

The Best of German & Swiss Technology at Indian Prices

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# SHARADA INVENTIONS

## SOLAR DRIERS for Agricultural & Industrial applications:

Outcome of intensive research at SHARADA INVENTIONS offers unique Hot Air Solar Driers for various applications. Large quantity drying with controlled humidity, & controlled temperature are some of the excellent features of '**BHASKAR**' system. We can design, Solar Driers to suit the user's specific requirement. The system performance is practically maintenance free. It does not involve any running cost for thermo syphone type system.

### Features:

- ❖ Drying under most Hygienic conditions.
- ❖ No soiling of the material. Free from dust.
- ❖ Quantities from 8 Kgs to large volumes of any material can be dried.
- ❖ Extra Long life, rugged trays made up of Special Non-corrosive material.
- ❖ Special arrangement for drying liquid material without spillage.
- ❖ Individual tray can be controlled to achieve drying of materials with variable moisture content.
- ❖ Default temp. gauge is provided to monitor & control the desired temp.
- ❖ Controlled moisture is possible.
- ❖ Colour, Taste and Texture of material can be maintained as per original material.

### Benefits:

- ❖ Saves drastically on ever increasing electrical energy cost in case of electrical driers.
- ❖ Portable or large Hot chamber system design.
- ❖ Lightweight & easy to carry structure.
- ❖ High efficiency, very low cost & easy to use system.
- ❖ User is entitled to get subsidy from MNES.
- ❖ Various material samples can be seen at our factory.
- ❖ Extremely useful for drying Cashews, Aloe, Vegetables without affecting original taste, Colour & Texture.
- ❖ Solar Dried material has very high export demand.
- ❖ No running cost.
- ❖ User can be eligible for Eco-friendly Award.
- ❖ Can be used for normal Paint Shop and Powder coating plants also.

### AREA OF APPLICATIONS

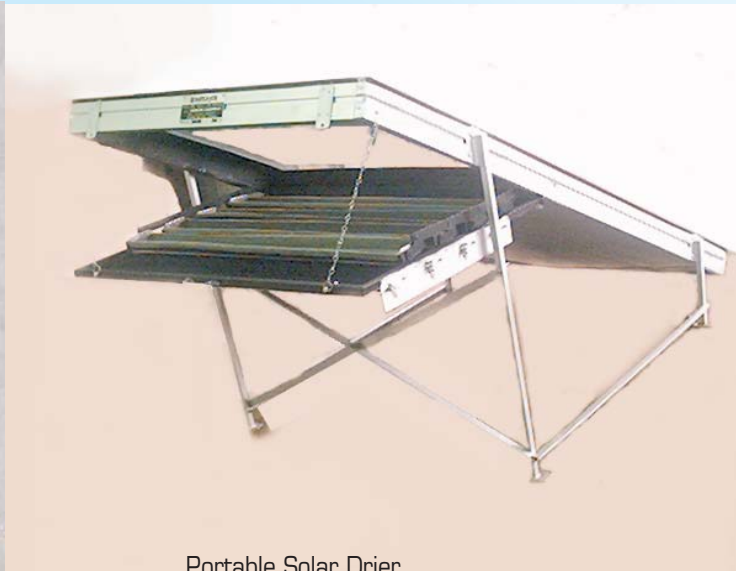
- TRADE & INDUSTRY
- FOOD INDUSTRY
- PHARMACEUTICALS
- AGRICULTURAL
- CHEMICAL INDUSTRY
- POWDER COATING

**YOUR GESTURE OF CONSIDERING SOLAR SYSTEM IS A MATTER OF PRIDE  
AND COULD BE REMARKABLE EXAMPLE TOWARDS POLLUTION FREE INDIA !!!**

Our standard range covers two types of Solar driers:

- ❖ Natural Thermo Siphon Air Draft Driers
- ❖ Forced Circulation type driers

❖ **Natural Thermo Siphon Air Draft Driers :** In this method the air is taken from the bottom of the Flat plate collectors. The air is filtered through a fine mesh to trap any dust, dirt or foreign particles entering the drying process. This air then passes through a heating chamber where the temperature of air is raised to about 60 to 90° C. The heated air then passes over the perforated trays. The stuff to be dried is kept in the trays. The trays can be either closed with a special heat absorbing covers to protect the stuff from direct exposure to Sun light or can be kept open as per specific requirements. The exhaust can be controlled through openings of baffles from fully closed to fully open condition. The picture shows a portable drier which can hold about 8 Kgs of stuff. In larger capacity systems, many number of Heat Absorber Panels of 2 x 1 Mtr size are connected in arrays and the hot air is taken in an insulated chamber.



Portable Solar Drier

❖ **Forced circulation type driers:** In this system the Air is heated by passing through Flat Plate Collectors having special heat absorbing selective coating, if the final temperature requirement is below 90° C. For higher temperature requirement, Scheffler 12.6 M<sup>2</sup> Parabolic Concentrators with specially designed heat exchangers are used. In this method the Air may be directly or indirectly heated through suitable media. Air heating using Scheffler concentrators is the unique design of SHARADA INVENTIONS. Hot air even upto 270° C or above can be obtained.

In normal course, the heated air is taken into an insulated chamber of particular size and design. The moisture can be controlled by adjusting either the opening of baffle or by adjusting the circulator fan speed.

This method can be configured with Spray Drying chambers for producing powder form of the material under drying process.

**SOLAR ENERGY FREE ENERGY CLEAN ENERGY FOR EVER**

(SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE)

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