

III) SOLAR FISH DRIER

Competitive bids are invited for the supply, installation, testing and commissioning of one solar hot air recirculation fish drier having 250kg / batch process capacity and a minimum 25 sq meter spreading area for drying with biomass backup at Poovar fishing village of Thiruvananthapuram district from the firms/companies having experience in the establishment of solar fish drier.

The process temperature of the drier shall range only in between 45°C to 55°C.

A. Technical Specifications

1. Solar collector

1. Collector - Flat Plate collector with total area of 45 square meters with thickness of 200 mm fitted on a galvanized metal support stand.
2. Glazing material - 4mm thick tempered glass. - Low iron, high impact resistant, toughened glass transitivity >92%. 1753 mm x 949 mm with 4mm thickness - 192 nos. Fitted with EPDM rubber beading
3. Insulation material - Rockwool slab 75mm thickness and above density 48kg/m³.
4. Absorber material – Aluminium absorber.
5. Collector box - Aluminum metal sheet of thickness 0.32 – 0.50 mm.
6. Hot air carrying ducts - Inner and outer duct aluminum sheet of 24 SWG and 28 SWG with rock wool insulation thickness of 75mm.
7. Suction blower – ISI make motor capable of delivering 2500 Cubic meter per hour 0.75 to 1.5 KW blower.

2. Hot air recirculation drier

Inner and outer wall with 26 SWG 304 stainless steel sheet with 50mm Rockwool insulation and 1.5 to 2 KW fan. Tray shall be 25 mm X 25 mm 304 SS square tubes with 304 SS wire mesh [food grade] with trolley.

3. Control panels – to regulate temperature inside the drier

There shall be one number of 2 Set point Digital Temperature controller, Rtd Thermocouple [Pt 100], 10 Amps Power input connector, Power on / Relay on lamps and Power on / Relay on switches & fitted with all necessary electrical components with Powder coated door type control Panel Box.

4. Biomass back up

Capable of delivering hot air of 50 to 60 Degree Centigrade and heat delivery 0.25 to 1 lakhs kilo calories per hour to the dryer cabinet.

1. Inner chamber wall: Mild steel – 12 mm thick
2. Outer wall : Mild steel - 1.25 mm thick
3. Smoke pipe : Clay – 12 inch

B. Tender Conditions

1. 1% of the cost of articles quoted shall be furnished as EMD by means of demand drafts of a Nationalized Banks drawn in favour of Managing Director, KSCADC at payable at Trivandrum.
2. A preliminary Agreement in the prescribed format (as per the tender document) on stamped paper worth Rs. 100/-) shall be executed and furnished along with the tender document.
3. 5% of agreed value shall be furnished as security deposit in the form of bank guarantee of a Nationalized/scheduled Banks for a period of five years from the date of issue of satisfactory completion report.
4. The solar fish dryer shall be commissioned at the site as specified by KSCADC in the Poovar fishing village of Thiruvananthapuram district.
5. There shall be 10 years replacement warranty for solar panels and five years replacement warranty for all other components of the fish drier including biomass backup. The electrical and electronic components shall have warranty given by the manufacturer.
6. The solar fish drier shall be commissioned within three months on receipt of the supply order as well as handing over of the site.
7. The rates quoted must be inclusive of all taxes, duties, freight, labour charges etc.
8. The quoted rate shall be after 30% MNRE subsidy for the Solar panel and that has to be claimed by the supplier.
9. The year wise terms of Annual Maintenance Contract (AMC) shall be submitted along with the tender for a period of 5 years.

10. Firm/company/ authorized suppliers declared by Kerala Govt., including KSCADC to be ineligible to participate for corrupt, fraudulent or any other unethical business practices shall not be eligible during the period for which such ineligibility is declared.
11. KSCADC do not bind themselves to accept the lowest or any bid and reserves the right to reject any or all bids with/without any reason and accept/prefer any bid or Bidder without assigning any reason and also reduce or extend the period of contract without assigning any reason.
12. KSCADC reserves the right to contact and verify Bidder's information, references and data submitted in the Bid proposal without further reference to the Bidder.
13. The absence of specifications details regarding any equipment to be supplied under this project implies that best general practices will prevail and that first quality material and workmanship will be applied as per the discretion of KSCADC. Certification standards, when available, for the to-be-installed equipments and materials, will prevail.
14. The KSCADC reserves the right to vary the quantities and fix a delivery schedule. KSCADC also reserves the right to order additional quantities at a price not more than the price accepted after this tender for a period of six months from the date of order placement.
15. KSCADC reserves the right to effect changes in the Technical Specifications. Any such change will be notified in writing to all those who have purchased this Document. In case, any of the bidder have submitted the bids before receiving the notification of changes, will be allowed to submit a revised tender accordingly.

Note:- The tender shall be put in a single sealed cover super scribing the wordings "Bid for Solar fish drier".