# Spray dryers with ecofriendly technology.





## **Our Company**

GALAXIE mainly manufactures standard spray dryers, for labs, ECO Dryer® line for effluent elimination, spray cooler and especial equipment with first quality materials and accessories.

The company also provides the customers with advice, modifications, updating and relocation of the existing equipment, helping with product tests and drying by third parties, equipment hiring, staff training and it also provides auxiliary equipment according to the specific needs.

# **Spray Drying Process**

The spray drying is the process of spraying a solution or suspension in a hot air flow that dehydrates them almost instantaneously. Said process is advantageous in relation to other types of drying.

## Advantages of Spray Drying

- High performance (quick processing, in a few seconds).
- The evaporation of water refrigerates the particle, allowing the use of high temperatures in the drying air without affecting the product.
- Continually controlled and continued process.
- Homogeneous production.
- Excellent presentation of the product.
- Installation is controlled by just one operator.
- Easy automation.
- Allows 24 hours of continuous operation.

# Main Products for Spray Drying

SLAUGHTERHOUSE BY-PRODUCTS: Blood, plasma, hemoglobin, gelatin and meat extract.
EGG: Whole egg, yolk, white.
EFFLUENT ELIMINATION: Washing waste water and liquids high in BOD and COD.
FLAVORS AND SCENTS: Natural and synthetic.
TANNERIES: Vegetable and synthetic tannins, chromic components.
YEAST: Leavening, hydrolyzed protein.
MARINE: Pulp, water-stick.
CATALYSTS AND COLORANTS: Organic and inorganic pigments and aniline.

# **Technical Specifications**

Drying Air Temperature °C		Water Evaporation	Fuel Consumption	MF	Required Area
Inlet	Outlet	Ltrs/h	KCal/h	Kw/h	Mtrs
Model 1612					
180	80	19	24.000		
220	90	25	30.000		
250	100	29	34.000	4	3 x 3.50
350	100	47	49.000		Height 4.80
450	100	64	64.000		
Model	2520				
180	80	63	80.000		
220	90	83	100.000		
250	100	97	115.000	9	4 x 4.50
350	100	156	165.000		Height 6.50
450	100	213	215.000		
Model 3	3530				
180	80	190	240.000		
220	90	250	300.000		
250	100	290	345.000	30	6 x 6
350	100	470	495.000		Height 8.50
450	100	640	645.000		
550	100	800	795.000		
Model 4440					
180	80	380	480.000		
220	90	500	600.000		
250	100	580	690.000	40	6.50 x 7.50
350	100	940	990.000		Height 11
450	100	1280	1.290.000		
550	100	1600	1.590.000		
Model 5	5240				·
180	80	570	720.000		
220	90	750	900.000		
250	100	870	1.035.000	47	7.50 x 9
350	100	1410	1.485.000		Height 12
450	100	1920	1.935.000		_
550	100	2400	2.385.000		

## **Special Equipment**

Besides the standard equipment, GALAXIE manufactures spray dryers built according to the specific needs of each client.

# Applications: Solutions, Suspensions, Emulsions and Bleach.

## Slaughterhouse By-Products

Blood, plasma, hemoglobin, glands, meat extract, gelatin.

**Egg** Whole egg, yolk, white.

**Effluent Elimination** Wash water, liquids with high BOD and COD.

Flavor and Scents Natural and synthetic.

#### **Dairy Products**

Whole milk, skimmed milk, whey, cream, cream for ice-cream, baby food and diet food, malted milk, cream cheese, caseinates, cocoa milk, milk substitutes.

**Coffee, Tea and Mate** Instant and substitutes.

Fishery Products Pulp, water-stick, collagen.

## Yeast

Leavening, hydrolyzed protein.

## Pharmaceutical Compound

Vitamines, enzimes, antibiotics, human serum, eteril, dextran, liver extract, rubber.

#### Plastics

Chloride emulsion, polyvinyl acetate, melamine, polyethylene, urea formaldehyde products and phenol, acrylic nitrite, acrylic resin.

#### Detergents

For delicate clothes and washing machines (beads), washing powder (by means of cooling atomization).

## Catalyts and

**Colorants** Pigment, aniline, organic and inorganic ones.

Fertilizers, Herbicides and Insecticides

### **Ceramic Materials**

Clay for sanitary appliances, floors, walls, concrete slab, ferrites, kaolin, steatites, enamels, porcelain.

**Minerals** Drying of concentrates.

#### Inorganic Chemistry

Aluminum, sulfur, arsenic, barium, boron, bromine, carbon, chlorine, chromium, fluorite, hydroxide, iodine, magnesium, manganese, molybdenum, nitrogen, oxide, phosphorus, titanium, tungsten, uranium, zirconium.

#### Organic Chemistry

Phthalates, stearate, salicylate, lactate, benzoate, butyrate, gluconate, saccharate, sorbate, hydrazine, chloramine, urea, amino acids, salicylic, maleic, ascorbic acids.

#### Tanning

Vegetal and synthetic tanning, chromic elements.



1. Feed Tank

Product Filter
 Dosing Pump

5. Complete Burner

Complete Atomizer
 Hot Air Disperser

4. Piping Set, Valves and Accessories

9. Drying Chamber with Doors and Sight Glass

6. Direct Hot Gases Generator

10. Interconnection Conduits

• Effluent Gas Scrubber (16)

Auxiliar Atomizer Indirect Oven

Heat Insulation
Pneumatic Transporter
Double Product Output
Powder Cooler
Powder Hooper

Explosion-Proof Door
Temperatura Register
Automation
Spare Parts Lot

Product Outlet Cyclone
 Rotating Valve

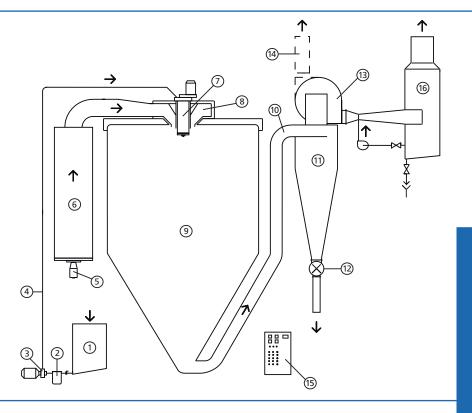
13. Aspiration Fan

**Optionals** 

14. Chimney 15. Control Panel www.logos.pablomagne

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# Spray Dryer Components



All equipment provided are self-supporting with stairs and plattform with handrail.

Indonesia

Russia

India



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Belgium Faroe Islands

Canada

Spain

General Vedia 215 B1872CXE Avellaneda Buenos Aires - Argentina

Bolivia

South Africa Saudi Arabia

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Brazil

Customer Service +54 11 4204-7019 info@galaxie.com.ar

Ecuado

www.galaxie.com.ar

Costa Rica

Egypt