



AIM COMMAND™ SPRAY SYSTEM



THE AIM COMMAND™ SPRAY SYSTEM FROM CASE IH TAKES SPRAY TECHNOLOGY TO A NEW LEVEL BY PROVIDING SPRAY PRESSURE CONTROL THAT IS INDEPENDENT OF APPLICATION RATE AND GROUND SPEED. THIS SPRAY TECHNOLOGY ALLOWS THE OPERATOR TO ADJUST TO THE EVER-CHANGING CONDITIONS PRESENT IN TODAY'S CHEMICAL APPLICATION ENVIRONMENT.



THE NEXT GENERATION IN SPRAY TECHNOLOGY



TOMORROW'S TECHNOLOGY TODAY

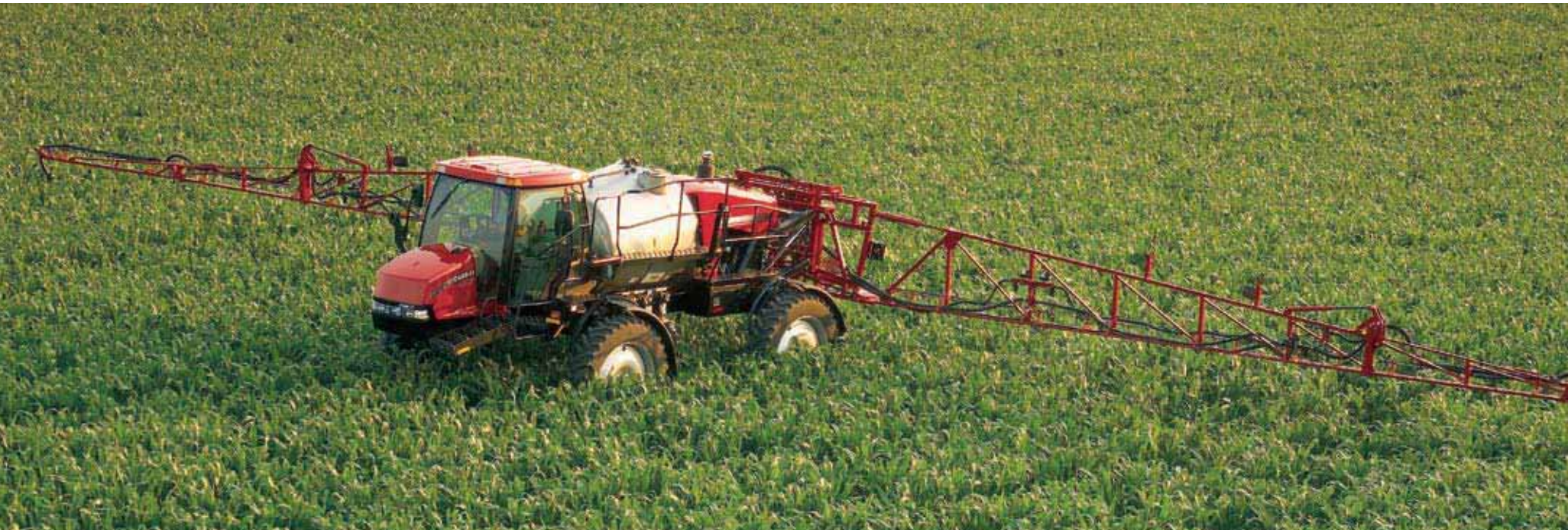
VARIATIONS IN SPEED GAVE RISE TO THE "ART OF SPRAYING."

Speed and Pressure spraying of years past required a constant speed to maintain a constant pressure so a constant

rate with a constant droplet size could be applied through a single nozzle.

Rate Controller spraying, common today, provided the capability for a constant rate within a 2:1 range of speeds through a single nozzle. Even with a rate controller present, there is still the need for the "Art of Spraying". Within the 2:1 speed range,

speed variations affect the application pressure and droplet size which can create problems in either the quality of application or drift potential. Outside the 2:1 speed range, these problems are compounded.

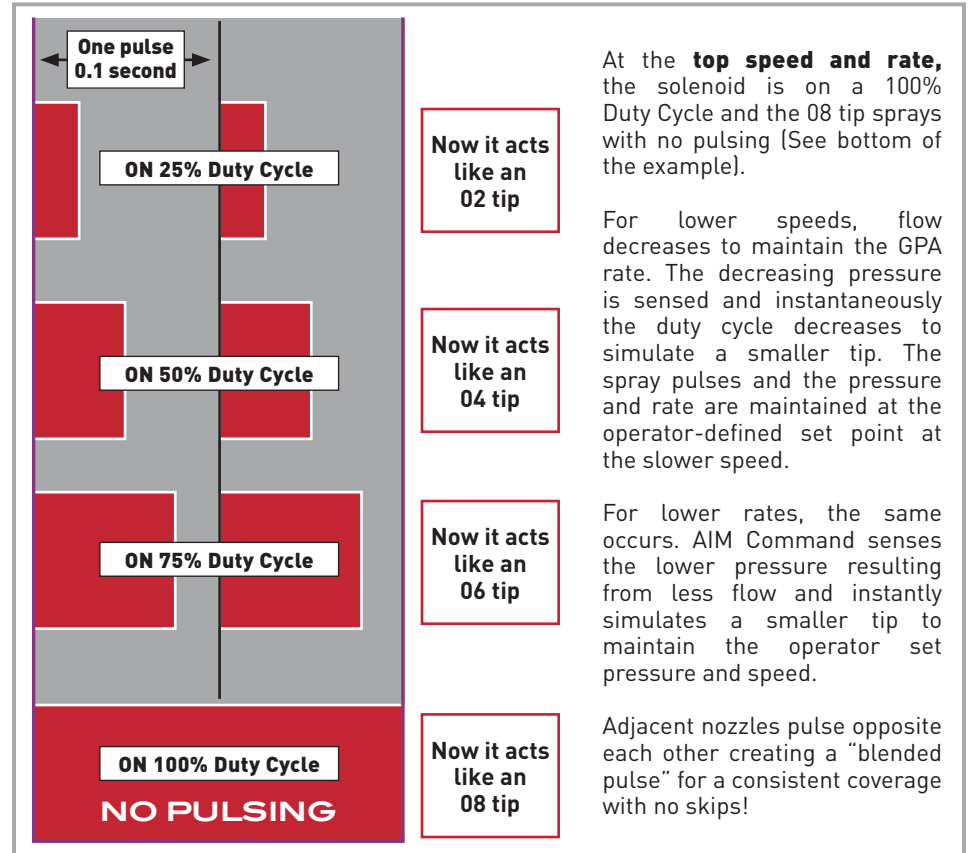


▲ With AIM Command, spraying is done with a constant rate within as much as an **8:1 speed range** through a single nozzle. Also, the application pressure can now be selected and toggled between two preset values without varying that 8:1 speed range.

Why is this important? Constant application pressure means constant droplet size which results in better coverage. Being able to toggle between two preset pressures means on-the-go drift management.

HOW DOES AIM COMMAND WORK?

EXAMPLE: USING AN 08 FLAT FAN TIP



▲ **A standard tip** is sized for the maximum flow, which is based on maximum field speed and application rate, required for a particular chemical. The AIM Command computer uses Pulse Width Modulation (PWM) valves to control the flow at each nozzle section. This PWM control varies the duty cycle to simulate a variable tip orifice that can change instantaneously to maintain both target application rate and pressure set points.

Issues that arise from speed and pressure or rate controller only spraying include inconsistent coverage in spots such as hills and turns, drift, pressure variation with speed changes, poor canopy penetration, wishing you could drive according to the

ground conditions-either faster or slower. If only there was a way to eliminate these problem areas.

For example, imagine spraying 10 GPA at 60 psi at 24 mph with the capability to slow down to 3 mph and still apply 10 GPA at 60 psi. Or, keep the same 10 GPA at 24 mph but change application pressure from 60 psi to 20 psi. Or, change the application rate to 7 GPA, but keep the pressure at 60 psi and the speed at 24 mph. All of these examples, and many more, are possible with a single tip using AIM Command spray technology.

Being able to change tip sizes on-the-go solves the issues found in conventional spray technology. However, manually changing tips on-the-go is impossible. The AIM Command system uses computer technology to automatically and instantly change tip orifice sizes on-the-go.



WHAT ADVANTAGES DOES THE AIM COMMAND™ SYSTEM OFFER TO THE OPERATOR?

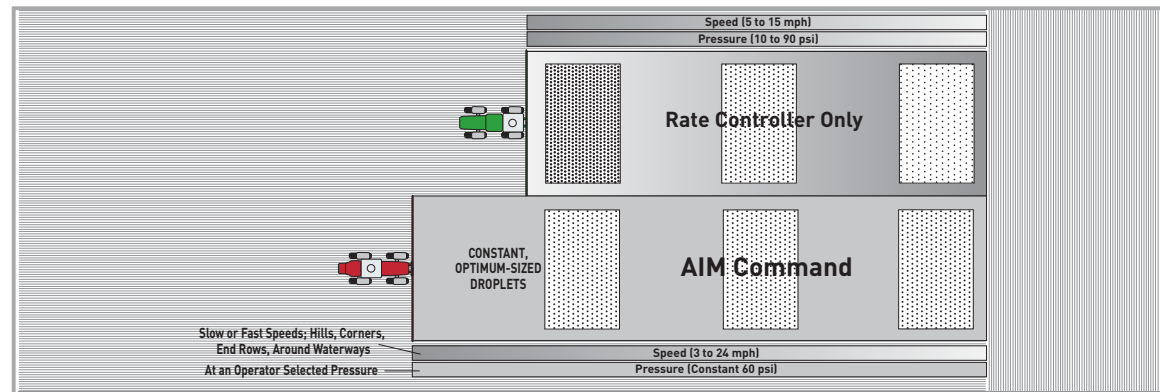
Consistent coverage across the entire field can be challenging with conventional spray technology. Slower travel speeds, encountered when making a turn at the end of a field, coming **out of a corner**, or maneuvering around an obstacle result in low-speed over-application in order to maintain the proper overlap pattern. This over-application causes potential crop damage and wastes chemical which affects the bottom line.

When field conditions allow faster travel speeds, boom pressure increases and droplet size decreases resulting in more drift potential. Neither of these examples is desirable in the application world.

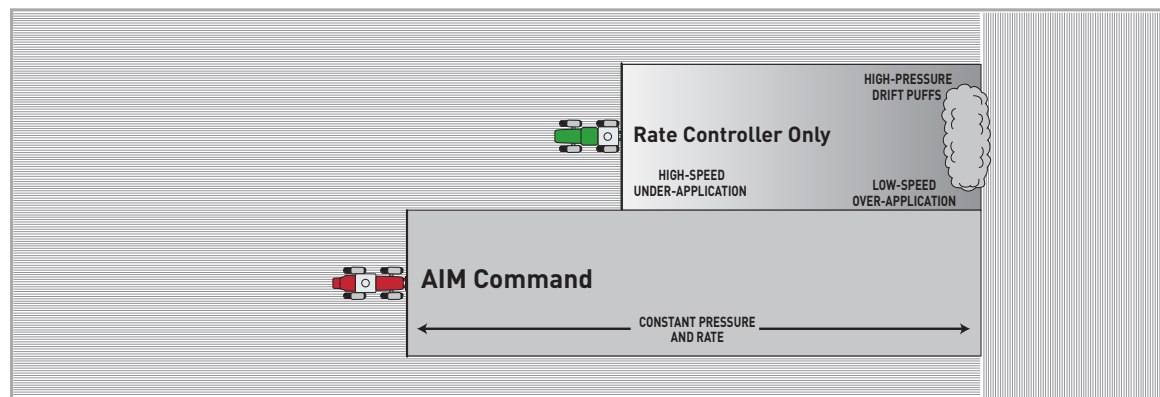
The AIM Command spray system addresses the quality of application and the drift management issues. By holding a constant pressure that is independent of application rate or ground speed, you get optimum droplet size for superior coverage within the 8:1 speed range.

Because AIM Command allows the operator to preset two spray pressures, a lower pressure setting can be used to spray **drift sensitive areas**, such as a field perimeter. Once that area has been applied, the operator can toggle to the higher pressure, on-the-go, and spray the remainder of the field at the desired pressure.

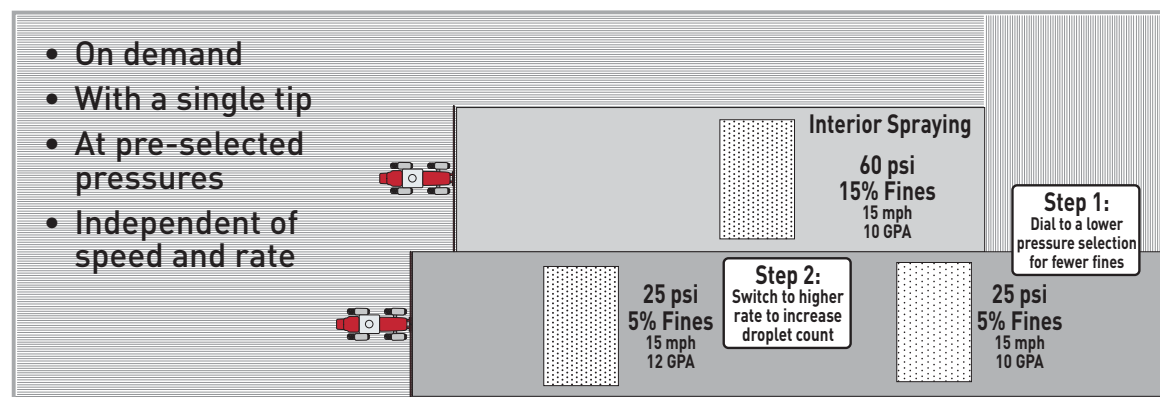
CONSISTENT COVERAGE EVERYWHERE



OUT OF THE CORNER CONTROL



DRIFT CONTROL



AIM COMMAND™ SYSTEM

THE AIM COMMAND SYSTEM COMPONENTS

AIM Command computer modules are located at the rear of the machine. They work with the rate controller to manage constant GPA rate by regulating the flow rate at each nozzle with a solenoid valve that opens and closes 10 times a second. At the same time, a constant preset pressure is maintained through managing the pump speed in concert with the solenoid valves.



▲ **Three conveniently placed switches put true application control right at your fingertips.** These switches allow the operator to control the spraying characteristics. The first switch selects between the AIM Command system and conventional spraying. The second switch increases or decreases the pressure setting and the third switch allows the operator to select one of the two preset pressures.



▲ **PWM solenoid on the nozzle body instantaneously controls the flow.** With the AIM Command option and the Wilger Combo-Rate nozzle bodies, the operator can switch between the AIM Command system and conventional spraying. This gives the operator an option to easily switch between pesticides and spraying larger application rates, such as liquid fertilizer.

AIM TO IMPROVE YOUR BOTTOM LINE

Optimum Chemical Performance

Operators can predetermine the most effective average droplet size of a particular chemical. They can also select a tip and pressure that produces that average droplet size. Program the rate into the rate controller and the pressure into the AIM Command spray system and the operator is assured that the ENTIRE field receives the most effective chemical treatment. There are no more burned crops at the end rows, in the corners or on hills where conventional technology must over-apply to maintain a proper spray pattern from the tip.

More Acres, Fewer Hours or Both

Productivity dramatically increases due to improved application practice efficiencies, higher average field speeds, fewer hours lost per day to wind, fewer days per season shut down due to wind, and less time spent changing tips whenever there is a rate change.

Pressure Relief

With drift reduction tips there is a higher boom pressure requirement to maintain a pattern. The operator sets the desired pressure and never worries about dropping pressure at slow speeds and either losing pattern or over-applying the chemical.

Reduced Equipment Repair

Now operators do not have to over-drive the equipment to maintain pattern or to keep from over-applying the chemical. Equipment repairs decrease as does operator fatigue.

Easier Tip Selection

Tip selection is made easier as a constant pressure capability allows a larger range of flow from a single orifice size. Fewer tips are required.

Accuracy in spray application affects your bottom line. That's where the optional AIM Command spray system comes in. By creating independent control of the speed, pressure and flow application variables, the AIM Command option is able to increase the production potential and reduce the cost per acre of a standard sprayer. No other sprayer offers this feature.



WWW.CASEIH.COM/NA

SAFETY NEVER HURTS!™ Always read the Operator's Manual before operating any equipment. Inspect equipment before using it, and be sure it is operating properly. Follow the product safety signs, and use any safety features provided.

Case IH is a registered trademark of CNH America LLC. Any trademarks referred to herein, in association with goods and/or services of companies other than CNH America LLC, are the property of those respective companies.

CNH America LLC reserves the right to make improvements in design and changes in specifications at any time without notice and without incurring any obligation to install them on units previously sold. Specifications, descriptions and illustrative material herein are as accurate as known at time of publication, but are subject to change without notice. Availability of some models and equipment builds varies according to the country in which the equipment is used.

