ARO[°]

CASE STUDY ARO® PD30P Diaphragm Pump

Pumping Efficiency into Logistics Operations. ARO[®] Accelerates Client's Loading Processes

Logistics processes are playing an increasingly important role in business endeavors of all kinds. At a time when the development of transport infrastructure is making distances shrink and customers expect to have their orders delivered to them within hours or days, rather than weeks, ensuring efficiency within your supply chain is the true key to success.

The ability to swiftly transfer goods into and out of your place of operation – be it a construction site, a warehouse or a production facility – can directly affect your business results. Very often, even a seemingly minor improvement in this regard will make a major difference. This is exactly the experience of one prominent chemicals manufacturer with over 70 years of market experience. Last year, they looks for opportunities to streamline the workflow at its Brazilian factory in São Paulo

Priming the Pump

The manufacturer produces a biocide designed for the pulp and paper industry, as well as offers chemical solutions for the industrial water treatment and leather sectors. Its liquid products are pumped from a tank located on the São Paulo site to trucks and then distributed to end users across Brazil. A discussion about the truck loading and unloading process with a representative of ARO[®], a part of the Ingersoll Rand, prompted an improved opportunity of how the operation should be carried out.

The chemicals producer came to the conclusion that the time to load the final product into delivery trucks needed to be significantly decreased. The company was not satisfied with the progressive cavity



ARO EXP 3" non-metallic pump is well suited to transfer chemicals efficiently.

pump (PCP) that it was using for that purpose at the time and was ready to replace it with a more efficient model. The engineers at ARO[®], a long-term business partner of the client which had long been using ARO[®] pumps for some of its other processes, suggested their EXP 3" non-metallic pump is well suited to transferring chemicals efficiently.

The 3" Non-Metallic diaphragm pump, coded PD30P, is the perfect solution for chemical companies as it can deal with a whole range of aggressive substances. The PD30P model can transfer up to 285 gpm (1079 l/min) of fluid with

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no risk of damaging the product. As such, it is very useful for processes demanding a high flow within a short period of time, as well as for dealing with high-viscosity products like the ones manufactured by our client.

Seeing the Benefits

The implementation of ARO's solution immediately resulted in a marked improvement in the factory's performance. The company is now capable of loading a 30-ton truck within two hours, which means an average efficiency of almost fifteen tons per hour. "The pump which we previously used needed eight to nine hours to transfer the product. Now,

we can transfer the same amount of product in just 2 hours," said an automation and project engineer from the client's Latin American division.

The new pump has been in operation for several months now without causing the client any problems. Thanks to this investment, our client has been able to optimize its production flow as the storage tank from which the company's products are pumped into trucks and is **emptied 4 times faster**. Crucially, the manufacturer

ARO[®] EXP 3" Non-Metallic pump reduced chemical transfer process from 9 hours to 2 hours!

can now offer a faster service to its customers thus gaining a competitive edge over rival producers. Last but not least, the shorter time that trucks need to spend on the factory's grounds means a substantial reduction in costs.

> By making use of ARO's technology this manufacturer of chemicals has ensured that its processes are now more efficient and cheaper than before. The company is already seeing the benefits of its decision, which will arguably be even more visible in the years to come as the demand for industrial output continues to grow.



A Simple Solution to a Complex Challenge



- 3-Inch Non-metallic Air Operated Diaphragm Pump
- EXP Total Cost of Ownership (TCO) Best TCO of all major competitive models tested
- EXP Reliability Lube free patented differential valve both on major air valve and SimulShift (Pilot Valve) provides reliable worry free operation
- EXP Serviceability Modular construction, reduced parts count and simple to use repair kits will minimize repair time and cost
- EXP Control & Monitoring "Process Ready" Electronic interface capability assures consistent flow rates and pinpoint control. End of stroke feedback (EOS), leak detection and solenoid actuation
- EXP Productivity Maximized flow rates with minimized pulsation and air consumption = Maximum Performance

ARO[®] Makes Success Flow

ARO[®] is a leading worldwide manufacturer of fluid handling products expertly engineered to deliver performance and serviceability, enabling customers to achieve the best total cost of ownership. For over 90 years ARO[®] has been helping customers solve their most complex fluid handling challenges to keep their business moving. For more information about ARO[®], visit www.AROzone.com.

