



# ***BROADACRE TRAILED SPRAYERS***



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## STANDARD FEATURES

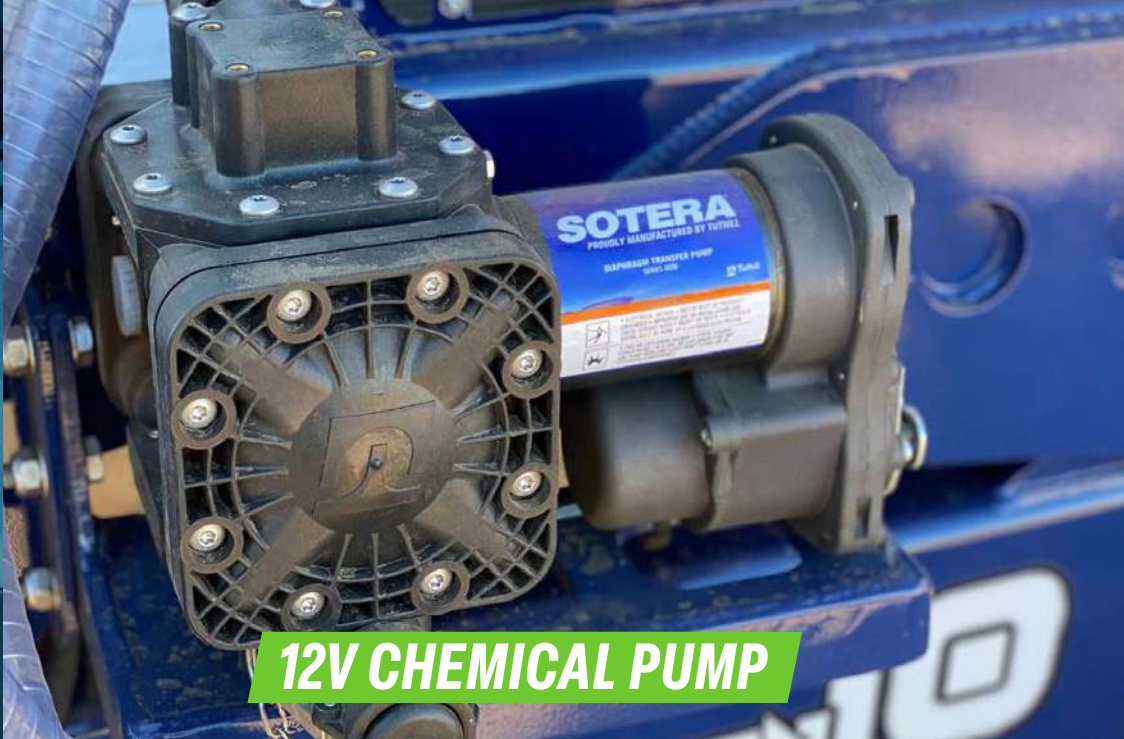
- Engineered structured booms
- Recirculating boom system
- Stainless steel wet booms
- High water rate CAPACITY
- Electric hydraulic control
- Soft boom fold
- Air switching
- Isobus joystick operation
- A-frame suspension
- YAW control
- Independant boom tilt
- Spray at reduced width
- 600-800L flush tank
- MSP400 centrifugal pump
- ARAG IBX 100 rate controller
- 3 metre aluminium break away
- Centre roll suspension
- Simple plumbing operation
- Large 100mm pressure gauges
- Greasable pivot points
- A-frame tool box
- Tank sprinklers
- Tank agitators
- Nozzles protected inside boom
- Fence line nozzles
- Air bag suspension
- 3 Stage filtration
- High quality spray hose
- Sandblasted & sealed
- 2 Pack primer & top coat
- All stainless steel fasteners
- All viton seals
- Oversize sign
- Flashing beacon
- Sealed control box
- Fold away steps

**THE LOCAL SERVICE  
DIFFERENCE**

**2 YEARS STRUCTURAL WARRANTY**







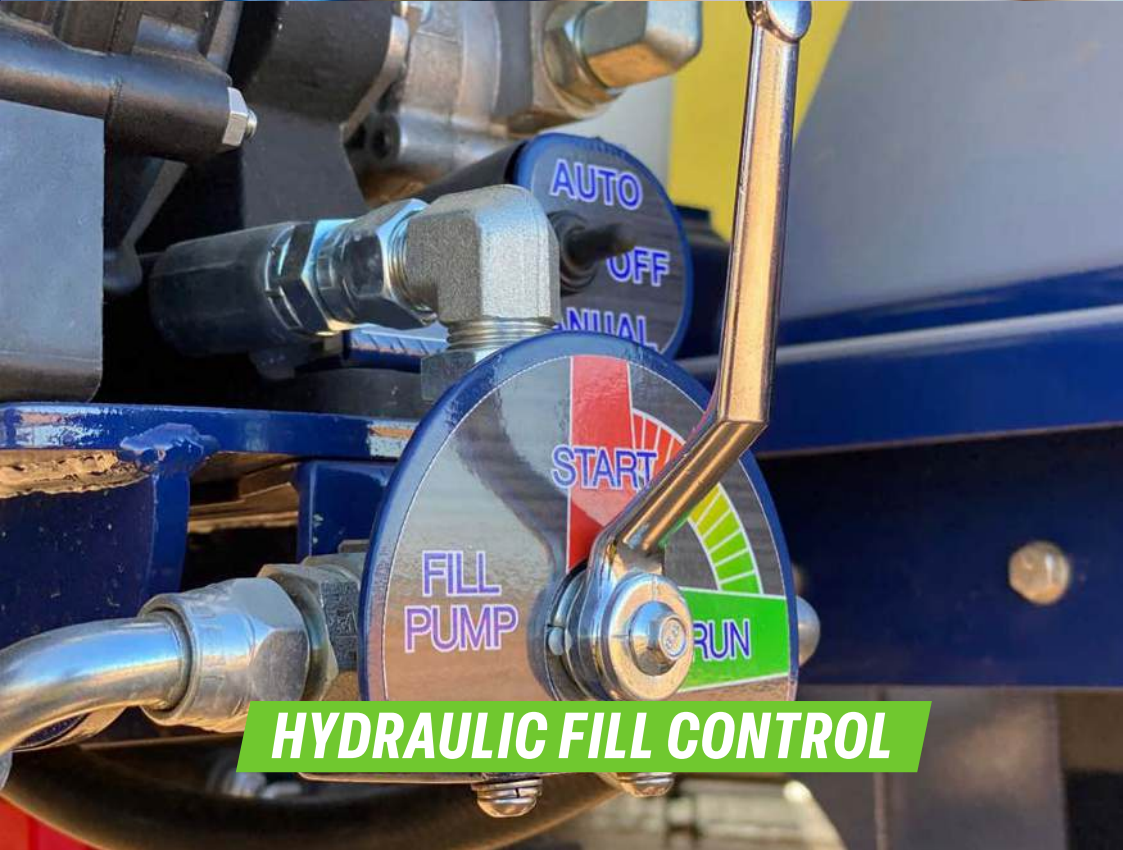
12V CHEMICAL PUMP



HEIGHT CONTROL



TANK LEVEL SENSOR



HYDRAULIC FILL CONTROL





# STANDARD FEATURES

The key to the success of BOSS Engineering lies in the rigorous engineering, research, and development that underpin our products. Our primary focus has been to manufacture cutting-edge broadacre trailed boomsprays that not only compete on a global scale but are also proudly manufactured in the West Australian Wheatbelt.

In an era where technology within the agricultural industry is advancing by leaps and bounds, BOSS Engineering stands at the forefront of embracing groundbreaking innovations to elevate both the operator's experience and overall performance.

The compact chassis design, combined with our distinctive centre frame, forms the ultimate foundation for the engineered structured boom, allowing it to surpass competitors in performance. Self-levelling roll and yaw dampening play a pivotal role in enhancing the longevity and efficiency of the boom. These features, integrated into our design, not only deliver an exceptional operator experience but also demonstrate resilience against the harsh Australian conditions.

With a straightforward decontamination process and a user-friendly plumbing layout, this machine ensures remarkable usability and efficiency.









# QUADRO SERIES

POWERED BY WEED-IT PRECISION SPRAYING







# ENGINEERED FOR PRECISION

## MANEUVERABILITY

The Quadro Series is designed for exceptional manoeuvrability. Its larger rolling circumference wheels and single axle significantly reduce draft requirements. The larger wheels provide a substantial advantage in wet and challenging conditions, while the single axle and compact chassis make the machine easy to manoeuvre. Furthermore, our advanced drawbar suspension system ensures a smooth ride and seamless load transfer to the tractor, enhancing overall performance.

## PURPOSE BUILT

Optical spot spraying systems require stable booms for precise results. The Quadro machine is purpose-built with unparalleled stability, optimising accuracy and delivering industry-leading results.

## THE ULTIMATE BOOM RIDE STARTS HERE

Experience the exceptional performance of our centre frame assembly, refined through years of development and testing. Featuring roll links connecting the boom to the chassis and advanced damping systems, our design ensures a precise boom ride, optimising the Weed-It system's performance. It manages roll and yaw forces, enhancing accuracy while extending the longevity of the boom for superior results.



Figure 01. Boomspray Back End.







## STRUCTURED BOOM FOR MAXIMUM CONTROL

## THE ALL-IN-ONE SOLUTION

The Quadro Series is the ultimate “all-in-one” solution for both spot and blanket spraying, delivering unmatched versatility and reliability.

Equipped with advanced 50Hz PWM technology, it ensures superior spray quality and performance across all applications. Effortlessly switching between modes, this machine adds

exceptional value to your spraying program.

Designed with large-capacity tanks, the Quadro Series significantly boosts efficiency, enabling you to cover more ground with fewer refills.

While spot spraying provides substantial chemical savings, blanket

spraying enhances performance with pressure-based control, precision turn compensation, and more sections for accurate, consistent coverage.

This machine is the ultimate choice for growers seeking a versatile, high-performance solution to elevate their entire operation.



### AUTOMATIC HEIGHT CONTROL



### WEED-IT SENSORS



### JOYSTICK CONTROL



# JOIN THE REVOLUTION

## PULSE WIDTH MODULATION

Pulse Width Modulation (PWM) technology has brought a new level of precision to agricultural spraying systems. By allowing individual nozzle control and maintaining consistent pressure, PWM ensures every part of the paddock gets the exact chemical dose required, even during turns.

Weed-It builds on this by enabling dual-mode spraying with a single nozzle, allowing growers to broadcast spray a paddock or crop while still spot spraying weeds.

By adjusting the PWM frequency, it optimises chemical use, reducing over-application, saving on costs, and protecting soil health.

Maintaining spray quality regardless of speed changes allows growers to work more efficiently, with less wastage and improved overall coverage. It's a smarter, more sustainable approach to modern spraying that optimises both productivity and crop health.

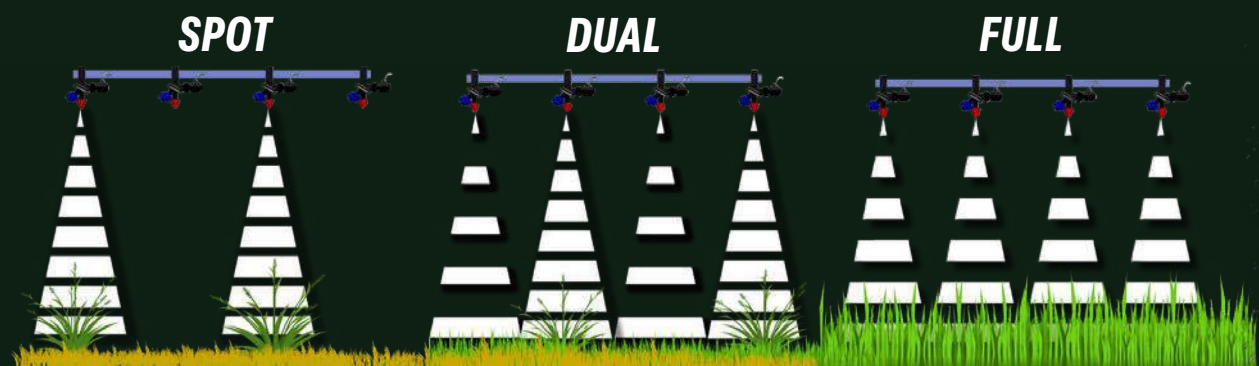


Figure 02. Graphic Displaying PWM.



# SMARTER SPRAYING

## MANEUVERABILITY

PWM turn compensation is critical for achieving accurate application in agricultural spraying. During turns, the speed difference across the boom causes over-application on the inner section and under-

application on the outer edges. PWM technology specifically addresses this challenge by adjusting the flow rate.

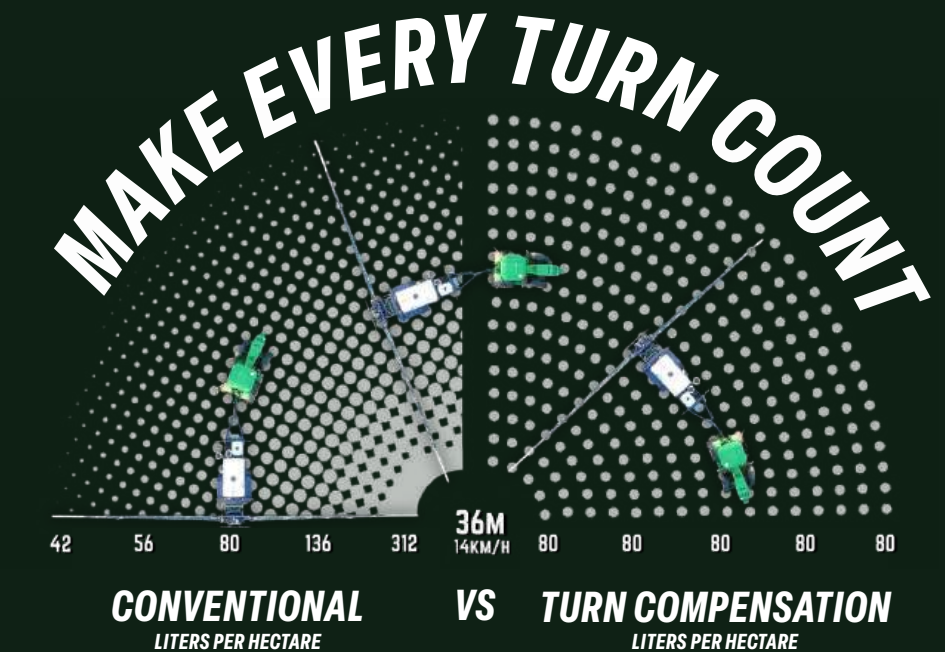


Figure 03. Graphic Displaying PWM Turn Compensation.





# **SENSE THE DIFFERENCE**

## **THE POWER OF NEAR-INFRARED**



## **DAY & NIGHT**

### **AUTOMATIC CALIBRATION**

Weed-It's cutting-edge near-infrared sensor technology, refined over 25 years, sets a new benchmark in weed detection. By harnessing chlorophyll fluorescence, Weed-It's sensor achieves unparalleled accuracy in identifying and targeting weeds. Calibrating itself 40,000 times per second, the sensor ensures optimal performance in real-time, adapting to varying conditions with precision.

Unlike competitors' visual methods, this technology detects the specific light reflectance patterns of chlorophyll, ensuring precise weed detection even in challenging environments. The sensor excels in varying lighting and soil types, providing reliable performance and exceptional consistency. Experience the industry's leading technology for smart spraying with Weed-It's advanced and dynamic sensor system.



## TANK SIZES

7,000L

10,000L

## BOOM SIZES

30.5M

36.5M

40.5M

42.5M

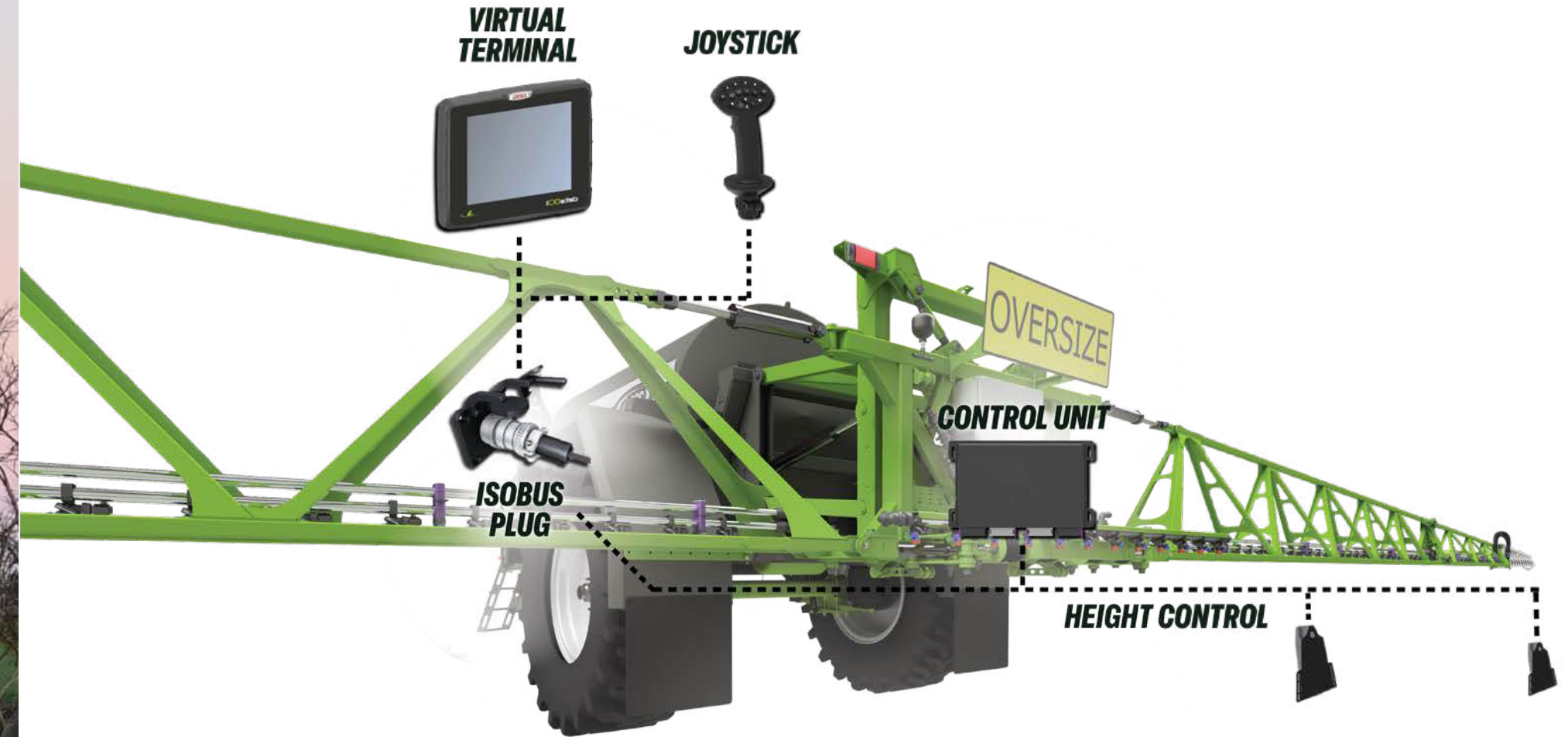


Figure 04. Graphic Displaying the Boomspray Back End Technological and Mechanical Connection.

## SIMPLE CONNECTION

The Quadro Series ensures seamless connectivity with its plug-and-play ISOBUS system, integrating effortlessly with your tractor's virtual terminal. Power-beyond hydraulics deliver reliable, efficient performance, making tractor and implement changes quick and easy for maximum operational simplicity.



# LEAP SERIES

POWERED BY BB-LEAP







# PULSE WIDTH MODULATION

The PWM system allows TURN COMPENSATION to constantly adjust each nozzle, to ensure the exact application rate is applied to the plant. Eliminating costly over application and better weed control.

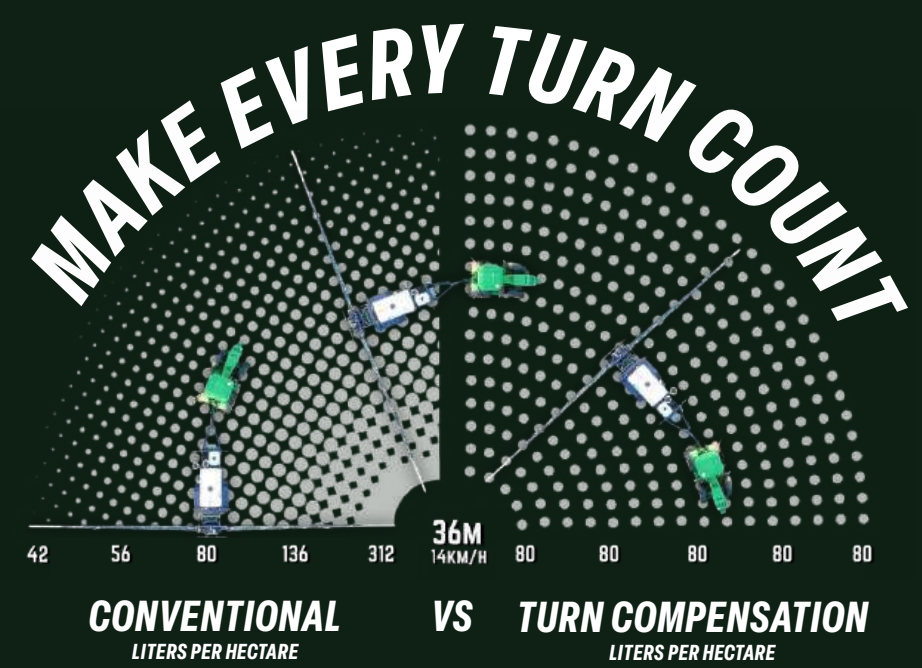


Figure 03. Graphic Displaying PWM Turn Compensation.



# FARMING AT PLANT LEVEL

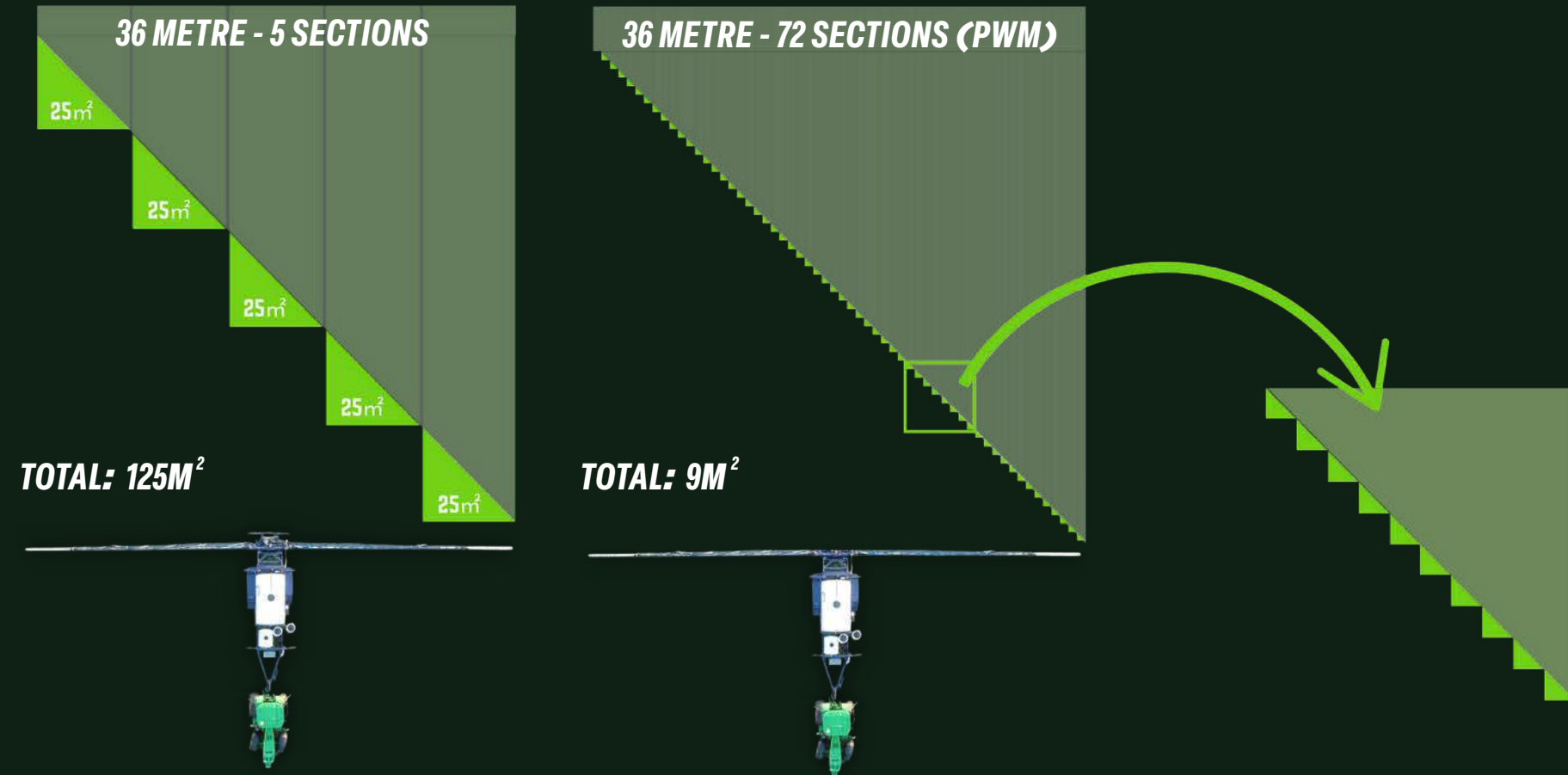
The Leap Series PWM system introduces cutting-edge technology that not only enhances efficiency but also effectively manages input costs. While it has always been a goal for each plant to reach the desired target rate, traditional technology often falls short. However, with the advancements in PWM nozzle control, **PRECISION AGRICULTURE** reaches new heights with the Leap Series.

The Leap system is capable of opening and closing up to **100 TIMES PER SECOND**, ensuring accurate rate control without any fluctuations in pressure or flow. Regardless of changing speeds or cornering booms, the PWM system continuously adapts across the entire boom width, guaranteeing the **PERFECT APPLICATION TO EVERY PLANT**.

This level of control sets the Leap Series apart. Moreover, the Leap Series offers the significant advantage of individual nozzle control with the option of 10" or 20" nozzle spacings. By **REDUCING OVERLAP** significantly, users can achieve even greater precision in application. This level of customization allows for optimal

efficiency while minimizing waste. What sets the Leap system apart and guarantees it's success is it's comprehensive integration. Every component of the machine is seamlessly connected through the same system, including LiDAR height control, droplet size control, turn compensation, and individual nozzle control. With these advanced features, **THE FUTURE IS HERE**.



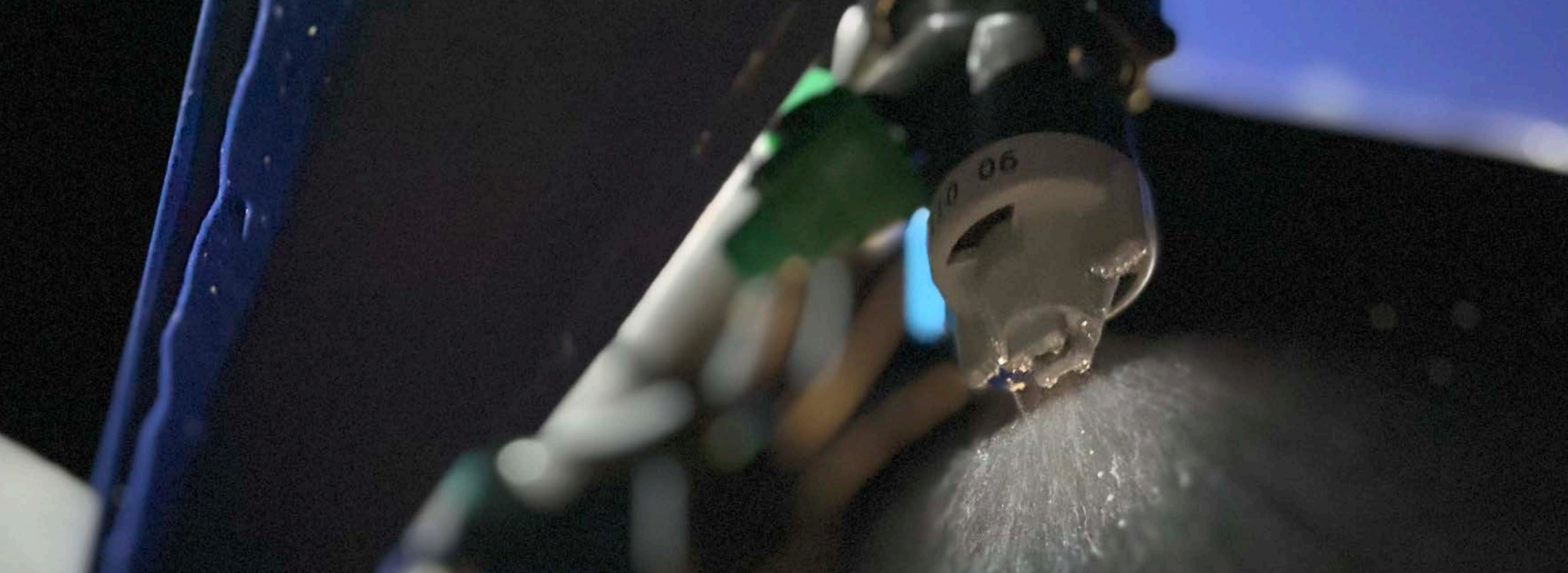


# INDIVIDUAL NOZZLE CONTROL

Figure 06. Graphic Displaying PWM Individual Nozzle Control

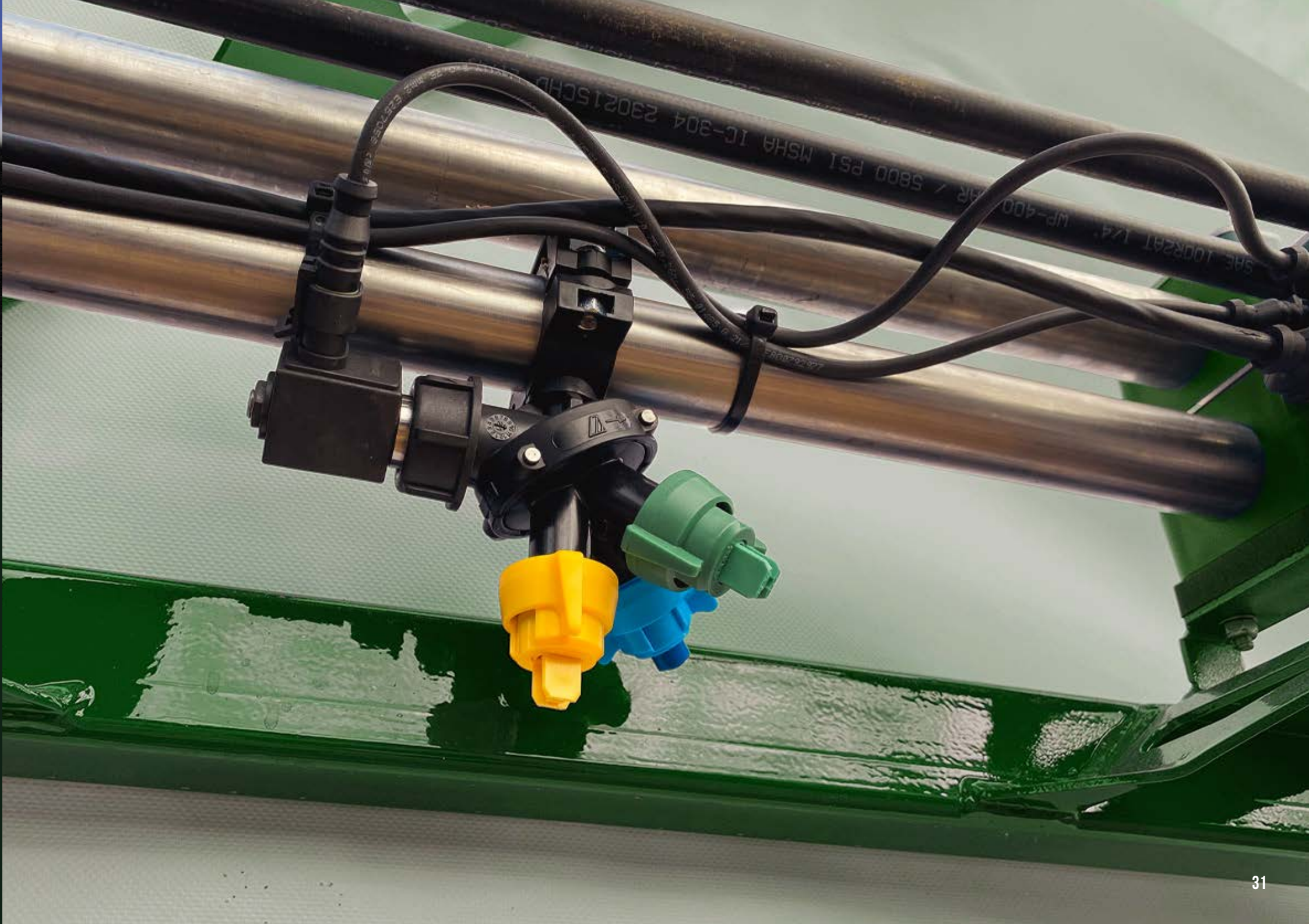
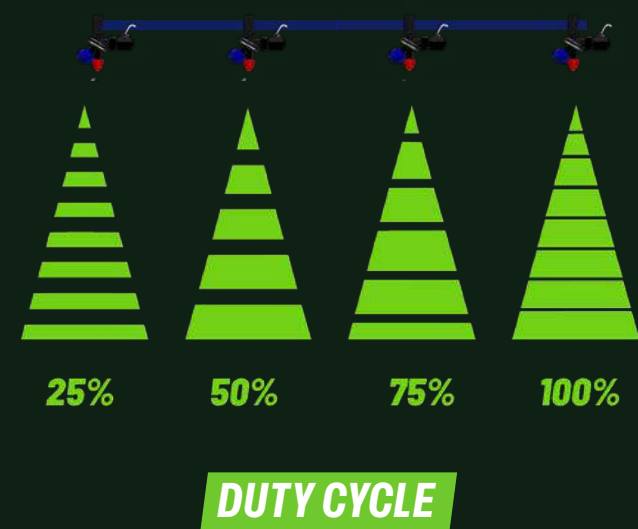






**CONSTANT  
PRESSURE  
& SPRAY QUALITY**

Figure 07. Graphic Displaying Duty Cycle







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