

Introduction | gke Bowie-Dick Test

GKE Helix/Bowie Dick simulation tests are used in vacuum steam sterilisation processes checking leaks, non condensable gases (NCG) and/or insufficient air removal and therefore sufficient steam penetration. Simulates 7 kg cotton pack according to EN ISO 11140-4.

The Helix/BDS indicator strip is placed into the Helix/BDS-test device and sterilized in an empty chamber at 121°C, 15 min or 134°C, 3.5 min (BD-test program).

The Helix/BDS device is highly durable and can be used for several thousand applications. Helix/BDS indicator strips will work in both devices and are available as a part of a starter pack with a device or strip only refill packs. The Devices come in 2 colours for different processes.



Instructions for use | gke Bowie-Dick Test

1. Unscrew the black capsule at the head of the device. Remove a BDS strip, fold in half and insert into the capsule.
2. Reinsert the capsule into the BDS device. Place the device into your autoclave. Ensure the autoclave is empty.
3. Run a sterilisation cycle. These BDS strips are designed for 121°C, 15 min or 134°C, 3.5 min (BD-test program).
4. Remove the indicator. Use the results table below to evaluate your result.

Reading the Results | gke Bowie-Dick Test

If the 4 bars of the indicator change from yellow to black, then the result is a pass and your steriliser is working correctly. If one bar is different to the final colour, it shows the presence of residual air in the steriliser, therefore an equipment malfunction. **We suggest retrying the test once again, before sending the equipment to technical service.** The visual result of the indicator can give you some indication of the specific reason for failure. See below for guidance.

Visual Result	Description
 BDS-Test STEAM	Sufficient temperature, time and steam penetration.
 BDS-Test STEAM	Insufficient air removal and steam penetration.
 BDS-Test STEAM	Temperature achieved, but no air removal and no steam penetration.
 BDS-Test STEAM	Insufficient temperature and no air removal and no steam penetration.

Note: A failure of the BDS test is not a conclusive proof that the fault is necessarily associated to the steriliser itself (insufficient air removal or leakages), but may well be due to external causes such as unpurged steam pipes at the start of the process, non-condensable gases in the external steam supply or changing temperature of the cooling water. Therefore Helix/BDS Tests made in subsequent cycles may show different results