

ENHANCING EFFICIENCY AND SAFETY IN THE LATEX INDUSTRY WITH

COGNITO™ EODD PUMP

OVERVIEW OF THE LATEX INDUSTRY

The latex industry is a critical sector, providing essential materials for various applications, including medical supplies, consumer goods, and industrial products. Efficient and reliable transfer of latex using industrial pumps is crucial to maintain high production standards and minimize operational costs.



CUSTOMER APPLICATION

A leading latex manufacturer was utilizing pneumatic pumps for their latex transfer processes. Despite the widespread use of pneumatic pumps, the customer faced significant operational challenges, which necessitated a shift to more advanced pumping technology.

CUSTOMER PAIN POINTS WITH PNEUMATIC PUMPS



Higher Energy Costs

The pneumatic pumps consumed a substantial amount of energy, leading to increased operational expenses.



High Maintenance Costs

The pneumatic pumps consumed a substantial amount of energy, leading to increased operational expenses.



Lack of Safety Features

Inadequate safety measures led to undetected leakages from diaphragm ruptures, resulting in significant safety hazards and operational disruptions.

PROCESS DETAILS

Fluid Latex	Flow Rate 156 LPM	Discharge Pressure 3 barg	Viscosity < 500 Cp	Specific Gravity 1.2
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THE SHIFT TO COGNITO™ EODD PUMPS

Cognito approached the customer with a comprehensive solution, introducing the Cognito Electrically Operated Diaphragm (EODD) pump.

Unlike the pneumatic pumps, the EODD pumps consumes less energy due to its electric operation. The EODD pump is equipped with advanced safety features that detect and address leakages promptly, preventing prolonged operational disruption.

Unique patented diaphragm, Seal-less design & the unique "Stopper Cage Design" exceptional durability extend the lifespan of critical components by 2 to 3 times apart from the significant energy savings.

The unique features and significant energy-saving potential of the EODD pump convinced the customer to trial several units in their latex transfer application.



CUSTOMER EXPERIENCE

After replacing the pneumatic pumps with Cognito™ EODD pumps, the customer experienced several notable benefits:

- Phenomenal energy savings (approx. 75% +)
- Reduced maintenance cost (approx.. 80%)
- Improved safety mechanism
- Achieved ROI within 1 year
- Improved total cost of ownership



Energy consumption	Pneumatic pumps	Cognito™ EODD Pump
No. of Working Hours/ Day	10 hr/day	10 hr/day
Energy Consume at Duty Point (estimated)	9.9 KW	1.2 KW
Electricity Consumption/ Month	2965 kWh	360 kWh
Total Electricity Consumption / Year	35584 kWh	4320 kWh

Maintenance	Pneumatic pumps	Cognito™ EODD Pump
Total Maintenance cost per year per pump	Consumption of minimum 3 sets of Diaphragms & Air valve assembly in a year	Operated smoothly with very minimum maintenance and zero downtime, resulting in efficient operations

The transition to Cognito™ EODD pumps has proven to be a game-changer for the customer in the latex industry. By addressing critical pain points related to energy consumption, safety, and maintenance, Cognito has provided a solution that not only meets but exceeds the customer's expectations. This case study highlights the tangible benefits and superior performance of Cognito™ EODD pumps, making them an ideal choice for businesses seeking efficiency, safety, and cost-effectiveness in their operations.