

FLEXLANCE TO PROTECT TANK CLEANING NOZZLE FOR A COOKIE MANUFACTURER

Industry: Food
Application: Tank Cleaning
Quantity: 1x FlexLance 735.XXX + 1x 5S3.189.1Y.AL per vessel
Duplicable: Yes



PROJECT GOAL

The team of Lechler France supported a well-known French cookie manufacturer. The factory features mixing vessels for dough, each measuring approximately 1.5 meters in diameter and 2 meters in height, equipped with agitators.

Following each production batch, a cleaning cycle is necessary to eliminate any residual product, a task that is typically handled by tank cleaning nozzle.



CHALLENGE

The cookie manufacturer operates Lechler XactClean nozzles series 5S3.189.1Y.AS at a pressure of 5 bar. These nozzles are fixed within the dough vessel, **but their rotation can be affected by the ingredients used during mixing, especially fine flour particles.** As a result, it became essential to monitor the functionality of the nozzles and, when necessary, clean or replace them. This approach proved to be unsustainable, prompting the search for a more effective solution, which was requested and found.



SOLUTION

Lechler has introduced a retractable lance called FlexLance. This system has a pneumatic cylinder that enables the nozzle to be lowered into the dough mixer for cleaning and then retracted afterward. The length of the cylinder is adjustable, ensuring optimal positioning for effective cleaning within the mixer. Additionally, it allows for the control of one or more nozzle positions as required.



BENEFITS

With the FlexLance, the nozzle is significantly better protected, eliminating the need for intensive cleaning or replacement. This enhances productivity, increases process reliability, and conserves resources. The first lance has been in operation for four years without any issues. Since then, additional vessels have been equipped with the same solution, and the customer continues to retrofit more units.



Cleaning lance FlexLance

Features:

- Stroke length: up to 2,700 mm
- Process-side components are food-compliant
- Tank cleaning nozzle connection by means of EN 10226 R 3/4 thread
- Driven pneumatic rodless cylinder
- Position monitoring possible (optional)
- Sealed by rod seal on process side
- Process-side flange EN 1092-1 DN 100 PN 16

