

Case Study

SOLVING REMOVAL OF DIFFICULT RESIDUE
BUILD-UP IN WATER STORAGE TANKS
FIRE PROTECTION INDUSTRY

TANK CLEANING SOLUTION



Tank cleaning applications have different requirements, including a variety of tank sizes and soils to remove. Manual cleaning is typical, but automated processes with a specialized spray device have proven successful. Selecting the proper tank cleaning nozzle for your application will give you the best results.

► PROBLEM: RESIDUE BUILD-UP INSIDE WATER STORAGE TANKS

|||||

A fire services provider contacted BETE to inquire about an automated tank cleaning solution for their fire water storage tanks. Over time, residue had built up inside the tank walls, and manual cleaning with power washers was not providing satisfactory cleaning results.

The tanks were large and measured 10m diameter x 11m high, which required a spray device that could reach these distances. Because the tank's wall was thin, spray devices with too much power could cause damage. The available pressure was only 58 psi, and water consumption was also a concern.



► SOLUTION: THE BETE HYDROWHIRL[®] ORBITOR

|||||

After reviewing all the criteria and considerations, BETE recommended the HydroWhirl Orbitor (HWO) rotary tank cleaning nozzle for this application. The HWO runs on low pressures of 45psi while consuming only 32 gpm. The four-nozzle configuration rotates on two axis points, ensuring that every surface area of the tank is touched.

Since these were substantial storage tanks, engineers proposed mounting the HydroWhirl Orbitor on a 13ft pole fixture. This positioning provided the spray distance needed for cleaning and offered just enough impact to avoid damaging the tank walls.

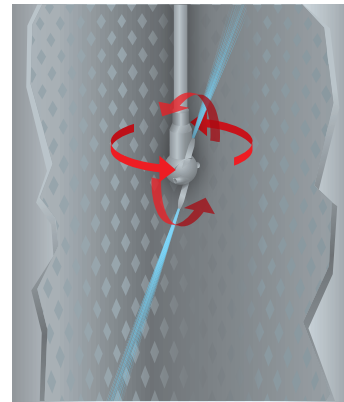
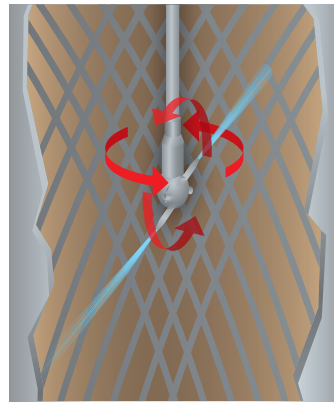




Results

There are many benefits to automating your tank cleaning process. It is much safer than manual cleaning, which puts workers at risk for injury. Automated tank cleaning results are precise – unlike manual cleaning, which can be inconsistent. Rotational tank cleaning devices require less time for cleaning and consume less water in the process.

The HydroWhirl Orbitor is proven to be successful for many tank cleaning applications, and by automating your cleaning process, you will gain measurable returns on your investment.



ADVANTAGES OF THE BETE HYDROWHIRL ORBITOR®

- High impact jets, orbital wash
- Self-cleaning, self-lubricating
- 360° wash pattern
- Minimal moving parts, easy maintenance
- Operates on low pressures 45 to 145 psi
- Low flow rates of 21.5 to 160 gpm
- Removes difficult soils
- Reduces water consumption and cleaning cycle times



WHY CHOOSE BETE FOR YOUR TANK WASHING NEEDS?

- ISO 9001:2015 Certified
- The ability to solve unique and complex process challenges
- Trusted nozzle design and manufacturing with consistent quality assurance

With over 70 years of experience designing and manufacturing nozzles and spraying systems, BETE is a trusted provider of spray technology.

50 Greenfield Street,
Greenfield, MA 01301 USA

800-235-0049
413-772-0846

www.BETE.com
sales@BETE.com