

Discover how one of the top paint companies in India was able to improve the energy efficiency & achieve trouble-free production line with minimal unplanned maintenance using

COGNITO™ EODD PUMP



THE NEED

Customer had hard time finding an appropriate pump for their final paint filling application from their thinning tank to the storage tank.



Their existing traditional AODD & single screw pumps (PC Pumps) were proving to be highly inefficient in terms of energy efficiency & maintenance cost.

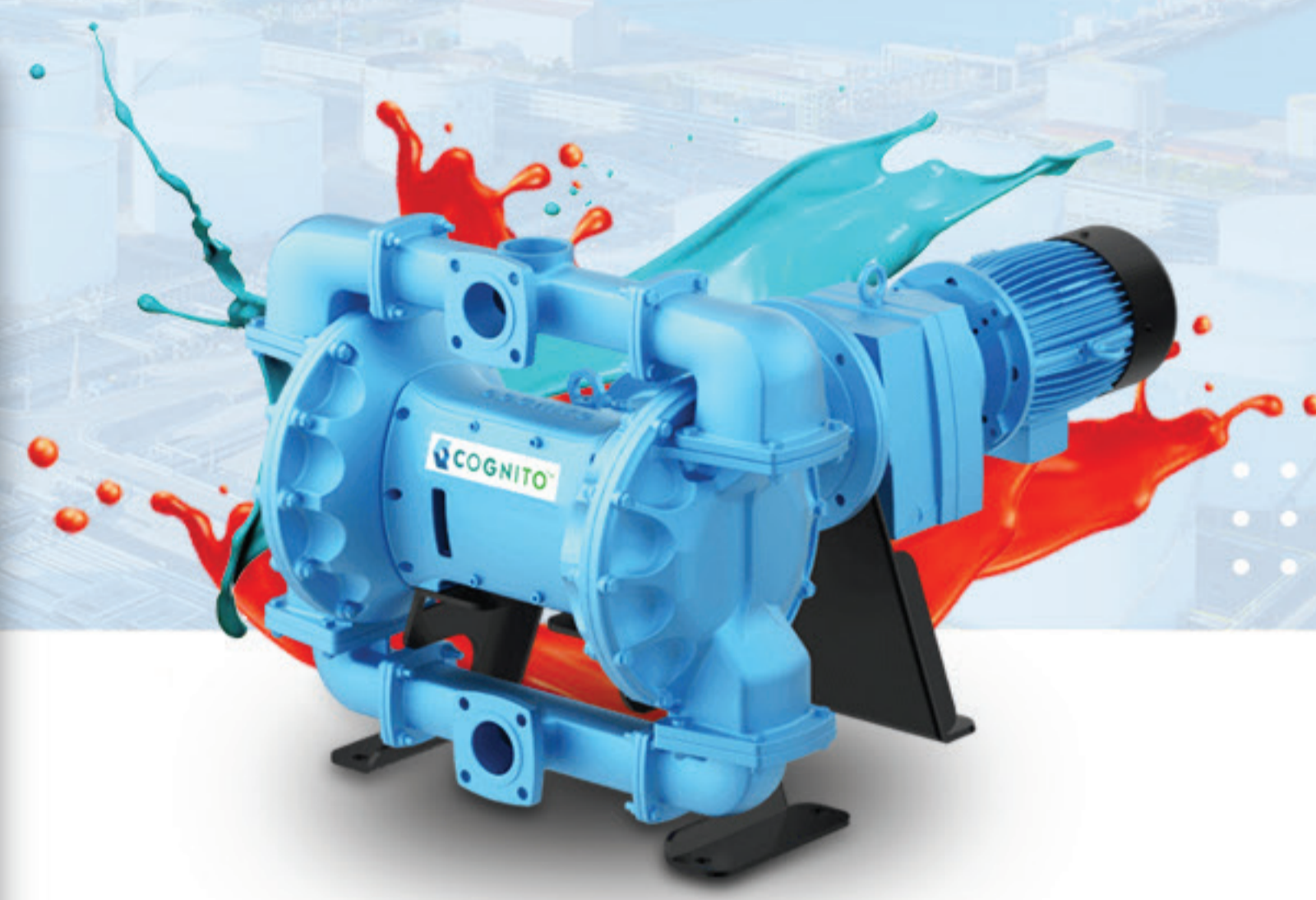


Challenges with AODD Pump:

- > Higher energy consumption due to over 12 hours of daily operation.
- > Frequent diaphragm ruptures caused contamination and pump failure.
- > Often struggled to generate necessary pressure, leading to prolonged filling times

Challenges with Screw Pump:

- > Frequent failures of packing glands causing leaks
- > Difficulty in sourcing and stocking spare parts
- > Higher Maintenance cost
- > Reduced operational efficiency



Process details

- Fluid : Final paint
- Flow : 300-400 LPM
- Discharge Pressure : 3 bar g
- Liquid Viscosity : up-to 2500 cps
- Specific Gravity : 1.65 kg/cm2
- Solid Particles Size : 100 microns
- Viscosity : up to 2,500cp
- Temperature ambient
- Discharge head : 3 meters

The Right Solution

The Cognito™ team assessed the customer's needs, pain points, and objectives, persuading them to trial a 4" Cognito™ EODD pump. Continuous engagement during the trial ensured alignment with their requirements.

The introduction of the Cognito™ EODD pump was a game-changer, resolving frequent maintenance issues and boosting efficiency with significant energy savings.

The successful trial led the customer to replace multiple AODD and screw pumps with Cognito™ EODD Pumps



Before



After replacing with COGNITO™ Pump

Customer Experience

The Cognito™ EODD pump excelled in this application, improving energy efficiency, reducing maintenance costs, and eliminating wastage from frequent leakages seen with conventional screw & AODD pumps



Energy consumption	Existing AODD Pump	Cognito™ EODD
No. of Working Hours/ Day	12 hrs	12 hrs
Energy Consume at Duty Point (estimated)	11.19 KW	3.9 KW
Electricity Consumption/ Month	4028.4 KWh	1404 KWh
Electricity Consumption/ Year	48340.8 KWh	16848 KWh
Total Electricity Cost / Month	\$ 0.42 K	\$ 0.14 K

Maintenance	Existing Screw Pump	Cognito™ EODD
Total Maintenance cost per year per pump	\$ 0.7 K	No spares consumed till date. So, zero maintenance cost in a year

Per year Energy Saving with Cognito™ EODD Pump (KWH)

31493

Per year Operational cost saving with Cognito™ EODD Pump

\$ 3.2 K

Per year maintenance saving with Cognito™ EODD Pump

\$ 0.7 k

Customer Feedback



Since the installation of the Cognito™ pumps, we have observed a significant decrease in maintenance costs & pump's energy efficiency has exceeded our expectations. Their consistent & efficient operation has contributed to smoother workflow processes & enhanced productivity within our facility.