

Spray Nozzles



Spray Nozzle Innovation

The CSI spray nozzle Mk III has been designed and developed from our popular Mk I and Mk II nozzles, incorporating performance features associated with those nozzles.

This now represents cutting edge technology, striving to provide outstanding and consistent results. In delivering effective and highly controlled film coating onto solid dosage products, the latest spray nozzle incorporates many clever design features. A series of spray manifolds have also been developed, with enhanced aerodynamic properties, to minimise air turbulence of the co-current airflow within the drum, thus reducing the risk of unwanted spray drying, with the associated inefficiencies.

These factors coupled with utilising the very latest anti-bearding technology, eliminates the time lost by stopping the process to clean the air caps.



Variable Spray Width:

Spray width can be remotely controllable and is easily adjusted, allowing optimisation of tablet bed wetted areas. This feature minimises the risk of over wetting whilst maintaining the optimum nozzle distance from the tablets.

Quality

All spray nozzle parts are manufactured in 316L stainless steel on world class CNC machinery and inspected at every stage to ISO9001 standards. In addition, each completed unit is tested and allocated an individual serial number and batch number prior to delivery. A full material certificate can be supplied on request.

Total Droplet Control

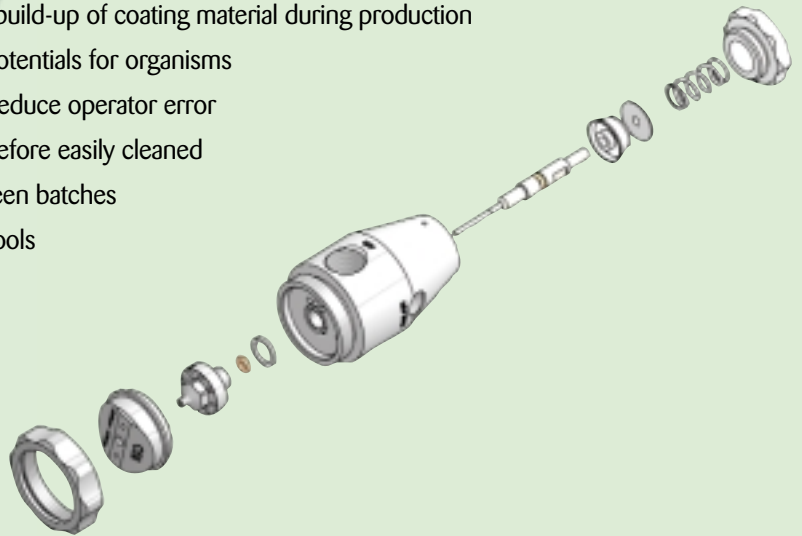
- **Consistency** - each FilmTech™ nozzle produces the same droplet spectrum every time
- **Accuracy** - the advanced technical capabilities allow a closely controlled droplet spectrum
- **Adaptability** - each liquid nozzle is available in a size ranging from 0.8mm to 1.8mm



Cleaning

Nozzle maintenance is kept to a minimum:

- The aerodynamics of the spray nozzle reduces the build-up of coating material during production
- The overall design avoids entrapment of solids or potentials for organisms
- Clearly marked ports speed up re-connection and reduce operator error
- All wetted parts are 316 stainless steel and are therefore easily cleaned
- Rapid strip-down and re-assembly saves time between batches
- Push-in connectors eliminate the need for special tools
- Specifically designed for solutions with high solids
- All parts can be ultrasonically cleaned



Spare Parts

A wide range of very competitively priced spare parts, are available for all your coating needs. Including spare parts for these nozzles, using aqueous and organic solvent. A current price list is available from our web site at www.coatingsystems.co.uk

Spray nozzle specification

Spray Nozzle	Type	CSI Mk III
Spray Type	Airborne	Air Atomised
Spray Gun Nozzle Liquid Tip Size (standard)	mm	0.8, (1.2), 1.8
Solution Flow Rate (typical per nozzle)	ml/min	50 - 150
Solution Viscosity (typical per nozzle)	MPa	5 - 350
Atomising Air Pressure Range	bar	1.0 - 4.0
Spray Width Pressure Range	bar	1.0 - 4.0
Maximum Compressed Air Pressure	bar	5.5
Compressed Air Consumption (maximum @ 4.0 bar)	Litres/min	120
Solution Viscosity (optimal)	MPa	350
Typical Flow Rate at 350 MPa	ml/min	80 - 120
Seal Material (standard) check compatibility for organic use	Type	Silicone
Seal Material (optional)	Type	EPDM, Viton

Spray width control

