Choosing the Right Sprinkler Package
With today’s higher energy prices and the need for water conservation, a uniform and efficient sprinkler package is critical to your operation. Choosing the correct water application solution is vital to the performance of your center pivot or linear. The first set of criteria you need to consider includes:

**Soil Type (and Texture)**
Proper sprinkler selection and design help reduce soil sealing.

**Crops to be Raised**
Crop height and the water’s ability to penetrate the crop canopy are significant considerations in sprinkler head design.

**Terrain of Field**
The slope of the field must be considered to minimize runoff and keep water where it is most needed.

Armed with this information, you will be able to knowledgeably discuss options with the water application experts from Valley Irrigation. Together, you and your Valley dealer can create the best water application solution for your operation—a solution that will reduce energy costs, save water, and increase your productivity and profitability.

**Correct Spacing Ensures Best Results**
Each sprinkler head must be positioned correctly to maximize water delivery, and the overlap of the sprinkler pattern is a critical factor. Valley determines optimum spacing through its exclusive computerized models to ensure uniform application once the sprinklers are installed in your field.

**Low Pressure Sprinklers Conserve Energy**
Low-pressure sprinkler technology provides solutions that lower your energy bill because you use less water pressure. You can effectively operate sprinklers at 10-20 PSI (0.69 - 1.38 bar), which is significantly lower than older sprinklers. Your Valley dealer will help you select a sprinkler package that will reduce soil compaction, reduce sealing and create excellent water infiltration.
Sprinkler Solutions
Professionally Designed Sprinkler Packages

- V-Chart software—available only to Valley dealers—is the most comprehensive sprinkler design program in the industry.
- Extensive training prepares Valley dealers to use the latest sprinkler technology for your fields’ soil types, crops and terrain.
- Valley can provide sprinkler package designs for competitive machines.
- Water application staff are qualified as Certified Irrigation Designers by the Irrigation Association to quickly certify a sprinkler package design for the Environmental Quality Incentives Program (EQIP).
- Valley inventories a full range of sprinklers, pressure regulators and drop components.
- Sprinkler package assembly is provided at five locations throughout the United States for fast delivery to our dealer network.

Sprinkler Technology Provides Efficiency and Uniformity

- Droplet sizes are designed to minimize wind drift.
- Combining drops with new sprinkler technology delivers the ultimate water savings.
- Distributing water evenly across the field provides maximum yields.
- Worn out regulators and sprinkler nozzles decrease efficiency and uniformity.
- Replacing or adding pressure regulators ensures proper flow from each nozzle.

Trust Your Valley Dealer

Valley dealers are truly the experts in helping you maximize the return on your irrigation investment. With the industry’s most advanced product knowledge and tools, your local Valley dealer is your most essential partner. Your Valley dealer will help you select the proper sprinkler package for your soil type, crops and terrain. Your choices include solutions from Valley, Komet, Senninger® and Nelson®.

Choose from:
- Rotating Pad
- Impact
- Low Energy Precision Application (LEPA)
- Fixed Pad
- Directional Sprays
Valley Sprinklers

Valley All-Range Pressure Regulator
- Use one model for the entire sprinkler package
- Six models available, 6-30 PSI (0.4-2.07 bars)
- Precise water application in hilly terrain

Valley Low-Energy Nozzle (LEN)
- Large variety of available pads
- Unique shape for movement through the crop
- 6-40 PSI (0.4-2.8 bars)
- 24-36’ (7.3-11 m) wetted diameter
- Chemigation and part-circle pads
- Low-pressure operation
- Single, double or triple deflector pads divide nozzle flow into more streams

Komet Sprinkler

Komet Precision Twister
- 3-D Motion system gives uniform water distribution throughout entire water pattern
- Specially designed body legs reduce dripping to a minimum
- Operating pressure range 6 - 20 PSI (.41 - 1.38 Bar) for all nozzle sizes #10/128 - #52/128
- Special groove and surface design provide consistent water droplets across entire water pattern
- Minimal losses to wind drift
- Three plate / trajectory choices
- Rapid fit nozzle system – fast and easy installation
- Integrated additional nozzle carrier
- Top-mounted Precision Twister Peak also available
Lowering the position of the sprinkler reduces spray and drift caused by wind and evaporation. Desired sprinkler placement can be achieved with various Valley applications, such as drops (flexible hose, semi-rigid and fixed) and boombucks. There are many options available to best fit your needs.

**Drops**

**Flexible Hose**
- Can be dragged through the crop
- Available in 3/4" (1,9 cm) hose

**Rigid Galvanized**
- Available for truss rod height application
- Utilizes 3/4" (1,9 cm), schedule 40 galvanized steel

**Semi-Rigid Polyethylene**
- Corrosion resistant
- Minimal flexibility

**Semi-Rigid PVC**
- Non-corrosive
- Multiple lengths down to ground clearance of 5½' (1,7 m)
- Utilizes 3/4" (1,9 cm), schedule 80 sunlight resistant material

**U-pipes, Drop Weights and Fittings**
- Additional options to complete any drop sprinkler application

**Remote Drains**
- Minimize wheel tracks in field
- Move drain water away from wheel tracks
- Run drain water through sprinkler drop hose

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**Solutions for Reducing Application Intensity**

**Goosenecks and Truss Rod Hose Slings**
- Use the span structure to increase the wetted area, while using the same amount of water
- Lowers application intensity
- Non-corrosive, UV-resistant thermoplastic construction for longer life

**End Gun**
- Valley offers a full range of end gun selections to maximize your irrigated acres
- Booster pumps can also be paired with an end gun for more pressure

**Control Valve**
- We offer a range of end gun valves

**Boombacks**
- Discharge water behind drive unit rather than over the wheel
- Used with directional spray units to help keep wheel tracks dry

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**Crop Protection and Fertilizer Application**

You can realize substantial savings when crop protection products and fertilizers are applied through center pivots and linears, rather than through ground rigs or aerial sprays. This is especially true for crops that require several applications during the growing season. The efficient application of inputs will produce a more uniform crop and save you money on labor and application costs.
Control Valves
You’ll fully appreciate the extra built-in quality and reliability of the Nelson control valve when it performs under the most demanding operating conditions. Different options are available to allow you to control downstream pressure, maintain upstream pressure and control the rate-of-flow to prevent water hammer. Specify a Nelson 1000 Series Control Valve at the pivot point and as part of your sprinkler package.

Pressure Regulators
- Precision manufactured to feature a dampening system, plug resistance and expanded flow range
- Single strut technology is standard in all models
- Patented design minimizes “hair-pinning” of debris around inlet seat, reducing the potential for plugging
- Also available with integral connection
3030 Series Pivot Sprinklers with 3NV Nozzle

- Manage your sprinkler package without ever having to remove a nozzle
- Simply push and turn this multi-use dial nozzle for on, off, nozzle flush and line flush functions

3000 Series and 3030 Series Pivot Sprinklers

- Combine exceptional droplet uniformity, excellent wind resistance and optimal soil infiltration rates
- High performance products that factor in soil variety and differing sand, silt and clay content
- Feature modular design to match the sprinkler to specific field conditions
- 3000 and 3030 part-circle option

R3000 and R3030 Rotator®

- Features the greatest throw distance available on drop tubes
- Wide water pattern from rotating streams equates to lower average application rates, longer soak time and reduced runoff
- More overlap with adjacent sprinklers improves uniformity
- 3000 and 3030 part circle rotator option

S3000 and S3030 Spinner

- Uses a free-spinning action to produce a gentle, rain-like water pattern
- Designed for more sensitive crops and soils
- Low instantaneous application rates and reduced droplet kinetic energy to help maintain proper soil structure
- Part circle spinner option distributes water to one side in an approximate semicircle

O3000 and O3030 Orbitor®

- Bracketless design minimizes drift
- Designed for long wear life and durability
- Streamlined for excellent movement through canopy and over field obstacles
- Outstanding uniformity and wind-fighting droplets, even at low pressures

D3000 and D3030 Sprayhead

- A fixed spray, designed with future needs in mind
- Features flip-over cap to change spray patterns as irrigation needs change
- Easily convertible to LEPA
- 3000 and 3030 part circle sprayhead option

A3000 and A3030 Accelerator

- Maximizes performance of in-canopy water application
- Designed as a low-pressure hybrid of Rotator and Spinner technology
- Increases rotation speed through the nozzle range to achieve maximum throw distance and wind-fighting capability

T3000 Trashbuster

- Developed for land application of processed water
- Features open-architecture body design to pass debris more easily
- Available with the 3000 FC, a plug-resistant, flow-compensating sprinkler package to simplify maintenance

Rotator and Orbitor are registered trademarks of Nelson Irrigation Corp.
Xcel-Wobbler® UP3 TOP

- Lower cost top-of-pipe installation
- Lower pressure operation – saves energy and provides larger droplet size
- Wobbler technology provides outstanding uniformity over a large area

i-Wob2®

- Designed to last longer in the field; industry-best three-year warranty
- Low pressure operation of 10 to 15 psi (0.69 to 1.03 bar) saves money and energy
- Convenience of a protective shroud that doubles as a nozzle carrier
Xi-Wob® UP3
- Wobbling action for outstanding uniformity
- Counter-balance design makes it ideal for semi-rigid and steel drops
- Suitable for flexible hose drops when used with the One Weight
- Low application intensity to preserve soil intake rate and to reduce soil compaction, soil sealing and runoff

LDN® (Low Drift Nozzle) UP3
- Multiple deflector pads divide larger flows into various streams resistant to wind-drift and evaporation
- Different combinations of grooved pads help direct the trajectory of streams and control droplet size
- Also available with chemigation pads, a LEPA bubbler pad, shroud and part-circle pads

Super Spray® UP3
- Ideal for surface water due to the distance between the nozzle and deflector, and the deflector and the bracket
- 22 interchangeable pads provide more control over spray pattern and droplet size
- Can be mounted on drops or on top of pipe

PSR™ (Pivot Special Regulators)
- Maintains a constant, preset outlet pressure while handling varying inlet pressures
- Large flow path minimizes plugging
- PSR-2 model for easy passage of debris on systems pumping surface water
- Low hysteresis, low friction loss and vandal-resistant housing

Pivot-Master® Impact Sprinklers
- Low, 6 degree trajectory combats the effects of wind
- Bearing assembly design reduces braking friction for dependable rotation and longer life
- Enclosed splash arm spring and bearing provide protection from the elements
- Single and double nozzle models available for different flow and distribution needs

Also Available:
- Drop hose
- Pressure gauges
- Pressure drops

Senninger, Xcel-Wobbler, i-Wob2, LDN, Xi-Wob and Super Spray are registered trademarks of Senninger Irrigation Inc.
Sprinkler Upgrades

Upgrade an Existing Machine with Valley Water Application Technology

- Low pressure sprinklers conserve energy
- Effectively operate sprinklers at 10-20 PSI (0.69-1.38 bar) to reduce your energy bill
- New sprinkler technology provides efficiency and uniformity
- Save money and water

Potential Savings per 1000 Hours of Operation with Electricity

Based on 850 gpm (54 L/s), 80% pump efficiency, $2.50/gallon ($0.66/litre) diesel fuel or $0.08/kW-hr electricity. Savings will also vary on how well the pump and engine fit the lower operating pressure.

*All dollar amounts in $USD

Potential Savings per 1000 Hours of Operation with Diesel

See your local authorized Valley dealer for complete details.