

## Premier Mills saves 17% in compressor energy consumption with axisCONSERVE 4.0!

### Background

Premier Spg & Wvg Mills Pvt Ltd (PSW) is a composite textile mill in Hosur, Tamil Nadu, with combined spinning, weaving, and finishing operations. They enjoy one of the best reputations in the textile industry, earned by seven decades of continued excellence.

### Challenges

PSW is actively seeking ways to reduce energy consumption throughout their plant infrastructure. They recognized the importance of analysing their electricity usage and were particularly interested in implementing machine-level monitoring to identify areas for improvement.

However, they faced some significant challenges :

- The lack of clear insights into the operating parameters and key performance indicators (KPIs) of their machines.
- Taking corrective action at machine level to ensure optimal operation and energy savings.

### Solution

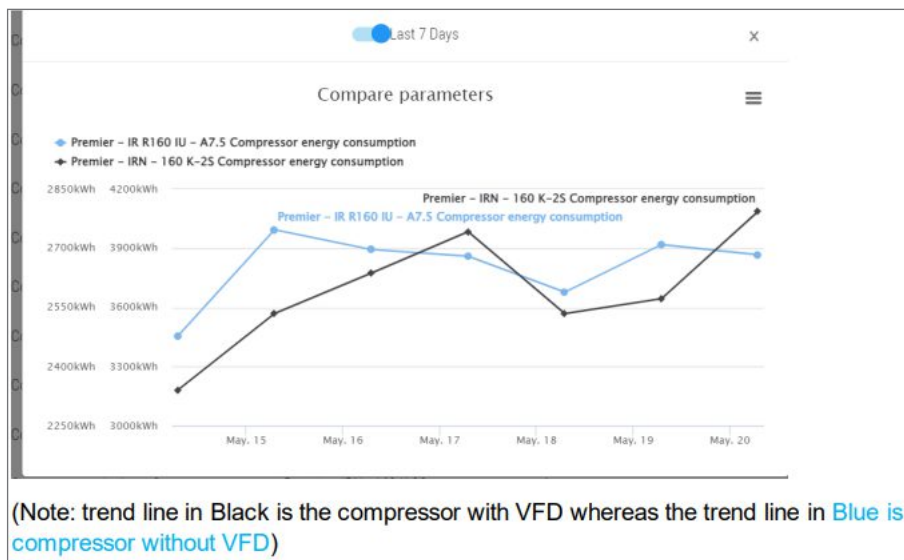
EcoAxis recently deployed axisCONSERVE 4.0 across PSW's four compressors. These compressors cater to different applications in the integrated mill and hence have different operating criteria.

axisCONSERVE 4.0, a product built on Industry 4.0 technologies, monitors critical operating parameters of industrial utility equipment in near real time to deliver deep actionable insights to optimise operating costs and increase equipment life.

### Results

By deploying axisCONSERVE 4.0 across these compressors at different sections of their facility, PSW gained a better understanding of their energy usage patterns. These insights revealed significant opportunities for energy savings. axisCONSERVE 4.0 supported benefits as follows:

- One section of the plant drew the same amount of compressed air as another section, though the production values were lower. By operating this compressor optimally, there is an opportunity to save up to 30% energy. This highlights the importance of fine-tuning operational processes through real time monitoring and ensuring the efficient use of resources.
- In another section of the plant 2 compressors operate simultaneously, 1 with VFD, the other without axisCONSERVE's data suggested that adding a VFD to the latter compressor offered the opportunity to save 25% of the energy consumption for that compressor; around 981 kWh/day. After accounting for the costs of VFD, the payback is 6 months making it a cost-effective solution for long-term energy savings.



The fluctuating nature of the loads and therefore of the compressor energy consumption requires a smart tool to determine total energy consumption trends and identify optimisation opportunities.

By leveraging comprehensive machine-level monitoring and accurate energy data through axisCONSERVE 4.0, PSW has set the stage for substantial annual savings of 17%, approximately Rs. 3.3 million on compressor energy consumption.