

INDIAN RAYON
(A unit of Aditya Birla Nuvo Limited)
Rayon Division, Veraval (Gujarat)

Unit Profile

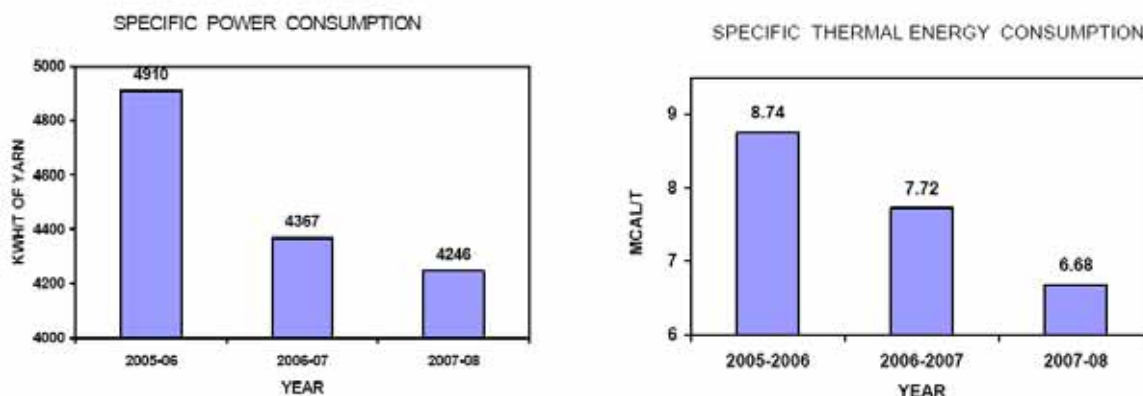
Indian Rayon (a Unit of Aditya Birla Nuvo Ltd.) is an acknowledged market leader of VISCOSE FILAMENT YARN business. The Rayon division is one of the 8 divisions of Indian Rayon, located in Veraval Gujarat. The main product of Rayon division is the Viscose Filament Yarn apart from chemicals like SULPHURIC ACID, CARBON DISULPHIDE which are consumed in house and SODIUM SULPHATE, which is a by product. The total Production capacity is 45.0 TPD of Yarn. Comprising 40 TPD pot spun yarn (PSY) & 5.0 TPD Continuous Spun Yarn (CSY). During the year 2007-2008, 17000 MT of yarn was produced with the capacity utilization of 103.65%. The Veraval unit's annual sale turnover was Rs. 364.14 crores in the same year.



Energy Consumption

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 increase efficiency of equipments. In spite of drastic increase in the cost of purchased Electricity and fuel the cost of Energy as percentage of total manufacturing cost reduces continuously due to the commitment from management and the extensive efforts made by the plant team for Energy Conservation.

DESCRIPTION	UNIT	2005-06	2006-07	2007-08
Electrical Energy	kWh/T	4910	4367	4246
Thermal Energy	M kCal/T	8.74	7.72	6.68
Total Manufacturing Cost	Rs. lakhs	22099	25574	27220
Total Energy Bill	Rs. lakhs	4101	4028	4122
Energy as %age of Total Cost of Production	%	18.56	15.75	15.14

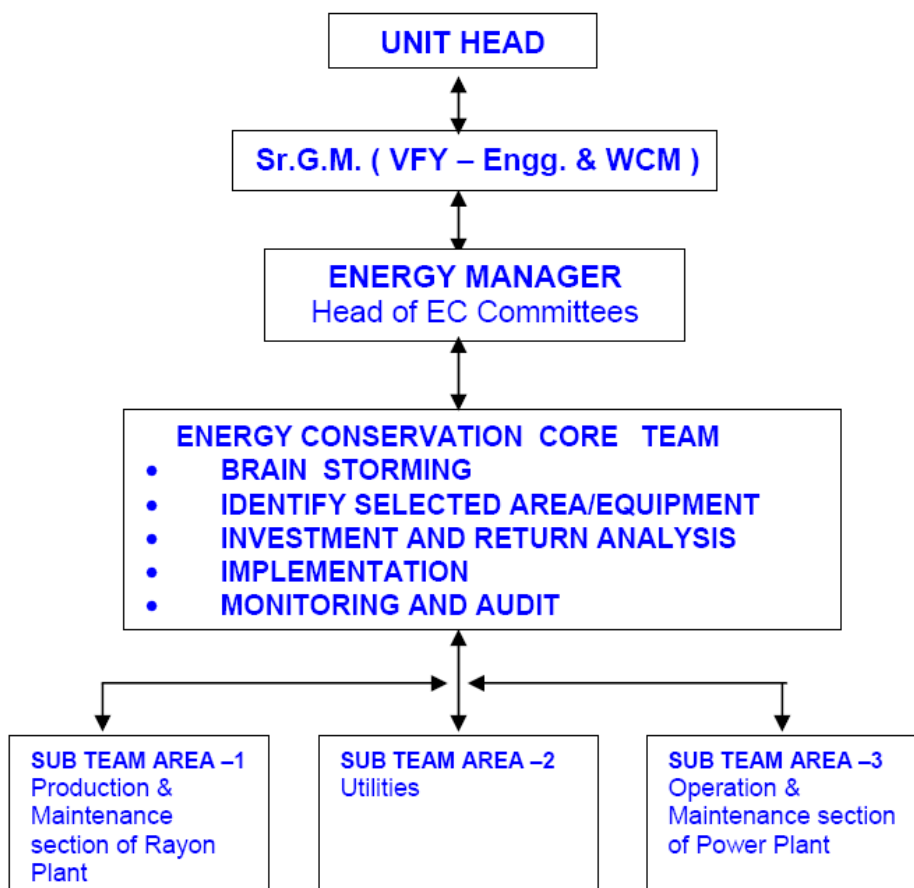


Energy Conservation Commitment, Policy and Set up

Indian Rayon visualized importance of energy conservation way back in 1990. Since then the unit has been involved in continuous improvement & energy conservation. The Core team led by unit head & headed by Energy Manager constitutes 11 nos. of subcommittees in the plant. Sub committee consist 2 to 4 members from different areas.

All the team meets periodically for review & implementation of new identified energy saving schemes. At Indian Rayon, energy cost accounts 15 to 20% of production cost and the unit gives utmost importance to energy conservation.

ENERGY CONSERVATION TEAM STRUCTURE



Major projects implemented for Energy conservation during 2007-08

1. Installation of Variable Frequency Drives in Fresh Air Fans of Spinning & Textile halls (Trend Setter Project)



The unit has installed Variable Frequency Drives in place of ordinary Star delta Starters on all the 19 Nos Fresh Air Fans of the Spinning & Textile hall. Speed of all these fans are controlled by changing the frequency of VFD as per the fresh air requirement by measuring the DB, WB Temp & %RH.

Power saving: 6.23 lakh kWh per annum
 Investment: Rs. 43.20 lakh
 Saving: Rs. 34.25 lakh per annum

2. Installation of One No. 100 TR screw chillers to stop Two Nos. 100 TR reciprocating type chillers.



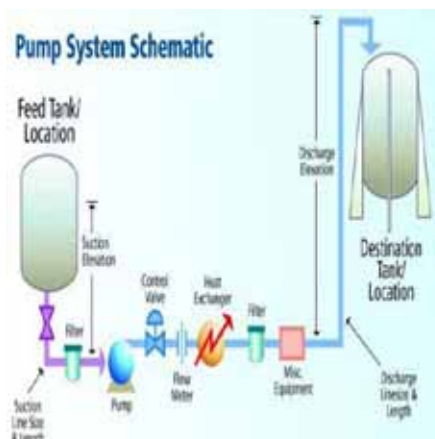
The unit was having two nos. reciprocating type 100 TR caustic chillers connected in series to chill dissolving lye at zero Deg. Celsius. These two chillers were stopped and replaced by one Screw type chillers of 100 TR capacity which can produce the same refrigeration effect.

Power saving: 4.38 lakh kWh per annum
 Investment: Rs. 36.00 lakh
 Saving: Rs. 24.09 lakh per annum

3. Micro-mapping of power and steam consumption to identify the losses.

With a view to identify the losses at various stages in the pumping system (from source to destination) micro mapping of the pumping system was carried out. Similarly the unit carried out the micro-mapping of the steam system to identify the heat energy losses in the system.

Power saving: 3.65 lakh kWh per annum
 Fuel Saving: 666 MT per annum coal
 Saving: Rs. 40.15 lakh per annum.
 Investment : Nil



4. Installation of Variable Frequency Drives in Viscose Department



The unit was having star delta starter on two speed 80/200 HP motors of 6 nos. dissolvers in viscose department. The unit has replaced these star-delta starter and installed variable frequency drive for speed control as per the process requirement.

Power saving: 1.82 Lakh kWh per annum

Investment: Rs. 40.23 lakh

Saving: Rs.10.04 lakh per annum

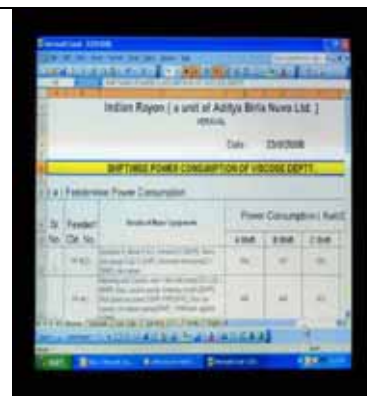
5. Shift-wise monitoring of power consumption through Energy Monitoring system

The unit was having PC based energy monitoring system. Power consumption of various deptt. was monitored on daily basis. Now the unit has started the shift-wise monitoring of power consumption to know the variation from shift to shift and analyze the reasons of variation. The unit has taken corrective actions based on the analysis and reduced the power consumption.

Power saving: 3.65 Lakh per annum

Investment: Nil

Saving: Rs.20.07 lakh per annum.



6. Reducing the running hours of Vapour absorption machines by optimizing the process temperature



The unit was having 2 Nos. Vapour Absorption machines of 525 TR capacity to meet the chilled water requirement for the process. The unit has optimized the process temperature and reduced the running hours of the vapour absorption machines. This has resulted into remarkable saving in steam consumption.

Fuel saving: 3193.9 MT per annum (Coal)

Investment: Nil

Saving: Rs.96.36 Lakh per annum

Other Major initiatives taken for energy conservation during the year 2007- 08

(A) Saving of Electricity

Sr. No	Description	Savings in lakh kWh	Savings (Rs.in Lakhs)	Investment (Rs.in Lakhs)
1	Replacement of old/less efficient cooling tower fans by most energy efficient FRP fans	2.45	13.45	14.50
2	Replacement of old/less efficient pumps by Energy efficient pumps.	1.25	6.87	6.20
3	Replacement of diaphragm valve with ball valve in old & New A.T.(69 Nos.)	1.27	6.97	7.60
4	Replacement of old and inefficient spinbath pump by Energy efficient pump.	1.40	7.71	12.00
5	Replacement of old and inefficient (21 Nos.) motors by energy efficient motors	2.43	13.35	17.40
6	Replacement of Ordinary Tube lights by Asian E+ tube lights (1196 Nos.)	1.14	6.24	11.00
7	Provision of pot enclosures in Spinning for power saving due to reduction in air friction (2000 Nos.)	1.14	6.26	4.00
8	Replacement of single stage ejector by three sage ejector in Spinbath Department.	1.10	6.02	6.00
9	Replacement of old and inefficient High Frequency Transformers (18 Nos.).	3.15	17.35	45.00
10	Connecting coning machine motor to star (341 Nos.).	2.98	16.42	0.00
11	Modification in cooling water system to stop cooling tower no.10.	1.82	10.04	0.00
12	Reduction in compressed air pressure.	0.36	2.01	0.00
13	Replacement of under-loaded motors of dryer exhaust fans by lower HP motors (8 Nos.).	0.18	1.00	0.80
14	Reduction of 5 HP motors in dryer circulation fan with 3 HP motors (18 Nos.).	0.36	2.01	1.26
15	Up-gradation of cooling tower no.7	0.73	4.01	15.00
16	Modification in lighting system on spinning machines.	1.09	6.02	0.00
17	Stopping the loss of conditioned air from textile hall.	1.50	8.21	0.00
18	Switching off unnecessary lights.	0.73	4.01	0.00
19	Modification in the lighting circuit.	2.56	14.05	0.00

20	To minimize the chilled water loss.	0.55	3.01	0.00
21	Stopping of 10 HP motor of jet room in Spinning by getting hot water from Spin-bath.	0.55	3.01	0.00
22	Making common system of compressed air for PSY & CSY in place of isolated system.	1.46	8.03	0.00
	Total	30.20	166.05	140.76

(B) Saving of Steam

Sr No	Description	Saving in MT	Savings (Rs.in Lakhs)	Investment (Rs.in Lakhs)
01	Improving the insulation of the steam pipeline in the various section of the plant.	729	4.01	5.00
02	Arresting steam leakages from plant.	729	4.01	0.00
03	To identify and remove the idle steam line in total Rayon plant.	365	2.01	0.00
	Total	1823	10.03	5.00

Major Plans and Targets for energy conservation for the year 2008-09

Sr No	Description	Savings	Savings (Rs.in Lakhs)	Investment (Rs.in Lakhs)
1	Reuse VAM condensate in boiler feed instead of sending it to raw water tank.	2540 MkCal	17.92	0.00
2	Replacement of old and inefficient cooling tower pumps (15 Nos.).	9.15 Lakhs kWh	32.05	12.00
3	Replacement of old and inefficient chilled tower pumps (14 No.).	9.80 Lakhs kWh	34.58	11.20
4	Replacement of old and inefficient soft water pumps(5 nos.).	3.10 Lakhs kWh	10.90	7.50
5	Preventing wastage of steam condensate by attending leakage in tank and recycling steam condensate to PHE.	438 MkCal	2.00	0.00
6	Replacement of non-functional steam traps.	854 MkCal	3.90	2.00
	Total : 3832 MkCal, 22.05 Lakhs kWh		101.35	32.70

Environment and Safety

The unit is committed to preserve its environment and safety of its employees. Following major improvements have been made during last three years:

a) Water Effluent

The effluent from various section of industry is led to the common effluent treatment plant. The acidic effluent flow are neutralized by addition of lime slurry and then fed to two zinc clarifiers for effective removal of zinc. The overflow from clarifier is fed to the mixing chamber where the effluent from other two drains also joined. The mixed effluent is then pumped to suspended solid clarifier. The overflows flows into a holding tank, from where it is disposed off to sea creek. The quality of this treated effluent will within the prescribed norms of GPCB.

b) Air

Regarding control of air pollution the company has installed ESP & Bag filter in power plant & boilers, scrubbers in acid plant & caustic plant for dispersion of process gas. The industry has provided a stack of 52.5 meters height. The company is regularly monitoring the all polluting parameters of stack & also the ambient air quality surrounding the industry. All the gaseous emission are always found well within the norms prescribed by GPCB norms.

c) Solid Waste

Mainly lime sludge is generated & disposed as a solid waste in low lying land area. Our industry has got ISO 14001:2004 , OHSAS 18001:1999, RC 14001:2005 and ISO 9001: 2000 certification, won the Greentech Award (Golden Award) for environment & the unit is committed to follow all the guidelines as per ISO standards.

First Prize

Textile

KANCO OVERSEAS
(Prop : Kanco Enterprises Ltd.)
Tal: Dholka, Distt. Ahmedabad (Gujarat)

Unit Profile

Kanco Overseas is BIS Certified **ASO 9001:2000** Cotton Spinning Mill, manufacturing 100% Combed Cotton Yarn of different counts for Weaving and Hosiery industries. The company has extended installed Spindles from 27456 to 38016 spindles and 7 nos circular knitting fabric machines. The target production of yarn is about 20 tons per day and knitted fabric is 3 tons per day. The Company is equipped with latest machinery which is indigenous as well as imported make. The company has it's own Quality Assurance Laboratory with latest imported testing equipment and system.

The company has F.O. based Captive Power Plant with installed capacity of 5075 KVA and also having purchased Power Contract Demand of 4000 KVA with Uttar Gujrat Vij. Company



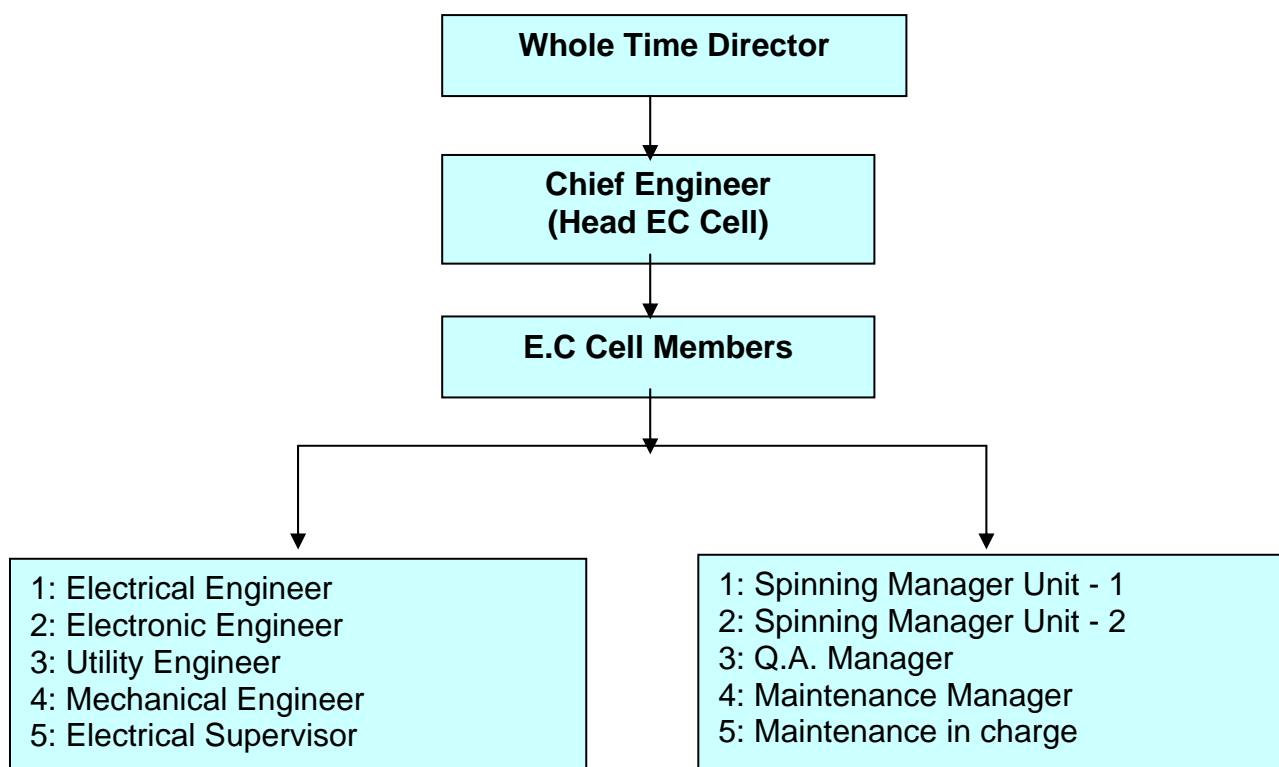
Energy Consumption

With continuous efforts and trials the unit is implementing various Energy conservation measures as ongoing practice, without hampering production and quality of yarn. Brief details of the Energy consumption for the last 3 years are as under:

ENERGY CONSUMPTION DEATILS




Description	Unit	2005 - 06	2006 - 07	2007 - 08
Electrical Energy	kWh/ T	4017	4217	4068
Total Energy Cost	Rs. Lac	712.13	915.32	1204.5
Energy as % of total production cost	%	13.71	16.51	16.76

ENERGY CONSERVATION CELL



Energy Conservation Achievements

Brief details of Major Energy Conservation Projects for years 2007 to 2008:

S. No.	Project Description	Savings in Power (kWh/Year)	Savings Considering unit rate Rs. 4.02/kWh	Investment (Rs)	Photographs
1	F.O. heating in storage tank by Steam heaters in place of Electric heaters.	138240	774144	Nil	
2	Steam heating at Sieger YCP	194400	1088640	40000	
3	Complete stopping of H – Plant of B/Room in Unit 2	151200	846720	Nil	
4	Blade angle reduction of Spg. Plant S.A Fan in Unit –II	182477	1021871	Nil	
5	Blade angle reduction of R.A. Fan of Spg. Plant in Unit 2	216605	1212988	Nil	
6	Replacement of 35 gms Bobbin by 28 gms bobbin in R/Frame of unit - I	97200	544320	Nil	

Energy Conservation Plans and Targets

S.No	Description	Savings (Lac kWh)	Savings (Rs. In Lakhs)	Investment (Rs. In Lakhs)
01	Installation of Inverter drive in place of hydraulic clutch drive in Simplex M/CS.	0.45	2.52	3.50
02	Replacement of very old and inefficient motors in Humidification Plants.	1.29	7.22	6.00
03	Replacement of old oil type Air Compressor by higher size oil free Compressors	2.60	14.56	40.50
04	Replacement of W -8 tapes by other energy saving tapes for 10 R/Frame m/c	0.65	3.64	2.90
	Total	4.99	27.94	52.40

Environment and Safety

The Company is committed to preserve it's Environment and safety for it's employees. Following steps have been taken in the last 3 years:

- **Water Effluents**

Kanco Overseas is a Spinning Mill where wet effluents are not produced. Effluent water produced by R.O. Plant and Boiler blow down is collected in a constructed under ground tank, where it's TDS is reduced and corrected water is re used in toilet flushing and gardening.

- **Air**

For Air control Kanco has installed 02 stacks of 40 meters height for DG Sets.

SPENTEX INDUSTRIES LIMITED

Baramati Unit – 1
Distt. Pune (Maharashtra)

Unit Profile

With its vision of going beyond tomorrow, Spentex Industries has shown a consistent performance and innovation to become one of the largest spinning enterprises in India. Its strength is deeply rooted in the finest quality of cotton and synthetic yarns it manufactures at its eight state of the art manufacturing facilities in India and abroad. With initially installed capacity of 26000 spindles, now Spentex has increased its capacity to 65000 spindles, producing 50 tones of yarn per day. (Unit 1 with 29232 spindles is sending application for energy award. Unit 2 started with 36000 spindles in year 2007) Spentex Baramati is producing premium quality cotton yarn of counts ranging from 20s to 40s combed hosiery as well as warp yarn. In it's new plant Spentex has included core yarn, slub yarn and carded yarn for denim application (Average count of unit 1 is 30s).



The yarn manufactured by Spentex has created brand image in the developed world. This has achieved through the deployment of state of the art machines and the quality test carried out with latest testing equipments.

Spentex is ISO-9001:2000, ISO-14001:2004 certified company. Spentex is also certified with Oeko Tex Standard 100 Certificate, certifying it's product suitable for baby wears. Spentex is recognized as a Trading house, by Government of India, Ministry of textiles. Spentex is also certified as an authorized user of Supima cotton.

Energy Consumption

Spentex has made very good progress in energy conservation. Continuous efforts are going on to reduce energy consumption. Various energy conservation measures are identified through KAIZEN and implemented during last five years and it is ongoing practice now. Specific energy consumption during last three years is shown below. The unit has an observed steady decline in the energy consumption during last three years due to the continual efforts of the Energy Conservation Cell.

DESCRIPTION	UNIT	2005-06	2006-07	2007-08
Electrical energy	kWh/T	3899	3794	3560
Total manufacturing cost	Rs. Lakhs / Year	4888.83	5848.02	5234.98
Total energy bill	Rs. Lakhs /Year	626.95	857.54	776.07
Energy as % of total cost of production	%	12.14	13.14	13.66

Energy Management Policy



INDIAN RAYON
(a Unit of Aditya Birla Nuvo Ltd)
(RAYON DIVISION)
VERAVAL

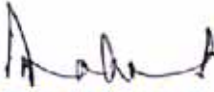


ENERGY MANAGEMENT POLICY

Indian Rayon, a Unit of Aditya Birla Nuvo Ltd., Veraval is committed to demonstrate excellence in Energy Management Performance on a continual basis.

To achieve this, we are committed for-

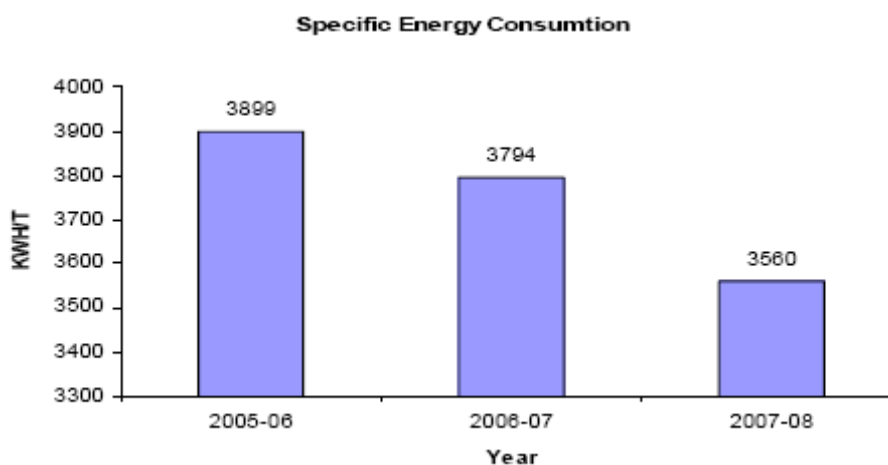
- Monitoring and Control of consumption of Energy through effective Energy Management System and periodic energy audits.
- Continuous Upgradation of process with energy efficient & eco-friendly technology to optimize the energy cost.
- Promoting & Propagating Energy Awareness among all the employees.
- Bench marking our performance with the best and endeavoring to be ahead in the world.


(Rahul Mohnot)
PRESIDENT

Energy Conservation Achievements

During the period 2005 - 2008, the unit implemented 92 energy saving ideas generated through periodic brain storming sessions. Annual savings of Rs.516.51 lakhs was achieved with an investment of Rs. 350.43 lakhs with payback period of approx. eight months only. It has resulted in percentage reduction of 13.52 % in electrical energy and 23.57% in thermal energy during last 3 years as shown below.

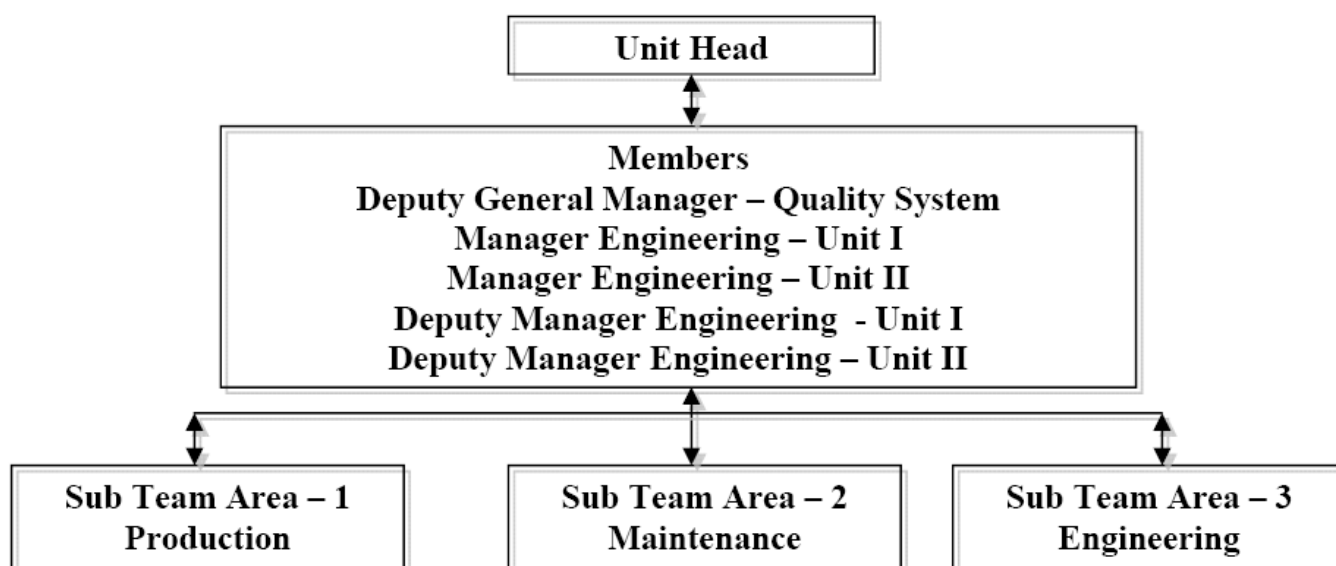
Year	Product	kWh/Ton	%Reduction over 2005-06	MkCal/ton	%Reduction over 2005-06
2005-06	Viscose filament yarn	4910	-	8.74	-
2006-07	Viscose filament yarn	4367	11.06	7.72	11.67
2007-08	Viscose filament yarn	4246	13.52	6.68	23.57



Energy Conservation Commitment, Policy and Set up

Considering increasing power crisis SIL has realized that the only way out is the systematic use and conservation of energy. Since 1993 engineering team in SIL is putting continuous efforts to improve the performance of energy management and energy conservation. In the Year 2005 a formal energy conservation cell has been established. This cell is headed by the Unit Head and constitutes six sub committees in the organization. Sub committee consist 3 – 4 members from different areas headed by a team leader. Members meet once in a month and review the progress of the energy management projects and their progress. Members of Energy conservation cell also meets once in a month. Reports from sub committees will be reviewed in such meeting and decisions will be taken on proposals from sub committees and members of EC cell.

Energy Conservation Cell Structure



Energy Management Policy

Spintex Industries Limited, manufacturing Cotton Yarn is committed for energy conservation through implementation of effective energy monitoring and control measures.

Spintex will upgrade it's processes, operations and maintenance activities and communicate the energy management policy to all employees to reduce the cost of energy, as well as its consumption per unit of production.

Energy Conservation Achievements

During the Year 2007-2008 the unit has achieved total savings of Rs. 13.21 Lakh KWH through the power saving projects implemented as detailed below.

1. All QA activities are now re-scheduled during 7.30 am to 7.30 pm and unit started to switch off LAB AC for rest of 12 hours.
2. Modified ducting waste collection system and reduced one dust collector fan in Preparatory Humidification plant.
3. Replaced existing rewound old demag motor by LEDL energy efficient motors.



4. Installed Solar water heater system to reduce electrical heating load for hot water generation in the yarn conditioning machine.



5. Installation of Electronic ballast in place of copper choke



Energy Conservation Plans and Targets

Spintex Industries has targeted energy saving of 2.52 lakh kwh per annum through

1. The replacement of existing Ring frame pneumafil suction fan by energy efficient excel fans.
2. The replacement of existing 250 watts HPMV lamps of street lights by CFL(4 nos 36 watt) Lamps.
3. The replacement of existing Demag main motors of comber m/cs (5 nos.) drawing more power by LEDL dual winding motors.

Environment and Safety

Spentex has implemented Environmental Management System since year 2001 and in the year 2002, certified with ISO-14001: 2004 for effective implementation of the same.

Safety

All safety measures as per Factory Act 1948 are implemented in Spentex. Considering the fire emergency plant is well equipped with fire hydrant system. Various types of fire extinguishers are placed at identified locations in the plant. Periodic mock drills and emergency preparedness test are being conducted. First Aid Boxes are provided at identified locations. Identified persons are trained for first aid and fire fighting. Smoke detectors and close circuit cameras are installed at important locations.

RISHAB SPINNING MILLS
Jodhan, Distt. Ludhiana (Punjab)

Unit Profile

Rishab Spinning Mills, Jodhan is a Unit of Nahar Group of Companies, which was established in the year 1991 with 25000 spindles and it has now 91104 spindles and is producing 55 tons of cotton, Blended Melange and other various type of yarn.

Nahar is very large conglomerate having the following salient features

1. It has 5 Lakhs spindles and 7400 Rotors working in the multi-location Units at various places of the country.
2. 'NAHAR' is India's largest Hosiery/Knitwear manufacturer and Exporter having the prestigious business associates like IZOD, OLD NAVY, GAP, Quick Silver, Perry Ellis, Ashworth, CAG and Philips Van-Huesen etc.
3. It holds High-profile Top rated Brands like "Monte-Carlo", "Canterbury" and "Cotton County" covering wide range of Garments.
4. It adorns "Golden Trading House Status" awarded by Govt. of India.

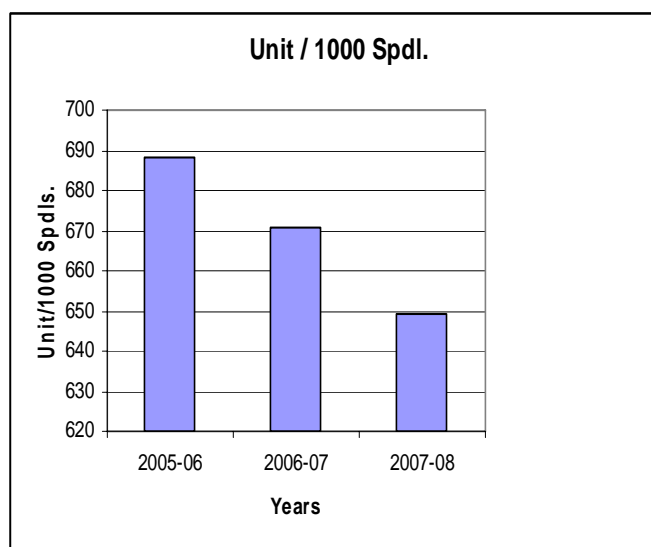
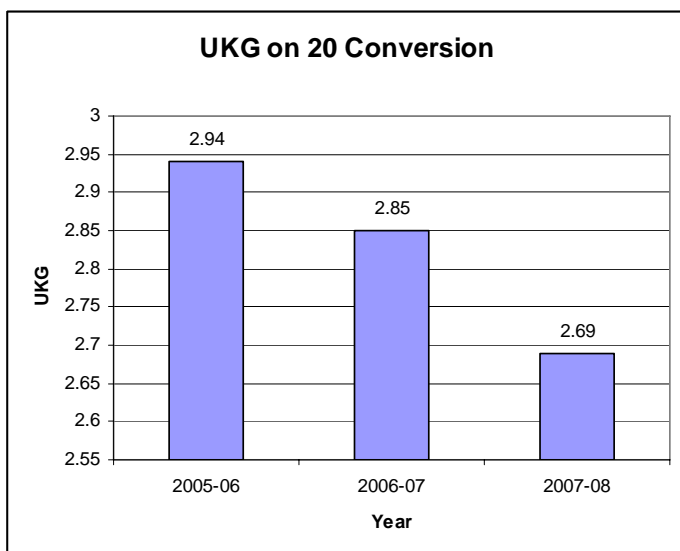
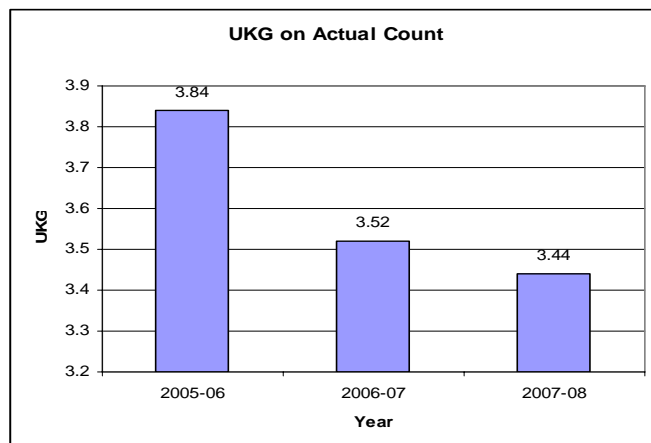
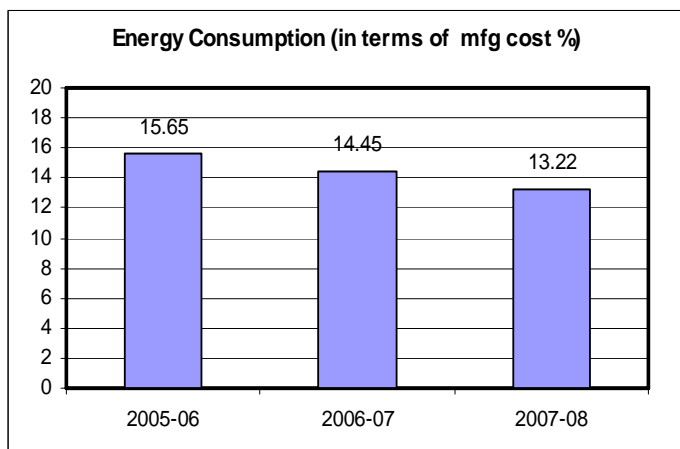
It is exporting its 60% products to several countries like USA, UK, France, Netherlands, Japan, Canada, Korea, Taiwan, Hong-Kong, Singapore, Egypt, Russia, Bangladesh and Sri Lanka. The bulk of the remaining 40% of the production is used as captive consumption to meet the requirements of its own for knitting & hosiery items which are exported to the above mentioned countries in the form of fabric and Garments. The small residual quantity of yarn is sold in the domestic market.

The Mill is professionally managed and has adopted modern managerial techniques for selection, recruitment, training/development and motivation of the entire workforce and enjoys very pleasant, peaceful and harmonious industrial relations.

Energy Consumption

The company is committed for conservation of energy. The implementation of company's energy management policy on day to day basis is carried out through system & procedures. Energy Consumption in terms of manufacturing costs, specific energy consumption for the period of 2005-06 , 2006-07 & 2007-08 are given below :

Year	Energy Consumption (in terms of mfg cost %)	UKG on Actual Count	UKG on 20 Conversion	Unit / 1000 Spdl.
2005-06	15.65	3.84	2.94	688
2006-07	14.45	3.52	2.85	671
2007-08	13.22	3.44	2.69	649



Energy Conservation Achievements

The company is committed to conservation of energy. Sustained efforts and the effective steps towards conservation of energy having bestowed financial benefits to the company year wise are depicted below:

During the period 2005-2008 unit implemented 33 energy saving ideas generated through periodic brain storming sessions.

Year	Energy Saved (in Rs. Lakhs)
2005-06	42.744
2006-07	30.578
2007-08	182.699

1. Trolley's modification of yarn conditioning machine to increase the production per doff.



Trolley's modification of yarn conditioning machine to increase the production per doff.

Investment : Rs. 75,000

Saving : Rs. 2.84 Lakhs per year

2. Installation of VFD on Savio Espro L Autoconers.



Installation of VFD on Autoconers Machine for their suction motor to maintain the vacuum and to save the energy

Investment : Rs. 8 Lakhs

Saving : Rs. 13.93 Lakhs per year

3. Installation of VSD FF drive compressor.



Installation of GA55 VSD FF compressor to maintain the compressed air and to save the energy.

Investment : Rs. 10.11 Lakhs

Saving : Rs. 5.63 Lakhs per year

4. Installation of Energy Conserver for lighting system



Installation of Energy Conserver for Lighting D.B to save energy

Investment : Rs. 2.2 Lakhs

Saving : Rs. 4.726 Lakhs per year

5. Replacement of old Murata auto coner with Schlafhorst 338 Machines.



Replacement of old Murata auto coner winder machine with Schlafhorst 338 Machines to save energy and to increase production

Investment : Rs. 455.89 Lakhs

Saving : Rs. 12.738 Lakhs per year

6. Installed Nestling Crafting Units.



Installed Nestling Crafting Units on Speed Frame for Roving Break Stop Motion.

Investment : Rs. 1.07 Lakhs

Saving : Rs. 9.453 Lakhs per year

Initiative Taken for Energy Conservation during the year 2007-08

Sl. No.	Description	Electricity (Lakhs kWh)	Total Saving (in Rs Lakhs)	Investment (in Rs. Lakhs)
1	Replaced 5 old low production Muratec machine model with State-of-art latest high production 5 Schlafhorst 338 **	3.027	12.738	455.893
2	Replace old High power consuming compressor with new latest model VSD GA55 Compressor **	1.339	5.635	10.111
3	The unit installed energy conserver for lighting DB	1.123	4.726	2.200
4	In order to reduce the back air pressure we installed Disc filter which resulted in reduction of power consumption	0.326	1.373	0.300
5	Adopted Speed control system for waste recovery system, instead of damper control	8.888	37.400	0.000
6	Increased Yarn conditioning capacity of the machine by modifying the old Trolley's with the new design.	0.675	2.840	0.750
7	Installed 24 supply air fans and 24 Return Air Fans initially in the year 1991 when the mills became operational. The supplies as well as return air fans were located at the ground floor. We observed that supply air fans were confronting with load of return Air fans and reduction in the air efficiency The unit shifted 16 supply air fans and mounted them at the first floor which increased the efficiency of fans and supplied the same amount of air as of 24 fans .The unit was able to stop 8 supply air fans and 4 air return fans keeping the same ambient conditions with regard to temperature and humidification of the spinning hall.	17.626	74.169	2.000
9	Immersed the water supply of water coolers through the water tanks of air washer. This resulted into the water temperature and we were able to get the cool drinking water from the water cooler without consuming any power for three months from March till the rainy season	0.036	0.151	0.030
10	Replaced ordinary chokes with electronic ballast (321x2)	0.555	2.334	1.603
11	Installed AC Drive (VFD) for 10 suction motors of Autoconer for maintaining optimum level of vacuum. This resulted into saving of electric power	3.312	13.937	8.000
12	Converted the continuous movement of empty tube conveyor belts by intermittent mode of movement where by we belts were running for 6 minutes only and stopping for 54 minutes in an hour. This resulted not only substantial power saving but also saving in maintenance cost, reduce hard waste and reduce maintenance inputs	0.494	2.079	0.440
13	Installed Electronic Roving back stop motion there by stopping the pneumafill fans on 14 Speed frames, which resulted in saving of power.	2.246	9.453	1.071
14	increased the run ration of blow room machines from 75 % to 90 %.Our this step not only improve the opening and cleaning efficiency of blow room machines but also resulted into saving of power.	0.100	0.421	0.090

15	Supplied out side air into department without the help of electric power by fabricating 10 nos.G.I.ducts. This not only resulted into saving of electric power but also helped maintaining the requisite ambient condition inside the spinning hall.	0.250	1.052	1.500
16	Installed water sprinklers for irrigation of grassy lands and vegetation in the mill's campus.			0.060
17	Installed One Touch Fitting instead of screw type fitting on Autoconer in order to prevent leakage of air, which results into saving of Electric power	0.200	0.842	0.800
18	Replaced fluid coupling with star delta starter for main motor of speed frame. Replaced fluid coupling of 4 speed frame with star delta starter for saving electricity.			0.120
19	Started using energy efficiency spindle oil in ring frame. This also resulted in saving of power consumption.			0.090
	TOTAL	40.197	169.149	485.057

The target to conserve energy for year of **2008-10 is Rs. 281.786 Lakhs.** out of which the unit has saved **Rs. 154.995 Lakhs** from April to Aug 2008.

Environment and Safety

Van Mahotsav is regularly celebrated during the rainy season in the month of July and about 100 trees are planted every year. Van Mahotsav is being celebrated every year for the past over 5 years.

In a drive to conserve ecology, a fully grown palm tree was transplanted with the help of cranes to save it from high-tension wires passing over it. Done at a cost of Rs 12,000, the transplantaion of the palm took three days of preparation by a horticulturist and two hours of strenuous effort by a group of 25 workers.

The company celebrates the National Safety Day on 4th March every year in which safety achievements of the year and preventive measures in respect of fire and industrial safety are highlighted.

The Company also organized training programs on safety with the help of outside agency under the execution and guidance of state govt. safety agencies.

