



RAYAT SHIKSHAN SANSTHA'S

D.P. BHOSALE COLLEGE, KOREGAON

Department of PHYSICS

"Industrial Training" 2017-18

Jointly Organized by Department of Physics and Electra Solar

Place to training

: Electra Solar Pvt. Ltd.

"Suryottam" (Golewadi, Plant II)

Day: Monday Date: 5th February, 2018

Time: 10:30am-5:30pm

Co-ordinator



Department ad Physics
D. P. Depole Coff Physics

Industrial visit: 'Suryottam' (Electro solar company)

Acknowledgement:-

It has remarkable experience of study tour .This acknowledgement is attempt to thanks to 'Suryottam' Solar Water Heater Company.

We are thankful to Dr. V. S. Jamdade (HOD) and Mr. N. D. Barge for offering us all facilities during tour. Completing this report would not have been possible without cardinal help and permission, extended to us by Honourable Principal Dr. V. S. Sawant.

Abstract:-

Solar water heating system for domestic use has been constructed using locally available materials. Lot of energy required for heating the water to good extent. Approximately 18% of domestic energy is used to heating the water in most homes and businesses this energy is generated from non-renewable sources i.e. oil, coal etc. But many people still heat their water using electricity which is the most expensive way to heat water. So by using Solar Water Heater we can save the energy.

Tour Report:-

Department of Physics of D. P. Bhosale College, Koregaon was organized one day study tour at Solar Company M.I.D.C. Koregaon Dist. Satara on 5th February, 2018.

We are the student of T.Y. B.Sc. (Physics) has participated in this study tour to understand construction as well as the working of solar water heater and its uses. Technician officer Mr. Salunkhe V. S. Sir was informed us about all machines and their importance. Also use of solar water heater in daily life and how we can save the energy. The also talked & demonstrate how to fabricate solar water heater.





Solar water heater consists:-

The domestic solar water heater has been divided into two componants.

- 1) Storage Tank.
- 2) Absorber Plate.

1] Storage Tank:-

The wide range of the storage tank ranging from low end capacities to high end capacities. The tanks can be used for small homes to large townships. The Storage Tank has to cylinder with drilled hole 20 i.e. inner and outer cylinder. These two cylinder separated by insulating material for avoiding the heat exchange with the environment.

2] Absorber plate:-

Evaculated tube collector are way to reduce heat loss. Water piping in an ETC surrounded by two concentric tubes of glass separated by vaccum that admits heat from the sun. The inner tube is coated with thermal absorber. ETC can gather energy from the sun all day long at all angels due to their tabular shape. In ETC cold water comes from tank with lower level and hot



Water transfer from ETC to tank with upper layer. Thus, separation of the cold and hot water obtained in same time. When we pass the cold water from inlet then and only then we get hot water through outlet.





Department of Physics

O. P. Bhosale College, Koregaon

Student attendence

Date: 0 5 02 18

INDUSTRIAL VISIT:

Sr. No.	Name of Participant visited	Sign
2	Bhosale Mohini Madhukar	0 m
3	Ghorpade Mayur Ananda	SEM.A-Ghorp
4	Ghorpade Sachin Sanjay	& Ghorpacle
5	Ghorpade Sunny Rajaram	Schorpad
6	Jadhav Tejaswini Dnyaneshwar	T.Q;
7	Jagdale Sarika Ashok	facta>
8	Mahamuni Kanchan Sanjay	Bernheruy
9	Ombale Amay Vitthal	Ambale
10	Phadtare Swapnali Sanjay	5.5. Phattare
11	Pujari Manoj Parshuram	to Sin asi
12	Sawant Swarupa Tanaji	SILSneamt
13	Shinde Aishwarya Dinkar	Alud
14	Sutar Anil Parshuram	Butar
15	Ubale Rahul Ravindra	RRUBALE
16	Khawale Vivek Ashok	Khawale V.A

Incharge

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Department lead hysics
D P Bh Dep Coofg Physics on