

INDUSTRIAL PUMPS

Featuring Wilden® Pro-Flo® SHIFT and Chem-Fuse Case Studies





Looking For Good Reasons to Switch to Pro-Flo SHIFT AODD Pumps?

See how these manufacturers solved their capacity, safety, and cost challenges with Wilden's game-changing mechanical actuation technology. Does your manufacturing process involve aggressive fluids? Chem-Fuse diaphragms may be the key to solving your toughest temperature, abrasion resistance, or caustic fluid challenges.



60% Savings in Air Consumption



50% Reduced Operating Costs



Mechanical Actuation Advantage

(Okay for flammable/ explosive liquids)



Total Product ContainmentBolted Configuration



Maximized Flow RatesFriction-Reducing Liquid Path

SOLVENT MANUFACTURER, INDOCHEM

Challenges: IndoChem needed to optimize the loading times, energy efficiency and product containment of its solvent-handling pumps. The time needed to fill one 45,000-liter holding tank had approached an unacceptable 7 hours. The capacity of their air compressor unit had been maxed out. Most importantly, the solvents were highly flammable and could self-spark, so it was imperative to contain them adequately. Furthermore, the diaphragms on their old pumps were not holding up and it was wasting manpower to work on them.

Goal: Save air, even though they were adding pumps and getting more pumping capacity, and operate within their existing footprint.

Why It Worked: Pro-Flo SHIFT AODD Pumps delivered enhanced loading times with leak-free operation and optimized air consumption. The mechanically actuated Pro-Flo SHIFT ADS restricts air flow into the air chamber near the end of each pump stroke through the incorporation of an air control spool that automatically meters the air to prevent overfilling with no corresponding reduction in product yield.









METAL TANK MANUFACTURER, AMTROL

Challenges: As part of its manufacturing process, AMTROL needs to properly process its waste. This begins by collecting metal particulates to separate oils and neutralize caustic components. AODD pumps then transfer the resulting sludge for final processing by filter presses, which separate the 'sludge cakes' from clean water. Overall, the filter presses process up to 9,600 gallons of waste sludge per day and produce over 100 tons of sludge cakes each year; however, the older AODD technology was a limiting factor in realizing the filter presses' full potential.

Goal: Upgrade to technology that could leverage, not hinder, their new filter presses and expand their waste-processing capacity without adding more equipment.

Why It Worked: By replacing aging technology with new Wilden Pro-Flo SHIFT ADS, AMTROL eliminated reliability issues, decreased pump maintenance, reduced water processing operating costs by 60%, and improved pump productivity by 40%.

PAINT & COATINGS, DUNN-EDWARDS

Challenges: Producing high-quality paints and coatings requires efficient and safe equipment that can handle abrasive fluids. This is especially true for latex, a complex emulsion consisting of polymer microparticles. When additives are injected into latex—such as color, reflectivity, and antibacterial properties—they are extremely abrasive and cause elastomer wear that leads to regular and extensive pump maintenance. This affects downtime and operational performance.

Goal: Even though Dunn-Edwards was happy with its existing Wilden AODD pumps, the diaphragms still had to be replaced every 6-8 months—due to the aggressive nature of latex. It was time to test Wilden's Chem-Fuse Integral Piston Diaphragms.

Why It Worked: The one-piece, zero-adhesive design of Chem-Fuse is engineered to hold up against acids, caustics, and other aggressive fluids, like latex. The one-piece design eliminates the need for an outer piston (a common leak point that creates a trap area for product buildup that can wear over time). The test pumps exceeded one year of operation (8 hours a day, 5 days a week)!







Finding the Right Pumping Technology Has Never Been More Important

With increasing energy costs and the sustainable-manufacturing movement rapidly gaining momentum, Wilden Pro-Flo SHIFT pumps offer a proven AODD pump technology that can ease energy consumption and contribute to a more sustainable manufacturing process. With documented reductions in air consumption and simultaneous improvements in flow rates, Wilden Pro-Flo SHIFT Series AODD Pumps deserve a spot as a first-choice pumping solution for many of the world's most significant manufacturing operations.

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