Second Prize ***Drugs & Pharmaceuticals***

IOL CHEMICALS AND PHARMACEUTICALS LIMITED

Pharmaceuticals Division
Barnala (Punjab)

Unit Profile

IOL Chemicals and Pharmaceuticals Limited is a major Indian manufacturer of Organic Chemicals, Pharmaceuticals Bulk Drugs and intermediates founded in 1986. IOLCP has grown from a single product company to a major global player with a diversified multi product facility and quality professionals. IOLCP Limited's success is based on its strengths in chemistry & Technology, excellent facilities and absolutely dependable quality achieved with the help of highly qualified, competent & committed men power. The company has built up long term relationships with its business associates in India and world wide by supplying quality products on schedule and its commitment to ethical.

IOL Chemicals and Pharmaceuticals Limited has world class manufacturing facilities located at village Fatehgarh channa, district Barnala of Punjab State.

The facility complies fully with cGMP standards. The company has two units

a) Chemical Unit
b) Pharma Unit

This Unit manufacturing IBUPROFEN as per IP / BP / USP / EP /JP / Micronised. The Plant is designed to comply with latest cGMP as well as WHO & FDA and 21 CFR. The capacity of plant is 10 TPD.

To fulfill the requirement of steam/power in chemical division and Pharma division, IOL have a 4MW cogeneration power plant. The plant is used to cater the steam and power requirement of the plan. The steam is produced at a pressure of 64kg/cm2. The steam is extracted at a pressure of 5.5 bar (24tph) and the rest is put to condensing to meet the power requirement.

Unit Name: IOL Chemicals And Pharmaceuticals Limited					
a.	Specific Energy Consumption (SEC) Reduction during the period 2007 - 2009 (S.No. 9)				
	Year	Product	Specific Electrical Energy Consumption MTOE/ tonne	% Reduction over 2007 - 2008	Specific Thermal Energy Consumption MTOE/ tonne
	2007 - 2008	Ibuprofen	0.297993136	—	2.22186272
**	2008 - 2009	Ibuprofen	0.279463825	6.218032819	2.098939307

Year	Elect. Saving (Lakh kWh) in 2008-09 (i)	Thermal (Fuel) Saving (MTOE) in 2008-09 (ii)	Elect. Consumption (lakh kWh) in 2007-08 (iii)	Thermal (Fuel) Consumption (MTOE) in 2007-08 (iv)	% Elect.Saving (savings achieved/ electricity consumption of previous year) (i) / (iii) x 100
2008-2009 **	22.83	1436.75	80.77	5179.162	28.26544509

Energy Conservation Commitment, Policy and Setup

Energy Conservation has always been an important management objective. We are aware that conserving energy is desirable not only to reduce costs but also for conserving precious & fast depleting fossil fuel reserves and protecting the environment.
Modernization, Technology, Energy & solvent conservation, Process automation and waste elimination are some of the drivers adopted to drive this journey for continuous improvement, to reach excellence in the field of energy conservation.

Energy Management Policy

IOLCP is committed to produce good quality of product with a mission to reduce the specific energy consumption 5 % every year. The action plan for achieving the target is as follows:

- Adopting best energy management practices.
- Regularly monitoring energy use.
- Reporting quarterly on energy use to staff and at Management Board meetings.
- Establishing an Energy Management organization structure.

- Encouraging Energy Managers of significant facilities to initiate Energy Management Committees and/or Energy Champions for their facilities.
- Ensuring that new appliances, equipment, and building projects are energy efficient.
- Identifying all areas of opportunity for improved energy performance via detailed consultation with staff.
- Facilitate developing and implementing an action plan.
- Checking the effectiveness of the energy saving measures, periodically document any changes in procedures resulting from process improvement, and make comparisons with objectives and targets.
- Continual interaction with the technology suppliers and visits and interaction with best pharma based plants in world and benchmarking various parameters is an on-going exercise at Pharmaceutical & Drug division.
- Everyday energy consumption is reviewed in daily coordination meeting and corrective actions are taken best achieved consumption is taken as target.

Strengths in Pharma Section for Energy Conservation

- IOLCP is the second largest manufacturers of IBUPROFEN in India as a final product.
- IOLCP is the Indian first company to replace conventional batch type high vacuum distillation process into continuous distillation by using high heat transfer coefficient agitated thin film evaporator to save energy in pharma section.
- IOLCP is the first pharma manufacturer to design & implement quenching technology through falling film reactor cum absorber to save energy by shifting heat load from brine water to cooling tower water.
- IOLCP have designed the plant in such a way that all the material flows through gravitational flow instead of pumping to save energy.
- IOLCP is having backup of Chemcad software for designing & sizing of process equipments for optimum utilization of energy.
- IOLCP is continuously working on Pinch Energy technology for energy system utilization.
- IOLCP is having well professional qualified staff to make the plant energy efficient.

Environment and Safety:

The unit is committed to preserve its Environmental, Occupation Health & safety of its employees.

Environment

The unit has been accredited ISO 14001:2004 from BSI.

The Unit is dedicated for safe environment and has an "Environmental Policy"

The quality of treated effluent will be within the prescribed norms of PPCB.

The unit is continuously managing itself "Eco Friendly".

Safety

Safety of employees is the prime concern of management at IOLCP and all measures are taken so that no untoward incidence took place.

- Entire plant area is dedicated as no smoking area.
- Work Permit procedure followed for all kind of jobs
- Adoption of health & safety policy
- Documented safety manual, Use of PPE's, Job safety analysis.
- Adequate fire protection system with 60 fire points at different location in plant.
- Onsite Emergency plant manual documented as part of ISO 14001:2004.