaky components filled with test gas are easily detected in this way.

Notes:

- If a component has a gross leak, there is a risk that the test gas will escape from the component again after bombing and before testing, and thus not be detected.
- This test method is very time-consuming and requires great care during execution. Therefore, it is rather unsuitable for 100% inspection in large-scale production.