Manjushree Technopack, a leading plastics product manufacturer, improves specific power consumption of its compressor by 18% using axisCONSERVE 4.0

Background

Manjushree Technopack, a plastics products manufacturer with multiple plants across India, has taken up energy conservation across its plants as a goal and wants to improve equipment performance while at the same time consuming less energy (fuel, power, etc).

Challenges

Compressors play a significant role in many industrial processes. They are often also major contributors to the overall energy consumption of a manufacturing plant. Manjushree too faced the same situation.

Solution

In their research on methods to improve equipment performance and reduce energy consumption, team Manjushree came across EcoAxis's cloud-based, IoT-enabled analytics solution - axisCONSERVE 4.0.

Because compressors are vital to their plastic production processes, they took the proactive step of monitoring one of their compressors under a pilot energy efficiency programme.

They deployed axisCONSERVE 4.0 on a 250 kW compressors to assess its impact. With the help of this advanced solution, they were able to:

- Gain valuable real-time data
- Identify areas for improvement
- Implement and monitor targeted measures
- Enhance the overall performance of the compressor

Results

With the power of this cloud-based analytics solution with IoT capabilities, team Manjushree has unlocked a new level of operational excellence in their facility while making significant savings by reducing their energy footprint.

axisCONSERVE 4.0 - offers Manjushree the benefits as follows:

- Real-time data collection enabled them to detect that the specific energy consumption of the compressor was more than it should have been
- The operating team's root cause analysis helped them identify steps to improve the performance of the compressor

This has resulted in **savings of 18% – approximately 335 units of energy** per day for a delivered average flow of 920 CFM.

RU	NNING TREND	Last 7.E		7 Days	Days 16 May 2023		
					+ Min	🕈 Max 🛛 🐡 Desi	gn 🔺 Value
Values	4000	-	Saturday, May 13, 06 00 Value: 5386.00 kWh				
	2000						
	0	May. 11	May, 12	May, 13	May. 14	May. 15	May. 16



Energy consumption post servicing the compressor

Energy consumption before servicing the compressor

Specific energy consumption (kW/CFM) of compressor is improved by 18%



Specific energy consumption before servicing the compressor



Specific energy consumption post servicing the compressor



