



THE
SPRAY NOZZLE
PEOPLE

Case Study

Tank Wash

FIRE WATER STORAGE SOLUTION

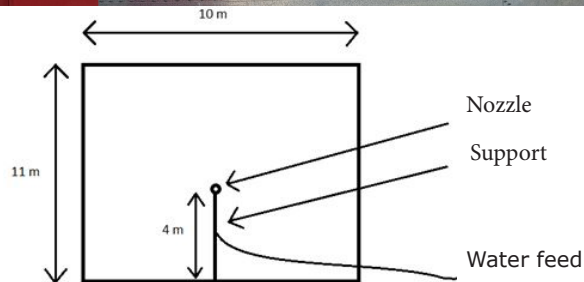
Companies need different things from their CIP systems. Some applications may need a vigorous, high impact clean for tough residues while others need a softer dwell time on surfaces to allow cleaning chemicals to work. Other applications may just require a rinse. Throw into the equation a large tank and a desire to reduce water consumption and a tailored solution is needed.

▶ THE PROBLEM

A fire services provider contacted SNP to see if an automated cleaning system could be designed for their fire water storage tanks. Light residues had built up inside the tanks but manual spray cleaning was not proving sufficient to remove them, meaning the water inside could become stagnant and unsafe to use. The company was concerned that the cleaning action was not too rigorous due to the thin metal construction of the tanks. The tanks, with a diameter of 10m and a height of 11m, also needed a cleaning system with a long reach but which did not consume a huge amount of water and which could work at the 4 bar pressure available.

▶ THE SOLUTION

SNP dismissed the use of spray balls as, while these would provide the required light clean, a number would be required in each tank and would consume too much water. We proposed using one Orbitor Compact rotary jet nozzle, mounted on a 4m high support fixed to the bottom of each tank. This would provide the reach needed but without too high an impact. The client was reassured that stability was not an issue because the precision engineering of the Orbitor devices meant that each jet was perfectly counterbalanced, so there was no wobbling of the support pole.



▶ CHALLENGES

- Tank material not very robust
- Stable solution needed as supported on a pole
- Long reach needed but at low impact

▶ THE PRODUCT

- Orbitor Compact rotary jet
- 4x4mm
- 360° wash pattern
- 316 stainless steel
- operating at 100l/min at 4 bars

