



### Effect of Aquatrols Snowmaking Additive (DRIFT) on Drop Size and Volume Flux Distribution (Spraying Systems Co., Wheaton, IL, 2002)

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**Objective:** To evaluate the impact of Aquatrols snowmaking additive DRIFT® on the drop size and volume flux distribution through spray nozzles typically used in snowmaking

#### Study Details

##### Location:

Spraying Systems Co., Wheaton, IL

##### Site Conditions:

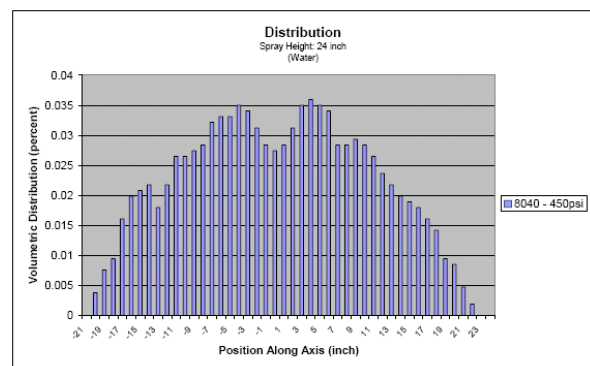
- Tests were conducted under laboratory conditions
- Equipment tested
  - SSCO. Veejet 8020
  - SSCO. Veejet 8040
- Flow rates were 2.0 and 4.0 gpm @ 40 psi
- Liquid pressure was 300 and 450 psi
- Spray height was 12 in. (30 cm.)
- Volume distribution was measured using a 1 in. patternator
- Drop size was measured using a two-dimensional TSI/Aerometrics PDPA instrument with test appropriate additional equipment

##### Treatments:

- Aquatrols DRIFT injected at 3 ppm
- Untreated Control

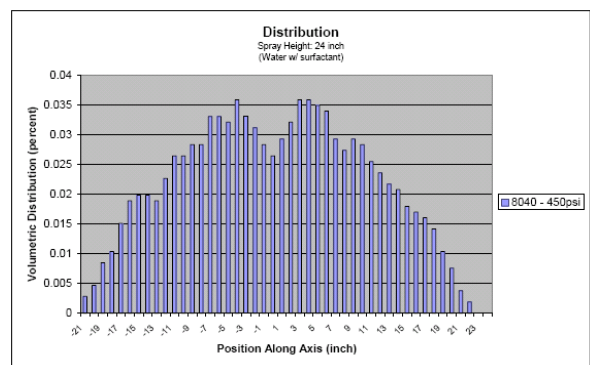
##### Evaluations:

- Drop size – using  $D_{V0.1}$ ,  $D_{V0.5}$ ,  $D_{V0.9}$  and  $D_{32}$  diameters
- Average volume flux distribution



#### Results

- The drop size variance between water and Aquatrols DRIFT solutions was insignificant for both nozzles tested.
- Volumetric distributions for water and the DRIFT solution were virtually identical



#### Conclusion

Aquatrols DRIFT snowmaking additive has no significant impact compared to plain water on drop size or volume flux distribution through nozzles typically used for snowmaking.