



Telephone :

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Indian Institute of Technology Madras

I.I.T. P.O., CHENNAI - 600 036.

Ref. No.

MEE	12-13	303	DSTX	KSRS	VIII
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Date : 31.05.2016

Dear Sirs,

DUE DATE : 21.06.2016

1. Quotations are invited in duplicate for the various items shown below / overleaf / enclosed list.
2. The Quotations duly sealed and superscribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The Quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS & D Rate contract. Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers)
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable samples if called for, should be submitted free of charges, and collected back at the supplier's expenses.
6. Local Firms : Quotations should be for free delivery to this Institute. If Quotations are for Ex-Godown, delivery charges should be indicated separately.
7. Firms Outside Chennai : Quotations should be for F.O.R. Chennai. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If-Ex-Godown, packing, forwarding and freight charges must be indicated.
8. The rate of Sales / General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales / General Taxes will be admitted at any stage and on any ground whatsoever. The taxes leviable should take into consideration that we are entitled to have Concessional Sales Tax applicable to Non-Government Educational Institutions run with no profit motive for which a concession. Sales Tax Certificates will be issued at the time of final settlement of the bill.
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. Payment : Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later.

Details as per enclosed list.

Yours faithfully

**Dr. K. SRINIVAS REDDY**

Professor

Heat Transfer and Thermal Power Laboratory
Department of Mechanical Engineering
Indian Institute of Technology Madras
CHENNAI-600 036.HEAD OF THE DEPT. /
PROJECT CO-ORDINATOR

*Strike out whichever is not applicable.

**Specification for Supply and Erection of Solar &
Chiller Pipelines and Accessories**

1. Hot Water Circuit

SI No	Item	Size	Quantity	Units
1	MS ERW C Class Pipe with bends and reducer	25 NB	52	Mtrs
2	MS Flange CI 150	25 NB	38	Nos
3	MS Header	100 NB	1	Nos
4	Ball Valve	25 NB	9	Nos
5	Needle Valve	25 NB	10	Nos
6	CI Y Strainer	25 NB	1	
7	DISC Type NRV	25 NB	5	Nos
8	Hot Water Circulation Pump (Grundfos) (2.9 m ³ /h) Product Name: CR 3-4 A-A-A-E-HQQE - 96516592		1	Nos
9	MS Structure for Pumps, Tanks and Piping Supports		250	kg
10	SS Metal Braided Hose 10 Mtrs Length	15 NB	6	Nos
11	Air Vent Valve	15 NB	7	Nos
12	Mineral wool Insulation for pipes with Aluminum sheets 26 SWG Cladding	25 NB	52	Mtrs
13	Insulation for Hot water Header	100 NB	1	No

2. Chilled Water Circuit

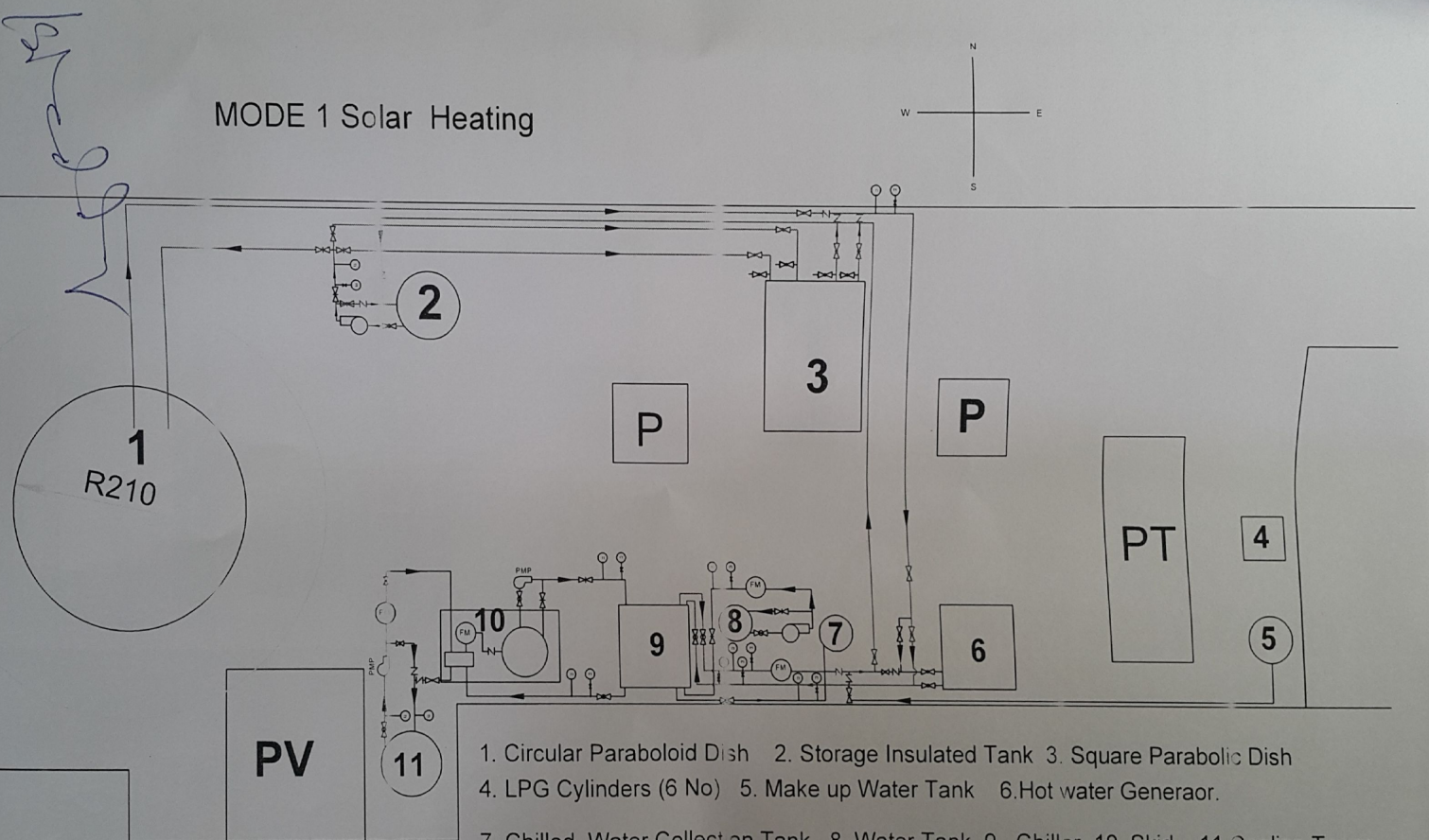
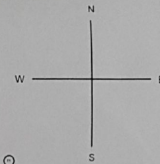
SI No	Item	Size	Quantity	Units
1	UPVC Pipe with bends and reducers	32 NB	12	Mtrs
2	UPVC Union and Sockets	32 NB	8	Nos
3	Ball valve	32 NB	3	Nos
4	Needle valve	32 NB	2	Nos
5	CI Y Strainer	32 NB	1	Nos
6	Chilled Water Circulation Pump mini monobloc Pump 0.5 HP (2 m ³ /h)		1	Nos
7	Chilled water line rubber foam insulation	32 NB	12	Mtrs
8	Cylindrical 200 Ltrs Tank		1	Nos
9	Tank Insulation -Rubber foam		1	Nos

3. Cooling Water Circuit

SI No	Item	Size	Quantity	Units
1	CPVC Pipe with bend and reducers	40 NB	12	Mtrs
2	CPVC Union and Sockets	40 NB	8	Nos
3	Ball valve	40 NB	4	Nos
4	Needle valve	40 NB	4	Nos
5	CIY Strainer	40 NB	1	Nos
6	Non return Valve	40 DN	3	Nos
7	Cooling water Circulation Pump mini monobloc pump 1 HP (5 m ³ /h)		1	Nos
8	Insulation- Mineral wool	40 NB	12	Mtrs

Note: (i) The complete piping work shall be carried out in accordance with the Piping layout
(ii) Provisions for Pressure, Temperature sensor and flowmeter should be provided in Pipe lines
(iii) Site Visit is Allowed

MODE 1 Solar Heating



- 1. Circular Paraboloid Dish
- 2. Storage Insulated Tank
- 3. Square Parabolic Dish
- 4. LPG Cylinders (6 No)
- 5. Make up Water Tank
- 6. Hot water Generaor.
- 7. Chilled Water Collect on Tank
- 8. Water Tank
- 9. Chiller
- 10. Skid
- 11. Cooling Tower