

# Micro Motion® Coriolis Flowmeters Give Competitive Advantage to Fertilizer Terminal

## RESULTS

- Micro Motion® meters provided twice the ROI of scale technologies
- Lowered maintenance costs
- Improved customer service by reducing wait times for filling



## APPLICATION

A terminal dispenses liquid fertilizer to independently operated tanker trucks for distribution. The demand for the fertilizer is seasonal, so there is a limited time in which demand is high – a 75-day spring season and a 45-day autumn season. To bill the truck operators, the terminal uses a single truck scale.

Each truck was filled with 50,000 pounds of fertilizer, and the terminal was capable of filling six trucks per hour. Therefore, in an 8-hour day, the terminal was capable of dispensing 2.4 million pounds of fertilizer. Figured at \$20 per ton, over 120 days per year, that amounts to \$2.88 million per year in revenue.

## CHALLENGE

In order to increase revenue, the terminal needed to find a way to fill more trucks. The bottleneck in the current application was the single truck scale.

One possible change would be to add a second truck scale. That would double the terminal's revenue to \$5.76 million per year. The investment cost for a new scale is approximately \$44,000.

A second option was to install Micro Motion Coriolis flowmeters, which are traceable and approved by government agencies for custody transfer. The question was whether Micro Motion meters can deliver a better return on investment than the truck scale.

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## SOLUTION

The terminal was able to acquire five Micro Motion Coriolis meters at a total cost of approximately \$42,000. This meant that five trucks could be filled simultaneously. Since each station was capable of loading, on average, 4.3 trucks per hour, the result was that 21.5 trucks per hour could be filled – a substantial increase over the 12 trucks per hour possible with the two-scale approach. The total revenue generated using 5 Micro Motion Coriolis meters was therefore \$10.3 million per year, not including the revenue that continued to be generated from the existing truck scale.

The Micro Motion Coriolis meters demonstrated a return on investment that was much better than what could be achieved with a second truck scale. The Micro Motion meters paid for themselves twice as quickly as the truck scale would have. In addition, the terminal saw lower maintenance costs, and the data generated by the Micro Motion meters allowed the terminal to streamline its reporting (e.g., mass balance, accounts receivable, demand profiles).

Since truck drivers did not have to waste valuable time waiting in line to load at this terminal (which was costing them money in lost productivity), the terminal gained a strong competitive advantage over other terminal owners in the area. The Micro Motion metering solution directly affected the terminal's bottom line and improved its competitive position.

