



(A Government of India Undertaking)

UNIT PROFILE: ITI Limited ,Mankapur, Gonda(UP)

ITI Limited is the first Public Sector Undertaking established in the year 1948 at Bangalore to meet the total telecom requirement of the country. The former Hon'ble Prime Minister late Smt.Indira Gandhi set up Mankapur plant Gandhi in the year 1982 located in the eastern part of U.P. The unit is known synonyms in telecom industry to manufacture Digital Switching Equipments (E10-B) ,CSN (OCB283) ,Max-L/XL (C-DOT),and BTS (GSM) from beginning from1985 to still,under the technical collaboration with M/s ALCATEL, France except C-DOT. The unit has pride of being 1st Indian manufacturer of mobile exchange Hon'ble Chairperson UPA Smt.Sonia Gandhi inaugurated GSM-BTS manufacturing facility on 07th July 2005 on the precious presence of Chairman of technology Collaborator M/s ALCATEL, France. The unit production Capacity target is planned by corporate office. The unit has extended its turnkey project for GSM network in Western Region Maharashtra, MP, Gujrat & Chattisgarh circles. Due to global tendering & fast changing in telecom technology, the Unit as well as the company facing financial crunch for the last few years. However, The Unit has constant approach towards Energy Conservation to reduce the manufacturing cost to sustain cutthroat market business competition.

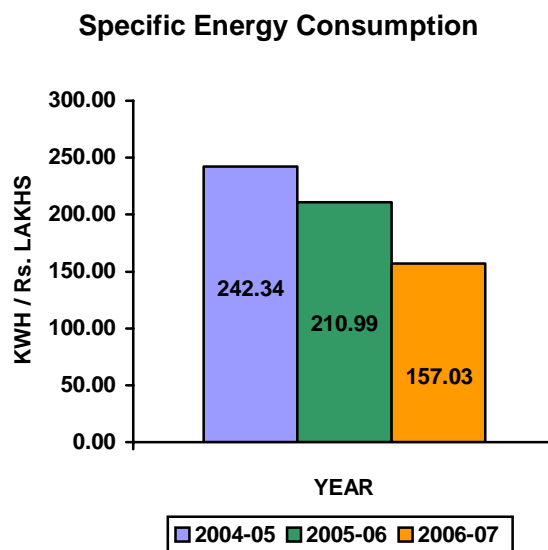
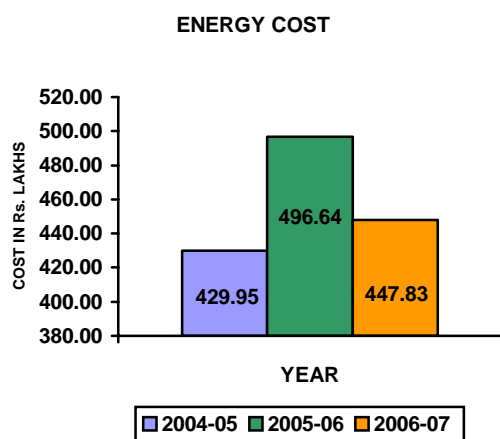
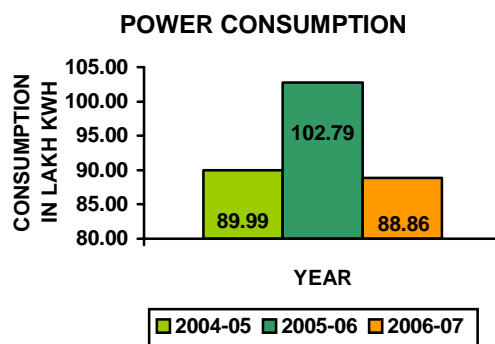
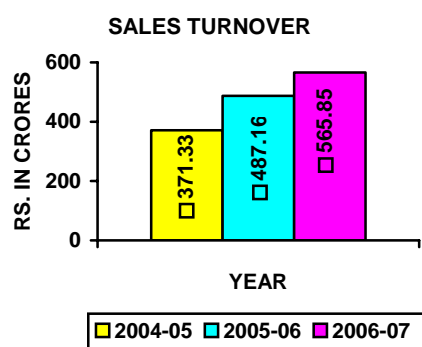
ENERGY CONSUMPTION:

The unit is well aware of energy efficiency & its benefits, which not only provides a highly cost effective and environmentally benign solution to meet energy demand, but also help in reduction of power cost. The Unit has accorded priority for reduction in energy consumption by putting consistent efforts towards monitoring of production / non-production operations / activities as well as company assets management. The details depicts continual reduction simultaneously over last three years (i.e.2004-

05 to 2006-07) Specific Energy Consumption (KWH/Rs. lakh Production) as below:

Description	2004-05	2005-06	2006-07
Total Power Consumption (Lakh kWh)	89.99	102.79	88.86
Total Energy Cost (Rs. Lakhs)	429.95	496.64	447.83
Sales turnover (Rs. Lakhs)	37133.57	48736.99	56585.48
Specific Energy Consumption in (KWH/Rs.Lakh Production)	242.34	210.99	157.03

The generation cost has increased due to steep rise in fuel/lub.oil cost and enhancement of imported spare of 05X1450KVA Yanmar- Toyo Denki' make captive power plant. Though there is not considerable saving in consumption over last year but we have achieved saving in respect of last year in spite of capacity addition & extended working hours of factory to meet the production Plan.



Energy Conservation Commitment, Policy and Set Up:

Commitment:

- ☛ The Unit is committed to promotion of energy efficiency and to reduce the need to create new capacities which require mobilization of huge resources.
- ☛ To intensify the in-house efforts for improving energy efficiency, Energy Conservation Cell and Core Committee have been set up by the Management.

ENERGY CONSERVATION POLICY

We, at ITI Limited Mankapur Unit are committed to adopt energy conservation measures in all our activities, products and services across the unit.

Our Mission is:

- ☐ **To control energy consumption by adopting best practices and energy efficient processes.**
- ☐ **To control energy consumption by producing energy efficient products.**
- ☐ **To conduct regular management reviews to ensure continual improvement.**
- ☐ **To conduct energy conservation awareness programs throughout the unit.**
- ☐ **To recognize efforts of our employees and their families in energy conservation initiatives.**
- ☐ **To ensure energy consumption reduction by 05% each year.**

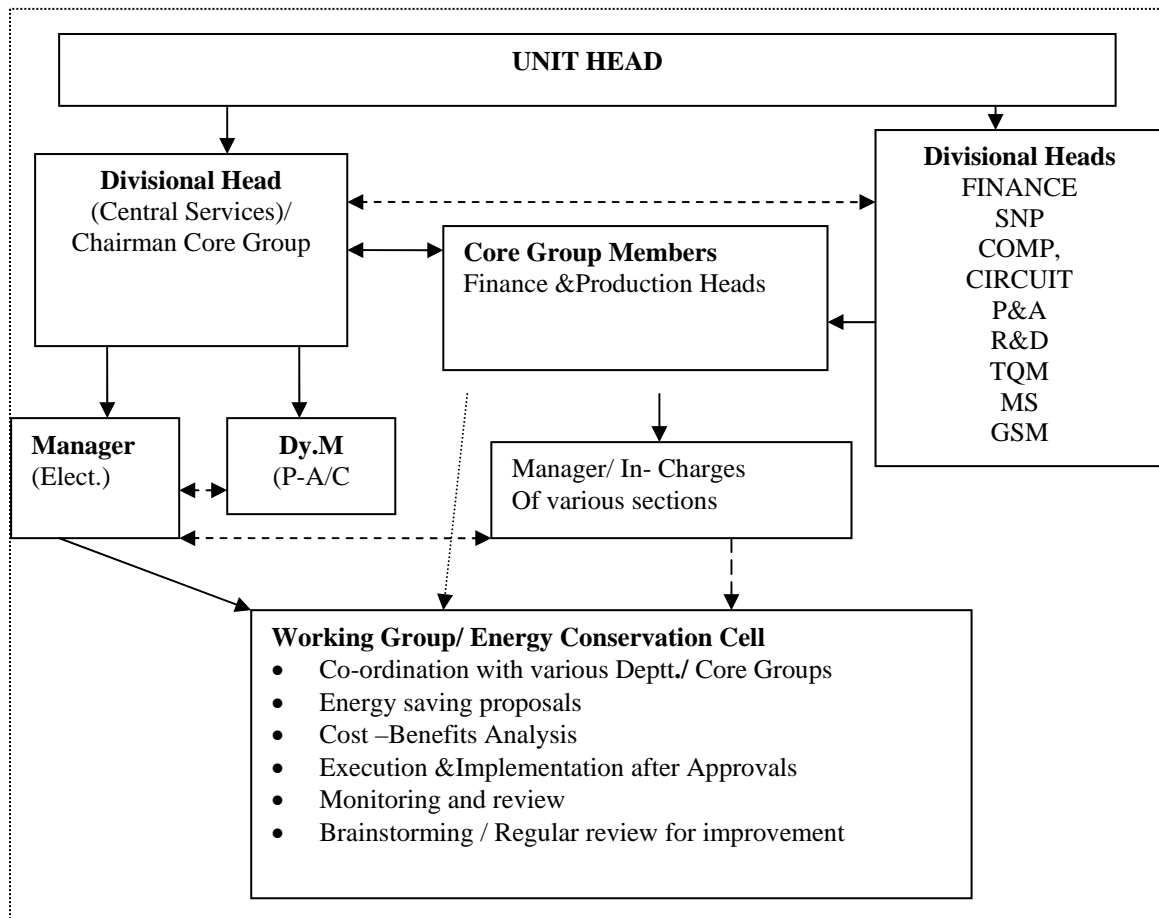
Date : 28.09.04

Place : ITI Limited , Mankapur

(S.P.TRIPATHI)

UNIT HEAD

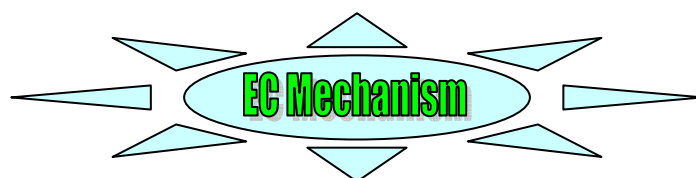
ENERGY CONSERVATION STRUCTURE:



National Energy Conservation Campaign_2005, 2006 &2007:

The Unit was successfully participated in National Campaign on Energy Conservation from 2005 to 2007. The token photographs are given below. In addition to this the Unit planted more than 3000 plants of Jatropha-Curcas' in the factory and Township area.





* **Monitoring and targeting** is the key to energy conservation on daily basis.

* **Norms** are set up on the best performance and practices in past three years.

* **Process Modifications** are focused to conserve the environment, economy and energy & use of non- hazardous chemical.

* **Small Group Activities** are conducted in –house for CAPA (corrective and preventive action) on the basis of planned and actual performance.

* **Brainstorming** – To promote the innovative ideas from brainstorming sessions of various groups.

* **Volunteers participation schemes** from all individuals, suggestions are invited for improvement in a constructive structured manner.

* **Six –Sigma Approach** is adopted to maintain the improvement techniques.

* **Create awareness** among employees and their families by conducting programs on the eve of National Energy Conservation Day.

ENERGY CONSERVATION ACHIEVEMENTS:

Major energy conservation achievements in the Unit during FY: 2006-2007 is as follows:

Project description	Energy savings (Lakh KWH)	Savings in (Rs. lakhs)	Implement cost (Rs.Lakh)
Replacement of low efficient under loaded, high commutation UPS system for Computer Division.	1.88	9.40	2.56
Shut off 75 HP, AHU & retrofit 02x2 Ton WAC installation at Circuit Division	1.62	1.25	8.12
Power Factor Management in Power distribution network for Plant A/C section.	3.20	2.65	14.78
Development of new treatment line in place of old large capacity at Component Division.	0.17	1.62	0.85
Retrofit modification cooling tower & Installation of new Cooling Tower for Chilled	1.95	6.58	9.75

water system at Central Air-Conditioning Plant.			
Installation of decentralized Compressed -Air system with dedicated small capacity compressor for BTS Assembly at Component Division.	0.14	0.65	0.81
Installation of new dedicated TC-100 Air compressor for BTS manufacturing area	0.25	2.96	0.93
Creating Awareness Programmes for employees / Schools.	0.18	0.23	0.95
Total	9.39	18.50	45.59

ENERGY CONSERVATION PLANS AND TARGETS:

Energy conservation is an ongoing process at ITI Limited, Mankapur and Plant is committed for it and always looking for new avenues on continual improvement basis. Following major proposals are in hand as a part of its future plans for energy conservation:

- ❖ Installation of Computerized Energy Monitoring Energy Management System for all production & non-production activities.
- ❖ Replacement of old version of 2X40 KVA UPS of HCB & PCB which is consuming much power due to high commutation involvement by energy efficient UPS
- ❖ Replacement of V-Belts with synthetic belts
- ❖ Replacement of Secondary Chilled Water Pumps
- ❖ Off loading of Central Compressed Air Plant by installation of small capacity air compressors
- ❖ Installing VSD (variable speed drives)
- ❖ Retrofit in electric drives by star mode /Use of Energy Efficient Motors.
- ❖ Providing dedicated Power Supply & Air-Conditioning system for CNC Drilling at Circuit Division.

ENVIRONMENT AND SAFETY:

Environment:

- ✓ The Unit has been accredited ISO: 14001 certificate in 2003-04 for its PCB Plant.

- ✓ The Unit has installed ultramodern Effluent Treatment Plant.
- ✓ The Unit is dedicated for safe environment and has an “Environment Policy”.
- ✓ The Unit has been getting NOC from U.P. Pollution Control Board regularly.
- ✓ The Unit is continuously managing itself ‘ ECO- Friendly ‘ and is committed for decrease in utilization of hazardous chemicals and consistent efforts are being made to replace these by Non – hazardous chemicals in planned phased manner.

Safety:

The ITI Limited Mankapur believes that the Safety of the employees is of the greatest interest to the Organization and ranks in importance with production, quality of products and cost. The Unit has its Safety Policy

- The Unit has meritorious record of Safety Awards , which are detailed below for reference:
 1. National Safety awards presented by Govt. of India regarding longest accident free period /year for the years of 1990,1991,1992,1999,2000, 2001, 2005.
 2. Lowest average accident frequency rate for the years – 1990,1991,1992,1999,2000, 2001, 2005 .
- Plant safety index is calculated at every quarter for assessing the Safety performance of different divisions.
- Joint fire safety inspection is conducted to assess the potential hazards on monthly basis.
- Safety training is conducted regularly and many awareness programmes are conducted regularly to create awareness among employees and their families.
- Personal protective equipments are provided to the employees and their use is 100% in the Unit.