

VARIABLE RATE IRRIGATION (VRI)

OPTIMIZE WATER DISTRIBUTION—MAXIMIZE EVERY PLANT'S POTENTIAL

Variable rate irrigation uses unique field prescriptions (Rx) to apply precise amounts of water to match numerous variables within each field. Multiple prescriptions can be created for each field using our VRI tool that comes with the RPM Touch Screen panel or by contracting a third party to conduct highly precise surveys to determine soil variables and define topography. You'll then be able to load each Rx into the touch screen panel with a USB drive and immediately verify that everything is running properly. (Reinke is the first in the industry to integrate VRI and GPS into a touch screen control panel, providing another level of ease.)

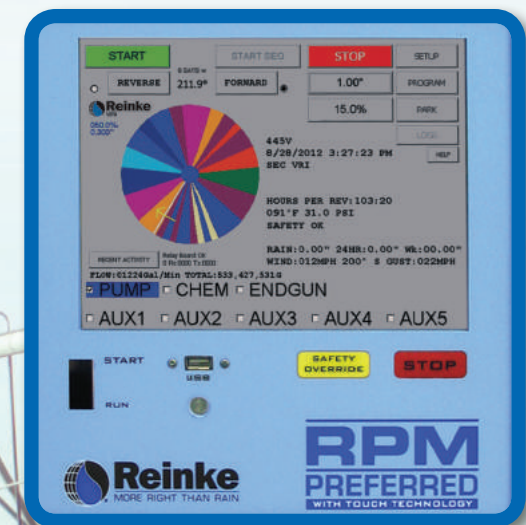
FEATURES INCLUDE:

Select the prescription that most accurately fits your current irrigation needs that day with the flexibility to easily switch prescriptions if conditions change.

- Full-color display
- View and select multiple prescriptions
- View the prescription while pivot is running
- See pivot location within each prescription
- Validate prescription is running as programmed
- Create prescriptions from multiple sources including aerial images, USDA web soil surveys and yield data

IRRIGATION VARIABLES INCLUDE:

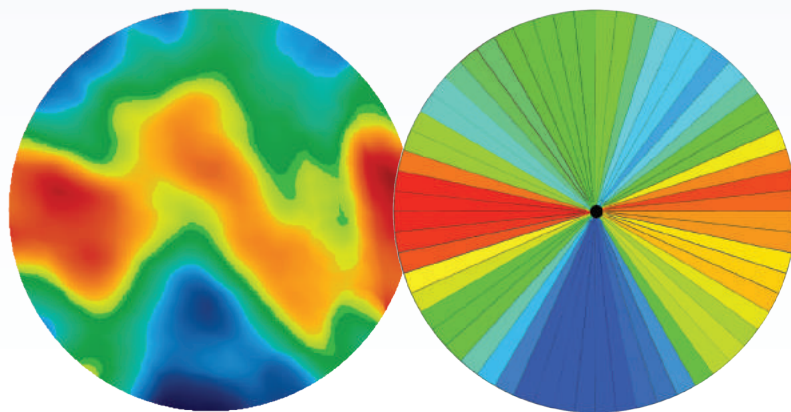
- Soil changes
- Slope
- Drainage
- Crop
- Seed population
- Rain events
- Drought
- Yield fluctuations



TWO PRESCRIPTION METHODS

OPTION 1: SPEED VRI

Slice the center pivot pie



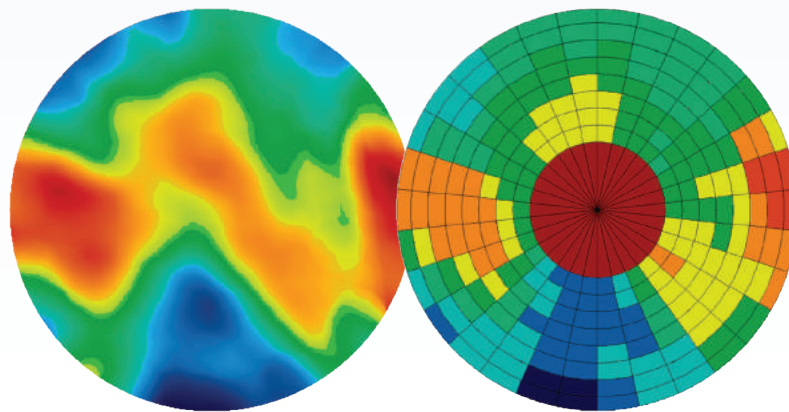
Field Scan

VRI Prescription

Speed VRI is economically accomplished by segmenting the pivot path into multiple pie-like slices (sectors). Each unique irrigation depth is achieved by altering the pivot speed at each slice. The Rx may concentrate on the outer 30 to 50 percent of the pivot circle, which accounts for 50 to 75 percent of the total area within each slice. Each slice can also be accurately proportioned down to one-tenth of a degree (3,600 increments) to provide maximum control of the water being applied. Base application depth can be easily adjusted higher or lower without changing the Rx.

OPTION 2: ZONE VRI

Find new potential



Field Scan

VRI Prescription

Zone VRI divides the pivot coverage area into two or more rings (zones) around the pivot point. Reinke VRI can control as many as 84 zones. When combined with the segmenting sectors, an even higher level of precision is possible by creating up to more than 300,000 independent zones within the field. Irrigation rates are achieved through individually controlled sprinkler banks, allowing an almost unlimited number of precision water application combinations. Variable Frequency Drive Pumps may be required and are recommended to minimize pressure fluctuations. Additional components required for Zone VRI include independently controlled sprinkler valves, sprinkler control valve boxes and air compressor.