**Tank Integrity Test** - Large tanks, silos and dryers

### closer look at your process line



# **Tank Integrity Test** - Large Vessels

- Applicable for large tanks, silos and spray dryers.
- Efficient and safe access.
- Monitor and manage hygienic condition of your production equipment.



Take a

**Bactoforce Tank Integrity Test and CIP Validation** are effective ways to reduce the risk of product contamination, monitor the hygienic condition and manage the lifetime of the vessel.



Rope Access

Performing inspections in large vessels in a safe and effective way requires special competences.

Bactoforce has many years of experience in performing inspections in tanks, silos and spray dryers of all sizes. Our inspection methods are developed for the food industry with fokus on minimizing downtime, while ensuring safety of people, product and production equipment.

### Advantages include:

### • Time efficient inspection and repair:

At Bactoforce, we recognize that when performing inspections, time is the essence. We ensure efficiency through structered planning and proven methods, tools and training. Inspections of large vessels can often be done in less than 1 day, including customer repair and Bactoforce validation.

### • Inspections designed for large vessels:

The inspections focuses on full surface of the tank/silo/dryer and consider cracks, residues and mechanical defects. Safety measures include risks related to working at height and in confined space. Bactoforce works in coordination with customer on-site repair teams and can also facilitate welders to make repairs at height.





# **Procedure** - Tank Integrity Test for Large Vessels

### Tank Integrity Test and safety

The Tank Integrity Test is a non-destructive test of microbiological risks in large tanks, silos, dryers, etc., and is an effective method to assess the hygienic condition of the entire surface.

The Tank Integrity Test is based on the combination of different non-destructive test methods and modified to inspections of large surfaces.

Inspection in large vessels requires tools, procedures and competence related to safe working in confined spaces and at height. Bactoforce can, in addition, facilitate safe access for repair work of defects.

### **Content of the Bactoforce Tank Integrity Test**

- Visual inspection with white light to locate mechanical defects in the equipment or instruments located in the inspected area.
- Visual inspection with UV-Light to locate residues and remaining product inside the equipment.
- Surface crack test by the use of penetrant on all surfaces and weldings to locate surface defects inside the equipment.
- Based on DS/ISO 3452-1:2013
- Reports includes classification of defects and recommendation for corrective actions.

## 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

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• Welding control



**R-force** - working with Bactoforce

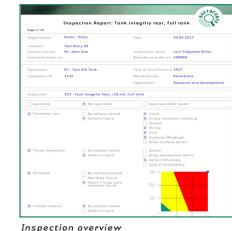
### Web-based reporting system

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

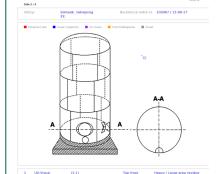
The system also gives a systematic overview of equipment, planned inspections and agreed inspection

frequency.









Report - on-line available

nspektion Rapport: Tank Integritets Test. 2m