

## Features on conventional spray drying method

The spray drying method was originally designed at the beginning of the 20th century in Europe for drying skimmed milk and is widely used today in many fields and applications.

- Spray drying system is simpler than other drying methods since the powder is available directly from a liquid material (solution or suspension).
- By atomizing the liquid, surface area per unit weight increases, thus higher efficiency for contacting with hot air. Drying can be achieved in less time.
- Due to the latent heat of evaporation surrounding the fine powder during the process, the temperature does not reach too high a level. This system is therefore suitable for material that is vulnerable to heat.
- As the atomized liquid becomes spherical due to surface tension, so does the dried powder.

## Micro Mist Spray Dryer

The Micro Mist Spray Dryer produces very fine and uniform powder by drying atomized liquid particles instantaneously in contact with hot air.

Atomized liquid particles of 10 micron or over in diameter are characterized as spray droplets, on the other hand particles under 10 micron in diameter are characterized as mist.

Our four-fluid nozzle enables liquid to be sprayed as mist in large volume.

For this reason, we have named our product the Micro Mist Spray Dryer.

The Micro Mist Spray Dryer achieves single micron range particle size that cannot be obtained in production scale with conventional spray dryers.

Previously, fine powder has been produced by either pulverization or classification methods in addition to spray drying. However, we are proud to introduce our Micro Mist Spray Dryer which produces very fine and uniform powder directly from a liquid. Immense benefits to fine powders will be realized by using our Micro Mist Spray Dryer.

