



## Indian Rayon & Industries Ltd , Jaya Shree Textiles

### (i) Unit Profile:

Jaya Shree Textiles, a part of Aditya Birla Group under the flagship of Indian Rayon & Industries Ltd. is situated at Rishra in the Hooghly District of West Bengal. Established in 1949 with the objective of import substitution of Flax Products (commonly known as 'Linen'), the plant started with linen textile (Yarn, Apparel and Industrial Fabrics) and today it has Synthetic Spinning, Wool Combing and Worsted Spinning in its fold.

In the world of textiles, this unit has its own image both in export and domestic market. Over the years, it has not only sailed through difficult times but also keeping pace with the changing competitive scenario it has modernized its operations and emerged as a Centre of Excellence. Whether it is manufacturing or timely delivery to customer, this unit has proved time and again.

**Flax Yarn** : Manufactured from the finest quality of West European Flax, Jaya Shree's Linen Yarn is suited for Weaving, Knitting, Industrial purposes, Fashionable Apparel, Furnishing & Bed Linen.

**Product Range** : Grey, Rove, Boiled and Rove Bleached Yarns for knitting and weaving apparel fabrics Multifold Yarns, Twine and Threads for industrial applications.

**Capacity** : 2142 tons per annum

**Wool Tops & Worsted Yarn** :The finest merino wool from Australia and New Zealand is processed into wool tops of world-class meeting the most stringent international quality standards. Started with 1400 tons production / annum in the year 1995, it has enhanced its capacity to 15178 tons / annum in the year 2005.

Worsted Yarn is spun from the finest quality merino wool from Australia and New Zealand, the wool and wool blended yarns are suitable for the knitting, hosiery and upholstery sectors. Started with 1000 spindles in the year 1975 and subsequently enhanced its capacity to 13000 spindles in the year 1986 and 21000 spindles in the year 1996 and 23448 spindles in year 2005.

### **Fabrics** :

Jaya Shree manufacturers a wide range of Pure Linen and Linen Blends for the elite world, Flame Retardant Fabrics for Apparel, Industrial and Defence use, Flame Retardant furnishings and Upholstery. Linen is sold under brand name "**Linen Club**" and protective clothing is branded as **Pyroguard**.



## World Class Recognition

Success at Jaya Shree is measured by how well we fulfill our economic, environmental, and social responsibility. This “triple bottom-line” accountability lies at the heart of us, factoring as it does holistically the interest of all of our stakeholders – shareholders, customers, employees and the community at large. The concern for quality, environment, health & safety and social accountability can be demonstrated by the fact that JST has achieved World Wide recognized Management Systems Certification which are as under :

<u>Year</u>	<u>Management Systems</u>
1993	ISO 9002:1993 by BIS ( <b>Now we have revised version ISO 9001:2000</b> )
<b>1999</b>	<b>ISO 14001:1996 by BIS (Renewed by BVQI in 2003)</b>
2003	OHSAS 18001:1999 by BVQI
2003	SA 8000 by BVQI

**Thus, Jaya Shree is now first textile mill in India to achieve SA 8000 certification and has a rare distinction of having a combination of all the three certification i.e. ISO 14001, OHSAS 18001 and SA 8000 from BVQI in India for the first time.**

## Awards and Accolades:

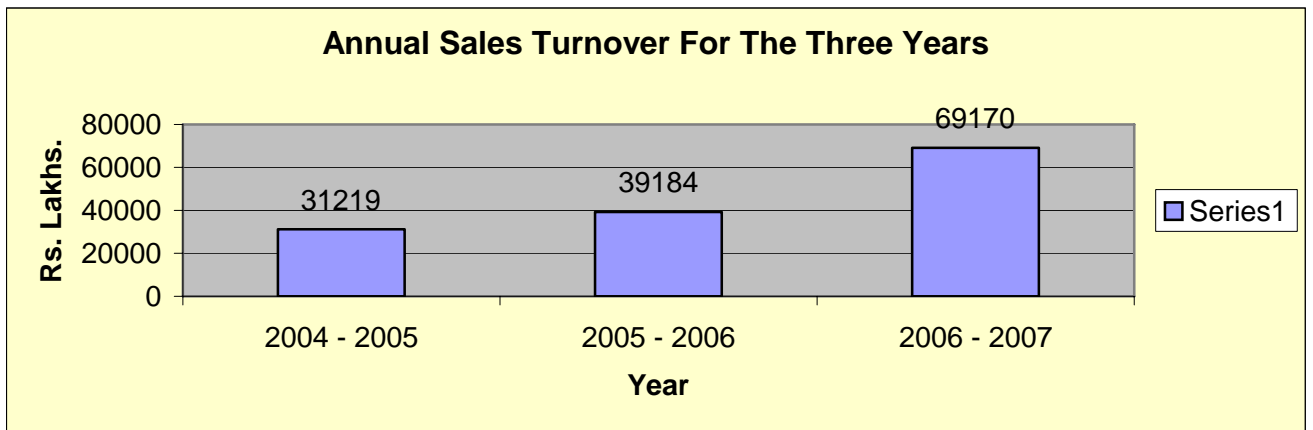
Awards are a reflection of commitment to customers. Over the years , loyal customers all over the world , stand testimony to Jaya Shree’s unfaltering commitment to quality and service. This commitment and closer bonds with customer is reflected in the recognition we receive year after year.

<u>Year</u>	<u>Award / Recognition</u>
1997	Award for Excellence in Human Resource Management by ICMF’s Birla Economic Textile Research Foundation
2000	Chairman’s Bronze Award for Manufacturing Excellence by Corporate World Class Manufacturing
2001	Golden Peacock National Quality Award in the Manufacturing (Large Unit) Category by The Institute of Directors (IOD)
2002	Chairman’s Silver Award for Manufacturing Excellence by Corporate World Class Manufacturing
2002	Export Performance Awards year after year (1981 and onwards)
2003	HRD Award – Certificate of Appreciation by CII (ER)
2003	National Energy Conservation Award in Textile Sector – FIRST
2004	National Energy Conservation Award in Textile Sector – SECOND
2005	National Energy Conservation Award in Textile Sector – SECOND

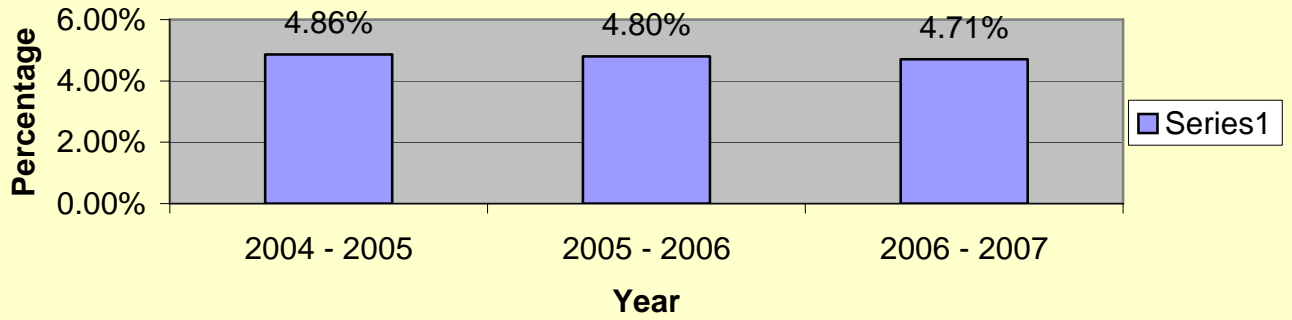
(ii) Energy Consumption:

SPECIFIC DETAILS	POWER	CONSUMPTION	UNIT	2004-2005	2005-2006	2006-2007
---------------------	-------	-------------	------	-----------	-----------	-----------

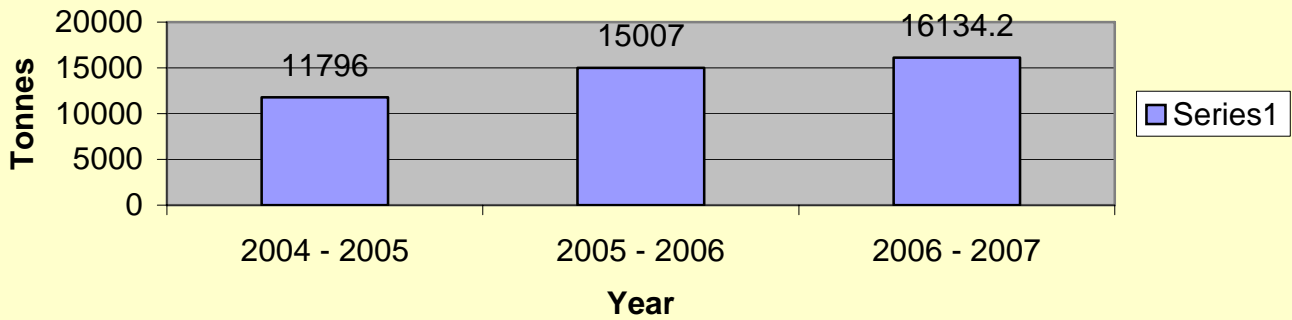
Annual Sales Turn over	Rs. Lakh	31219	39184	61459
Annual Production	MT	11786.369	15005	16134.2
Total Electrical Energy Consumption	KWH (lakh)	329.39	423.05	466.42
Total Thermal Energy Consumption	MillionKCal	46628.45	79990	69170
Energy cost as % of Manufacturing cost		4.86%	4.80%	4.71%
Total Energy Cost in Rs. (lakhs)	Rs. Lakhs	1491.83	2155.37	2036.45
Specific Energy Consumption (Electrical)	Kwh/Tonne	3254.44	3176.00	2583.83
Specific Energy Consumption (Thermal)	MKcal/Tonne	4.96	5.33	4.29



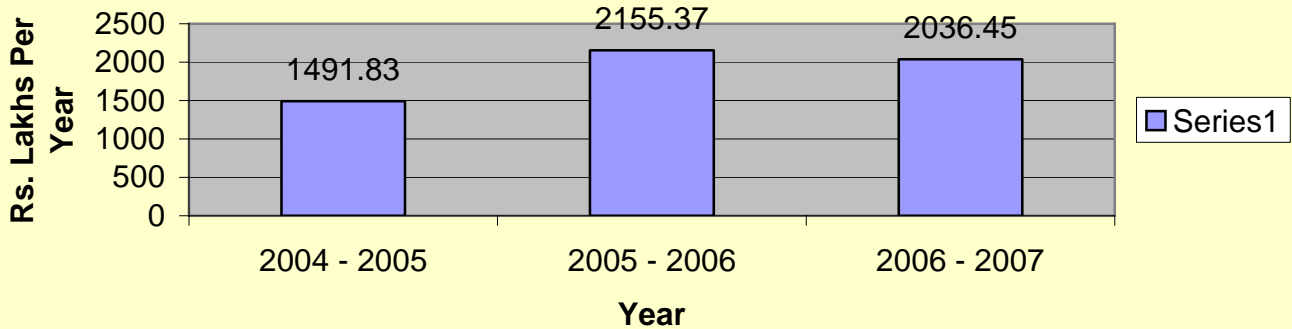
### Energy Cost As % Of Manufacturing Cost

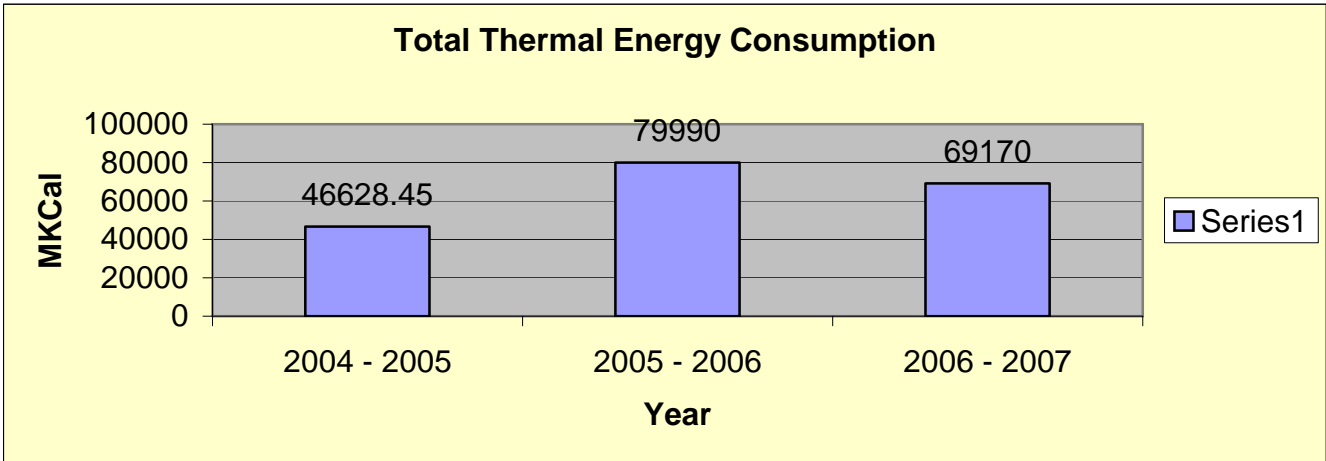
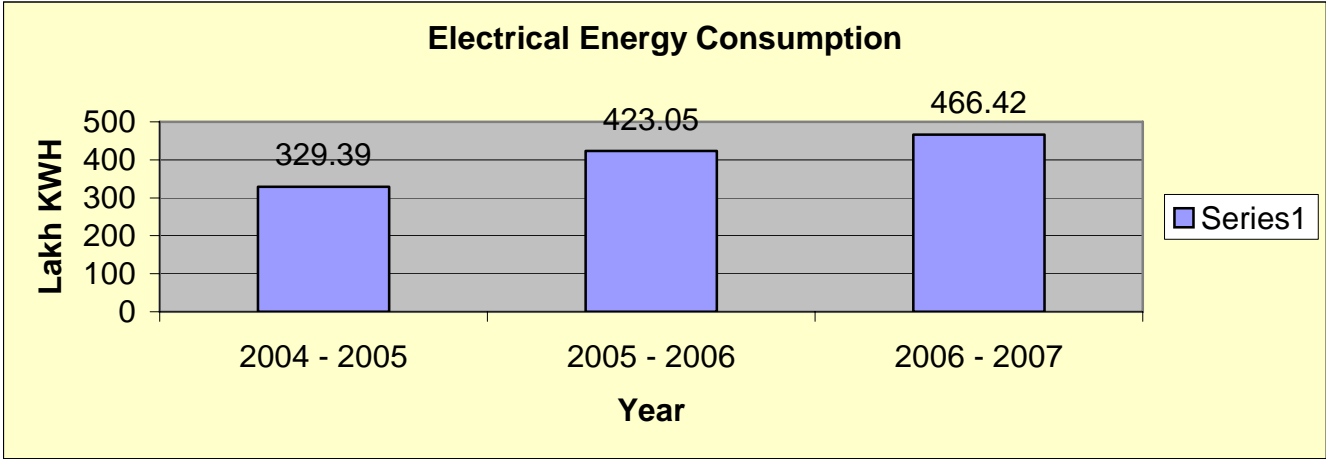
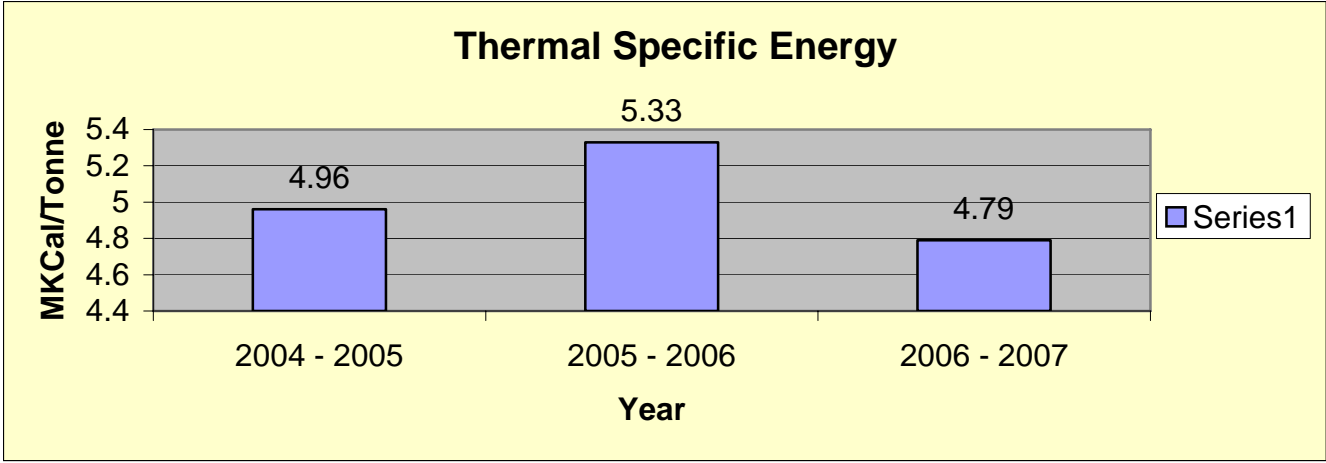


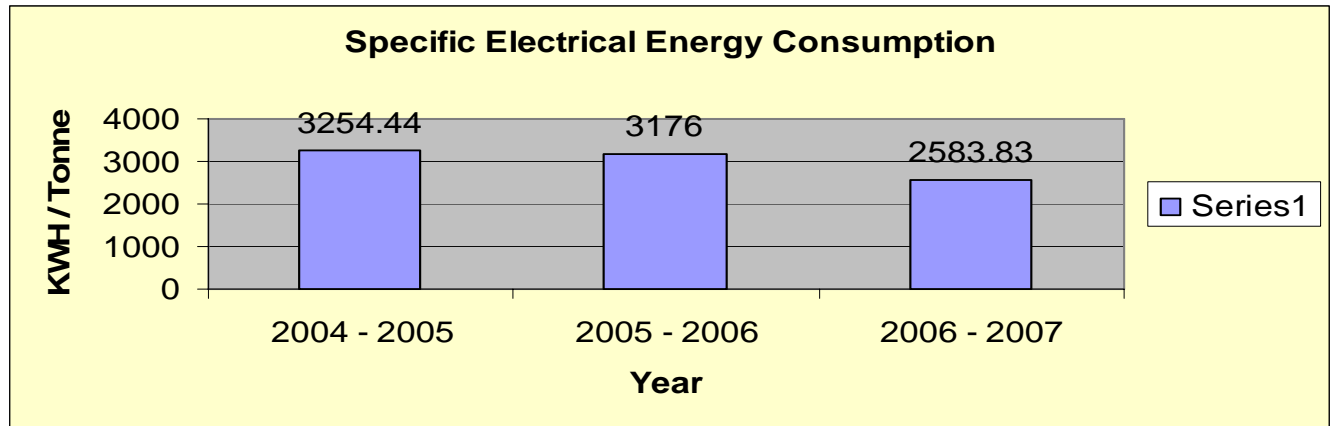
### Actual Total Production



### Total Energy Cost







### Salient Feature of Energy Cell:

**There is an Energy Cell, which deals with all energy conservation activities & projects in the plant. This cell is Jointly headed by GM Purchase and designated Energy Manager of the plant and directly reports to the CEO of the Plant. One officer associated to the ECC is engaged exclusively for energy conservation and environment management purpose since April 1998. ECC furnishes the project**

proposal related to energy conservation to the CEO directly who decides on financial matters related to the projects.

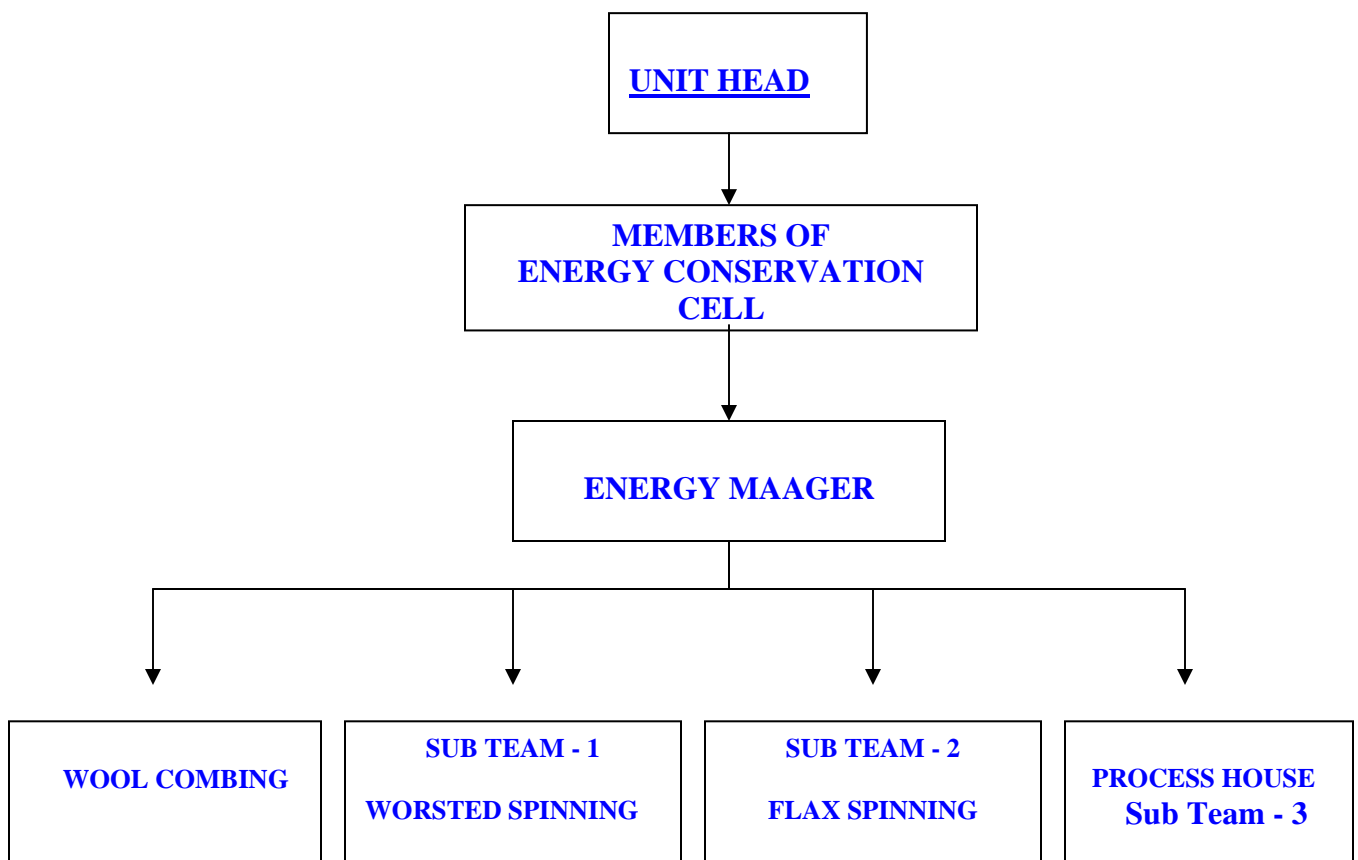
Energy conservation practices as a policy at Jaya Shree Textiles since more than 10 years, is observed from the total point of view i.e. the immediate monetary benefit in view of the cost of fuel and power rocketing high and long term social benefit in view of the increasing trend of environmental pollution threatening the modern civilization. Our visitors which include international experts in the field of energy economics often mention the notable awareness level on energy conservation of category of people in the industry.

The United National Economic and Social Commission of the Asia and Pacific (ESCAP) chosen Jaya Shree Textiles for the hands-on energy audit session of their first international training performance in efficient energy management in industries held in the Eastern India recently. Jaya Shree Textiles also took a key role informing an enacting India's only Energy Club, for mass awareness on energy conservation. Energy Cell also organizes various seminars and workshops on energy efficiency and management in association with different

leading educational institutes, energy intensive organizations and consultancy firms. Thus, this industry is committed to energy efficiency and awareness enhancement in this region.

Energy accounting system procedure exists. Parta Dept. (i.e. MIS or Management Information System) is preparing report on weekly and monthly basis. Engineering dept. and Energy Cell takes care of the implementation of the approved projects.

## **ENERGY CONSERVATION TEAM STRUCTURE**



### **ENERGY CONSERVATION PLANS AND TARGETS**

**Energy Conservation Achievements.**

Jaya Shree Textiles saved both electrical and thermal energy consistently during the last

three years. Although we had to install several high energy consuming new utilities during last three years for introducing new product range and improving quality of existing products, we consistently reduced energy consumption in each product and utility area.

2004-05	:	Rs. 64.97 lacs saving from 13 energy projects
2005-06	:	Rs. 120.8 lacs saving from 18 energy projects
2006-07	:	Rs. 113.09 lacs saving from 15 energy projects

### Strategy

The set strategies will be as follows:

- To monitor specific energy consumption for each department and set target to reduce the same for each dept.
- To remove direct wastage coming out of negligence.
- Installation of new energy saving technology on priority basis where technical feasibility is there and payback period is within acceptable limit (2 years)  
New R & D projects in association with Educational Institute (e.g. IISWBM, Jadavpur University etc.) or process modification and energy saving through it.

### ENVIRONMENT AND SAFETY

At Jaya Shree Textiles (JST), we firmly believe in sustainable development. We deeply appreciate the fact that the earth's resources and its capacity to absorb pollution and regenerate are finite. Therefore, operations at our unit are conducted in an eco-friendly way. Naturally then, the environment dimension forms an integral part of all business decisions. The company has already achieved ISO 14001 certification for environmental management system.

Each department identified all its activities and on the basis of that aspect impact analysis has been conducted in all the departments. 50 significant environmental aspects had been identified in the plant and to mitigate the impact of those aspects 49 programmes on environmental management have been taken. We monitor all parameters of water & air quality on a regular basis (say every week). We provided personal protective equipment to all staffs and workers wherever it is required. Adequate control measures are adopted to maintain consistent effluent discharge and flue gas emission quality. Compared to 2001-2002, environmental pollution parameters reduced by 10 – 50%. We conduct environmental audit in the plant on a regular basis. Our quality and environment policy is attached herewith.

Our company is committed to the safety and security of all employees working in our plant and also for our people residing outside the plant. We have a separate safety-health environment (SHE) sub-committee headed by VP (Finance) which comprises of

heads of all departments. This high level committee monitors all the parameters related to SHE and takes initiative to improve the parameters. Apart from that we have qualified safety officer for our plant. Safety audit is regularly conducted by outside agency.

Number of accidents in the plant reduced by more than 70% compared to the figure of 2001-02. We have a sustainable general health check up system for all employees and also have a special health check up system for employees working in the sensitive areas.

At JST, the disposal hazardous waste is a great problem i.e. potential threat for the existence of the company in future. At present, the company is dumping, at a substantial cost, the wastes inside the campus as specified in the consent for hazardous waste handling rules stipulated by the State Pollution Control Board. It has been found that the solid waste (sludge) of ETP (effluent treatment plant), after chemical treatment contains more than 50% volatile matter and has calorific value of more than 3500 Kcal/Kg.

A Project has been undertaken with an investment of Rs.75 lacs to upgrade the ETP plant incorporating Up flow Anaerobic Sludge Blanket ( UASB) technology to generate substantial methane rich biogas from the waste an aerobically and to generate power subsequently from the generated biogas.



## **JAYA SHREE TEXTILE MANAGEMENT** **ENERGY POLICY**

**We are committed to continuously improve our energy performance in all our activities, products and services by way of**

- a) Reducing specific energy consumption in our all activities.
- b) By use of energy efficient technologies/equipment.
- c) Involvement of all employees through small group activities.
- d) Maximize recovery of waste energy.
- e) Conducting regular management reviews to ensure continual improvement.

Date : 26th September,2001