

Global Automotive Leader Cuts Energy Use by 88% with Cognito EODD Pump

In automotive manufacturing, efficiency and safety are paramount. One of the world's largest manufacturers of essential automotive components, with facilities in about 25 countries, faced a significant challenge at its plants. A dusting slurry transfer application was fraught with frequent failures and safety risks.

Why Dusting Slurry Poses Pumping Challenges

Dusting slurry is a challenging fluid due to its abrasive properties and high specific gravity. It demands robust pumps that can withstand wear and tear while maintaining consistent performance. Effective recirculation of dusting slurry is crucial to avoid process interruptions and ensure smooth, efficient operations.

Discovering the Customer's Need

Running 24 hours per day for 312 days per year, the plant's operations consumed a staggering 48,878 kWh of energy annually. The inefficiency of their pumps led to high energy costs, frequent diaphragm and flap failures, and substantial maintenance expenses. The lack of safety features further compounded the operational risks.

The customer required a robust and reliable pump capable of handling the abrasive nature of dusting slurry while minimizing maintenance time and costs. They also sought enhanced safety features. Our business development team in India not only provided a solution that met these needs but also demonstrated how it could save energy and deliver a quicker return on investment.

The Right Solution

The EODD pump's efficiency was evident in its energy consumption. While the pneumatic pump consumed 5.2 kW, the EODD pump required only 0.6 kW. This translated to a dramatic reduction in electricity consumption from 31,332 kWh per year to just 3,600 kWh.



Customer Benefits

The customer was extremely satisfied, saying the switch to Cognito's EODD pumps was transformative. Key benefits included:

- ✓ **Energy savings:** Operational energy costs were drastically reduced.
- ✓ **Reduced maintenance costs:** Minimal component failures and downtime.
- ✓ **Better safety features:** Enhanced operational safety.
- ✓ **Improved ROI:** Quicker return on investment due to reduced costs.

Proven Performance Leads to Repeat Business

The implementation of Cognito's EODD pump revolutionized the customer's dusting slurry transfer process. By exceeding expectations, Cognito has not only earned significant repeat orders from the customer across India but has also leveraged this success to gain traction with a similar company in the industry.



Before



After

Competitive Analysis

- Fluid name: Dusting slurry
- Flow rate: 160 LPM
- Discharge pressure: 1.5 barg
- Viscosity: 500 cP
- Solid particle size: less than 1mm
- Temperature: Ambient
- Specific gravity: 1.3

Energy Consumption	Pneumatic Pump	Cognito EODD Pump
Number of working hours (312 days/year)	24 hours/day	24 hours/day
Energy consumed at duty point (estimated)	6.5 kW	2.0 kW
Total electricity consumption/year	48,878 kWh	14,976 kWh