



# Case Study

SOLVING CLEANING ISSUES FOR  
DIFFICULT SUBSTANCES

CHEMICAL PROCESSING

## TANK CLEANING SOLUTION



Adhesives and other harsh chemicals can be difficult to remove from tanks and may cause clogging in spray nozzles and tank cleaning machines.

### ► PROBLEM: ADHESIVES CLOGGING NOZZLES



A chemical processing plant specializing in making adhesives contacted BETE for a better tank cleaning solution. They were using a spiral nozzle, which could not effectively remove the gluey substance from the tank wall's surfaces.

They considered using rotational spray nozzles or static spray balls. Their biggest concern is that the new spray device cannot clog during the wash cycle's recirculation.



### ► SOLUTION: THE BETE HYDROCLAW®



The Chemical Processing plant's systems designer inquired about the HydroClaw but wanted to know if this would be the right solution for their tank cleaning application.

After assessing their vessels' dimensions and available flow and pressure from their pumps, BETE's tank cleaning experts recommended the HydroClaw. For this type of application, the cleaning solvent's viscosity increases as it comes in contact with the adhesive. The viscous substance will cause rotational spray nozzles and static spray balls to clog. BETE designed the HydroClaw to handle applications where viscosity can become an issue.







# Results

By replacing their existing spray nozzle with BETE's HydroClaw, the customer is now experiencing effective cleaning results. The nozzle has not caused any clogging issues, where other tank cleaning spray technology would. Due to a reduction in the cleaning cycle times, there is lower consumption of solvents and water and increased production time.

BETE offers a full range of spray nozzles for tank washing, each uniquely designed to handle applications with specific requirements. For this particular application, the HydroClaw is the perfect tank cleaning solution.

## 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

## ADVANTAGES OF THE BETE HYDROCLAW®

- Nozzle design allows particulates and sediment to flow through and self-flush
- Clog resistance and low maintenance = reduced downtime and more economical water usage
- 316L stainless steel construction means it is ideal for clean-in-place (CIP) and food grade applications
- Complete 360° coverage



## 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

BETE is an innovative global leader, developing and manufacturing specialized spray technology solutions.

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