

TECHNICAL SPECIFICATIONS AND OTHER ALLIED REQUIREMENTS

NAME OF THE ITEM	QUANTITY
Solar cabinet drier	1

1. INSTALLATION, COMMISSIONING AND TRAINING

- 1.1. The ordered goods are required to be installed within 15 days of receipt of goods at final destination. Installation should be carried out only by expert engineers of Supplier / Manufacturer. During the course of installation, necessary training on operation and maintenance of the goods shall be imparted to Institute's Scientist / Engineers/Technicians.

2. WARRANTY

- 2.1. Comprehensive on-site warranty for **one year** must be provided to be effective from the date of completion of installation and commissioning and/or final acceptance of the items / equipment at the final destination

Annexure-I

Supply, Installation, Testing, Commissioning and Trial run of Solar Cabinet Drier at Mizoram Food Processing Industry (MIFPROY), A/97, Hmar Veng, Sihphir Venghlun, Aizawl, Mizoram – 796036

1 Detailed specification:

a) Solar Cabinet Drier

Capacity: 100 kg/batch (6 to 8 hours)

Material to be dried: Ginger, Turmeric, Chilly etc.

Solar Panel: 25 m²

Panel Construction: Aluminium extrusions and Aluminium composite sheets

Absorber: Copper absorber with selective black coating

Top glazing: Toughened glass of 5 mm thick

Insulation: Rockwool of thickness 50 mm

Inner body: 28 SWG SS Sheet

Outer Body: 22 SWG powder coated CR Sheet with Painting

Air Circulation inside dryer: 0.5 hp axial flow fan – 2 Nos.

Temperature of hot air: 55°C to 65°C according to the product to be dried. The temperature is to be controlled by using temperature controller mounted in control panel.

Thermocouple to measure temperature of air at inlet and outlet of dryer and at least four different locations inside the dryer.

Relative humidity of air is to be measured at inlet and outlet of dryer.

Maximum relative humidity of air at inlet to dryer: 25 ~ 30%

Hot air supply: Variable speed centrifugal blower with 2 hp motor and damper arrangement to suck the hot air from the solar panel and deliver it to the Dryer

Number of Trays: 24 SWG Stainless Steel perforated Trays 44 nos.

Tray Size: 22" x 22" x 3/4"

Electrical back up: 5 kW Finned "U" shape electrical heating coil

Ducting & Cladding for bringing hot air from Solar Panel up to the drier inlet (Up to 50')

2 Scope of supply & incidental services:

a) Solar Cabinet Drier

Detailed specification as Provided in Section 1 above.

The supplier shall be required to perform the following services:

- a) Installation & Commissioning, Supervision and Demonstration of the goods;
- b) Providing required jigs and tools for assembly required for the completion of the installation;

Annexure-I

- c) Cabling from main panel to all instruments and devices;
- d) Onsite training to Scientists/ Technicians/ Staff is to be provided by Supplier for operation and maintenance of the equipment to the complete satisfaction of the user department;
- e) All safety requirements are to be incorporated.

3 Inspection and Acceptance Tests required:

Trial run and full load test will be conducted for 5 days to the complete satisfaction of the end user in the presence of Scientists/Technical Officers from CSIR-CMERI.

4 Minimum Pre-Qualification Criteria:

None

Subho Samanta