



THE  
**SPRAY NOZZLE**  
PEOPLE

# Case Study

## ROAD TANKERS CLEANING SOLUTION



The Food Hygiene Regulations (2006) place an obligation on all food businesses to make sure that their activities are carried out hygienically, making it 'an offence to supply food which is unsafe to be consumed and harmful to human health'. Food businesses are defined as those involved in any process to do with preparing or selling food and thus include transport companies. Ensuring road tankers carrying food products are scrupulously clean and comply with regulations is therefore of paramount importance.

### ► PROBLEM:

The transportation of foodstuffs in liquid or powder form by road tanker requires that tankers are washed to a very high standard. Abbey Logistics, one of the UK's leading logistics services providers was overhauling its Hull-based food-grade tank wash bay which provides tank washing services for its own fleet and third-party hauliers. In addition to installing new boilers and water softeners, the company was seeking a new cleaning head system for the internal washing of the tankers which would "exceed legal compliance and all customer requirements" while reducing water and energy consumption.

### ► SITUATION:

The containers were 2 x 4m and there was 6 bar pressure available. Abbey Logistics had previously used a cleaning head with exposed gearing which would become clogged due to the hard water in the area and which was not able to deliver thorough enough cleaning of some food residues, the toughest of which was the coating left by chocolate known as 'chocolate liquor'. While the hard water issue was to be solved by the water softening system, the company had been unable to solve the 'chocolate liquor' test. One cleaning head they tried failed to remove the liquor and, in addition, was too lightweight and rocked back and forth in the container.





Orbitor 4

## WHY CHOOSE SNP FOR YOUR CIP NEEDS?

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## The Solution

SNP engineers recommended the use of the Orbitor 4 rotary spray nozzle, a hygienic, self cleaning, self lubricating and highly versatile tank washing machine capable of cleaning tough residues in tanks from 2 - 26 metres in diameter.

The Orbitor 4 is typically used in food processing, beverage, pharmaceutical and chemical tank cleaning applications making it ideal for the food tanker cleaning application.

The 4.2mm model with a 360° clean pattern was trialled against the other product and produced far superior results in the tough chocolate liquor test. Abbey installed two Orbitors in each of its two cleaning bays. On a site visit, SNP engineers were surprised to discover the Orbitors were being run at 2-3 bar pressure and achieving excellent results.

"Our goal was to set the standard for food grade tank washes in terms of reliability, quality and environmental efficiency and I think what we have achieved in Hull does that," said Adam Copping, Abbey's Technical and Quality Manager.

### ► CHALLENGES

- Ability to clean the toughest food residues
- Reduction of energy & water consumption
- Hygienic solution for food grade cleaning
- Robust for heavy handling and usage

### ► THE PRODUCT

#### **Orbitor 4**

- 4 nozzle rotary jet head
- 360° clean pattern
- 316ss
- Jet lengths up to 13m
- Flow rates between 80-458 l/m
- Cycle times between 5.5-20 minutes
- ATEX options available



Orbitor 4  
Side view

### ► ADVANTAGES

- Powerful jets to clean even chocolate liquor residue
- Energy and water efficient
- Food grade 316 stainless steel
- Self-cleaning and easy to maintain