

Excellence in Energy Management...

CASE STUDIES

A case study of a Textile Industry

This is a case study of a leading 100% EOU (Export Oriented Unit) Textile Unit located near Ludhiana, India. They are manufacturers of 'A' Yarn (Spinning) in India. It is a 20 year old company with a turnover of over US \$ 208 million.

Energy Consumption pattern:

The major energy consumption loads in manufacture of yarn is Numerical Controlled Machines, Ring frames, Auto koning, De-Humidification equipment and speed controlled drives etc.

System Configuration:

Conzerv's Energy Management System comprises of 17 nos. Power & Energy Meter (EM 3360), 2 nos. of Power & Energy Meter is connected to distribution transformer at the incomer, 4 meters are connected to DG Panel, 11 meters connected to major feeder with Conzerv's eLAN[®] Energy Management System customised to the client's requirements. The features include Real Time instantaneous data of all the meters in a single screen, Graphical Trends, Historical Data and Reports.

Energy Balance at plant:

Before: installation of the system, the data was collected manually, accurate data was not available. This lead to wrong computation of energy balance.

After: installation of Conzerv's eLAN[®] Energy Management System, the entire energy balance of the plant was determined accurately. The cable losses and distribution losses were quantified and accurate reports were generated for the management.

Power factor management:

Before: Power Factor was not monitored continuously and it was maintained to 0.92.

After: installation Conzerv's eLAN[®], customer is able to add the required capacitor banks to improve to 0.99. Hence losses are reduced.

- Automobiles
- Beverages
- Cement
- Chemicals
- Engineering
- Fertilizers
- FMCG
- Glass
- Hotels
- Hospitals
- IT
- Paints
- Paper / Pulp
- Petrochemicals
- Pharmaceuticals
- **Textiles**
- Shoes
- Steel
- Sugar
- Wind Mills
- Shopping Malls

Conzerv Systems Pvt Ltd
 (formerly Enercon Systems Pvt Ltd)

Benefits: Saving due to the PF improvement is US \$ 208/- every month.

Online Monitoring

Before: The data pertaining to the energy consumption pattern was not available particularly during night times.

After: installation eLAN[®] Energy Management System, customer is able to identify the non-essential loads during night hours.

Benefits: Saving of US \$ 625/- was achieved in the first month by switching off the non-essential loads and by analysing the consumption with respect to production during night .

Payback period

Investment in Energy Management System	US \$ 8000
Annual Saving	US \$ 10200
Payback period:	10 months