

1500kgs Pounds of Tomato Unloaded in Less Than 10 Minutes

You are standing next to another **1000 Litres tote** of tomato paste. It is going to take 2 of your employees all day to unload the material so you can begin cooking. Market demand is going up and orders are starting to fall behind. You have a huge bottleneck. You need a solution.

A BETTER WAY

Food Service Specialties had the same problem. Based in Red Wing, Minnesota, FSS produces custom tomato and dairy based sauces for private label. They needed a way to fulfill the increasing orders from their downstream restaurant, frozen food, and retail grocer partners.

25 years ago, throughput shot through the roof. Two, 2-piston pump Graco unloading systems were installed. **These systems cut evacuation times to 20 minutes per 1000 Litres tote.** 36,000kgs of tomato products were unloaded daily. How long is it taking to manually scoop product out and what about the labor costs on that? Food Service Specialties has one employee with a forklift moving product in, setting the system up, unloading, and removing the empty totes. *Pure efficiency.*

Over time those 25 year-old Senator piston pumps began to break down. To fix the increasing maintenance burden, Anderson Dahlen, manufacturing solutions provider, upgraded the systems to the **Graco SaniForce 2.0 Bin Evacuation System (BES).**



SaniForce Bin Evacuation System with four piston pumps unloading tomato paste

Application Details

- Material: Tomato Paste/Crushed Tomato
- Flow Rate: 35 gpm
- Discharge Distance: Up to 40 Feet
- Hose Diameter: 4 inches
- Material Temperature: 40° F to ambient





1,500 kgs of tomato paste unloaded in less than 10 minutes



Graco fluid handling experts increasing operational efficiency

PRODUCT EVACUATION, IMPROVED.

Anderson Dahlen installed two 4-piston pump bin evacuation systems with electronic PLCs. These new systems cut unloading time by more than half, **evacuating 1,500 kgs pounds of tomato product in less than 10 minutes.** Food Service Specialties is unloading 26 totes per day doubling their production to **45,000 kgs** *per day*.

Process equipment integrator, Spec Engineering, further reduced unloading time. An additional I/O panel was installed to tie into the Graco BES operator control station. This allowed for reduced unloading times and seamless integration into the customer's existing Clean-In-Place (CIP) regimen.

EFFICIENT CLEAN-IN-PLACE

Further process improvements were seen in cleaning the systems. The SaniForce 2.0 product line was designed to make the cleaning process easy. It used to take five hours for one worker to clean the four Senator piston pumps. Cleaning time is now 3 hours, even after adding 4 more pumps.

Andy Ahern, Food Service Specialties Plant Manager, said this when asked what made the SaniForce Bin Evacuation System stand out from other options: *"Graco Piston Pumps move tomato paste the best, we beat the hell out of the pumps and they work awesome."*