RAVEN APPLICATION CONTROL SYSTEMS

A true systems approach to maximizing sprayer efficacy
SPRAYING EFFICACY

Right Mode of Action
On target
Effective rate
Proper timing
Weather
Neighboring crops
Tank Mix
Contamination/Cleanout
ROI
Nozzles
Droplet size

Pressure
Speed
PWM
Boom Height
Reporting
Buffer zones
Dicamba
Inversion
Vapor
Maintenance
System Setup
Bees
Weed resistance
Stewardship

Make spraying simple
Weed Resistance

Crop Protection

Chemistry

Regulations

DICAMBA

Stewardship
Field Computers and Information Management

Application Controls and Input Management
VIPER® 4+

POWERED BY THE RAVEN OPERATING SYSTEM

- Customizable user interface
- ISO VT
- Portrait or landscape orientation
- Camera inputs
- Weather station
- Grower-Farm-Field data structure
- User configurable product and machine profiles
- Slingshot ready for wireless data transfer, remote support and over the air software updates
- Up to 10 product control
RAVEN RATE CONTROL MODULE
• Four decades of Raven application controls experience
• Universal rate controller meets the needs of any application
• Three years of development and testing, including 20 months of in-field testing
• Testing against harshest of OEM reliability requirements
• Flexibility for multiple ISOBUS controller platforms
• Certified for most countries worldwide with regulatory marks for CE, RCM (Regulatory Compliance Mark), IC, FCC
APPLICATION CONTROLS
RAVEN RATE CONTROL MODULE APPLICATIONS

- Pull-type sprayers
- Self-propelled sprayers
- NH3 applicators
- Liquid fertilizer applicators
- Planters (liq/gran control)
- Pull-type spreaders
- Self-propelled spreaders
- Air seeders, carts and drills
- Strip-Till applicators
HAWKEYE
PRESSURE BASED NOZZLE CONTROL SYSTEM

- Consistent spray pattern and droplet size
- Turn compensation standard
- Fewer nozzle changes
- Less over-application at lower rates
- Simple set-up and installation
- Fully integrated application control system
- Upgrades without hardware changes
- Designed to be simple to setup and use
- Compatible with direct injection
- Up to 16 virtual sections
• Consistent droplet size allows for drift and coverage optimization
Pressure control

Lower Pressure

Higher Pressure

Field Border
HAWKEYE® TURN COMPENSATION

Under Apply

Over Apply

Without Hawkeye

With Hawkeye

Unrestricted
Jul-17
HAWKEYE HD
INDIVIDUAL NOZZLE ON/OFF

- Upgrade from base system with software unlock, no hardware change required
- As-applied mapping of individual nozzles
- Reduce costly skips and overlaps and the highest possible level of precision
Broadcast application with 110° flat fans and 100% overlap. 100% of the planted area receives spray.
SIDEKICK PRO DIRECT INJECTION
MULTI-SEASON USES

- Planting (Insecticide)
- Crop Protection (Herbicides, Fungicides)
- Anhydrous (Nitrogen Stabilizers)
GLYPHOSATE/ROUNDUP RESISTANT WEEDS

Over 90% of all farms in the US have Glyphosate/Roundup resistant weeds.

Result and challenge
- more crop specific herbicides
- more tank flushing
- more time
- disposal of tank flushed product
- Dicamba Application may require Buffer Zones (two different products applied in the same field)
SIDEKICK PRO DIRECTION INJECTION

- High resolution encoder that provides smoother pump control and exceptional lock on target rate technology
- Remote closed-system calibration, eliminating the need for calibration catch tests and exposure to chemicals
- Automatic priming feature
- Real-time diagnostics
- Rinse assist ensures optimal pump performance
BUFFER MANAGEMENT

Buffer Zone

Sensitive Crop

Wind Direction
GUIDANCE AND STEERING

VARIABLE FIELD SHAPES AND CONDITIONS REQUIRE FLEXIBILITY
SPRAYING EFFICACY

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Field Computers and Information Management

Application Controls and Input Management

THANK YOU!

Guidance and Steering

Data Management

Machine Controls

Unrestricted
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