

Technical Specifications

Type	Co-current
Temperature Sensor	Type K Thermocouple
Temperature Gauge	Delta DTB Series
Burner	High-pressure burner
Fuel	LPG
Suction Blower	3 hp
Type of Nozzle Spray	Single fluid system
Fluid Delivery	Plunger Pump
Chamber Dimensions	
Diameter	900 mm
Length	1800 mm
Material of Construction	SS 304
Evaporation Capacity	2-3 kg of water per hour



SPRAY DRYER

for more information, please write, fax, call, or email:



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The **Spray Dryer** is one of the food processing equipment designed and fabricated to substitute imported equipment. Its use can help improve the performance and productivity of the country's micro, small, and medium enterprises (MSMEs) engaged in food processing.

What It Can Do:

- It dries food solutions, slurry, paste gel or suspension efficiently and rapidly.
- It offers better control of powder quality in terms of particle size and bulk density.
- It is the preferred method for drying thermally-sensitive materials such as food and pharmaceutical products.

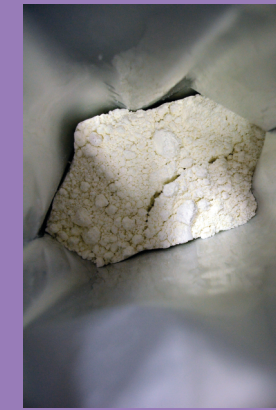
How It Works:

- The liquid feed-stock is atomized. The droplets are made to come in contact with hot air inside the drying chamber.
- Heat allows moisture to evaporate from the droplets. Dry particles form at 120 – 180°C under high-volume airflow conditions.
- Powder that is discharged continuously from the drying chamber is collected in a cyclone-type dust collector.
- A high-pressure LPG is used to directly heat the air in the system.

Uses/Applications:

The Spray Dryer technology may be best applied in the making of the following product lines:

Food	milk powder, coffee, tea, cereal, spices, flavorings, starch and starch derivatives, vitamins, enzymes, food colorings
Pharmaceutical	antibiotics, medical ingredients, additives
Industrial	paint pigments, ceramic materials, catalyst supports, microalgae



The "Design and Development of Process Equipment for Food Processing Firm" is a project implemented by the Metals Industry Research and Development Center (MIRDC) in cooperation with the Project Management Engineering Design Service Office (PMEDSO) and the Industrial Technology Development Institute (ITDI) in support of the High Impact Technology Solutions (HITS) Program of the Department of Science and Technology (DOST).

