

Spray Cooling  
Spray Drying



# | Spray Cooling Plant



Custom design, fabricate, install & commission spray cooling plant & items below, mechanical polished high finishing stainless steel and the latest equipment from Japan, Italy, Germany, USA, etc to provide customer affordable yet efficient plant.

- Spray Chamber
- Cyclone
- Bag Filter
- Fluidised Bed
- Clean Air Cooler / Heater
- Air Duct
- Anti Caking Mixer
- Nitrogen Heater
- Twisted Tube Heat Exchanger
- CIP System

**Bag Filter /  
Cyclone**

**Fluidised Bed**

**Clean Air Cooler /  
Heater**





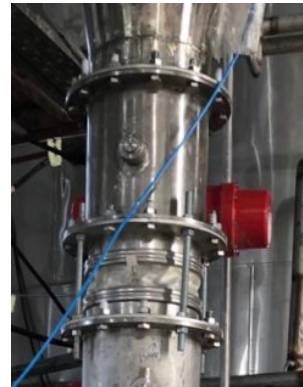
# SPRAY NOZZLE LANCE AIR DISPERSER ATOMISER

# DOUBLE FLAP VALVE PRE COAT SYSTEM CIP SYSTEM



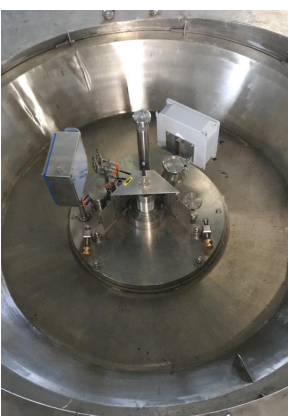
Preci Japan 360 degree adjustable, multiple angle, light weight spray nozzle lance makes spraying much easy. Fast & easy changing of spraying nozzles is the unique feature.

Double flap valve system ensure tightness of the spray cooling system during operation from moisture and losing cool air to the atmosphere.



Preci Japan engineered air disperser system enable air enter spraying chamber with high mixing efficiency. Adjustable vane for both atomiser & pressure spray systems.

Engineered Clean In Place System with high efficiency, cavitation free, flow controlled hot water generation & distribution system, coupled with reliable automatic projection / retraction leak proof CIP nozzles.

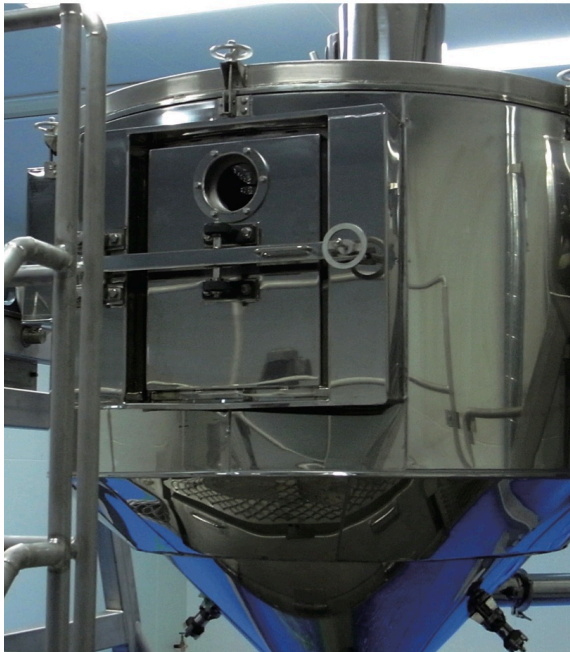


State of art atomiser from Europe & Japan for producing high quality fine powder from 35-150 micron.

Proven reliability and quality over the years. Maintenance & spare parts readily available.

Easy to use, high performance percolating system ensure the products are clear from impurities before being sprayed. Sanitary quality equipment, pumps, valves and pipes are used.





## PRECISION

Tapping on the best experiences of Preci, K Engineering is able to offer high quality spray cooling & spray dry plants & equipment like:

- Innovative Spray Nozzle lance
- Air disperser
- High Pressure CIP System
- Spray Cooling Chamber
- Spray Dryer

to the various local industries.

Test Spraying, Rental of Spray plant, R&D spray system are ready to assist our customers to establish a suitable spraying plant for their continuous product improvement.

Food	Collagen, Chitosan, Agaricus, Propolis, Herbal medicine extracts, Lactobacillus, Green tea extracts, Vitamin C, Stevia, Inulin, Dextrin, Glucose, Flavors, Dairy products, Seasoning, Algae, Albumen, Fishery products
Chemical and Pharmaceuticals	Polymers, Pigments, Yeast, Enzymes, Biopharmaceuticals, Medical products, Agricultural chemicals, Dental materials, Surfactants, Antibiotics, Cosmetic
Industrial material	Zeolite, Catalysts, Glass material, Fire-resistant materials, Cellulose, Pulp, Carbon material, Superconducting material, Fine ceramics, Toners, Abrasives, Piezoelectric ceramics, Semiconductor materials, Magnetic materials, Optical fibre material, Battery materials
Steel and Metal	Rare metals, Alloys, Rare earth materials.



### Lab scale

Spray Boy is an ideal all-in-one spray dryer for R&D. It is designed for easy dismantlement and cleaning, and is capable of more high-level condition settings the general experimental spray dryers. Everything needed for operation, including bag filters comes standard.

### A variety of options

A variety of options can be selected to meet your additional needs. Options include: closed-cycle system, HEPA filter, heat insulation unit, and fluorescent coating.



## AUXILIARIES



Tumbler Screen  
Vibrating Screen  
Gyratory Screen  
Air Conveying  
System



Anti Caking  
Mixers with  
Jacketed Cooling  
Water, Screw  
Feeders +  
Chemical Dosing

**Instrumentum Group**

5 Stonebridge Dr. Markham Ontario L6C 2C3, Canada

Phone: 1 (365) 608-4541

Mobile: 1(647)787-856

Web: [www.instrumentumgroup.com](http://www.instrumentumgroup.com)

Email: [sales@instrumentumgroup.com](mailto:sales@instrumentumgroup.com)

**North America Region**

Instrumentum Group

1801-1 Yonge Street, Toronto, ON, M5E 1W7

Phone: 1 (416) 214-7832, 1 (365) 608-4541

Email: [sales@instrumentumgroup.com](mailto:sales@instrumentumgroup.com)

Web: [www.instrumentumgroup.com](http://www.instrumentumgroup.com)

**Asia Pacific Region**

Instrumentum Group

41A Bedok Ria Crescent 04-40 Stratford Court,

Singapore 489929

Phone: +65 66525843

Fax: + 65 63236062

Email: [sales@instrumentumgroup.com](mailto:sales@instrumentumgroup.com)

Web: [www.instrumentumgroup.com](http://www.instrumentumgroup.com)

**Middle East Region**

Best Sourcing Solutions LLC (Instrumentum Group's Partner)

Sharjah Media City, SHAMS United Arab Emirates

Email: [bss@instrumentumgroup.com](mailto:bss@instrumentumgroup.com)

Web: [www.instrumentumgroup.com](http://www.instrumentumgroup.com)

**Asia Region**

ES Concern (Instrumentum Group's Partner)

419, 4th Floor, Mashriq Center, Sir Shah Suleman Road,

Block-14, Gulshan-e-Iqbal, Karachi.

Email: [esc@instrumentumgroup.com](mailto:esc@instrumentumgroup.com)

Web: [www.instrumentumgroup.com](http://www.instrumentumgroup.com)

