

SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi / Affiliated to Anna University / Accredited by NAAC/ Accredited by NBA (ECE, EEE, MECHANICAL- UG Programmes))

Dindigul — Palani Highway, Dindigul — 624 002



NAAC CRITERION-7

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation Measures

Bills For The Purchase Of Equipments For The Facilities Created

11. SOLAR WATER HEATER

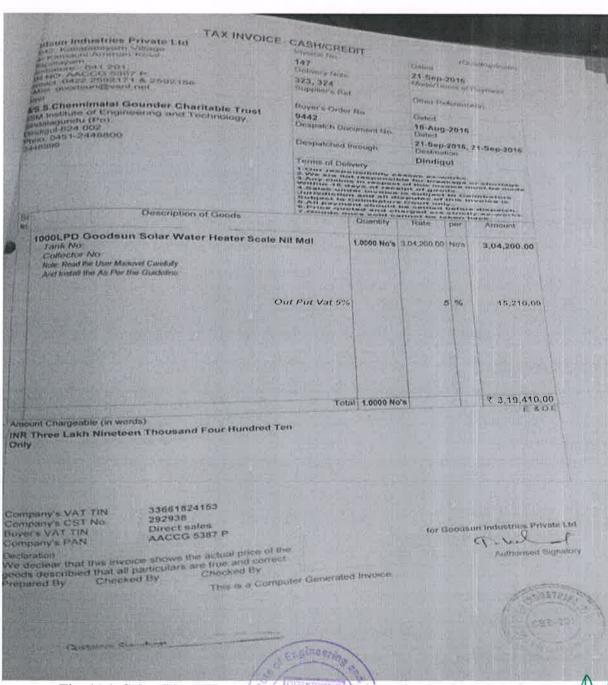


Fig. 11.1. Solar Water Heater from Goodsun Industries Pvt Ltd, Coimbatore

Dr.D.SENTHIL KUMARAN, M.E. Principal

Principal Principal

Kutfathupatti Village, Sindalagundu (19), Palani Road, Dindigul - 624,002

Gustomer Scope

- Choice of the whist E. The Water Heater will be assembled by our Technicion/Engineer at your site and all the treasury in
- 2. Givil Works. Client should carry out all civil works as directed by our Engineers or old 3. Boarding & Lodging should be provided by the customer.

Terms and Conditions of Contract

- Purchase Order: We can accept Purchase Order in your formats or in our format for this project.
- Payment: 50% advance, 50% against Proforms Invaion
- Transportation: Extra at octuals
- Erection : Extra (3% of the Invoice value) 4.
- Plumbing work: Client should corry out all plumbing work such as wilet and outlet propagation work in outlet (hot water pipeline) will be done by the company wherever necessary depending on the distribution of extra cost.
- Site clearance: Plain shadow free place should be provided for the projects
- Warranty: One year warranty for systems if any manufacture defect (Except Glas & Heating Element)
- After sales services: PER CALL BASIS can avail services per call basis where spare parts and services changes are to be given by the client against our estimation.
- Delivery: Within four weeks time.
- Mode of Despatch: By Tempo or Truck depending on the volume of unit
- Despatch Date: Against readiness of the site and confirmed instruction from the buyer
- Validity of offer: 30 days from the date of this offer

The Note:

- (A) The rated output is variable and ultimately depends on the particular day's purchine only
- (B) We can manufacture systems with higher capacity as per specific requirements
- (C). All plumbing work connected to outward or inward to distribution will have to be carried out by the and use as per the suggestion of our technician to get uninterrupted supply of hot water.

We trust this offer is in line with your expectation and for any clarification in respect of *echnical commercial please feel free to call us at any time.

Thanking you and looking forward for your valuable orders which, we assure you will receive our first and prompt attention always, we remain.

Yours Faithfully For GOODSUN INDUSTRIES (F) LTD ;

R. VELUSWAMY MOB 98422 43043

Goodsun Industries Pvt Ltd.,

\$1,760 Pers sarron Debet Villa Vingo S Se Ph. 0422 7990171 753218 \$3 -2A2 Valentinys Village This Fun Crientature - 641 201 Per 29AV2 5/476 Brul gestunders on Pine gods

Fig.11.2. Solar Water Heater from Goodsun Industries Pvt Ltd, Coimbatore

Dr.D.SENTHIL KUMARA

ASM Institute of Engineering and Technology

Kuttathupatti Village, Sindalagundu (r.

11(5)	DATE:	ATTENDED NO
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		Choice of the wite of		
S.NO	COST STUDY			
1	COST DETAILS	ELECTRICAL HEATER	SOLAR HEATER	
20	Tempreature	1000 Lit / Day	1000 Lit / Day	
3	Heater Capacity.	70°C	70°C	
	Electricity Cost at Rs.5 / Unit	25 Lit x 20 Nos	1000 Lit × 1 No	
4	* Domestic Rs.7 / Unit- Commercial	23000 units × 5 = 1,15,000/- 23000 units × 7 = 1,61,000/-	Nil	
5	Initial Cost		A STATE OF THE STA	
6	Interest Cost / Year	7500 x 20 = 1,15,000/-	2,50,000/-	
7	Maintenance Cost / Year	at 12% / year	at 12% / year	
8	Depreciation Cost / Year	500 x 20= 10,000/-	10000/-	
9	Inflation Cost / Year	10%	10%	
10		10%	10%	
	Risk Cost / Year	500 × 20 = 10,000/-	Nil	
11	Operating Time Cost / Year	500 x 20 = 10,000/-	Nil	
12	Total Cost in the 1st year	Rs. 1,45,000/-	Rs 10,000/-	
13	Cost in 5th Years	Rs:7,25,000/-	Rs 50,000/-	
14	Cost in 10th Years	Rs 14,50,000/-	Rs 1,00,000/	
15	Cost in 15th Years	Rs, 21,75,000/-	Rs 1,50,000/	
16	Cost in 20th Years	Rs.29,00,000/-	Rs 2,00,000/	

Based on Datas mentioned under:-

a). Number of days used / year - 330 - 50°C b). Rise in Temperature - 7 Units

c). Average Power Consumption / day \$ 80% d). Electrical geyser efficiency

e). Capital Cost in for standard stainless steel heaters

f). Capital Cost is for standard stainless steel heaters (304) and DLX HR (316 55) 1000 LPD GOODSUN Solar Water Heater

g). Inflation Cost on Electricity is not included which may push the running cost of the electrical geyser up by 100% over a period of ten years

Goodsun Industries Pvt Ltd.,

S.F. 206 Perks campos, Biblind VGM Hospital, Singariallor, Colembatore - 05. Ph. 0427-2592171, 2592158. S.F. et/42. Kullapalayam Vilage, Near Kattachiamman Kovil. Kattapalayam, Colembatore - 641-201 Ph. 98422-66434. Email: goodsunavani.net. Web.; goodsunardia.com

Fig.11.3.Solar Water Heater from Goodsun Industries Pvt Ltd, Coimbatore

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., INUS Principal

SSM Institute of Engineering and Technology Kuttathupatti Village, Sindalagundu (Po).

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