

Excellence in Energy Management...

CASE STUDIES

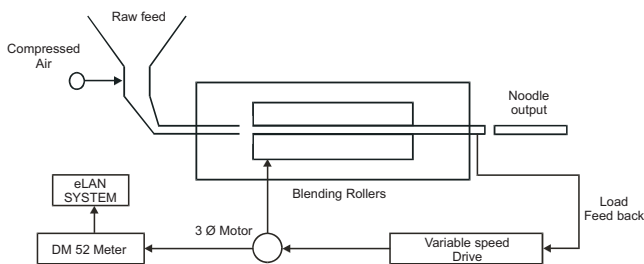
A case study of a Soap manufacturing industry

This is a case study of one of Indias leading FMCG company involved in soap manufacturing.

Application: Feeder is at Hooper, the output of TRQ Mill and Noodler is the material in the form of cylindrical bars.

Load Pattern: 60% of operation at full load, 40% of operation at no load.

Problem: At no load with full speed, eLAN[®] identified that the specific energy consumption was very high and was around 30 kWh/hour and 12 kWh/hour respectively for the TRQ Mill and the Noodler respectively.



Solution: VFD Drives were installed and sensing the no load condition, speed was reduced to low speed mode.

Specific energy was monitored using eLAN[®] and savings enumerated above were quantified.

Savings: Power consumption before installation:

- a) TRQ Mill : 30 units/hours
- b) Noodler : 12 units/hour

After observation and variable speed drive installation:

- a) TRQ Mill : 12 units/hour
- b) Noodler : 6 units/hour

Total savings: 24 units/hour
Savings/year @ 8,700 hours
Operation - 24 units/year

- 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)

Cost savings/year at 8,700 hours
Operation - 208,000 lakhs units / year

Cost savings per year US \$ 18,208

Total Investment in variable speed drives and eLAN® system = US \$ 14, 583

Payback period = 10 months

Conclusion: eLAN® is highly beneficial in identifying opportunity for energy conservation, proving savings and continuously monitoring the health of the system.