

Spray Drying Colour Dye (4)

Location	India	Hydra-Cell model	G10XKSGHFECH
Type of application	Spray Drying Colour Dye	Flow rate	800 L/hr (211 US gal/hr)
Liquid	Dye	Pressure	60 bar (870 psi)

Application details

Hydra-Cell® Spray Drying

The dyestuff sector is one of the core chemical industries in India.

M/S Amidhara Enterprises in Ahmedabad is a rapidly expanding manufacturer of reactive dyes and has selected Hydra-Cell G10 pumps for its spray drying process; turning liquid dyes into powders.

The liquid dye slurries have a dissolved solids content ranging from 12% to 35%with varying viscosities yet are easily pumped into the spray drying chamber by the Hydra-Cell pumps and require no fine filtration. Nozzles atomise the slurries, which are met by a counter current stream of super-heated steam to accomplish the drying process.

Spray pattern consistency is essential for uniform powder production, so stable pressure and flow conditions are essential for optimum efficiency.

Hydra-Cell's seal-less design ensures leak free, long life reliability and its ability to run dry without damage provides further assurance. The Hydra-Cell pumps have also proved to have a low power consumption thanks to their small size and high pumping efficiency.

Advantages of Hydra-Cell pump on this application

Hydra-Cell was chosen for this application for the following reasons:

- Ability to handle this particle laden liquid, wit ease.
- Offering a virtually pulse-less flow, ensuring a smooth delivery to the spray dryer.
- Extremely low energy usage when compared with other technologies.

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