



Evaluation of Aquatrols Snowmaking Additive (DRIFT) (Killington, VT, 2002)

Research Cooperator: Yaroslav I. Stanchak

Objective: To evaluate the effectiveness of Aquatrols snowmaking additive DRIFT[®] on snow gun performance and quality of resulting snow product.

Study Details

Location:

Killington Ski Area (test hut), Killington, VT

Site Conditions:

- Established snowmaking test area
- Equipment
 - ASC 25 ft tower mounted SR1
 - McKinney 15 ft tower – 3 jet
 - McKinney portable 20 ft – 4 jet
 - MVT K2000
- Five testing dates were possible

Treatments:

- Aquatrols DRIFT injected at 3 ppm
- Untreated Control
- Gradual increase of water flow to determine effect on performance and quality

Test period:

- February & March 2002

Evaluations:

- Air water and flow
- Water pressure and flow
- Temperature, Relative Humidity and Wet Bulb (F)
- Snow Quality
- Observations and Comments

Results

- Aquatrols DRIFT gave a water flow improvement of about 3-5% under conditions of these tests.
- This translates into a 1 or 2 degree (F) gain in wet bulb temperature for a given snow quality – or a one step gain on the snow quality chart.
- Use of DRIFT reduced the number of coarse snow particles, and minimized crusting and glazing resulting in an improved snow surface quality.
- This year's testing supports the results obtained in the 2001 test program.

Conclusion

Aquatrols DRIFT snowmaking additive has a positive impact on snow gun performance and snow quality.