

SLUDGE DRYING PILOT



Non contractual photo

**SERVICE : POWER SUPPLY 220V, 50HZ,
3.5KW**

REFERENCE : MP302B

**Convection and radiation sludge drying pilot.
The heating is done by two devices:
By radiation: by two lamps simulating the sun.
By convection: a fan and an electric air heater. Both
adjustable**

Educational Objectives :

- Comparison of the drying efficiency of a radiant or convection heater or a combined system.
- Study of the efficiency of the mixing of the material on the drying time
- Make the energy balance / quantity of evaporated water.
- Study of the influence of heating parameters on the drying speed.
- Take a water balance
- The measurements relate to: the weight of the material, the humidity of the air, the air temperature, the energy consumed and the air flow

Technical specifications :

The material to be dried is placed in a **circular** stainless steel tray, whose base is porous to promote ventilation. The tray is located in a closed box-shaped enclosure with a transparent door. During drying, the material is stirred continuously to promote ventilation.

- Bench mounted on a frame made of stainless steel tubes and fitted with castors
- Air heater: Power 3 KW
- Fan: 200m³ / h approximately
- Two IR lamps: 100W
- Agitator with mobile agitation
- A removable humidity / temperature probe with display
- A hot air temperature probe
- An air flow measurement
- A 0-5 Kg scale with display
- IP55 control cabinet containing:
 - Open door safety of the enclosure
 - A temperature regulator
 - A fan speed controller
 - A stirrer speed controller
 - Adjustment buttons

OPTIONS :

9.7 " touch screen for viewing and storing information and performing commands