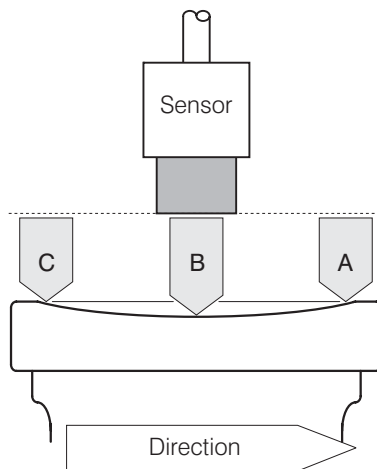


Vacuum integrity of cans, jars, and bottles

After preserving jars are filled and closed they must be vacuum-tested in fully automatic operation to immediately sort out any defective containers. During transport of the jars an eddy-current sensor scans the cap shape that is generated by the vacuum in a non-contacting way. The subsequent electronic unit calculates cap bending, which directly depends on the internal pressure, with high accuracy. After comparing this value with a specified permissible value range a decision is made about the quality of the internal pressure and thus about the tightness of the preserves container.

Principle



Pic: Pano Verschluß GmbH, Itzehoe

Technical details

- Measuring range: 3 mm/6 mm
- Resolution: < 16 μ m
- 50 - 180000 pieces/hour

Ambient conditions

- Temperature: 20 - 80° C
- strong vapour,
- Very wet environment

System configuration

- water proof sensor with 3 m cable
- Light barrier to detect cans without lid or tilted cans

Reasons for choosing the system

- Fully-automatic, non-contacting vacuum test
- Optimum adaptation to the production process
- Almost unlimited service life without system disturbances
- Environmental influences such as moisture, pungent vapours (vinegar) in the field of wet and sticky food, and temperature fluctuations must not influence the function of the system
- Counter for total throughput and for the number of ejected glasses