

VALUE Testimonies

SharpShooter®

Patented



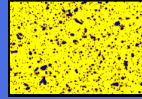
Quality of Application

**Capability #1
Consistent Applications**

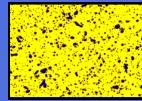
“Spray from 3 mph to 20 mph at the same pressure through the same tip”

PWM Technology

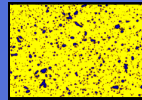
20 mph, 60 psi, 10 GPA, same tip



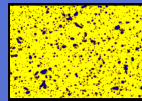
15 mph, 60 psi, 10 GPA, same tip



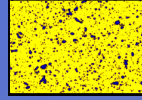
10 mph, 60 psi, 10 GPA, same tip



5 mph, 60 psi, 10 GPA, same tip

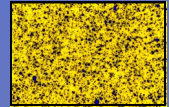


3 mph, 60 psi, 10 GPA, same tip

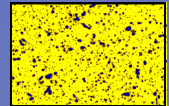


Rate Controller Only

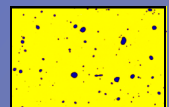
15 mph, 90 psi, 10 GPA, same tip



10 mph, 40 psi, 10 GPA, same tip



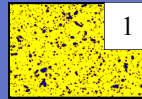
5 mph, 10 psi, 10 GPA, same tip



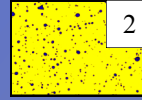
**Capability #2
Added Drift Control**

“Change pressure, on-the-go”, to reduce drift and simultaneously increase rate to retain coverage control with the same tip.”

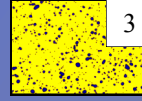
60 psi, 10 GPA, 12 mph, same tip



30 psi, 10 GPA, 12 mph, same tip



30 psi, 12 GPA, 12 mph, same tip



“Due to windy conditions, the state inspector shut down my competition’s sprayers. When she came to shut me down, I demonstrated AIM Command and my ability to reduce drift. She let me keep running.”
-Dennis Engen

**Capability #3
Variable Rate Application**

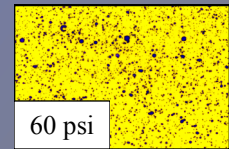
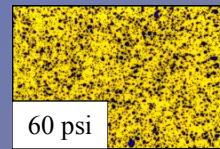
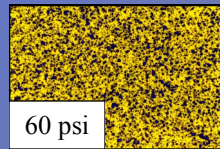
“One tip, held at a constant pressure, can do a range of rates for mapping, turn compensation, fence rows, individual nozzles

12 GPA

8 GPA

6 GPA

[Same Tip, Same Pressure, Same Droplet Sizes]



Capability #4

Boom Versatility and Improved Canopy Penetration

Larger droplets with enough mass sustain their tip exit velocity and penetrate canopy better.

**Systemic Chemical
340 to 500 um**

**Fertilizer
> 500 um**

**Contact Chemical: Both Nozzles
Broader Droplet Range: 135 to 500 um
Larger Droplets Penetrate Better**



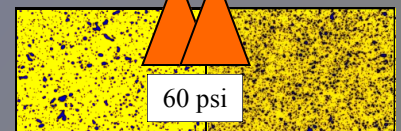
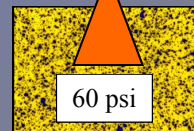
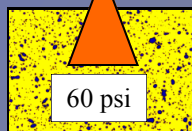
3-15 GPA



15-20 GPA



15-20 GPA



Greater Productivity

Customer Claim #1

“We can run a selected pressure for faster speeds, 19-20 mph, in the flats and field perimeters, and still slow down for the corners without the pressure changing.”

In row crops average field speed increase by 2 mph and 5 mph in the cereals.

Customer Claim #2

“Now we have more opportunity to keep on spraying throughout the day”

Typically applicators gain 5 to 7 spraying days back on the season and, on average, a gain of 1 hour per day.

Customer Claim #3

“We cover the same acres in a more timely fashion”

The Equation:

Acres/Hour = Average Speed x Boom Width x Efficiency x .1212

ROW CROPS:

Field Observation: 2 mph average speed increase

Assumptions: 100' boom, 40% typical efficiency, 10 mph average speed

Calculation: $2 \text{ mph} \times 100' \times 40\% \times .1212 = 9.6 \text{ acres/hour more}$

Productivity Gain: 9.6 acres/hr

CEREAL GRAINS:

Field Observation: 5 mph average speed increase

Assumptions: 100' boom, 40% typical efficiency, 15 mph average speed

Calculation: $5 \text{ mph} \times 100' \times 40\% \times .1212 = 24.3 \text{ acres/hr}$

Productivity Gain: 24.3 acres/hr

The Equation:

Total Acres/Season = Acres/hr x Hr/day x Days sprayed

Field Observation: 6 more days:

Spraying Assumptions: 60 acres/hour, 10 hours/day

Calculation: $60 \text{ acres/hr} \times 10 \text{ hrs/day} \times 6 \text{ more days}$

Productivity Gain: 3,600 acres/season

Field Observation: Average of 1 hour/day more (per 30 spray days)

Without: $60 \text{ acres/hour} \times 30 \text{ days} \times 10 \text{ hours/day} = 18,000 \text{ acres}$

With: $60 \text{ acres/hour} \times 30 \text{ days} \times 11 \text{ hours/day} = 19,800 \text{ acres}$

Productivity Gain: 1,800 acres/season

The Equation:

Time (days) = Total Acres/(Acres/hr x Hrs/day) + Days lost to wind

ROW CROPS: (per 10,000 acres)

Without: $10,000 \text{ acres}/(58.2 \text{ acres/hr} \times 10 \text{ hrs/day}) + 10 \text{ lost days} = 26 \text{ days}$

With: $10,000 \text{ acres}/(67.8 \times 11 \text{ hrs/day}) + 5 \text{ lost days} = 18 \text{ days}$

Spray Window: 8 less days/10,000 acres

CEREAL CROPS: (per 10,000 acres)

Without: $10,000 \text{ acres}/(72.7 \text{ acres/hr} \times 10 \text{ hrs/day}) + 10 \text{ lost days} = 24 \text{ days}$

With: $10,000 \text{ acres}/(97.0 \text{ acres/hr} \times 11 \text{ hrs/day}) + 5 \text{ lost days} = 14 \text{ days}$

Spray Window: 10 less days/10,000 acres