

A BRIEF WRITE UP
GODREJ CONSUMER PRODUCTS LIMITED
Industrial Area Malanpur, Bhind (M.P.)

GROUP PROFILE

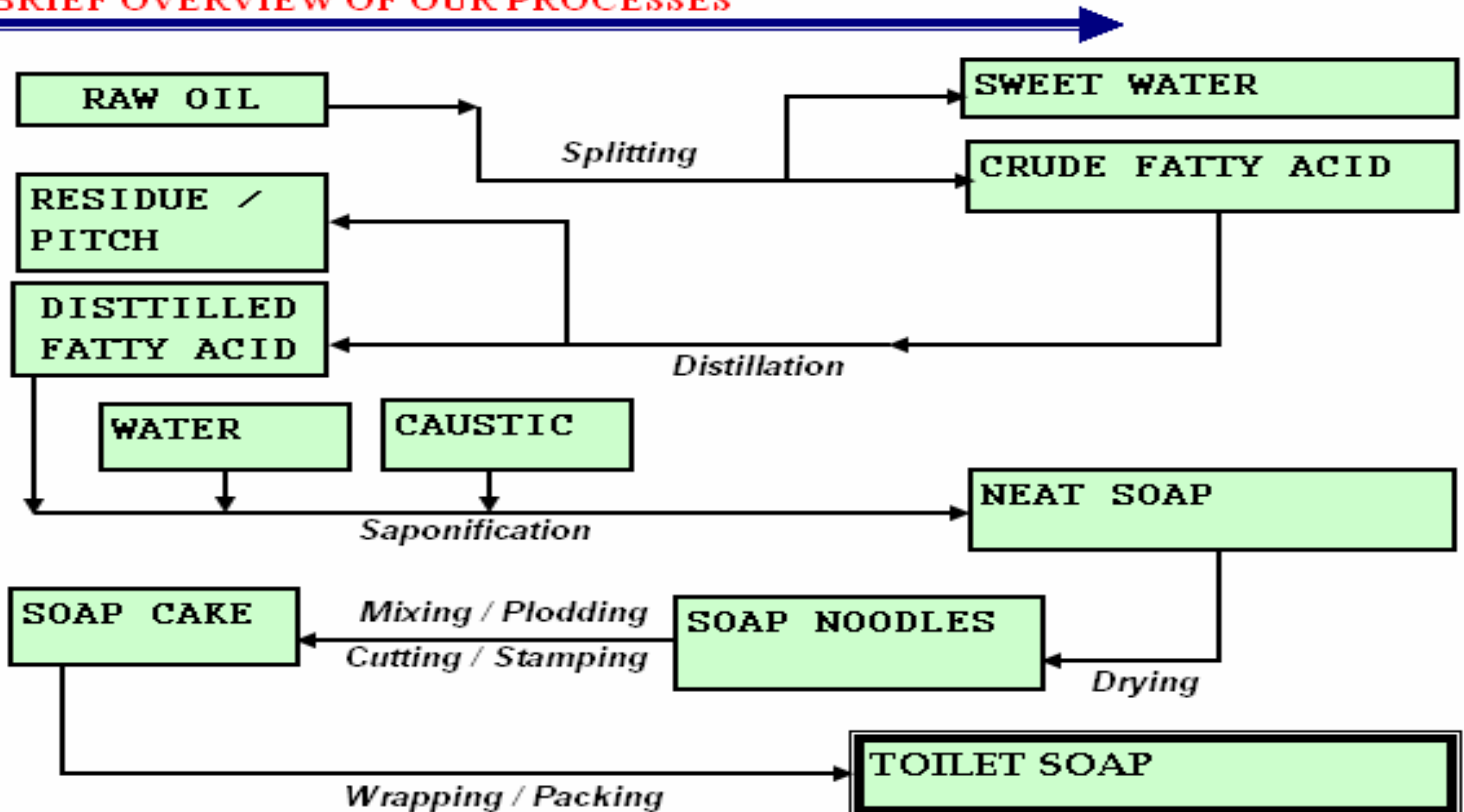
- The group was established in 1897, current turnover Rs. 4000 crores, 17000 strong workforce.
- It started with manufacture of locks to launchers and safe to soaps.
- The Pirojsha Godrej foundation owns 25% of the group and thus at least 25 % of the profit are given back to the society,
- Company driven by the concept of "EVA" and other initiatives like Young Executive Board and Red & Blue teams.
- Godrej was the first company in the world to manufacture toilet soap from vegetable oils as previously, soap were made from tallow and animal fat.

Godrej is # 1 in safes and security equipments, liquid detergents, office furniture, hair colors, almirahs, oleo chemicals, house hold insecticides and animal feed.

COMPANY PROFILE

- This unit is located at Malanpur, Bhind, M.P. on the Gwalior - Etawah high way. It is 25 km. away from the historical city Gwalior.
- Its main products are soap noodles & toilet soaps, installed capacity 72000 & 45000 tonne per annum respectively, current turn over Rs. 240 crores.
- It is an ISO 9001-2000 certified company.
- First soap manufacturing company to get ISO 14001- 2004 certification in India.
- At Malanpur Unit we are practicing the Japanese Concept of TPM (Total Productive Maintenance) since Mar. 2001.

BRIEF OVERVIEW OF OUR PROCESSES

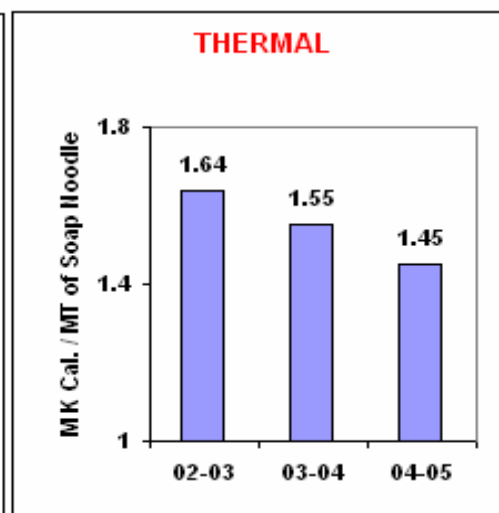
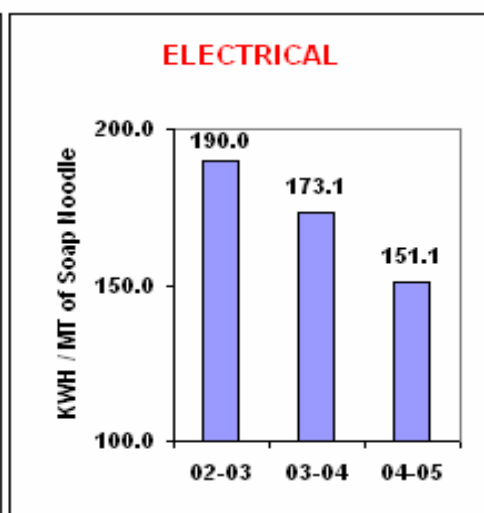
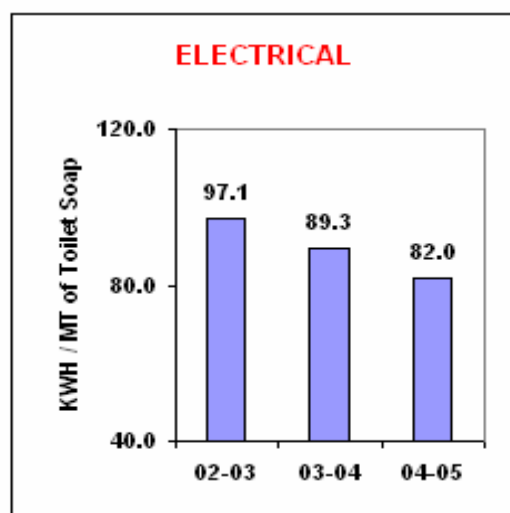


ENERGY CONSUMPTION

During study on Electrical & Thermal Energy, the consumption of energy per tonne of Soap was found in decreasing order except in electrical energy for the year 2002-2003 due to change in process requirements.

DESCRIPTION	UNIT	2002-2003	2003-2004	2004-2005
Annual Toilet Soap production	Tonne	34378.0	34879.0	36399.0
Annual Soap Noodle production		32354.0	35250.0	51615.0
Total electrical energy consumption/annum	Lakhs KWH	97.7	92.2	108.3
Specific energy consumption - Electrical	KWH / tonne of Toilet Soap	97.1	89.3	82.0
Specific energy consumption - Electrical	KWH / tonne of Soap Noodle	190.0	173.1	151.1
Total Thermal (fuel) consumption/annum	MK Cals	56266.0	54086.0	72784.0
Specific energy consumption - Thermal (Fuel)	Mkcal / tonne of Soap Noodle	1.64	1.55	1.45
Total Manufacturing Cost	Lakhs Rs.	13222	14972	21038
Energy Cost as %age of total manufacturing cost	%	8.13	7.11	6.86

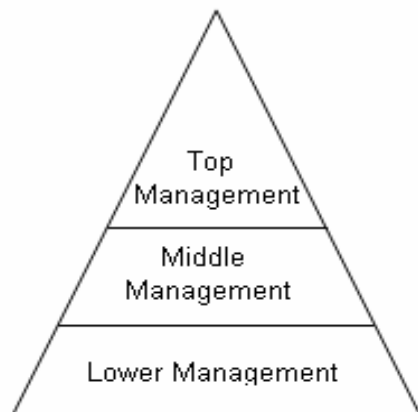
YEAR		ELECTRICITY		THERMAL (FUEL)	
		Consumption (KWH/ tonne of Toilet Soap / Soap Noodle)	% reduction over 2002 - 2003	Consumption (MK Cals./ tonne of Soap Noodle)	% reduction over 2002 - 2003
2002-2003	(Toilet Soap)	97.10	-----		
2002-2003	(Soap Noodles)	190.00	-----	1.64	-----
2003-2004	(Toilet Soap)	89.30	8.03		
2003-2004	(Soap Noodles)	173.10	8.89	1.55	5.49
2004-2005	(Toilet Soap)	82.00	8.17		
2004-2005	(Soap Noodles)	151.1	12.71	1.45	6.45



Reduction in Specific Energy Consumption Over 2002 - 2003

ENERGY CONSERVATION COMMITMENT, POLICY & SET UP

GCPL is committed to Total Energy Management and prevention of energy waste, because of this commitment. Energy Conservation features have been incorporated in the plants & machinery and there have been continuous effort to reduce the energy consumption right from beginning of our process to the end. GCPL Energy Management Policy reflects its commitment towards continual improvement & its plan to achieve the set targets.



Top Management comprises of GM & Managers. It encourages the involvement and commitment of the middle management. It all also gives all the support and encouragement to various Encon activities / projects.

Middle Management forms the lower management includes all section heads of the shop floors and helps in smooth implementation of these projects.

Lower Management identify the problems, look for continuous improvement, conduct brain storming sessions , arrive at remedial measures and implement the same by involving all employees. The performance is monitored continuously, reviewed periodically & reported to the top management.

ENERGY MANAGEMENT POLICY

We are committed to manufacture and deliver our products of superior quality at optimum consumption of energy through

- *Optimum utilization of energy by continuous measuring and controlling the energy index.*
- *Carry out periodic energy audits and implement identified improvement projects.*
- *Benchmark continuously our performance against the achieved energy level and also best in the industry (group companies).*
- *Promote energy awareness among all the employees in the organization.*

ENERGY CONSERVATION ACHIEVEMENTS

During the period 2004-2005, GCPL has implemented 10 high cost proposals & around 20 low cost proposals through initiatives, workmen suggestions, TPM methodology resulting into saving of Rs. 23.2 Lakhs with an investment of Rs. 43.6 Lakhs. This has resulted in a reduction of 6.95% in specific electrical consumption & 1.68% in specific thermal energy consumption.

The major projects implemented during 2004-2005 are as

1. Replacement of modulation unit with advanced modulation unit in Thermic Fluid Heater, TP - 10.

Investment	: Rs. 0.60 Lakh
<i>Power Consumption :-</i>	
Before Installation	: 1500 Kgs. / day
After installation	: 1455 Kgs. / day
Saving in fuel	: 13.5 MT / annum
Saving in cost	: Rs. 7.0 Lakhs / annum



Better combustion achieved

2. Replacement of energy inefficient nozzles with energy efficient nozzles in vacuum system of FADP-II

Consumption of Steam. :-

Investment	: Rs. 1.50 Lakhs
Before Installation	: 800 Kgs. / hr.
After Installation	: 640 Kgs. / hr.
Saving in fuel	: 92.16 MT / annum
Saving in cost	: Rs. 11.7 Lakhs / annum



Saving in steam due to better efficiency of ejectors

3. Replacement of dyno drives with inverters in plunger pumps for better speed regulation as well as power saving.

Consumption of Power. :-

Investment	: Rs. 2.0 Lakhs
Before Installation	: 313.33 kwh / day
After Installation	: 161.66 kwh / day
Saving in power	: 0.155 Lakh kwh / annum
Saving in cost	: Rs. 0.70 Lakhs / annum



Reduction in power due better performance of motor

4. Provision of agitator in the Blending Tanks for better & faster mixing of blends as well as power saving

Consumption of Power. :-

Investment	: Rs. 6.00 Lakhs
Before Installation	: 146.66 kwh / day
After Installation	: 101.08 kwh / day
Saving in power	: 0.42 Lakh kwh / annum
Saving in cost	: Rs. 2.02 Lakhs / annum



Saving in power due to reduction in cycle time

5. Installation of inverters on the Roll Mills & Soap Feed Pumps

Investment	: Rs. 7 Lakhs
Saving in energy	: 0.76 Lakhs kwh / annum
Saving in cost	: Rs. 3.63 Lakhs / annum



Saving in power & better speed regulation

ENERGY CONSERVATION PLANS & TARGETS

Future plans of energy conservation in GCPL include the following.

Sr. No.	Energy Conservation Measures (Planned)	Anticipated savings			Approx. Investment (Rs. Lakhs)	Project commencement & completion year
		Energy Unit (specific)	Energy Value	Rs. Lakhs		
01	Replacement of filament type indicating lamps with LED type	Lakhs KWH	0.08	0.38	0.5	2005
02	Replacement of energy inefficient tube lights with energy efficient tube lights	Lakhs KWH	0.16	0.80	0.9	2006
03	Removal of intermediate conveyors after modification in Roll Mills foundation to ensure material flow through gravity	Lakhs KWH	0.27	1.30	0.6	2005
04	Provision of variable frequency drive in air compressors & TP-25 blower	Lakhs KWH	1.63	8.00	7.0	2006
05	Replacement of indirect cooling tower with smaller cooling tower in tempered water circuit in FADP-2	Lakhs KWH	1.02	5.00	5.0	2006
Total (Electrical)			3.16	15.48	13.98	
06	Provision of ON-Line O2 analyzer for controlling excess air in the boilers	MKCals.	1108.16	12.50	12.0	2006
07	Installation of automatic blow down system to avoid manual blow down in the Boilers	MKCals.	354.61	4.00	4.5	2006
08	Installation of air pre-heater in TP-25 Thermic Fluid Heater	MKCals.	487.59	5.50	5.0	2006
09	Provision of thermo compressor to recover flash steam & use it for process heating	MKCals.	709.22	8.00	3.0	2006
10	Use of Gas instead of liquid fuels in Boilers & D.G. Sets	MKCals.	17730.50	200.00	80.0	2006
11	Use of thermic fluid in place of steam in Heat Exchangers	MKCals.	4255.32	48.00	48.0	2006
Total (Thermal)			MKCals.	24645.39	278.00	152.50
Total (Electrical + Thermal)				293.48	166.48	



ENVIRONMENT AND SAFETY

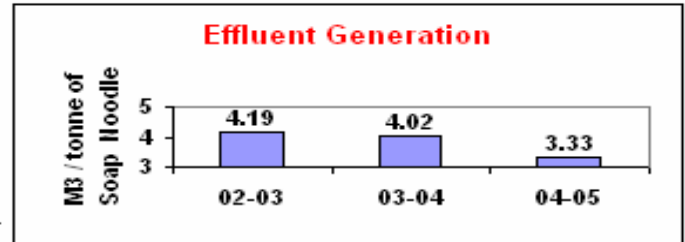
As per the environment policy, GCPL is committed to continual upgradation of technology, prevention of pollution, conservation & optimal utilization of natural resources by adopting Reduce, Reuse & Recycle methods, training for environment awareness of employees & suppliers, safe operation of plants & machinery, complying with all the applicable environment legislations & regulations to preserve its environment and ensure safety of its employees and further strive to go beyond legal requirements.

GCPL is certified & awarded for the following.

- First soap unit to get ISO 14001- 2004 certification.

WATER

- Having effluent treatment plant of 600 M3 / day.
- Using treated water for irrigation purposes.
- Ensuring zero discharge of effluent outside the factory.
- Daily effluent plant performance monitoring.
- Rain water harvesting is being studied.
- Decreasing effluent generation level in last three years.



AIR

- Cross ventilation provided for better fresh air circulation at Shop Floors.
- Pneumatic arrangement provided for talc handling to maintain the dust free atmosphere on shop floor.
- Flue gas analyzer in boiler to reduce excess air & conserve energy.
- Regular monitoring of stack & ambient air.

Following programs & activities are introduced on Environment & safety

- Celebration of Safety day on 4th March & Environment Day on 5th June.
- Participative management through employee involvement in departmental safety committees, Projects related with safety in QC/SGA/TF. Competitions, Celebrations, HCT training, regular fire drill & mock drill drill exercises.
- Regular monitoring of noise level & tracking on near-miss incidents.
- Merit award & Wage agreement - linkage with safety
- Training to contractors & contract workmen
- Work place visit of employees families.

