



Vardhman

MAHAVIR SPINNING MILLS - HOSHIARPUR **(A unit of M/S Vardhman Textiles Limited)**

UNIT PROFILE

Mahavir spinning mills (MSM) is a Flagship unit of Vardhman Textiles Limited, was established in the year 1973. This is a multi location and multi product-manufacturing unit. The unit produces 20.5 Tons of sewing thread per day & has 60352 yarn spindles installed on date at Hoshiarpur location. The Hoshiarpur unit is one of the top most leading spinning and sewing threads – manufacturing set ups and the largest in the country under one roof of its kind. Having conquered a substantial portion of India’s Sewing Thread market, the division has attracted interest of foreign collaborators.

The unit follows a dynamic approach & continuous improvement upon its operation through technology up-gradation, innovating approach through TPM. Our unit has latest internationally available technologies on many machines. We have 32 Quality Circles for quality improvement. We are following KAIZEN – doing autonomous maintenance on many machines.

We have a team of sixteen members for Task Force from various departments to carry out energy saving activities, system improvements and to carry out innovative ideas from different section of the departments. The outskirts area of the factory building, main gate and other available area is decorated with lawns, gardens, flower, trees etc. in order to motivate people and better house keeping and this has improved the total impact of our unit. The success of our company has improved the quality of life in general.

World Class Recognition

Success at Mahavir is measured by how well we fulfill our economic, environmental, and social responsibility. This “triple bottom-line” accountability has become the culture of the Mahavir family, our stakeholders – shareholders, customers and the community at large. The concern for quality, environment, health & safety and social accountability can be demonstrated by the fact that Mahavir has achieved World Wide recognized Management Systems Certification which are as under...

Year	Management Systems
1993	ISO 9001:1994 by BIS (Now we have revised version ISO 9001:2000)
2007	ISO 14001:2004 by Moody International
2007	BSI-OHSAS 18001 (⊕Amendment1:2002) by Moody International

Awards are a reflection of commitment to customers. Over the years the commitment is reflected in the recognition (**National Safety Award**) we received from National Safety Council constituted by the govt. of India for the **9th consecutive year**, as a best industry with regard to maintain safety & no accidents since last nine years.

In this global competitive market MSM has sustained because of more customer focus and energy management for reducing the operational & energy cost

MSM is a profit making company and at present turnover of the company during the year 2006-2007 is Rs. 22313 lakhs.

Energy Consumption:

Energy is basic to production and its efficient use contributes to enhanced productivity. Energy conservation efforts have helped optimal utilization under condition of scarcity and rising costs. The total energy consumption in terms of electricity, rice husk, steam coal and diesel used for the process is as follows:

Year	Electricity (Lakhs kWh)	Rice Husk (MT)	FO (MT)	Diesel (KL)	Money Value (Rs. Lakhs)
2004-05	512.39	7810.25	0.00	30.70	2244.11
2005-06	521.97	9555.66	90.60	00.00	2526.85
2006-07	528.415	9965.46	16.90	5.50	2480.91

Year	Mfg. Cost (Rs. Lakhs)	Total Energy Cost (Rs. Lakhs)	Energy as % of Total Mfg. Cost (B/L)x100L
2004-05	16144.67	2244.11	13.90*
2005-06	19252.20	2526.85	13.20*
2006-07	20276.78	2480.91	12.45*

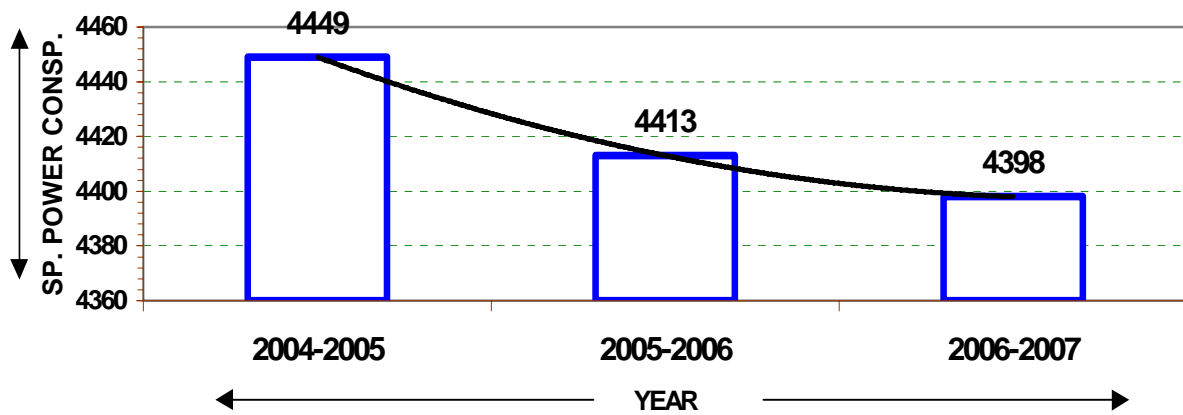
NOTE:

- *** Manufacturing cost shown is for our final product i.e. “Sewing Thread”, which requires additional processing & value addition as compared to Yarn produced by other Spinning Units.**
- **Manufacturing Cost Is Excluding Selling, Excise & Financial Cost.**
- **The balance sheet of Mahavir Spinning Mills is prepared taking into consideration all the manufacturing units, as such the balance sheet figures will not tally with the figures provided by us in this report which is exclusively prepared for the spinning/sewing thread unit of Mahavir Spinning Mills, Hoshiarpur.**

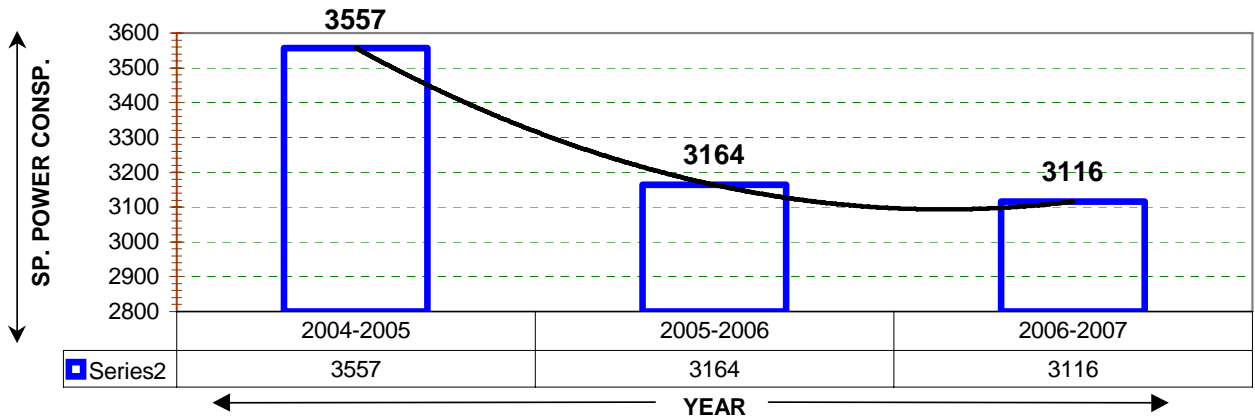
The Specific Energy Consumption Figures for the Period 2004-05 TO 2006-07

Year	Product	Specific Energy Consumption	
		Electrical Energy kWh/Tonne of Production	Thermal Energy MKCal/Tonne
2004-05	Cotton Yarn	4449	Nil
	Sewing Thread	3557	4.05
2005-06	Cotton Yarn	4413	Nil
	Sewing Thread	3164	4.04
2006-07	Cotton Yarn	4398	Nil
	Sewing Thread	3116	4.00

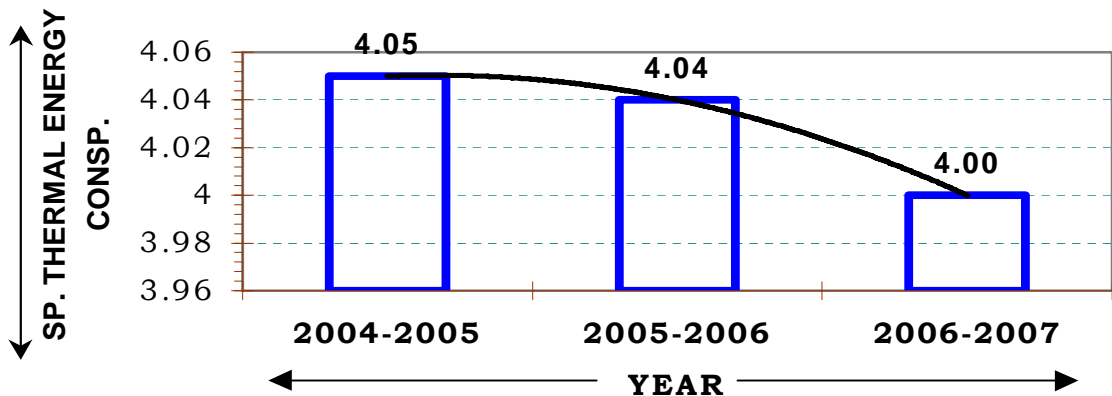
Specific Power Consumption of Cotton Yarn in kWh / Tonne of Production



Specific Power Consumption of Sewing Thread in kWh / Tonne.



Specific Thermal Energy Consumption in mKCal / Tone



Energy Conservation Scenario

Energy conservation receives paramount importance at Mahavir Spinning Mills. In view of increasing price of energy, depleting natural resources, the unit is highly committed towards energy saving program. The consistent efforts are invested for achieving optimum energy consumption through.

- Continual improvement in energy performance through perfect working of machines & continuous up-gradation of the system.
- Adoption of innovative technologies. Energy saving device, sharing knowledge with scholar energy auditors & learning through vendors.
- The recommendations of the unit are advisory and engineering (a senior level qualified expert in the corporate office for assisting and guiding different units in the group) and put up to capital expenditure committee for its final recommendation to the chairmen's office for sanction.
- Training and involvement of all employees for creating energy awareness.
- Reduction in energy losses.
- Adoption of TPM Techniques.

There is high level of commitment from top management for energy conservation activities with full support. A clear-cut policy, action plan implementation, and continuous monitoring system and allocation of necessary material & human resources back this commitment.

MSM believes that **“ENERGY SAVED IS ENERGY PRODUCED”** so no effort is spared to achieve highest levels of efficiency in managing & conserving the energy resources. Both financial and human resources coupled with technological up-gradation are provided for the purpose.

The ECC (Energy Conservation Cell) at MSM by AVP- Engg. /Energy & Senior Executive from all area of Engineering, Production, Maintenance, Utility, R&D etc. Based on various energy data collected by ECC, a report on energy performance of the plant is prepared on monthly & yearly basis is reviewed at various levels of management as per details given below...

- Daily review in engineering meeting, where weak areas are identified & attended by group of engineers.
- Monthly review by ECC to examine the status of ongoing energy conservation projects & devising (if reqd.) The target of Energy Conservation.
- Yearly review with similar committee of one group for setting up energy targets for next consecutive year
- Monthly reviews by chairman (ECC) at apex level meeting with the unit head.

Based on recommendation made by the ECC & capital projects committee, the decision could be taken for implementation of energy conservation program in medium & long term basis. Respective department would implement modification & retrofitting of energy efficient equipment in different areas. Heads under the close co-ordination with ECC.

Energy Conservation Achievements

During the year 2006-2007 the unit has successfully implemented following electrical & thermal energy conservation steps & achieved enormous saving

Please refer Sl.No 16.

The unit has made an investment of **Rs.13.85 Lakhs** & energy saving of worth **Rs.103.16 Lakhs** for the year 2006 - 2007. The specific power consumption figures are improving constantly for last three years by continuous efforts put in by the management & staff.

Energy Conservation Plans & Target:

Energy Conservation schemes are already under implementation & activities are planned for near future. Some of these are highlighted below.

- **Please refer Sl.No 18.**

Environment & Safety

MSM strongly believes that resource conservation & pollution prevention go hand in hand with dwindling resources, it is imperative to conserve them. Keeping this in view, it has been a constant endeavor of the unit to upgrade the production process by carrying out maximum recycling of inputs, so that minimum pollutants are generated which could be treated effectively. The unit has taken several steps on safety awareness including safety audit, Risk analysis, Monitoring and measurement, Health checkup of all the employees.

MSM is committed to **SHE**. The unit has full fledged Manager – SHE & a central SHE committee & it is headed by the AVP-Engg./Energy. The committee comprises of hod's of various sections (Mtc, Engg., Production, IR, HRD etc.). The safety team monitors various operations in the plant & provides adequate solutions for the safe working, safety permit systems, emergency plans, and mock drills for fire fighting, safety training etc, is part of work culture at the unit. Special types of personal protective equipment have been introduced for the betterment of occupational hazard. Various measures have been adopted to avoid the fire hazards like installation of gas leakage detector & fire hydrant system in the plant. Due to the above continuous efforts, MSM has bagged the **national safety award** from the govt. of India for the **9th consecutive year**, as a best industry with regard to maintain safety & no accidents.

The requirements relating to various environmental legislation are being duly complied by the company. Environment audits are regularly being conducted and suggestions there in are being implemented to maintain ecological balance in and around the factory premises.