

# FurrowForce™



## The Goal Of A Closing System

The closing system is a critical aspect of the planter that leaves the operator questioning if it is set right or even if it is the right system for the field conditions. What spring pressure should it be set it to? Which of the dozens of wheel types do I use? Do I need to change settings during the season, throughout a single day, or even throughout a field. Current closing systems are attempting to address one aspect of closing but struggle to provide what is necessary for optimal emergence:

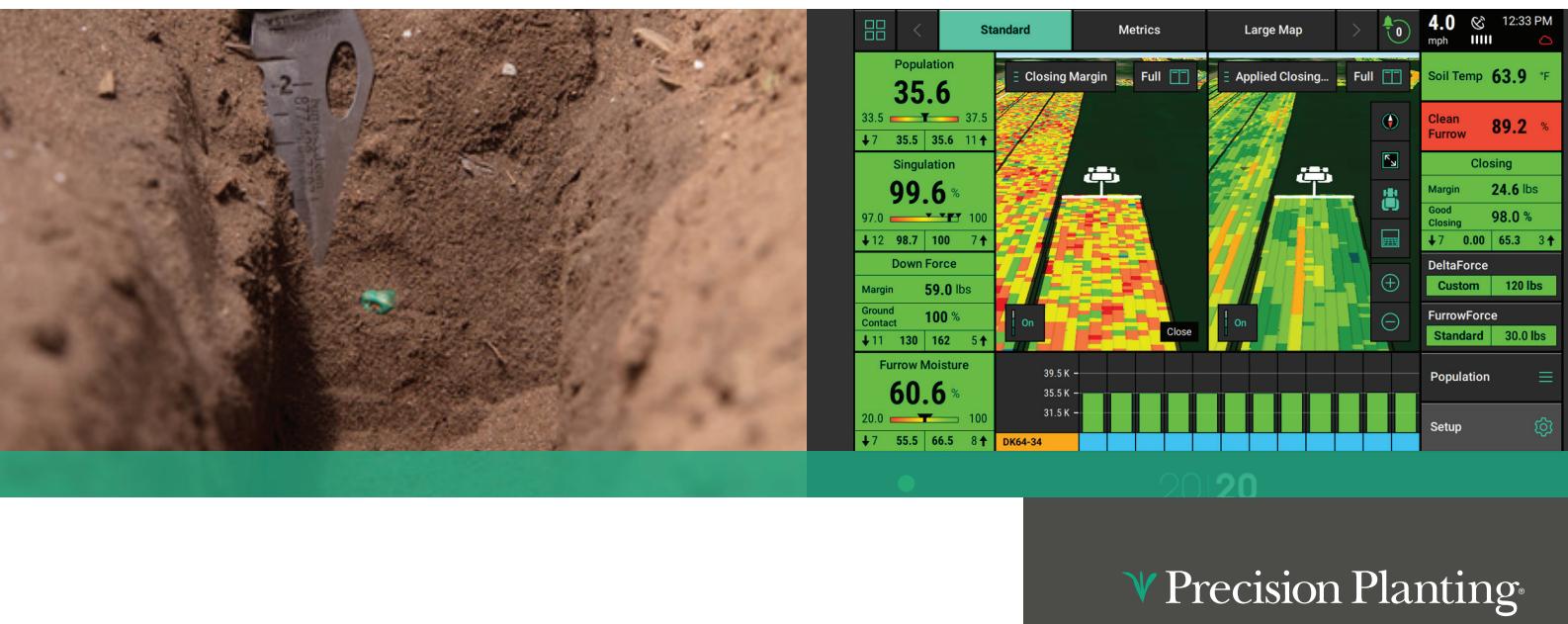
### 1. No Slotting or Air Pockets    2. Mellow Path to the Surface    3. Moisture Retention in Loose Soil

Correct closing means management of soil density to drive uniform seedbed moisture and temperature, minimizing delayed germination, inconsistent emergence, and lost yield. And you may not even be aware of these issues in your fields. Too much air in the soil after closing is your enemy, as either hidden air pockets in hard to close environments or loose soil that dries out quickly in easy to close environments.

## Confidence That Your System Is Set Correctly

FurrowForce changes closing entirely, addressing all aspects of managing soil density through it's unique design as an automated two stage closing system with integrating sensing. The first stage closes the trench from the bottom up to eliminate air pockets and the second stage stitch wheel wheels firm the soil for moisture retention, fully managing the seedbed environment for consistent germination.

FurrowForce eliminates the guesswork of what notch to set your closing system to. The first and second stage are linked together with the remaining stitch wheel weight being measured by a load cell on each row and displayed in the cab on the 20|20 monitor. Using the load cell, a control module on each row automatically increases or decreases the force applied to the closing wheels, to ensure that the first stage wheels are successfully closing the trench and the second stage applying just the right weight for optimal seedbed moisture and soil density management. Across every acre, with FurrowForce, you can now be confident in your planter's ability to manage furrow closure for optimal germination and emergence.



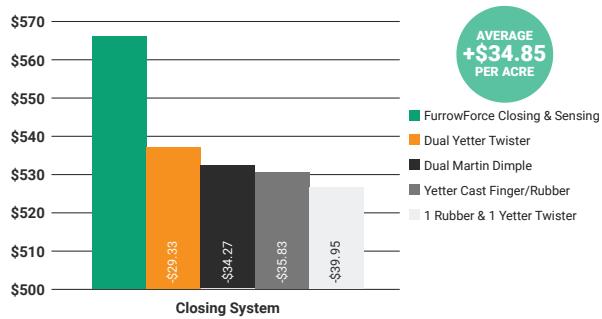
# See The Difference

FurrowForce is an automated system, meaning that the operator in the cab sets a desired closing margin, or the amount of weight carried on the stitch wheels. As variation is encountered in the soil, as you change speeds, or as row unit downforce changes, the change in weight on the stitch wheels is sensed by the load cell and the control module changes the force applied to the entire system, keeping the first stage wheels at just the right pressure while maintaining ideal closing margin on the second stitch wheels to optimally firming the soil to manage soil density and moisture. It's a smart system that eliminates guesswork.

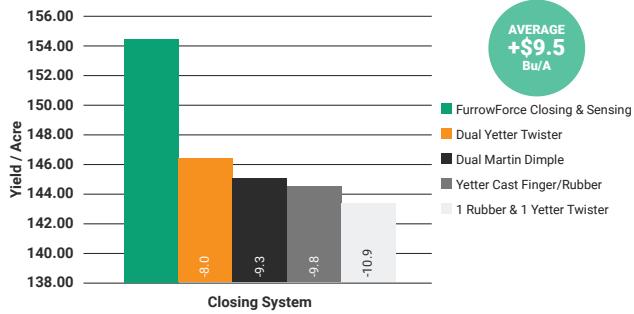
Get the confidence you deserve with FurrowForce, the automated two stage closing system with integrated sensing.

In 2019, various closing systems were studied at the Precision Planting Precision Technology Institute in Pontiac, IL. See the study results below, where sensing and control improved yield over traditional systems, in a continuous corn program.

2019 PTI Farm Closing System Study: Continous Corn \$Return



2019 PTI Farm Closing System Study: Continous Corn Yield



## Specifications

### ROW UNIT

JOHN DEERE® 7200/7300/17XX/DB/17x5/  
ExactEmerge

KINZE® 3000

PRECISION PLANTING® Ready Row Unit

WHITE® 9000

HARVEST INTERNATIONAL® LaserPro

### OTHER REQUIREMENTS

20|20 (Gen 3) is required for sensing and control.

Air Supply - Precision Planting has options for compressors that are matched to your planter as part of the FurrowForce system.

Wheels - FurrowForce uses specific wheels from Precision Planting for the first and second stage.

Rocky Conditions - A rock guard from Precision Planting is required for FurrowForce when planting in fields with rocks.