



1. General

The study unit IC49D is a small but technologically advanced fluidized bed drier.

It is suitable to carry out research and small batch production in processes on fluidized materials such as drying, granulation, coatings, etc.

It allows to directly obtain the characteristic drying curve (CDC), which is used to preset precise parameters on industrial drying plants also of different type such as: cabinets, conveyor plants, rotary.

The unit is supplied together with a complete instruction handbook.

2. Composition and Description

The unit is composed of the following parts:

- Suction vessel with cloth filter and header tank.
- Drying vessel with mixer.
- Fan-Heater assembly.
- Centrifugal separator with tank for powder collection.
- Control electric board.

The electric board includes the following instruments and regulations:

- Electronic thermostat for setting the temperature of the air crossing the fixed bed.
- N.2 Pt100 thermoresistances with digital indicators for the measurement of inlet and outlet air temperature.

- Fan speed regulation.
- Mixer speed regulation.

The main parts of the unit are made of stainless steel and tempered borosilicate glass.
For the experiences, it is possible to use the following materials:

- Powder milk.
- Corn powder.
- Sand and different crystals.
- Different chlorides.

3. Technical features

- Feeding capacity: 6 kg
- Evaporation capacity: 1.5 – 2 kg/h H₂O
- Power: 2.8 kW
- Electrical power supply: 220 V CA, 50/60 Hz

4. Weight and dimensions

- Dimensions: 900 x 500 x 1100h mm
- Weight: 60 kg