

COMPANY PROFILE

1. **NAME OF THE COMPANY:** MICROWARE TECHNOLOGIES PVT. LTD.

2. **YEAR OF ESTABLISHMENT :** 1991

3. **ADDRESS :**

Registered Office :

A- 81, New Raipur, Kolkata – 700 084

Project Office :

1, Ashok Row, Ganguly Bagan
Kolkata – 700 084

Contact:

Tel : 033- 2436 3675

Cell : 9830031956, 9674174914

E-Mail: dpc.hce@gmail.com,

amukherjirnd@rediffmail.com

Website: www.microsolns.com

4. **ACTIVITY :**

Design, Supply, Integration, Manufacturing of

- i) Battery Charger
- ii) DC Distribution board
- iii) Industrial Inverters
- iv) UPS Systems
- v) DC Power supplies
- vi) Solar Power Stations.
- vii) Solar Torches and Flash lights.
- viii) LED Drivers and Special purpose Lights
- ix) Switch Mode Power Supplies
- x) Microcontroller Based Relative Humidity Controller
- xi) Microcontroller Based Assistive Devices for Disabled Persons

4.2 Design and Supervision of turnkey execution of Electrical projects.

4.3 Energy Audit and Automation Audit.

4.4 Project Survey and Digital mapping including Architectural Modeling.

5. KEY PERSONS :

1. D.P.Chattopadhyay -- Chartered Engineer, Bachelor of Electrical Engineering from Jadavpur University, Experience – 29 years. Specialisation – Power Electronics
2. Kalyan Dhal -- Chartered Engineer, Bachelor of Electrical Engineering from Jadavpur University, Experience – 29 years. Specialisation – Projects and Alternative Energy.
3. Dipankar Banerjee -- Chartered Engineer, Bachelor of Electrical Engineering from Jadavpur University, Experience – 29 years. Specialisation – Electrical Projects
4. Dr. Dipanwita Chattopadhyay -- Phd. In Geography and specialist in G.I.S and Survey
5. R.N.Biswas -- Graduate Engineer, Experience – 30 Years Specialisation – Electrical Projects
6. A.K. Mukherjee -- Commerce Graduate, Experience – 30 Years Specialisation – Project implementation
7. P.K.Ghosh -- Science Graduate, Experience – 28 years Specialisation – Manufacturing of Power Products.

6. ADVISORY BOARD

1. Dr. T.K.Ghosal – Professor Emeritus - Electrical Engineering Department, Jadavpur University.
2. Professor Sujay Kr. Basu – Ex Head of the Department Electrical Engineering Department, Jadavpur University.

7. MAJOR CLIENTELE

1. Hewlett Packard India Pvt. Ltd.
2. WWF India
3. IEE Projects (Rourkela Steel Plant / Bokaro Steel Plant)
4. Ashok Leyland
5. Wesman Thermocontrol Pvt. Ltd.
6. Caldyne Automatics Ltd. (Exide)
7. West Bengal Industry Development Corporation (WBIDC)
8. Central Mining Planning & Design Institute Ltd.
9. Eastern Railways.
10. National Aluminum Company Ltd.
11. Bharat Heavy Electricals Limited.
12. Oil and Natural Gas Corporation Ltd.
13. Indian Institute of Technology, Kharagpur.
14. State Bank of India.
15. Deecee Electrosystems Pvt. Ltd.
16. Concast Projects.
17. Balin & Co.
18. Indian Institute of Cerebral Palsy, Kolkata.

8. RECENT MILESTONE PROJECTS

1. 57 Numbers Solar Stations in Man Animal Conflict Zone of The Sunderbans in association with WWF India.-2012.

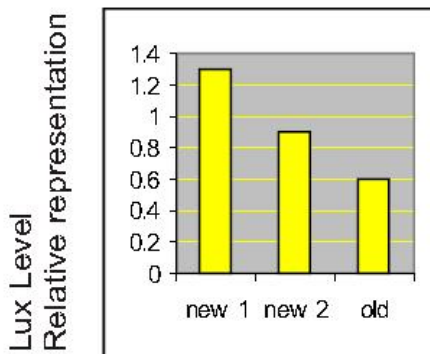
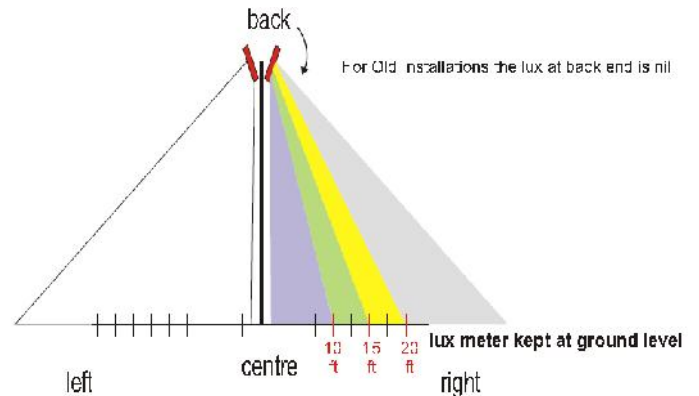
Summary:

The situation of The Sundarban Delta is extraordinary. The Land Mass itself has manifold Geographical and sociological challenge. The height of the Solar Pole is 10 meters and the battery cabinet is mounted at a height to prevent tampering. The most state of the art telescopic pole and special charge controllers are used. The entire pole structure is collapsible and can be transported by small boats.

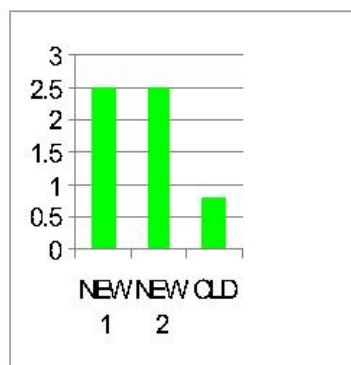


The project was executed during Rainy Season and it can operate even for Five(5) Consecutive No-sun days. Sealed maintenance Free Batteries with White LEDs with highest efficiency are used

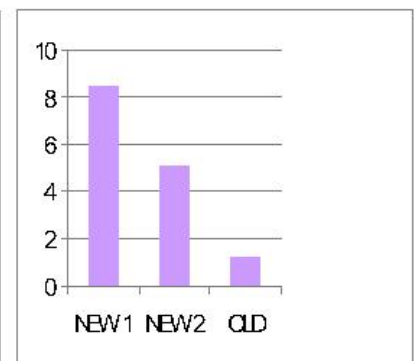
Careful scrutiny and illumination verification was carried out by specialists of WWF India and it was found that with usage of 50 percent less power better luminous efficiency is achieved.



at 20 ft distance-left side of the pole



at 15 ft distance-left side of the pole



at 10 ft distance-left side of the pole

2. Automatic Tiger cage with solar operated control system and load cell that sends SMS along with the weight of the Trapped animal.-2012

Present Problems: The Present Trap cages are heavy and thus require a different Transfer cage for transporting the Animal. The design is also not safe for the animal. Chances of the nails and teeth getting injured... 'It ends up with deep gashes and wounds'-says the wild life expert.



Moreover, once the tiger is trapped the information is not available with the foresters thus the animal perishes inside the cage. The modern cage senses the weight of the animal as soon as it is trapped and sends SMS to respective

officials.

Animal Trapped, weighs '130 Kg' that goes with time stamping by default as it is from a GSM server.

Additional challenge was to keep the electronics and camera alive inside the forest where electricity is not available and even more than a week the cage electronics has to be kept alive. A special solar charge controller and electronic circuitry is used that activates only on demand.

Special effect LED lamps shall be incorporated along with cameras in next phase



3. Implementation of Solar Operated Tri-cycle in Gangasagar, West Bengal.-2012

Summary:

The aim is to explore opportunities to design, develop and demonstrate low carbon mode of transportation in the Indian Sundarbans. This project has quantified the amount of fossil fuel consumed and consequent GHG emission in the transport sector. Road trails of electric vehicle prototypes are underway since May, 2012.



Strategy:

To design, develop and demonstrate a viable alternative to the fossil fuel based transport system.

Exploring the financial opportunities of carbon markets for mass scale conversion of fossil fuel based transport vehicles.

Policy dialogue and awareness building of government / policy makers.

Technology:

The technology involves DC operated DC Series motor with a power controller to replace the diesel engine with all other vehicular implements and to put SPV cells and charge controller in a Station for Recharge. The possibility of putting the Solar Plates on the top of the vehicle is also conceived.



4. Automatic Furnace Control system-Manskhia Ltd.-2011.

Technology:

It was an import substitute project undertaken and executed. The scope involves design, manufacture, supply and implement microcontroller based controller that shall control electrically heated furnaces despite huge voltage fluctuations in the Input Supply.

5. Relative Humidity controlled Pharmaceutical Storage-ASG Biochem Ltd.-2012.

Technology:

Relative Humidity is the most important parameter in ensuring quality of the Drugs manufactured in a pharmaceutical company. In order to achieve this a unique single sensor Relative Humidity Controller is designed , manufactured and implemented in ASG Biochem Ltd. That generates a potential free contact as soon as the desired set point of R.H is crossed. This contact in turn controls the humidifier and Air-conditioners. The controller has a built in Data Logging software that can be implemented in a PC through USB port to record the time based R.H of the Storage area. The controller also delivers 4-20 mA signal output for connecting it to a PLC.

6. Blast Furnace auxiliary modernization-Bokaro steel plant in association with IEE Projects.-2011.-Turnkey Project Consultancy .

7. DCDB and Battery Charger for R.S.P-2011.

8. DCDB and Battery Charger for Concast Projects Ltd.-2011.

9. Co-ordination of SAP Implementation in D.S.P and R.S.P in association with HP India.-2010-2012.

10. Co-ordination of SAP Implementation in Ashoke Ley Land, Chennai in association with HP India.-2009-2010.

11. Voice Output Communication Aid for Indian Institute of Cerebral Palsy.

Technology:

Micro controller based Voice Output Assistive devices were introduced in India meeting the challenge of the persons with neuron Disorder.