

# SPRAY ENGINEERING DEVICES LIMITED

**Regd. Office :** 25, Industrial Area, Phase II, Chandigarh (India) Tel: +91-172-5089000 Fax: +91-172-5018001  
**Works :** Khasra No. 395-398, Vill Billonwali, Baddi,HP (India) Tel: +91-1795-320033 Fax: +91-1795-245316



## Unit Profile

SEDL was incorporated in Yr 1992 with the objective of manufacturing energy efficient systems for Sugar industry. Today our product is placed in more than 500 sugar units world wide. Our consistent effort to reduce the energy consumption in sugar industry has been welcomed. Most of the units work with the steam consumption of up to 50% and with the introduction of our equipments the energy demand for the sugar unit has reduced to 35% of steam consumption. We are working to achieve a target to run a sugar unit at 15% of steam consumption.

We have most sophisticated fabrication machinery and state of art workshop at the foothills of Himachal. We have the capacity to process 5000 tons of steel per annum. With expansions in sight the production capacity shall go up to processing of 8000 tons of steel per annum. The annual sales turnover was Rs 150 crores for yr 2006-07.

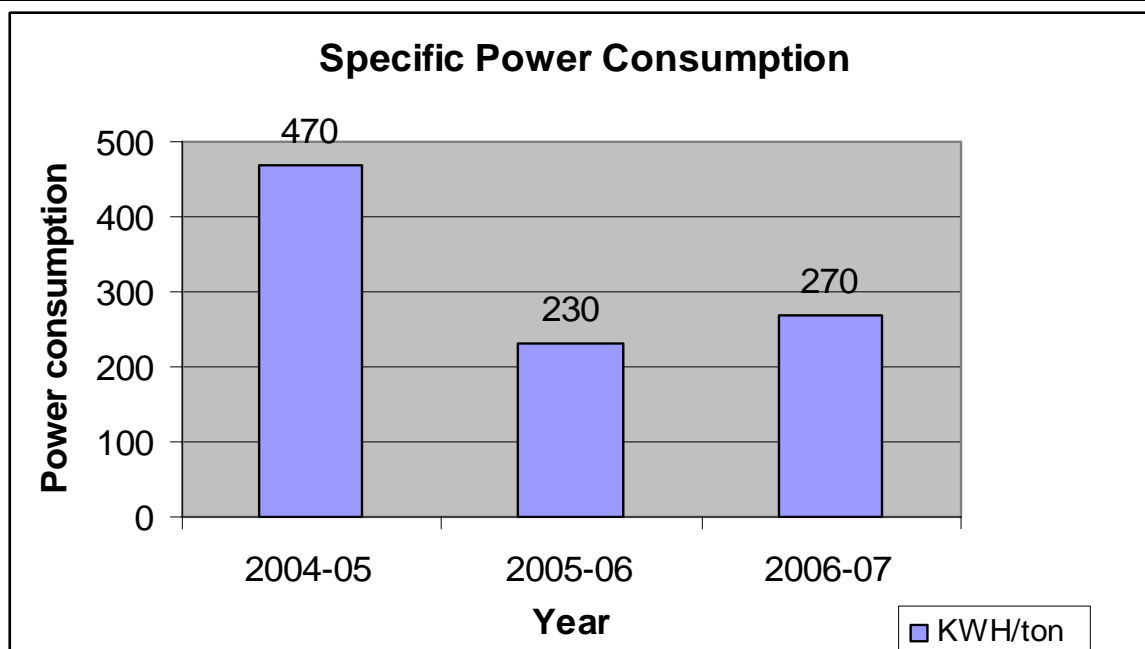




## Energy Consumptions

With the implementation of various energy conservation measures as ongoing practice, there is steady decline of specific energy consumption. Last three years specific energy consumption figures are shown below, which depicts continual reduction in energy consumption over last two years due to our sustained efforts to conserve it with the implementation of various energy conservation measures & ideas to in-crease efficiency of equipments.

Description	Units	2004-05	2005-06	2006-07
Electrical Energy	Lakhs(KWH/Year)	1.64	3.01	7.98
	KWh/Ton	470	230	270
Thermal Energy	M Kcl/T	Nil	Nil	Nil
Annual sales turnover of the unit	Rs. Lakhs	3070.13	7070.56	15001
Energy as %age of Total Cost of Production		7.47	1.06	1.06

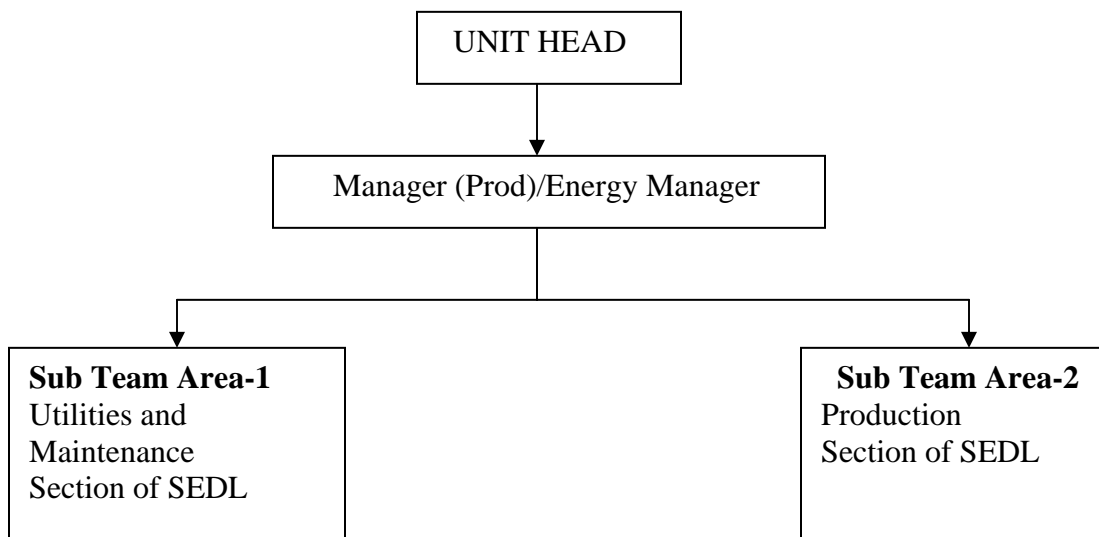




### Energy Conservation Commitment, Policy and Set up

SEDL visualized importance of energy conservation way back in 1992. Since then has been involved in continuous improvement & energy conservation. The Core team led by Manager (Production) & headed by Unit Head constitutes 2 nos. of subcommittees in the plant. Subcommittee consist 2 to 4 members from different areas. The entire team meets periodically for review & implementation of new identified energy saving schemes. At SEDL, energy cost accounts 1.06 % of production cost and the unit gives utmost importance to energy conservation

### Energy Conservation Team Structure



# SPRAY ENGINEERING DEVICES LIMITED

Regd. Office : 25, Industrial Area, Phase II, Chandigarh (India) Tel: +91-172-5089000 Fax: +91-172-5018001  
Works : Khasra No. 395-398, Vill Billionwali, Baddi,HP (India) Tel: +91-1795-320033 Fax: +91-1795-245316



## **Energy Management Policy**

We at SEDL, feel that the next revolution shall be energy conservation. We have been providing energy efficient solutions to the sugar industry and other process plants from last one and a half decade, and also realize the need to responsibly use this resource in a manner that is sustainable and complementary to our quality policy. Thus, at SEDL we are committed to save energy be it man energy or any other form of energy.

In addressing this statement, we shall endeavor to -

- Incorporate energy efficiency measures, including alternative and emerging technologies, into all new and rehabilitated facilities through best practice in energy efficient design, the selection and sizing of plant and equipment, systems and other energy infrastructure.
- Maintain all plant and equipment, and control and manage systems and energy infrastructure in such a way as to minimise energy wastage.
- Monitor and report on plant's energy consumption at micro and macro levels and identify and implement opportunities for improved energy minimisation.
- Promote awareness of the responsibility for energy conservation to departments, divisions, sections and employees.
- Effective Operation and Maintenance Practices.
- Pursue the use of renewable and alternate energy to supplement conventional energy sources.
- To meet our obligations as a member of the Global Community including legislative requirements and minimizing environmental impact.
- Strive to procure, distribute and maintain energy resources at the lowest cost while addressing the items above.

Santosh Kumar  
G M (Works)



### Energy Conservation Achievements During the period 2004 – 2007

Year	Product Description	Electricity Saved (Lakhs KWh)	Total Saving (Rs. Lakhs)	Investment Occurred (Rs.Lakhs)
2004-05	Welding M/C with Microprocessor Based inverter Technology	0.55	2.99	8
2005-06	Welding M/C with Microprocessor Based inverter Technology	0.9	4.76	15
2006-07	Welding M/C with Microprocessor Based inverter Technology EOT cranes with latest technology Sky Lights and New Tech Lights	3.6	19.20	100
	Total	5.05	26.96	123

### Major projects implemented for Energy conservation during 2004-05



Installation of latest welding machine with microprocessor based inverter technology  
4 nos. of machines had installed in the year of 2004-05 to reduce the electricity power.

Investment – Rs 8 Lakhs

Savings - Rs 2.99 Lakhs

Savings of Electricity – 0.55 Lakh KWh



### Major projects implemented for Energy conservation during 2005-06



Installation of latest welding machine with microprocessor based inverter technology 8 nos. of machines had installed in the year of 2005-06 to reduce the electricity power.

Investment – Rs 15 Lakhs

Savings - Rs 4.7 Lakhs

Savings of Electricity – 0.90 Lakh KWh

### Major projects implemented for Energy conservation during 2006-07



Installation of latest welding machine with microprocessor based inverter technology 20 nos. of machines had installed in the year of 2006-07 to reduce the electricity power.

Investment – Rs 50 Lakhs

Savings - Rs 16 Lakhs

Savings of Electricity – 3 Lakh KWh



	<p>Installation of Over Head Cranes.</p> <p>Investment – Rs 45 Lakhs</p> <p>Savings - Rs 2.66 Lakhs</p> <p>Savings of Electricity – 0.5 Lakh KWh</p>
	<p>Installation of SkyLights.</p> <p>Investment – Rs 5 Lakhs</p> <p>Savings - Rs 0.53 Lakhs</p> <p>Savings of Electricity – 0.1 Lakh KWh</p>

### **Future Plans**

	<p>Installation of turbo roof ventilators to be driven by wind energy.</p> <p>Investment – Rs 21 Lakhs</p> <p>Anticipated Savings - Rs 13.44 Lakhs</p> <p>Anticipated Savings of Electricity – 3.36 Lakh KWh</p>
--	--



## Adoption of new Technology

- (a) 40% of our power requirements constitute welding machine and we have procured microprocessor based inverter technology welding machines, whose power requirements are 40%-50% as compared to old fashion old technology machines. Our present consumption of power is 95000 units a month, using the welding machines we have, we save 38000 units a month.
- (b) The sophisticated & CNC machines which we have installed, has also increased our production level without increase of manpower. With installation of these machines the per unit cost of production has come down.
- (c) We have placed more efficient Overhead cranes which are optically designed so as to consume less power.
- (d) We have installed induced draft system for circulation of air, thereby pumping fresh air in the working area.

## Environment and Safety

- (a) We are developing three parks near our unit, thereby providing a green patch in Industrial area.
- (b) We are concerned about the safety and we have provide all necessary accessories required to work i.e. Helmets, Gloves, Industrial Safety shoes, Mask, Face shield, Goggles.
- (c) We have installed induced draft system for circulation of air, thereby pumping fresh air in the working area.