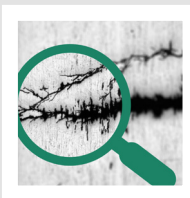


Take a **closer** look at your process line



## Leakage Test

- Validated method applicable for heat exchangers and pasteurizers
- Reduction of heat exchanger downtime
- Reduction of spare parts and maintenance costs
- Quality documentation



V - shaped leakage



Crack in plate

Bactoforce Leakage Test is an effective way to reduce the risk of cross contaminations while reducing maintenance and spare parts costs

With more than 2000 leakage tests performed per year, Bactoforce offers a unique know-how and experience. Advantages from using the Bactoforce Leakage Test include:

- **Validated method designed for the food industry:**

Liquid based method simulates production conditions without being vulnerable to air pockets or water film in the equipment. Internal and external leakages are detected and equipment is tested from both sides to ensure detection of V-shaped leakages.

- **Reduction of heat exchanger downtime:**

The inspection is performed without draining/drying or opening the equipment and potential leakages are located during the inspection process. Inspecting the heat exchanger without opening avoids potential harm to plates and need for re-sealing the plates.

- **Reduction of spare parts and maintenance costs:**

Preventive inspections can lead to increasing the time between changing plates in the heat exchanger and avoids exchanging non-defective plates.

- **Quality documentation:**

All inspections are documented and made available for relevant employees to ensure easy access for the purpose of internal and external audit requirement and analysis of equipment status.

# Procedure - Leakage Test

## Non-destructive test

The Leakage Test method simulates the production environment by using water as the carrier liquid.

Defects causing cross contaminations in the heat exchanger, between the product and energy side are located by pressuring traceable liquids through cracks and pinholes down to 5µm. If defects are located during the inspection, the method is able to localize defects in the heat exchanger within 5-20 plates.

Functions as documentation in your HACCP-plan, verifying that your equipment is in a safe condition.

## Content of the Bactoforce Leakage test

- Pressure test on both sides to identify defects causing cross contaminations inside the heat exchanger.
- Non-disassemble localization of defects in the heat exchanger.
- Visual inspection of accessible in- and outlets, to locate defect gaskets and residue.
- Visual inspection on the outer heat exchanger, to locate residue, indicating leakages in the heat exchanger.

# Other Bactoforce Services

## Heat exchanger/pasteurisers

- Leakage test
- Organic residue test
- Energy side cleaning
- Calibration
- Holding time test
- Holding tube measurement
- Diverter valve reaction time

## Tanks

- Tank integrity test
- Validation of new tanks
- Riboflavin test / CIP validation

## Sensors

- Temperature
- Flow (on-site /off-site inspection)
- Pressure
- Conductivity

## Pipes

- Hygiene inspection
- Welding control

# R-force - working with Bactoforce



REPORT. READ. REACT.

## Web-based reporting system

Bactoforce is using an on-line reporting system, R-Force, which allows our customers to have full access to current and historic inspection reports.

The system also gives a systematic overview of equipment, planned inspections and agreed inspection frequency.



Inspection overview

Report - on-Line available



www.bactoforce.com