



THE
SPRAY NOZZLE
PEOPLE

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Case Study

SOLVING CLOGGING FROM
SEEDS & SKINS



WINE PRODUCTION TANK WASHING SOLUTION

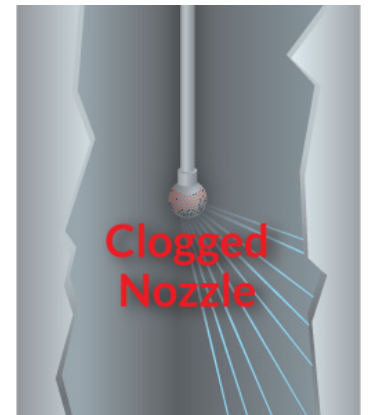
Seeds, skins, pulp, stems, and grains in a recirculated water system can cause blockage in many tank washing nozzle designs, inhibiting their ability to work correctly. Cleaning tanks and maintaining a sanitary environment is essential to success in food processing and beverage industries. Problems within these systems lead to loss of time, money, and resources – an unacceptable situation.

► PROBLEM: CLOGGING WITH RECIRCULATED WATER

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 completely 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.

► SOLUTION: THE BETE HYDROCLAW[®]

BETE engineers went to work to develop a solution to this issue 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 result was the new HydroClaw[™] nozzle with a full 360 degree spray pattern, three times the free passage of a comparable static spray ball, and no moving parts to jam.





WHY CHOOSE BETE FOR YOUR FOOD INDUSTRY NOZZLE NEEDS?

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

With BETE you get our world-class customer support from a nozzle industry pioneer who has been creatively solving problems for over 65 years.



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Results

Direct from the customer:

"I have some very, very good news for you. We are smack in the middle of peak harvesting right now, and the winery is cranking full-blast. Did our first hard-trial test on the HydroClaw today, and.....I can't stop smiling. We threw that thing into a tank post-ferment without any pre-rinsing whatsoever (had probably 3 gallons of grapes, yeast, garbage in there), and did a sequence on one of our 2-ton tanks and it is absolutely sparkling clean."

CHALLENGES WITH OTHER TANK WASHING NOZZLES

- Small holes and moving parts lead to clogging
- Nozzle blockage leads to unclean tanks, and more maintenance downtime becomes costly
- The expense of high water consumption from extra wash cycles and the inability to use recycled water effectively

The HydroClaw® was explicitly designed to offer a tank washing innovation for wineries – allowing grape seeds and skins to pass through the nozzle. This design feature makes it the perfect nozzle for other food processing applications. It is being used in the following tank cleaning processes.

BEER MAKING
JUICE PRODUCTION
JAM MAKING
TOMATO PROCESSING

ADVANTAGES OF THE BETE HYDROCLAW®

- Nozzle designed to let particulates and sediment flow through with no clogging
- Clog resistance and low maintenance = reduced downtime and more economical water usage
- 316L stainless steel construction means it is perfect for clean-in-place (CIP) and food grade applications
- Complete 360-degree coverage