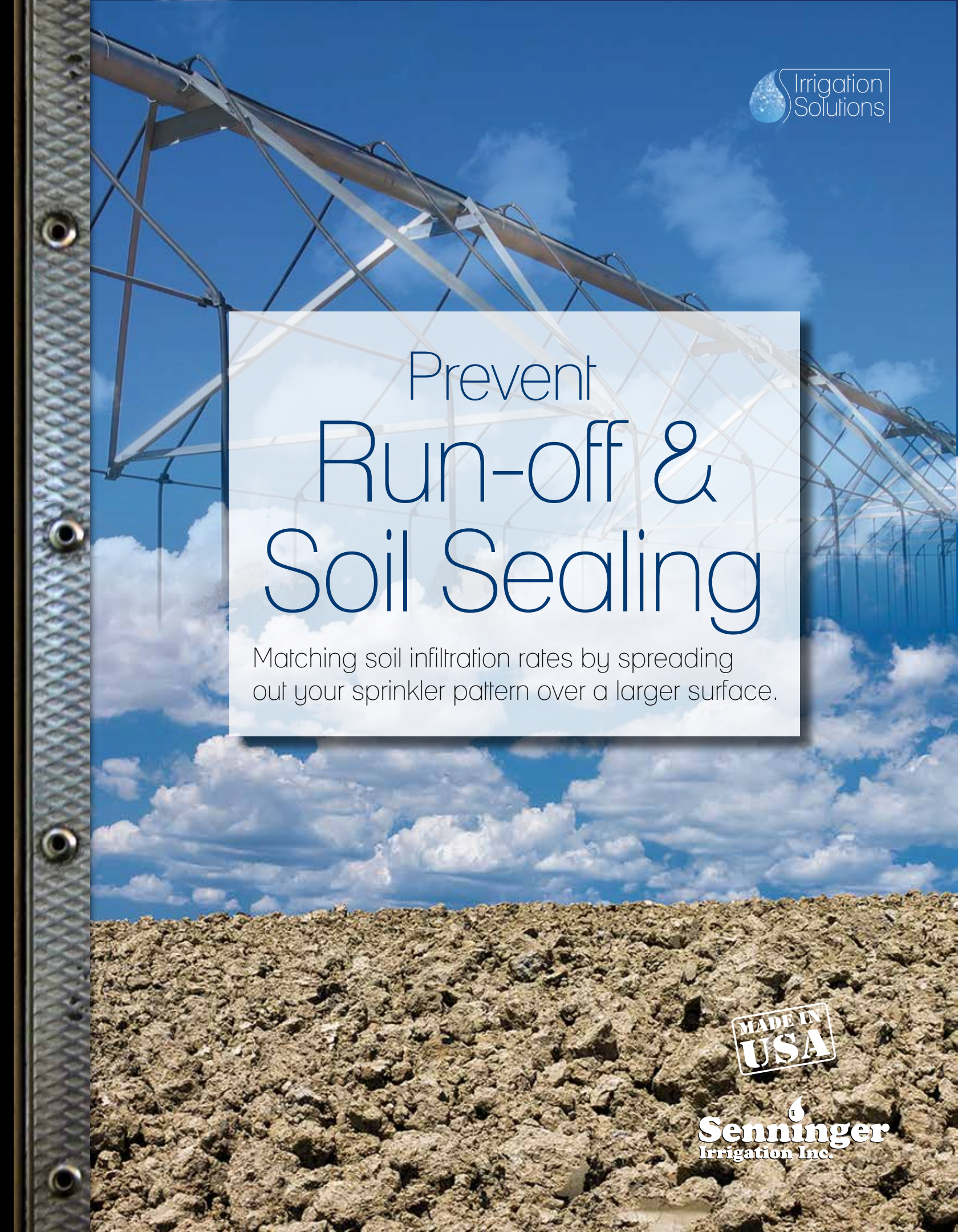

Irrigation Solutions
Prevent
Run-off &
Soil Sealing
Matching soil infiltration rates by spreading out your sprinkler pattern over a larger surface.
MADE IN USA
Senninger
Irrigation Inc.

Tight Soils

Tight soils are a challenge for growers who depend on irrigation. Unlike sandy soils that can absorb almost 1 inch of water per hour, clay soils have extremely low infiltration rates around 0.2 inches per hour. These dense soils are prone to runoff, soil sealing and salinity issues caused by poor drainage and water evaporation from the soil surface.

Irrigation efficiency can be a little difficult to maintain when watering these clay-based soils, but efficient and sustainable irrigation is entirely possible with equipment specifically designed to match your soil's intake rate.

We at Senninger have found that spreading out the water distribution from a single outlet on a pivot is an incredible asset for growers struggling with surface sealing and run-off. Dividing a flow and spreading it out over a larger area not only lowers a sprinkler's application intensity, it gives soil time to absorb water at a comfortable rate.

All you need are goosenecks and low-pressure sprinklers with uniform distribution. No boom systems, no altering the pivot speed – just a little ingenuity and a desire to make your irrigation system more sustainable.

Maximize Your Irrigation Efficiency

Goosenecks

Double 125° goosenecks divide the flow from a single outlet on a pivot and spread it out over a larger area. They let you install two separate drops on opposite sides of the mainline when used in combination with truss rod hose slings.

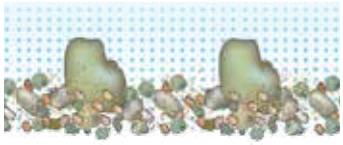
A standard goosenecks' sole purpose is to allow the installation of drops along the pivot. Double goosenecks expand on this technology and help lower sprinkler application intensity while maximizing the efficiency of your sprinkler package.

This installation increases your system's area of coverage while still using the same amount of water. The less concentrated irrigation lowers the overall application rate and provides extra soak time without disrupting the soil's structure. This helps the soil absorb water at the rate it needs and encourages deeper movement of water into the soil.

Closely matching the soil's intake rate prevents runoff, soil sealing and pooling. So not only do you preserve your soil's health, you also save water by making the most out of every drop pumped.

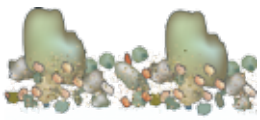
"Call your nearest irrigation dealer to ask about Senninger's Double Goosenecks"

Low Application Intensity



- More closely matches soil infiltration rate
- Low kinetic energy minimizes surface soil compaction
- Good infiltration maximizes irrigation efficiency, minimizes erosion and reduces costs

Healthy Soil



- Early season, typically pre-germination
- Small soil particles disbursed with larger particles
- Maximum soil infiltration capability

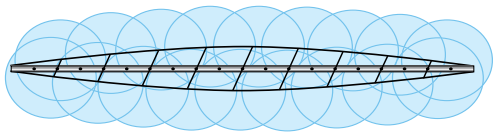
High Application Intensity

- Exceeds soil infiltration rate
- High kinetic energy can further compact the soil surface
- Infiltration reduction can result in runoff of irrigation water

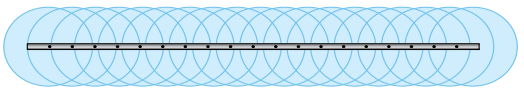
Goosenecks

- Lowers the instantaneous application rate by widening the area of application
- Reduces soil compaction, soil sealing and runoff
- Reduces or eliminates the need for welding extra outlets
- Provides easy drop alignment for precision irrigation application
- Designed for a long life and reduced plugging from rust flaking
- Available in 3/4" hose or 3/4" NPT (M) outlet connections
- Two-year warranty on materials and workmanship

Water Patterns



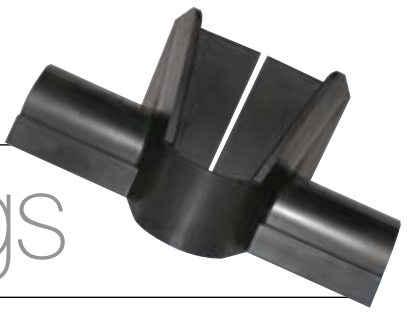
Double 125° Goosenecks



Conventional Applicators

Double goosenecks increase a sprinkler's wetted area to reduce application intensity and lower the pivot system's water application rate.

Truss Rod Hose Slings



- Securely fastens 3/4" flexible hose to the truss rod
- Supports flexible hose to prevent kinking and abrasive wear
- Maintains the drop/sprinkler position and allows for easy adjustments
- Color coded models for various truss rod sizes: 5/8" (rust), 11/16" (green), 3/4" (black), 13/16" (grey), 7/8" (blue)
- Two-year warranty on materials and workmanship

Preserve Your Soil & Save Water

i-Wob®

A good sprinkler head makes the double gooseneck installation even more efficient. No matter which sprinkler you use, our recommendation has always been to find a sprinkler that distributes water instantaneously and uniformly over a large wetted area.

Senninger's i-Wob with the standard black plate or the grey plate is frequently requested with the double gooseneck. Its wide and gentle application pattern reduces the kinetic impact of droplets on the soil surface and works hand-in-hand with the gooseneck to maintain good root aeration and minimize erosion.

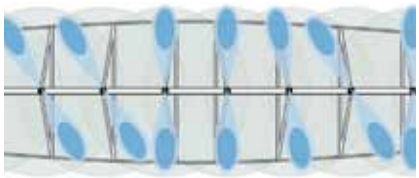
The i-Wob's consistently sized droplets help maintain pattern integrity in wind conditions and resist evaporation. The popular black plate model can be used at 15 psi to create slightly smaller droplets that better match the infiltration rates of dense soils. The new and improved grey model is designed to produce smaller droplets at 10 to 15 psi.

i-Wob® UP3

The i-Wob instantly and uniformly covers the entire area of its wetted circle with consistently sized droplets.

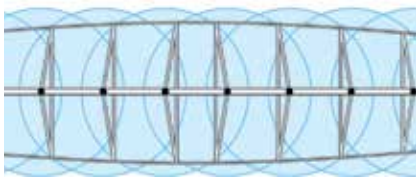
- Ideal for flexible hose drops
- Low application intensity helps reduce soil compaction and runoff
- Consistent droplet size helps prevents wind-drift and evaporation
- 4 models available with diverse trajectories and droplet sizes
- Exclusive below-the-nozzle weight eliminates the need for heavier, conventional drop weights
- Low pressure operation - 10 to 15 psi (0.69 to 1.03 bar) - saves money and energy
- Two-year warranty on materials, workmanship and performance

Water Patterns



Stream-driven applicators

Stream-driven applicators can provide good throw distance, but their distinct streams instantaneously place the entire flow in a relatively small area when compared to the i-Wob.



i-Wob sprinklers

The i-Wob offers immediate uniform coverage. This means it wets a much larger area with low application intensity and preserves the soil's structure and infiltration capabilities.

The Importance of Pressure Regulation

It's critical to accurately monitor and control pressure fluctuations on any irrigation system – and more so on low pressure systems. Senninger pressure regulators maintain a constant preset outlet pressure that can be matched to the applicator design, regardless of variations in inlet pressure.

Uncontrolled pressure fluctuations in irrigation systems result in unwanted flow deviations and over or under watering. Proper use of pressure regulators prevents these fluctuations due to elevation changes, fluctuations in system demand, and water supply, and helps maintain the overall efficiency of an irrigation system.

Benefits of Pressure Regulators

- Greater application uniformity
- Optimum system performance
- Longer system and component life
- Energy savings due to lower pressure operation
- Conservation of natural resources

Maintain Irrigation Efficiency for the Long Run

Your sprinkler package is one of the most critical components on a center pivot or linear machine. Sprinklers are in charge of getting water to your crops, so they should always be in top shape before the start of a growing season.
Inspecting your sprinkler package on a regular basis is as important as the proper maintenance of any other equipment on your pivot.
We at Senninger recommend you take a good look at your existing package at the end of every season to make sure everything is operating in top shape and you're getting the maximum benefit out of your equipment.

1. Get Your Sprinkler Package Chart

Find a copy of the sprinkler package chart. This contains the location of all sprinklers and pressure regulators along the center pivot. It will also include detailed information for each sprinkler's nozzle size or flow rate.

2. Evaluate Sprinkler Wetted Patterns

Turn on your pivot and visually inspect all sprinklers for potential damage, lost parts, and consistency and uniformity in their distribution patterns. Assure that sprinkler overlap is sufficient. Disassemble any sprinklers with poor distribution patterns or overlap and check for plugging or defective parts.

Sprinklers can wear out and will stop rotating – or rotate out of control. Check sprinkler deflector pads to ensure they do not have a build-up of materials that could affect the distribution pattern or flow rate.

3. Check System Pressures

Using a pressure gauge, check that the operating pivot pressure matches the design pressure. Pressure should be at least 5 PSI above the pressure regulator rating.

If you have a 10 PSI pressure regulator, your pressure gauge should read a minimum of 15 PSI. Compare the numbers to the design pressure in your sprinkler package chart to make sure everything matches.

Note: It's best to check pressure with the pivot parked in the same location!

4. Consider Upgrading

Like all farm equipment, sprinkler packages need to be replaced every so often to maintain top irrigation performance.
Look into available Environmental Quality Incentive Program (EQIP) programs in your area that help fund irrigation system upgrades. Many incentive programs will help fund sustainable, water conserving irrigation equipment.

Senninger® Irrigation Inc.

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Made in U.S.A.

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