

Spray Drying



European SprayDry Technologies is a major global supplier of spray drying plant and auxiliary equipment to all major industrial sectors.

Designed in the United Kingdom and have been progressively developed over 40 years resulting in high performing, robust machines easy to operate and control and producing high quality product.

Spray Dryers come in many shapes and sizes from portable laboratory machines to multi stage process plants incorporating pre-concentrating falling film evaporators, multi ton evaporation spray dryers with multiple fluid beds for post drying and cooling.

**High Performance
Hassel Free Operation
Longevity ...Built into Every Plant**

European SprayDry Technologies are Europe's specialists in the tall form spray drying design with nozzle atomisation ensuring the operator has the maximum control over powder properties. We cater for all products with options for high pressure, disc or twin fluid atomisation catering for specialist products.

The Direct natural gas, thermal oil or indirect steam are the main heating systems employed on our larger spray dryers, electrical heating is available but more suited to smaller laboratory and development spray dryers. In some chemical producing plants direct fired oil can be utilised.

Cyclones are a speciality of European SprayDry technologies offering very high efficiencies for multiple product drying. Scrubber Systems ensure that the majority of powder particles are arrested before discharging from the system.

For cleaner spent atmospheric air discharges bag filters can be supplied either as the primary method of powder / air separation or as a secondary final filter located after cyclones policing air discharge. Filters can be supplied as standard or with CIP function.

Spray dry plant design



ESDT1 Laboratory spray dryer



USDA spray dryer for WPC powders



Tailored processing solutions

Maximising production efficiencies for varying powder characteristics chambers are designed in many variants which include co-current, counter current, mixed flow and plug flow variants.

Where necessary our designers can make adjustments to chamber dimensions allowing maximisation of chambers size to be accommodated within existing buildings.

Minimal floor space requirements of the Tall Form spray dryers usually permit quite large capacity machines to be accommodated within existing buildings or within a localised raised section.

All designs boast high thermal efficiencies and low radiation losses allowing for fast highly efficient powder drying, minimal contact times inside the chamber returns higher powder qualities including colour and flavour retention.

Designs as large as 1 ton/hr evaporation are manufactured in workshops and installed directly from transport into its final position, no need for excessive site manufacture.

Control systems are designed with our clients ensuring personalised systems from hard wire panel control to touch screen PLC or PC control point.



Left: Large capacity spray drying plant installation. Spray dryer delivered to site in sections for final fabrication.

Bottom Left: Nozzle atomisation is cost effective low in maintenance and gives maximum control over powder properties.

Below: Chemical producing spray dryer, clean lines and simple control system offers an uncomplicated production option.



European SprayDry Technologies offer our clients a full service from point of design to commissioning and the training of spray dryer operators. Once in production customers enjoy direct contact with engineers to help solve problems as they arise.

No special parts with long lead times, most parts can be obtained within the Country or Region where machines are installed.

We cater for a wide range of clients from small family firms to multi nationals.

All of our customers are important to us and given the same personal service regardless of size or cost of contract.