

Why the ASC Rotary Atomizer

Improve Coverage

“Some agronomists and entomologists mistakenly think that to achieve better coverage the applicator must increase the spray volume.” Alan McCracken

Here is one of Al McCracken's Stories

**Where do we want to deliver the chemical product:
To the soil or to the foliage of the crop?**

Grower was considering increasing the spray volume from 3 to 5 gallons/acre because of poor application results but then the productivity of the aircraft was also a problem.

Confirming that the product was systemic and he wanted coverage on the foliage we placed water sensitive papers horizontally on floating pieces of wood within the crop and also attached strips of paper to the leaves and conducted an application at 3 gallons.

The technical team observed excellent coverage on the horizontal papers, with very few droplets on the vertical papers.

Conclusion: The greater part of the spray was falling into the rice water and only a minimal amount on the foliage. **That is a significant portion of the spray volume was being wasted.**

My solution to this problem was to significantly reduce the droplet size, permitting a reduction in spray volume to **1.5 gallons/acre**. We subsequently repeated the test and demonstrated to the astonishment of the local agronomist that with smaller droplets we had recovered dramatically fewer droplets on the horizontal cards and achieved many more droplets on the vertical cards.

Result: This reduction in spray volume and in droplet size enabled the aircraft to treat a swath some 15 feet wider with excellent coverage!

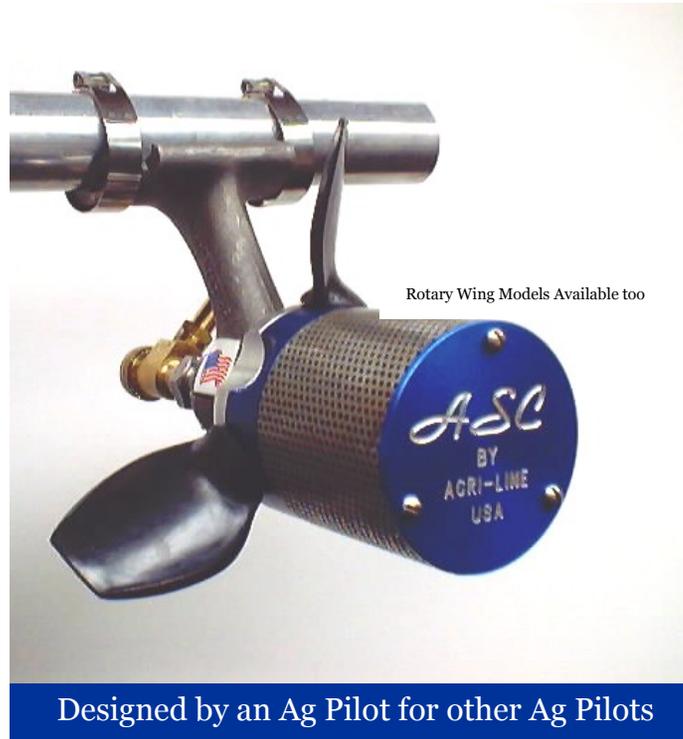


Photo taken using a GoPro camera attached to the end of the spray boom of the AT-402B applying fungicides to corn. This photo clearly illustrates that no sign of any product entering the wingtip vortices, confirming that the atomizers were installed in the correct position.

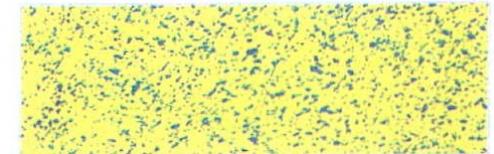
PHOTO COURTESY OF ALAN MCCrackEN

2014 Rotary Atomizer Calibration Thrush 510P



Nozzle Type: **ASC, #12 orifice, blade #3**
Target Rate: 2 GPA

0.0 with 5.56 GPA & VMD = 267



VD(0.1) = 147

VD(0.9) = 406

**Uniform Droplets
Narrow Spectrum- Extreme Coverage**

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Hangar #2 Yorkton Airport, P.O. Box 1604
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Toll Free: 1.800.776.4656
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