

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



Bactoforce has a portfolio of inspection services customized for the food industry.

Let us together find an excellent solution.

**- Take a closer look!**



## Pleased to meet you

Would you like to reduce costs, prevent delays, and maintain your production installations in optimum condition?

Then look no further - we are here to identify and eliminate microbiological risks resulting from defects or residues in your production installations.

Our name is **Bactoforce**, pleased to meet you.

## 7000 inspections per year

Bactoforce has a long and successful track record of carrying out inspections of tanks, dryers, pasteurisers, heat exchangers, pipes and other installations for global companies within the food industry.

Bactoforce is the preferred supplier for a number of the leading food producers in Europe. More than 7000 inspections per year globally ensures that we have the necessary experience to successfully meet all your needs and comply with the most stringent criteria.

## Inspection planning

We would like to introduce you to the benefits of planned, preventive inspections:

- Time saving for maintenance and quality managers
- Management of equipment hygienic condition
- Reduced equipment downtime and maintenance
- Reduces risks related to product safety and quality



# Service overview

	Service concept, complete overview of the inspections we offer							
Service	Pasteurizer integrity test	Heat exchanger integrity test	Tank integrity test	Tank validation	Hygiene flow systems	Hygiene open systems	Weld inspections new installations	Sensor calibration
Leakage test	•	•						
Leakage localization	•	•						
Holding time test	•							
Holding tube validation	•							
Diverter valve response time	•							
Organic residue test	•	•			•			
Cleaning the energy side	•	•						
Calibration	•	•						•
Tank integrity/validation: also applicable to dryers, towers, cyclones, bag filters, and evaporators								
- Surface crack test			•	•				
- UV residue test			•			•		
- Visual inspection	•	•	•	•		•	•	
CIP validation/Riboflavin test				•				
Material roughness/thickness				•				
Endoscopy - weld inspection							•	
Endoscopy - hygiene					•			

☐ = combined service

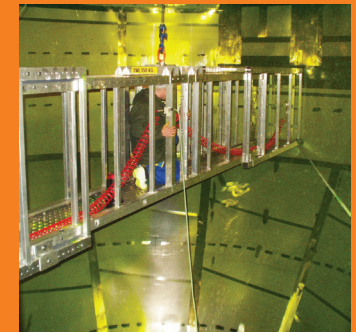
# Minimize risks and save time and money!

Our service	Explanation of the goal and implementation of our inspections
<b>Leakage test</b>	Controlling cross-contamination risks, best practice accurate liquid/liquid measurement of internal or external leakage without opening the installation
<b>Leakage localization</b>	Determining the position of the leak in a plate exchanger with an accuracy of approximately 30 plates without opening it
<b>Holding time, heat retention time</b>	Measuring the product holding time in the holding tube based on salt injections and conductivity measurements (US Army approved)
<b>Holding tube validation</b>	Documentation of the holding tube configuration
<b>Diverter valve response time</b>	Determining the response time of the diverter valve in case of under-pasteurization
<b>Organic residue test</b>	Determining organic residue in closed flow systems without opening it; Bactoforce developed this method on the basis of Total Organic Carbon analysis; validation of CIP and/or troubleshooting
<b>Cleaning the energy side (pasteurizer/exchanger)</b>	Accumulated sediment on energy exchange side reduces energy efficiency of installation; Bactoforce's temporary CIP cleans the installation for you
<b>Calibration</b>	Calibration of flow and temperature meters and sensors
<b>Tank integrity/validation: also applicable to dryers, towers, cyclones, bag filters, and evaporators</b>	
<b>Surface crack test</b>	Surface defects are potential growth sites for microorganisms. Dye-based, non-destructive analysis of mechanical surface defects such as cracks, tears, corrosion, pitting etc.
<b>UV residue test</b>	Organic residue test and inadequate hygiene due to insufficient cleaning; Bactoforce's special UV lamps make organic residues visible
<b>Visual inspection</b>	Visual inspection completes the integrity inspection; focus on contamination, quality of gaskets, defective mixing equipment, foreign objects etc.
<b>CIP validation/riboflavin test</b>	Does the CIP supply the inside of the object with sufficient CIP liquid over the entire surface? Validation of cleanability (riboflavin test)
<b>Material roughness/thickness</b>	Measurement of wall roughness and/or thickness in new or existing installations
<b>Endoscopy-based weld inspection</b>	Video-endoscopy inspection of weld quality
<b>Endoscopy/hygiene</b>	Video-endoscopy inspection for contamination, defective gaskets and valves etc.

Additional	
<b>Reporting</b>	Documentation with photos and descriptions in PDF format, accessible via R-force online database with historical inspection overviews and statistics
<b>Access equipment</b>	Bactoforce has a variety of access equipment for entering large tanks. Choice of application based on case-by-case evaluation considering safety, inspection time, physical conditions, etc.
<b>Safety</b>	Safety is a primary focus at Bactoforce. Our inspectors are trained to work in food production environments in general and in addition, trained to work in confined space and at height. We are certified according to local standards. (VCA, SCC)

## Safety first at Bactoforce

- Our inspections aim to ensure the safety of your products.
- We work in compliance with relevant safety standards.
- Safety risk management of all our activities and focus on product safety.





Established in 1993, Bactoforce is today the leading European supplier of inspections of processing equipment in the food industry.

**Take a closer look** at your production equipment - we would be happy to arrange for a meeting in the near future to see what we can do for you.

Explanation of opportunities/options, prices, efficient planning and grouping of inspections.

Taking stock of the installation and identifying your inspection wishes and requirements.

Working together, we draw up an inspection plan and a periodic inspection schedule.

Inspecting, monitoring, analysing, reporting and advising on a periodic basis.

Annual evaluation and review of inspection plan.

## About Bactoforce

Bactoforce specializes in locating microbiological risks that can result from defects or residue in production installations.

Building on more than 20 years of experience in food safety, we are now market leader in Europe for the inspection and validation of tanks, heat exchangers, pipes, spray towers, and other equipment and installations.

Involvement of Bactoforce in processing equipment is not limited to the hygienic condition of your installations in the operational phase.

We are also capable of providing input and thinking along with you in the design/purchase and production/commissioning of your installations, in particular when it comes to optimizing the hygienic design factors.

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