



Case Study

SOLVING TANK CLEANING ISSUES IN
FERMENTATION TANKS

BEVERAGE PROCESSING INDUSTRY

TANK WASHING SOLUTION



Even with a preliminary rinse before the cleaning process, leftover grape debris in the fermentation tanks such as seeds, stems, and skins remain.

► PROBLEM: SEEDS, STEMS, AND SKINS CAN CAUSE TANK WASHING NOZZLES TO SEIZE OR CLOG

A premier winery in Napa Valley contacted BETE to help improve their tank cleaning process.

They had tried both rotating tank wash machines and traditional static spray balls, but they weren't satisfied with either option. Even with a preliminary rinse before the cleaning process, leftover grape debris in the fermentation tanks such as seeds, stems, and skins had a habit of finding its way into the nozzles during recirculation cleaning cycles – causing the nozzles not to perform.



► SOLUTION: THE BETE HYDROCLAW®

BETE engineers went to work to develop a solution for this problem that plagues not only the winemaking industry but also brewing, food processing, and many other applications that involve cleaning tanks with high solids content. The new HydroClaw nozzle provides complete 360 degree spray coverage and three times the free passage of a static sprayball. The nozzle has no moving parts and requires no maintenance.





Results

Spray ball frustrations:

- Clogging
- Extended maintenance time
- Poor cleaning results
- Excessive water consumption

Particulates in the fermentation tank can get caught in the gears of rotational tank washing nozzles, which causes the units to seize. On the other hand, Static spray balls have no moving parts but feature many small orifices prone to plugging, resulting in incomplete coverage. With both options, the amount of maintenance time required to keep the nozzles in proper working condition was unacceptable.

After trialing the unit, the customer was so pleased with the cleaning performance and clog resistance of the HydroClaw that they used it exclusively to clean their tanks during the busy harvest crush season. This is the time when the fermentation tanks experience their highest levels of solids. Over the course of several months, **not a single clogging issue** was experienced. Additionally, the high flow rate of the HydroClaw allowed the customer to adequately pre-rinse their tanks using quick and powerful blasts of water, thus **reducing their overall water consumption** compared to a lower flowing nozzle operating for a longer period of time.

ADVANTAGES OF THE BETE HYDROCLAW®

- 3x the free passage of static spray ball
- 360° coverage with no moving parts
- High flow rate provides vigorous rinsing action to quickly flush tank solids and contamination
- Sanitary finish for food and beverage applications
- Saves you time and money



WHY CHOOSE BETE FOR YOUR FOOD INDUSTRY SPRAY NEEDS?

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

Top food processing companies depend on BETE's specialized spray technology for everything from precision coating applications to cleaning tanks.