

Mindarika Pvt. Ltd.

(An Indo-Japanese Joint Venture)



Mindarika Pvt. Ltd. Is indo- Japanese joint venture Company with Tokairika Japan? It is a unit of Minda Group of Industries. Mindarika is an India lead manufacturing of the all types of automobile electro – mechanical switches for four wheelers. Mindarika is ISO TS - 16949, ISO14001& Ford Certified.

Company is fully equipped in product Development engineering (auto CAD . pore, Unigraphing, Mould flow analysis etc.) tool design cell with modern tool room equipped with CNC & Cam wire cut, milling EDM etc. molding section process engineering for developing of P.L.C. Base assy. Line setup & with Assy. shop. Mindarika have a special switch testing Laboratory & Standard Room for Technical, Electrical Environmental INDURANCE Testing etc & plastic raw material also.

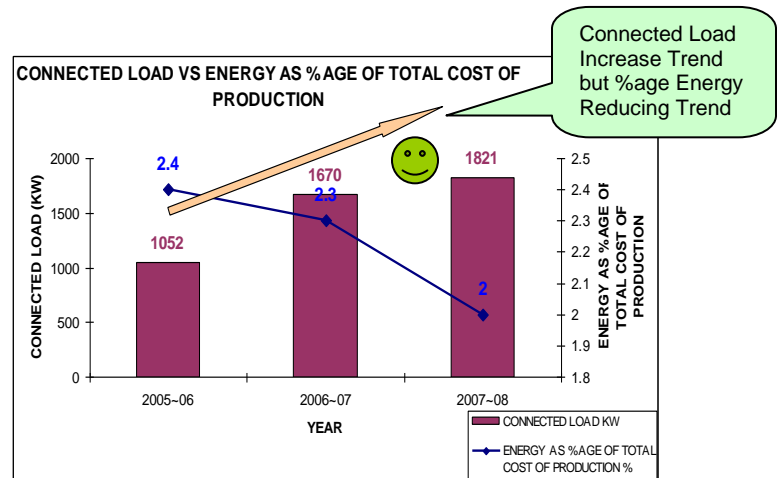
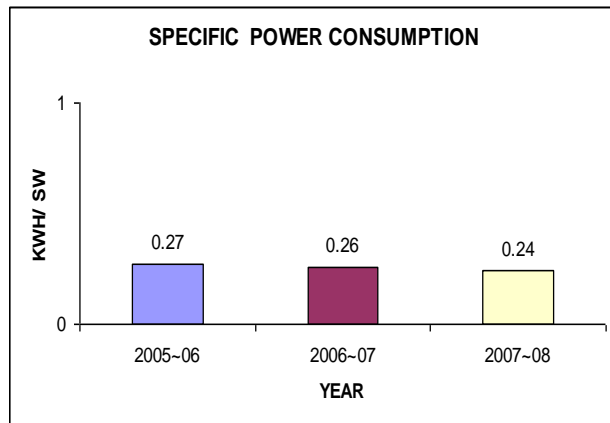
Mindarika product are used by most of the O.E.M. for 4 wheelers in India like Maruti, Toyota (TKML) Honda (HSIL), Tata Motors, General Motors (GMIL), Ford India Ltd. M & M, Eicher Motors etc. it is exporting to ford (USA), Ivoco (Italy), Troika (Japan) etc.

Energy Consumption

Considering the cost saving potentials, energy conservation is promoted by management as continual improvement area. Last three years specific energy consumption, plant energy performance and energy cost % of manufacturing cost consumption, figure's are shown below, which depicts continual reduction in energy consumption over last two years due to each person involvement and sustained efforts & ideas to increase efficiency of equipments are from:-

- (a) Optimum utilizations.
- (b) Capacity utilizations.
- (c) Technology up-gradation.

DESCRIPTION	UNIT	2005~06	2006~07	2007~08
SPECIFIC ENERGY CONSUMPTION	KWH / SW	0.27	0.26	0.24
SEC % REDUCTION OVER BASE YEAR 2005 ~ 06	%	0	3.7	7.69
TOTAL MANUFACTURING COST	RS. LAKHS	6245.41	8192.16	9460.1
TOTAL ENERGY BILL	RS. LAKHS	153.19	193.52	190.34
ENERGY AS %AGE OF TOTAL COST OF PRODUCTION	%	2.4	2.3	2
CONNECTED LOAD	KW	1052	1670	1821



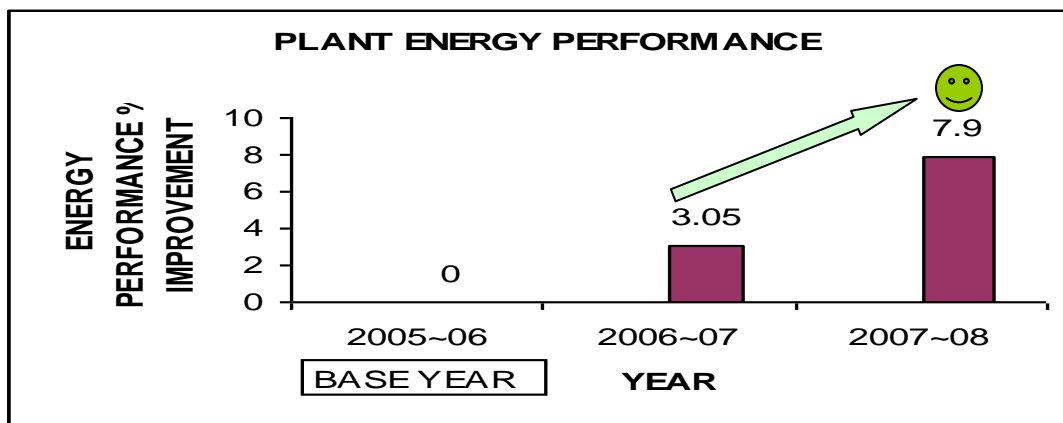
Energy Conservation Achievements

- With best support & contribution of all employees, Unit generated many ideas. Out of which 20 ideas considered during the period 2005~08 & Achieved Annual savings of Rs. 34.7 Lakhs with an investment of Rs. 8.6 Lakhs. It has resulted in “PLANT ENERGY PERFORMANCE IMPROVEMENT BY 7.69%” as shown below:

Calculation for Plant Energy Performance:-

DESCRIPTION	UNIT	2005~06 Base Year	2006~07	2007~08
PRODUCTION	No. of Switch	8004580	8765315	10402288
PRODUCTION FACTOR = Current Year Production / Reference Year Production	-	0	1.09	1.30
Reference Year Equivalent = Ref. year Energy use X Production Factor	Lakh Kwh/Year	21.62	23.56	28.10

Current Year Energy	Lakh Kwh/Year	21.62	22.84	25.88
Energy Performance = (Ref. year Equivalent – Current Year Energy) X 100 / Ref. year Equivalent	%	0	3.05	7.90



- Promoted qualified energy manager

Energy conservation commitment, policy and set up

Mindarika follows an Integrated Management System this concept has enriched the company to have a balanced focus on all the area whether it had to be Energy Conservation or Quality Improvement, It has never left any area behind.

Even our Environmental Policy gives an major emphasis on the Energy Conservation. Energy Conservation movement was started in the year 2001 by the Plant Maintenance Force and today it has the entire team of Mindarika, jointly upgrading this Mission.

Mindarika Management has never put its foot back in promoting and upgrading the Energy Conservation activities and has very serious reviews in this area. To mention a few of the activities carried out in this area are:

- Development of Energy Skill Champions for up-gradation and deployment of this skill along with allocation of yearly Energy Saving targets in all the functions.
- Budget allocation for installing Energy saving devices in various process & machines. New Machines and New Process line setups are being reviewed for Energy saving efficiency.
- Promotion of effective Energy Management System are thru':
 - 1) Regular Training on EMS, Energy Management, Equipment efficiency and Efficient Maintenance of Machines and Processes.
 - 2) Continually Skill Up gradation of the Energy Cell thru' Internal and External Trainings.

- 3) Facilitating the Energy Skill Champions to qualify for Certified Energy Managers.
- 4) Reviewing the Environmental and Energy Conservation Performance thru' Morning Meetings, Weekly meetings and group wide quarterly meetings.
- 5) Celebration of Environment Month.
- 6) Regularly Awarding and Rewarding the Associates and Staff for the Best Improvements done in the Environment and Energy Management Areas.
- 7) Promoting the associates to get involved in this mission by setting the Quality Circle and EMP targets of a particular function.
- 8) Not limiting the attitude within the unit Mindarika Management is promoting its group units to also focus on this area by having constructive deployments of our learning's and creating Energy Skill Champions in other units as well.

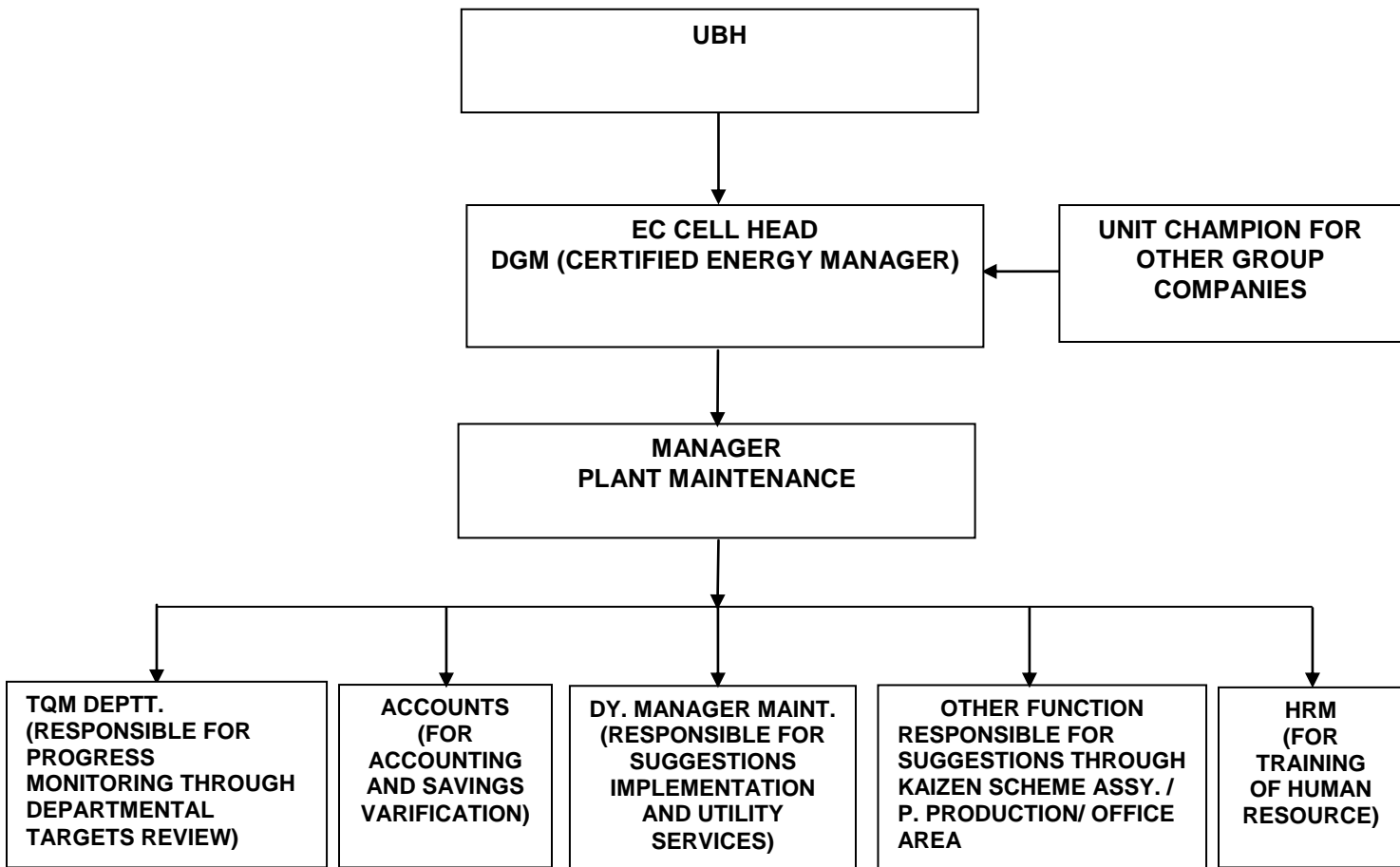
Birthday Meetings



Monthly Unit Address



Energy conservation team structure



Envirmental and safety

The company owns responsibility to preserve its envirmetal and safety not only for of its employees but for society also. Following major improvements have been made during last three years:

a) Water effluent

Sewage treatment plant was installed to reduce raw water consumption. Sludge is led to the common sewage treatment plant and after treatment being utilized for gardening purpose.

The quality of this treated effluent will be within the prescribed norms of HSPCB and daily monitoring is carried out.

Aqua free urinal procured through internet searching to avoid capital investment for higher capacity Sewage treatment plant installation because of more volume of water at STP inlet as shown below:-



**BEFORE
(WATER FLUSH URINAL)**



**AFTER
(AQUA FREE URINAL)**

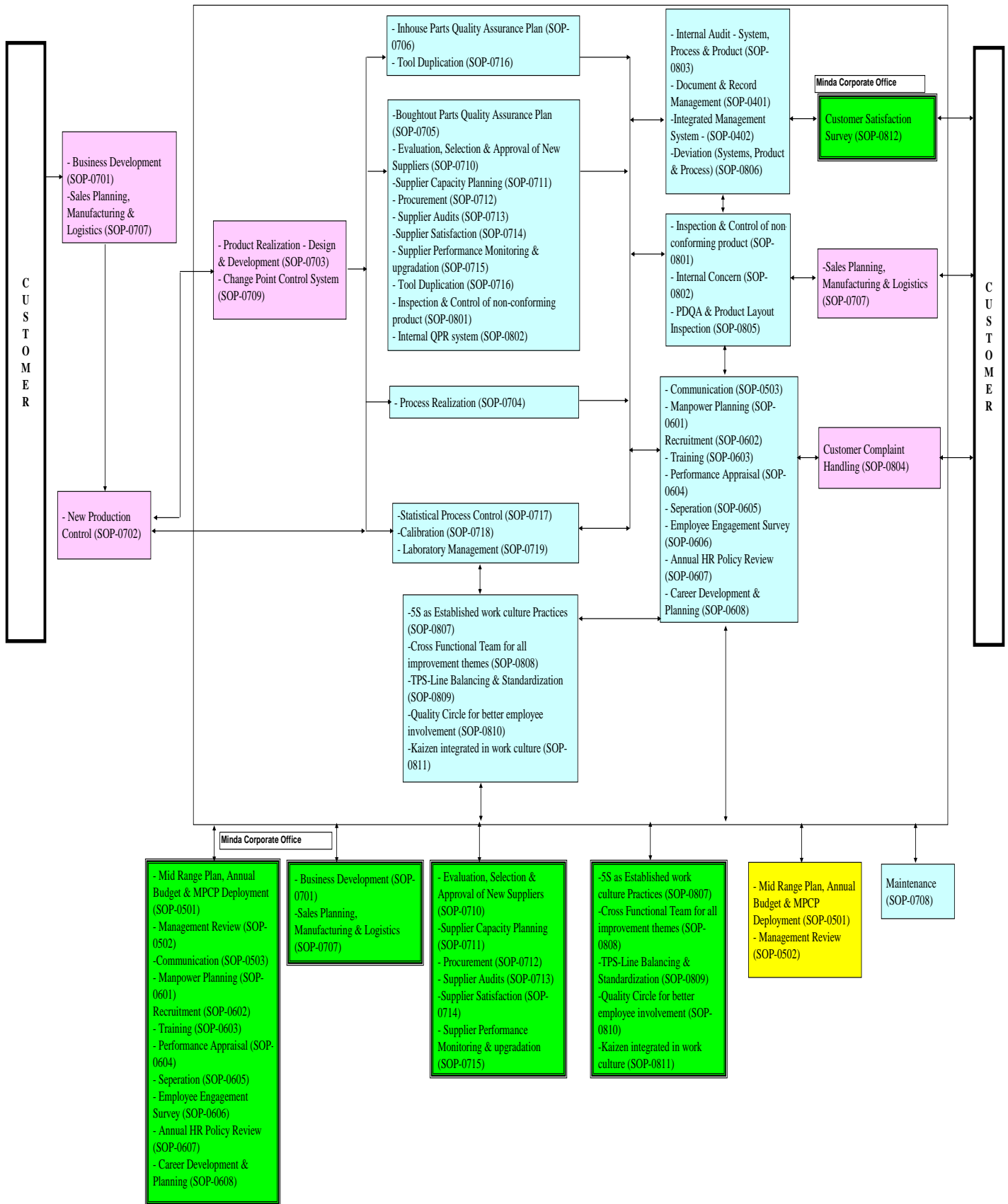
b) Air

To control air pollution regular monitoring of D.G. set stacks, ambient plant air quality is carried out

Acoustic treatment of D.G. house and regular monitoring is done

c) Solid waste

Being ISO14001 certification, committed to monitor and reduce through continual improvement.



Management Oriented Processes.
 Support Oriented Processes.
 Customer Oriented Process.
 Remote Locations

Note - Units to identify the Remote locations as per the applicability - Laboratory, Warehouse, Design Development, Process Development, Tool Room, Calibration, Marketing, Corporate Exports