

Post-harvest Treatment

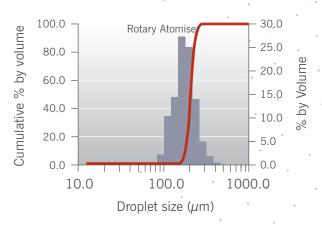
Micron rotary atomisers offer major benefits in coating applications by applying precisely controlled droplet sizes allowing for low volume applications, targeted spray applications and minimal product waste.

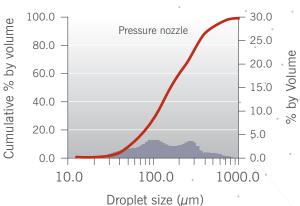
Uneven application leads to losses in quality of stored product. Rotary atomisers provide for precision spray application and consistent coverage of the target. This reduces water volumes avoiding spoilage and fungal problems.

The desired droplet size range can be selected by varying the rotational speed of the atomiser. Consistent performance is ensured over a wide range of flow rates according to throughput of stored product.

Micron industrial atomisers benefit from long life brushless motor technology and can be supplied with electronic speed control.

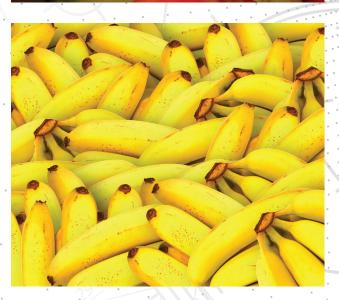
Example of a rotary atomiser droplet spectrum compared with a standard pressure nozzle







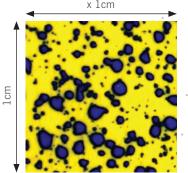


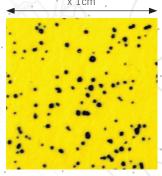


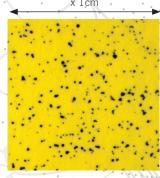
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Comparison of spray patterns

Spray deposits under Microscope. Hydraulic pressure nozzle (far left) vs. Rotary atomiser at low, medium and high rotational speeds. Rotary atomisers achieve consistent coverage, even when operating at very low spray volumes.







Hydraulic pressure nozzle-200 μ m VMD 10x Spray volume of rotary

Low Speed- $300\mu m$ VMD

x 1cm

Medium Speed- 120μm VMD

High Speed- 60µm VMD

Installation, maintenance and energy costs for the Micron rotary atomisers are very low as they require no air compressors, high pressure lines or demand high power requirements. Rotary atomisers can also replace brush applicators and dipping vats, improving ease of maintenance and cleaning.

Small and lightweight design makes rotary atomisers simple to incorporate into new systems or retrofit into existing ones. Units are available with sectorial spray patterns to accurately target products such as fruit, nuts or cereals on conveyor lines with a fan spray pattern at defined spray widths.

As there are no small orifices the risk of blockage is minimised reducing downtime and maintenance. Atomisers are not prone to nozzle wear ensuring droplet size is maintained throughout its lifetime.

These benefits provide for more efficiency in spray applications and reduced process costs with enhanced protection of stored produce.

