

MIRC ELECTRONICS LTD

Organization Profile

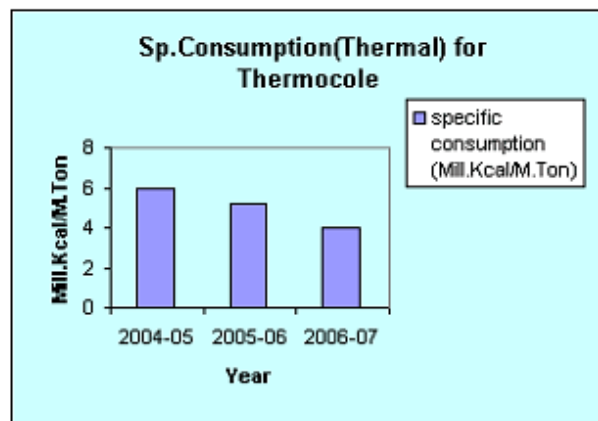
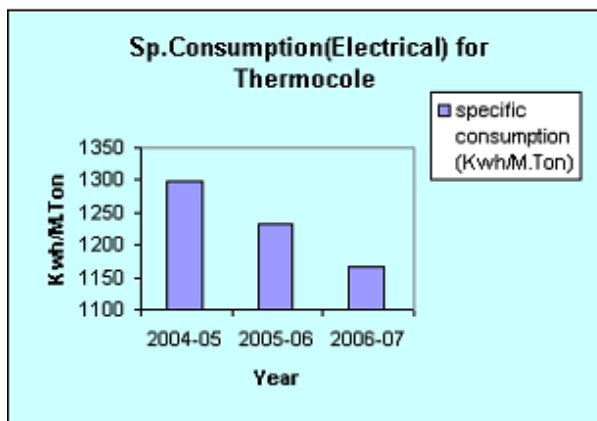
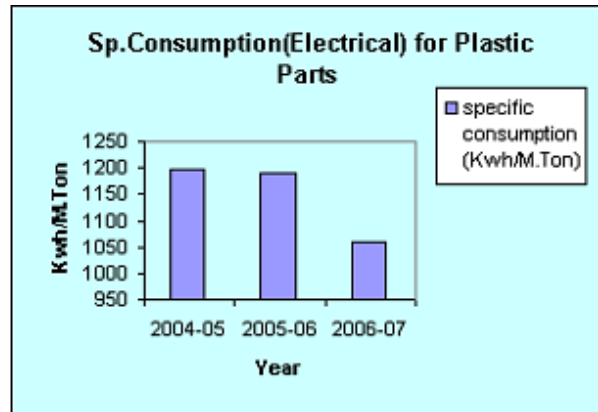
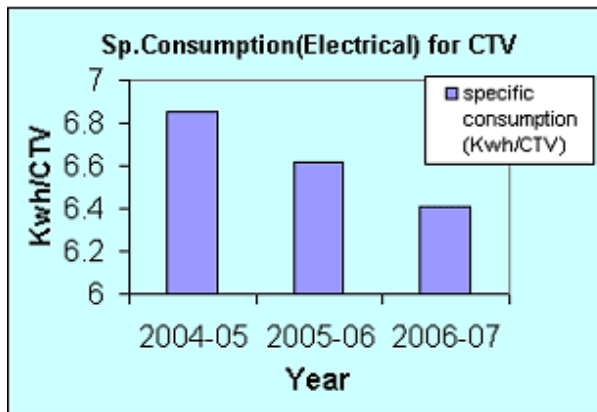
MIRC ELECTRICS LTD, one of India's leading consumer durables companies, is primarily engaged in Designing, Manufacturing, and Marketing of Colour Televisions, Air-Conditioner, Washing Machines, DVD Player, Microwave Oven and Presentation products under the acclaimed "ONIDA" brand name. Manufacturing plant is located at 50Kms from Mumbai City. The Total production Capacity of the plant is 3 Million Colour television sets per annum. The annual sales turn over of the Wada Plant is 882 Crores. The Unit is ISO 9001 and ISO 14001 certified by BVQI.



ENERGY CONSUMPTION

From the Organisation level and at Global level, The company has realized the importance of Conserving the Energy and Hence taken major initiatives to control the Energy Consumption. The last three years specific energy consumption are shown below which depicts the continual reduction in Energy consumption over the last two years.

DESCRIPTION	UNITS	2004-05	2005-06	2006-07
ANNUAL PRODUCTION				
COLOUR TELEVISION CTV	NOS IN LACS	8.31	9.14	8.52
INJECTION MOULDING PLATIC PART	M.Ton	2713	3554	3966
ARTICLES FOR PACKING(THERMOCOLE)	M.Ton	394.08	634.47	942.01
TOTAL ELECTRICAL ENERGY CONSUMPTION				
COLOUR TELEVISION CTV	lakhs KWh	56.96	60.54	54.62
INJECTION MOULDING PLATIC PART	lakhs KWh	32.48	42.32	41.98
ARTICLES FOR PACKING(THERMOCOLE)	lakhs KWh	5.12	7.82	10.99
TOTAL THERMAL ENERGY CONSUMPTION				
ARTICLES FOR PACKING GOODS	Million Kcal	2350.99	3314.08	3813.19
SPECIFIC ENERGY CONSUMPTION(ELECTRICAL)				
COLOUR TELEVISION CTV	KWh/CTV	6.85	6.62	6.41
INJECTION MOULDING PLATIC PART	KWh/M.Ton	1197.19	1190.77	1058.49
ARTICLES FOR PACKING(THERMOCOLE)	KWh/M.Ton	1299.22	1232.52	1166.65
SPECIFIC ENERGY CONSUMPTION(THERMAL)				
ARTICLES FOR PACKING GOODS	Million Kcal/M.Ton	5.96	5.22	4.04



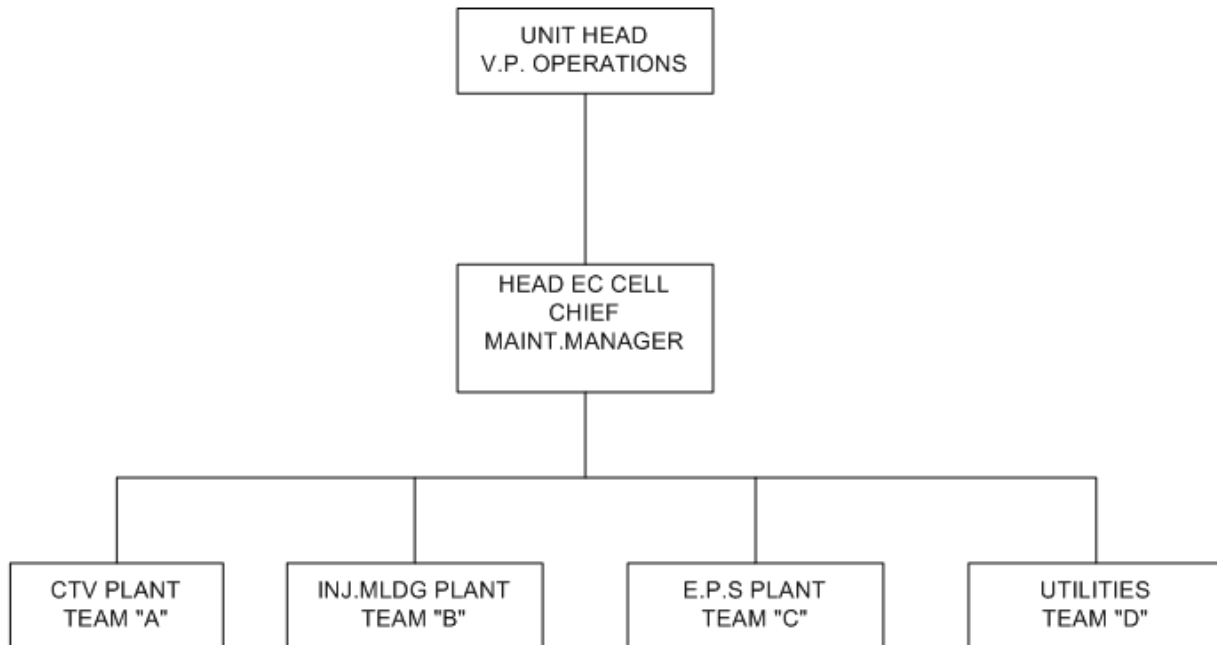
ENERGY MANAGEMENT POLICY

We are committed to conserve the Energy and Strive for continual improvement through Innovation and Human Involvement.

This shall be achieved through

- Daily monitoring and Control the consumption of electricity in each section.
- Continual Up-gradation of process.
- Introduction of Trend setter Technology in infrastructure
- Promoting and Propagating Energy conservation awareness among all the Employees.

ORGANIZATION SETUP



ENERGY CONSERVATION ACHIEVEMENTS DURING 2006-07

POWER SAVING DUE TO INSULATION JACKETS IN INJN.MOLD. MACHINES(06-07)

Implementation of insulation Jackets for Barrel heaters in Injection moulding machines

Before Implementation electrical consumption per day per machine = 591 Kwh

After Implementation electrical consumption per day per machine = 531 Kwh.

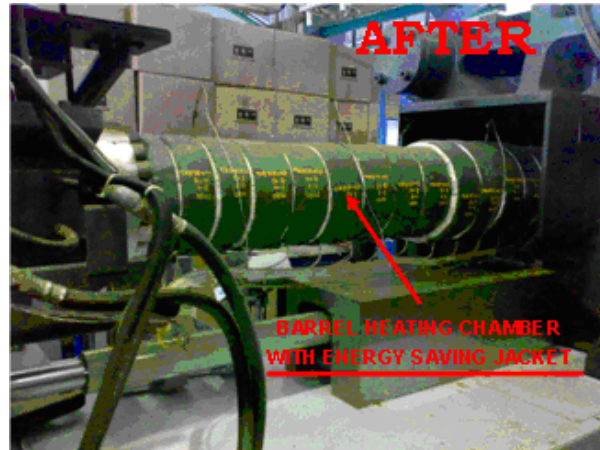
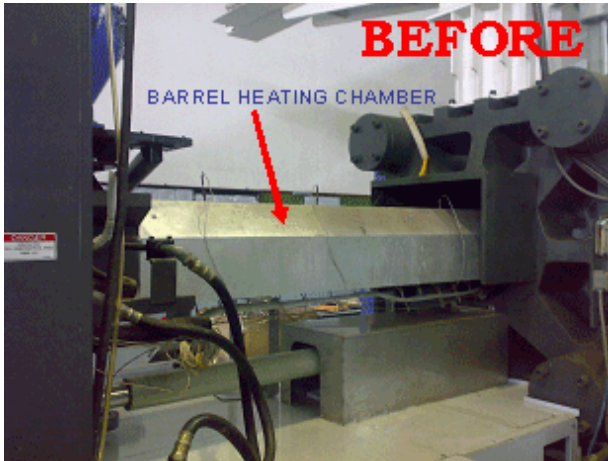
Saving per annum (300 working days) = 18000 Kwh

Savings per annum for 8 machines = 144000 Kwh

Saving in rupees = Rs.5.76 Lacs

Investment = Rs. 2 Lacs

Payback period = 4.5 months.

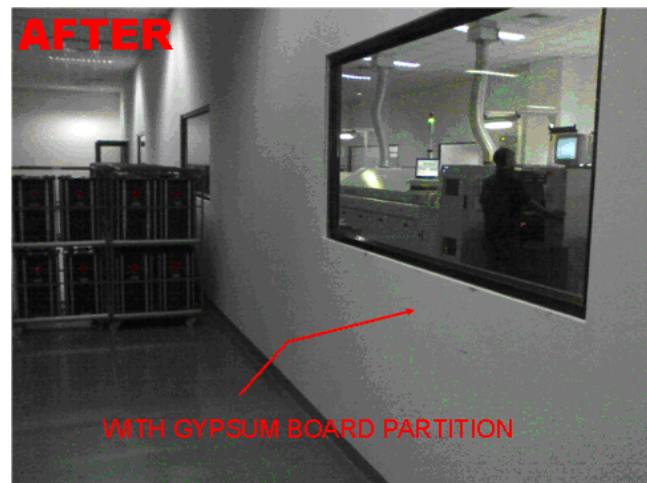
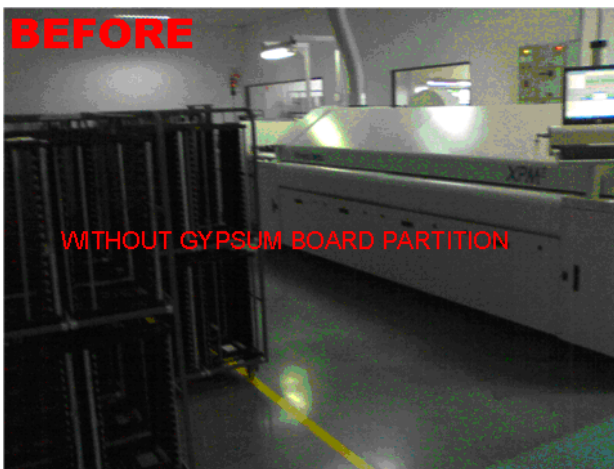


POWER SAVING BY REDUCING THE VOLUME OF AIR CONDITIONING AREA (06-07)

Total Volume of Air conditioning in Auto Insertion Dept (A.I) = 3.33 Lacs cu.ft.

Area required for material handling Trolleys is separated from the A/C area by putting gypsum board partition and subsequently the volume of air conditioning was reduce by 0.84 Lacs cu.ft

Saving per annum (300 working days)	= 3.60 lacs kwh.
Saving in Rupees	= Rs.14.4 lacs.
Investment	= Rs. 3.5 lacs.
Payback period	= 3 Months



POWER SAVING DUE TO NATURAL LIGHTING (06-07)

Provided transparent poly carbonate sheet on the roof of finished good stores thus facilitating the natural lights.

Saving in units per annum	= 1.98 lacs Kwh
Saving in rupees per annum	=Rs. 7.92 lacs
Investment	= Rs. 4 lacs
Payback	= 6 Months.



POWER SAVING DUE TO REPLACEMENT OF RECIPROCATING COMP. BY A SCREW COMP.(06-07)

Saving in units per annum	= 0.5 lacs Kwh
Saving in rupees	= Rs. 2 lacs.
Investment	= Rs. 5 Lacs
Payback	= 30 Months.

Saving due to UNITY Power Factor

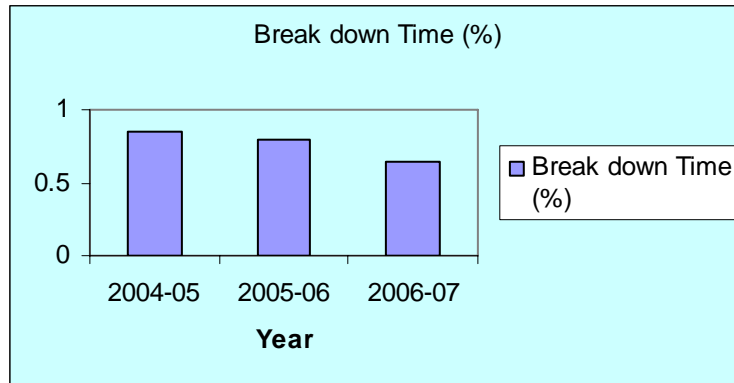
We are consistently maintaining the UNITY Power factor SINCE December 2006

Incentive received from MSEB during 2006-07	= Rs. 12.17 lacs
Saving due to reduction in M.D	= Rs. 1.8 lacs.
Total saving	= Rs. 13.97 lacs.
Investment on APFC Panel	=Rs. 2.8 lacs.
Payback	= 2 Months.

OTHER ACHIEVEMENTS

Maximum plant availability for production

Plant availability is increased by reducing the break down time through TPM methodology by which there is an improvement in specific energy consumption. Break down time of the CTV plant for the year 2004-05,2005-06,2006-07 are 0.85%,0.8%,0.65% respectively of the total available time.



POWER SAVING DUE TO LATEST TECHNOLOGY IN INJECTION MOULDING MACHINES (2004)

Electrical moulding machines are equipped with servo drives using PWM technology and are only run for specified time instead of conventional type hydraulic injection moulding machines in which hydraulic pump motor are run continuously. So electrical machines are much superior in terms of energy consumption, production consistency and quality.

Electrical machines consume 49% less energy compared to conventional hydraulic machines.

Total units consumed by electrical machine per annum (300 working days) = 2.59 Lacs

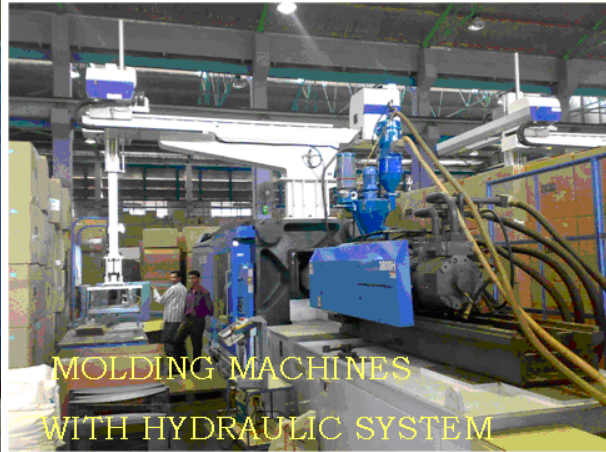
Total units consumed by hydraulic machine per annum (300 working days) = 5.26 Lacs

Saving in electricity per annum = 2.67 Lacs units.

So we have imported 4 nos. electrical machines for our expansion instead of hydraulic machines at an additional cost of 240 Lacs and the saving achieved in electricity consumption is 10.68 Lacs units. Payback period for the additional cost is 4 years.



ELECTRIC MOLDING MACHINES
WITH SERVO MOTORS



MOLDING MACHINES
WITH HYDRAULIC SYSTEM

ENERGY CONSERVATION PLAN AND TARGETS FOR 2007-08, 2008-09

Energy conservation Plan and Target 2007-08

Energy Conservation Measures (Planned)	Anticipated savings per annum			Approx. investment (Rs.lakhs)
	Energy Value		Rs. Lakhs	
	lacsKwh	million.kcal		
Solar Water Heating for boiler feed water		174	3.96	14
Solar Water Heating for canteen	0.5		2	4
Transparent polycarbonate sheets for RM stores	0.75		3	2.5
Replacement of Mercury vapour lamp by CFL	1.5		6.12	1.8
Replacement of choke by electronic ballast	0.36		1.44	3
TOTAL	3.11	174	16.52	25.3

Energy conservation Plan and Target 2008-09

Energy Conservation Measures (Planned)	Anticipated savings per annum			Approx. investment (Rs.lakhs)
	Energy Value		Rs. Lakhs	
	lacsKwh	million.kcal		
VFD for Air handling Unit	0.8		3.2	5.55
Replacement of reciprocating comp. by screw comp	0.42		1.68	10
TOTAL	1.22	0	4.88	15.55

ENVIRONMENT AND SAFETY

Our unit is committed to preserve its environment and safety of its Employees. Hence following improvements have been made during the last two years.

i) **Effluent Treatment Plant(ETP)**

The waste water from the paint booth is treated at the ETP, having a capacity of 10,000 litres/day and Recycled again for the same process. There is no discharge of Effluent water to the surroundings.

ii) **Vermicompost Plant**

The Canteen waste is processed in the vermicompost plant and is fed as a fertilizer for the plantation.

iii) **Plantation**

15 Acres of factory land is planted with trees. A total of 1973 trees are planted in the last two years.

iv) **Lead Free soldering** technique was introduced in the production of printed circuit boards.

v) The Company is regularly monitoring and controlling the stack emission parameters from the Boiler, DG sets and paint booth.

vi) **Safety** : Fire hydrant system was implemented through out the factory . An exclusively appointed safety Manager conducts Mock drill , Periodic review of safety equipments and awareness and training to all employees.

vii) **Air** : The Company regularly monitor the stack emission through the authorized body and we fall within the MPCB limits.