

TOLL MANUFACTURE : EQUIPMENT AVAILABLE

SPRAY DRYING PLANTS

We have on site 11 Production Scale Spray Drying Plants which are dedicated to Toll Manufacture:-

2 only	5 metre diameter, direct Gas Fired, Stainless Steel, Spray Drying Plants, with both Exhaust Vapour Scrubbers and Bag Filter Units.
1 only	4 metre diameter, direct Gas Fired, Stainless Steel, Spray Drying Plant, with both Exhaust Vapour Scrubbers and Bag Filter Units.
2 only	3 metre diameter, direct Gas Fired, Stainless Steel, Spray Drying Plants, with both Exhaust Vapour Scrubbers and Bag Filter Units.
1 only	3.5 metre diameter, direct Gas Fired, Stainless Steel, Spray Drying Plant, with both Exhaust Vapour Scrubbers and Bag Filter Units.
1 only	2.5 metre diameter, direct Gas Fired, Stainless Steel, Spray Drying Plant, with both Exhaust Vapour Scrubbers and Bag Filter Units.
1 only	2.5 metre diameter, direct Gas Fired, Stainless Steel Spray Drying Plant with Nozzle or Rotary Atomisation, with both Exhaust Vapour Scrubbers and Bag Filter Units.
2 only	2.4 metre diameter, direct Gas Fired, Stainless Steel Spray Drying Plant with Nozzle or Rotary Atomisation, with both Exhaust Vapour Scrubbers and Bag Filter Units.
1 only	2 metre diameter, direct Gas Fired, Stainless Steel Spray Drying Plant with Nozzle or Rotary Atomisation, with both Exhaust Vapour Scrubbers and Bag Filter Units.

2 only	1 metre diameter, direct Gas Fired, Stainless Steel, Spray Drying Plants
1 only	1 metre diameter, Electrically heated, Stainless Steel, Laboratory Scale Spray Drier
<p>Using quantities of 20 kgs. or greater on the Pilot Plant Scale Drier, it is usually possible to determine suitable drying conditions for a given solution or slurry.</p>	

SPRAY COOLING

Several of the Spray Drying Plants can be utilised as Spray Cooling units, these are fitted with an Inlet Air Cooling System which can be used as an alternative to the Gas Fired Air Heaters.

FLUID BED DRIERS

Two continuous Fluid Bed Driers in Stainless Steel, complete with Screening and Packing Plants.

CALCINER

Rotary Calciner Unit, with inter-changeable charging systems and fitted with Exhaust Vapour Emission Control, by either Bag Filter or Wet Scrubber unit.

VACUUM DRIERS

Two stainless steel Rotary Vacuum Driers complete with ancillary charging and discharging equipment.

PILOT PLANT

In addition to the two stainless steel Pilot Plant scale Spray Driers, there are available for pilot plant scale testing:

1 only Rotary Vacuum Filter

1 only Jacketed blender

A Laboratory Scale Spray Drying Plant is also available for smaller scale trials.

LIQUID PROCESSING

LIQUID BLENDING

Stainless Steel vessels
Rubber Lined Mild Steel vessels
GRP reinforced polypropylene vessels
Ranging in size from 500 litres to 50,000 litres capacity.

The above vessels are fitted with Agitators and Heating / Cooling Coils, where required.

CHEMICAL REACTORS

For processing of Liquid / Liquid and Liquid / Solids in:-

Stainless Steel vessels
Rubber Lined Mild Steel vessels
Ceramic Lined Mild Steel vessels
Ranging in size from 1,000 litres to 30,000 litres capacity.

These vessels are fitted with the necessary Agitators, Heating/Cooling Coils and Heating/Cooling Jackets.

To be used in association with the above vessels are:-

Rotary Vacuum Filters
Stainless Steel and PTFE Pumping Systems
Where necessary the Reactors or Blending vessels are fitted with Scrubbing or Condensing Systems.

LIQUID PACKAGING

We have complete systems for filling into 10 litre, 25 litre, 200 litre, 600 litre and 1,000 litre containers.

The machinery involved is fitted with all contact parts in either Stainless Steel, Polypropylene or PTFE.

SOLIDS PROCESSING

POWDER BLENDING

Stainless Steel U-trough mixers and stainless steel Nauta Mixer.

POWDER / LIQUID BLENDING

Stainless Steel U-trough mixers
(Jacketed for Heating or Cooling).

POWDER SCREENING

Stainless Steel Rotary and Vibratory Screening machines are available.

These can be fitted with either Stainless Steel or Nylon Mesh Screens from 2,000 micron to 100 micron aperture.

SIZE REDUCTION

Various types of stainless steel mills are available for size reduction of Powder or Granules.

POWDER PACKAGING

Stainless Steel equipment to fill into either 25 kg, 20 kg or similar Open top or Valve Sack packages.

SMALL PACKAGING

Stainless Steel equipment to fill into either units of 0.5 kg, 1 kg, or 5 kg etc.

BULK BREAKING

Stainless Steel Hoppers, Screw Feeders, Elevators etc. to package from 1,000 kg, 500 kg or similar IBC's or Tote Bins into 20 kg, 25 kg or similar Open top or Valve fill packages.

LOADING & PACKING

We have on site equipment for Stretch Wrapping and Shrink Wrapping of pallet loads.

The various Vehicle Loading Points on site are equipped to allow direct entry of Fork Lift Trucks into containers, for efficient packing.

QUALITY CONTROL

The Works Laboratories are equipped to carry out Quality Control procedures, as agreed with our Clients.