

# **Irrigation Solutions**

Invest in your future with the brand trusted to last for generations



RELIABLE | DURABLE | PRECISE | ADVANCED | RESPONSIVE

The Leader in Precision Irrigation®

# Invest in your future.

VALLEY W

Whether you're installing irrigation equipment for the first time, replacing an aging pivot or upgrading your current equipment, there's no question that it's a big investment – and a significant commitment. Determining exactly what you need is crucial to the way you farm.

# So how do you decide what to buy?

You want to make decisions that improve your yield and bottom line. Valmont<sup>®</sup> Irrigation is here to provide you with the equipment and technology you need to achieve maximum productivity and profitability. No matter your field size or budget, we have the best irrigation solution for you.

# A solution that will last for generations.

Valmont Irrigation Dealers:

- Undergo extensive product training
- Provide fast, reliable service
- Have the most extensive network and the most responsive, factory-trained technicians
- Work on all brands of irrigation equipment

#### Valmont Irrigation Technology:

- Smart irrigation solutions from Valley<sub>®</sub> offer the most advanced monitoring and control capabilities available.
- Valley 365<sup>®</sup> Single sign-on connected crop management to help you produce greater yields while using fewer water, energy and labor resources.
- BaseStation3<sup>™</sup> the industry-best, on-premises remote management solution for areas where connectivity is substandard.

Valley Center Pivots, Corners and Linears/Laterals:

- Outperform other brands under all field conditions in independent tests
- Are chosen by more growers than any other brand
- Are precision engineered and customized for each individual field



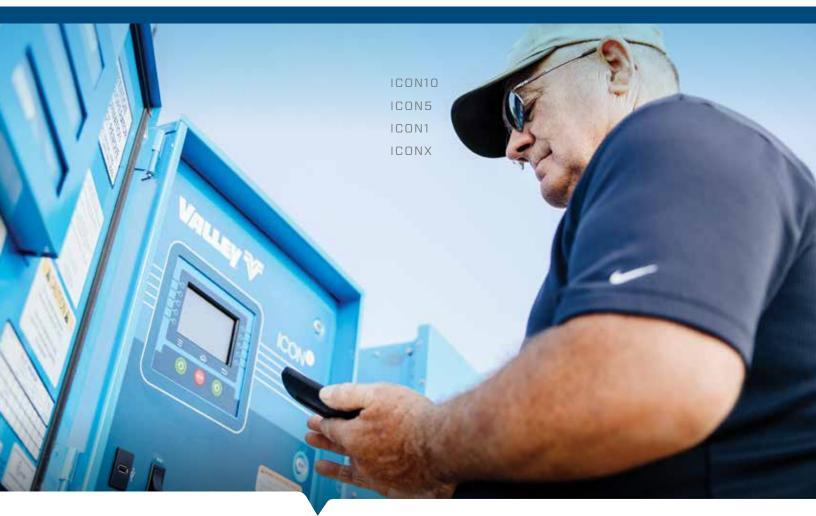
One of the most important decisions you will make is selecting a dealer. Your Valley Dealer won't disappear when the sale is final. He'll be there in the field with you when you need him.

# **DID YOU KNOW?**

Valley pivots command the highest resale value in the industry.

# **Irrigation Control Panels**

Smart Panels Made Easy®



# Valley ICON® Panels: The Most Advanced Smart Panels in the Industry

We designed our smart control panels to decrease the time and effort you spend, eliminate unnecessary visits to your field, and give you the control you need to manage your irrigation operation simply and efficiently.

- Entering commands and programs on Valley ICON® panels is easy with the full-color touchscreen display.
- The intuitive graphical user interface shows the real-time status of the center pivot through easy-to-understand screens and icons.
- See immediate changes in bright, vivid colors. ICON panels make managing your pivot fast and easy.
- Connect all your fields and technology on one platform with Valley 365 built in.\*
- ICON Link is installed standard.\*
- Optimize your yields every ICON panel is Variable Rate Irrigation (VRI) capable.
- Protect your investment with cable theft monitoring.\*

Valley designs control panels for all kinds of growers – from panels with the most advanced computer technology to basic, non-computerized options. This variety allows you to choose the best panel for your operation without sacrificing field-proven Valley technology.

# **ICON Series**

## Key Features:



### ICON10

ICON5

- 10-inch, full-color touchscreen display
- Intuitive user interface
- Valley 365 built in\* ICON Link is installed standard.\*
- BaseStation3 compatible\*
- Variable Rate Irrigation (VRI) capable
- Cable theft monitoring\*
- Patented Valley Cruise Control™



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- 5-inch, full-color touchscreen display
- Intuitive user interface
- Soft-touch buttons for feature selection and navigation
- Valley 365 built in\* ICON Link is installed standard.\*
- BaseStation3 compatible\*
- Variable Rate Irrigation (VRI) capable
- Cable theft monitoring\*
- Patented Valley Cruise Control



### ICON1

- Wireless display through tablet or smartphone
- ICON app available on the App Store and Google Play
- Cable theft monitoring\*
- Patented Valley Cruise Control



Valley 365 app available on the App Store and Google Play



### ICONX

- Compatible with all major pivot brands
- Uses power and control circuits in the host panel and transfers control to the ICONX
- Full ICON control functions right at the pivot
- Intuitive user interface
- 5-inch, full-color touchscreen display
- Valley 365 built in\* ICON Link is installed standard.\*
- BaseStation3 compatible\*
- Cable theft monitoring\*
- Patented Valley Cruise Control

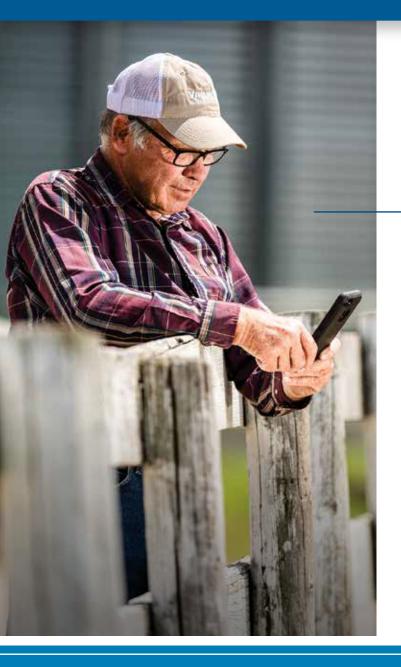
\* Additional hardware or subscription required.

# **Connected Crop Management**

# A single sign-on platform to save growers time and resources

Valley 365 is the next-level solution that unites the best features of our top-rated remote management solutions into one easy-to-use interface.

We've taken the functionality of existing technology like AgSense<sup>®</sup>, Valley Scheduling<sup>™</sup>, Valley Variable Rate Irrigation (VRI) and Valley Insights<sup>®</sup>, and integrated these tools into one location. Now you can access everything you need for crop management with a single sign-on. Valley 365 offers a simpler, more intuitive user experience, making it easier to harness the power of your data for greater profitability.



Valley 365 is organized into intuitive modules:

# Valley 365 is...

**Efficient** – Existing applications will seamlessly integrate, allowing you to use a single sign-on to access all solutions.

**Accessible** – This end-to-end cloud-based platform offers a simpler, more intuitive user experience, anytime and anywhere.

**Intelligent** – Leverage equipment, environment and agronomy data more effectively, in real time.

**Scalable** – This innovative software solution will enable you to add features effortlessly, and is customizable based on changing needs.

**Secure** – Built upon the latest cloud-based technology, it provides unlimited data storage, offers enhanced support capability and is extremely secure.

# Valley 365

## Forecast & Plan

Informed decisions require complete data. Growers can Forecast & Plan water delivery better with Valley Scheduling technology. This is award-winning irrigation management proven to improve water application, save money and increase productivity on more than 2 million hectares worldwide.

View data on soil moisture, crop type, stage of development and automatically updated weather information. Then get easy-to-understand irrigation recommendations based on real field data – precise information that competitors can't promise. The recommendations are delivered right to a simple dashboard on your smartphone, tablet or desktop PC.

# **Monitor & Control**

Once you make irrigation decisions, you need to be sure those decisions are implemented correctly. The tried-and-true power of AgSense technology gives you greater control in real time to manage everything from pumps to pivots and more.

When you can Monitor & Control irrigation from anywhere at any time, you have the freedom to spend time on other duties around the farm, or on family activities you used to miss.

# Optimize & Apply

Every field is different. Even within fields, there are variations in soil type and topography. With Valley Variable Rate Irrigation (VRI), you can Optimize & Apply water in the most accurate way possible, based on field-specific irrigation prescriptions.

Reduce over-watering, under-watering and runoff, and be



more precise with water and chemical application through pivots, avoiding unnecessary areas of fields, such as ditches, buildings or low areas. Valley VRI helps maintain the health of the plant and maximize yield potential everywhere in your fields. Plus, as more restrictions on water use go into effect, VRI helps conserve water and apply only where and how much needed.



### Access to Valley Insights® (Currently available in select regions)

You still like to walk the fields, but not every potential issue is visible soon enough or with the naked eye. Using various types of imagery and artificial intelligence algorithms, Valley Insights, powered by Prospera, virtually scouts fields for crop health concerns.

Then we alert you to those concerns and irrigation issues so you can take immediate action – before damage occurs. Use Valley Insights to adjust pivots, maintain crop uniformity, and reduce overall input costs by focusing only on the relevant areas of fields.

# **Remote Irrigation Management**

# Monitor and control from anywhere

Valley offers the most advanced remote monitoring, control and reporting capabilities available, so you can do more – simply.

Manage your irrigation equipment from anywhere via any smartphone, tablet or PC, saving you money you can re-invest in your operation. You'll also save time, which you can spend with your loved ones or doing other work on the farm, while still knowing that your center pivots are running when they need to. Plus, you can access all of your data, to put the information to work for you.



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#### A Connected Farm is a Smart Farm

Valley 365°

Valley 365 is the remote management solution to transform your operation into a smart farm. With advanced solutions from Valley, the devices on your farm can connect and operate together to provide the security, convenience and efficiency you need. And as a cloud-based system, support is more streamlined and future tech updates are easier to implement.



### THE VALLEY SMART FARM



Trusted AgSense monitor and control technology forms the foundation of Valley 365, our single sign-on platform for total connected crop management. Learn more at valleyirrigation.com/365

The Leader in Precision Irrigation。

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# **Smart Irrigation Management**



BaseStation3™

BaseStation3 is the industry's leading on-premises solution, offering a choice of cellular, data radio, Internet connectivity or a combination of technologies. BaseStation3 is intuitive, can expand as your operation grows, and offers:

- Monitoring and control devices from anywhere
- Alert notifications and instant, at-a-glance status updates
- Access to alarms and status updates in real time
- Stay up to date with text, email or push notifications
- Operational view that allows you to see what each machine is doing
- Advanced data exports (applied water, equipment, etc.)
- Patented Valley Cruise Control<sup>™</sup> and step programs for accurate rotation
- Easily adjustable end gun templates for quick and easy setting changes
- Tiered levels of access and security for designated users
- Multiple and simultaneous users



# Valley Irrigation Exchange®

#### Available exclusively with BaseStation3!

Valley Irrigation Exchange<sup>®</sup>, makes your irrigation data available across platforms, allowing you to make informed, data-driven decisions regarding water and nutrient management.

- Allows you to manage and monitor your irrigation equipment from within other farm management systems
- Lets you share irrigation data with your agronomist, industry-leading seed companies, equipment manufacturers and other providers
- Makes irrigation management tools available across multiple software platforms
- Leverages irrigation data alongside other farm information for maximum irrigation efficiency
- Executes recommendations developed in other partner software programs



Access to accurate weather data is one of the best ways to ensure increased yields, and the new Valley Weather Station is an important tool to detect current weather conditions and analyze historical weather patterns. It can also assist with other aspects of crop management, such as irrigation scheduling.

- View weather data anytime, anywhere via Valley 365
- Integrated sensors and enclosure with a built-in solar panel
- Sensors for wind direction, wind speed, temperature, humidity, rain, barometric pressure and solar radiation



#### Field Commander®

The industry-leading Valley Field Commander<sup>®</sup> incorporates patented GPS technology to remotely monitor and control irrigation systems on the Valley 365



platform. It works on any web-connected smartphone, tablet or PC, and provides real-time information and up-to-the-minute alarms via email or SMS message.

Because it's the best, Field Commander is installed on more irrigation machines than all other brands combined.

Save time and money – Turn any smartphone, tablet or PC into a virtual control panel that can monitor and control irrigation machines from anywhere in the world

Economical – Provides the functionality of a digital panel while still working with any brand of pivot or linear (lateral)

Flexibility – Manages a mixed fleet of hydraulic and electric irrigation machines, bringing them into a single web dashboard

If it's a simplified model you're after, **Field Commander Lite** allows you to simply monitor and stop your irrigation machines. You can still set up alerts and view real-time information.

**Field Commander View** gives you access to a trusted remote **monitoring-only** solution at a value price. Monitor GPS position, machine power status and end pressure of your pivot or linear.



#### Crop Link®

Valley Crop Link® provides growers with the flexibility to monitor and control many types of equipment on the farm with one simple device. Options include flowmeters, pumps, weather sensors, tank monitors, electric motors and many others enabled by the easily configured interface.

- Monitor and alert on/off status of electric motors, power circuits and generators
- Monitor and control multiple pump and tank-level systems
- Effective for grain theft detection when attached to a bin unloading motor
- Ideal for subsurface drip irrigation systems



**CommanderVP**<sup>®</sup>

For all Valley pre-ICON series control panels1

ICON Link For ICON series smart panels<sup>1</sup>

- Complete Control & Monitoring of your irrigation machine from your mobile device or desktop.
- Access real-time status of your irrigation machine and other inputs.
- Delivered fully activated.
- Processes commands at industry-leading speeds.

1. Firmware upgrade or Valley parts kit may be necessary; Select Panel – Monitors but cannot change end guns remotely. Requires v1.9 or higher firmware and serial port; Select2 Panel – Compatible with all firmware versions; Pro Panel – v6 or higher firmware required; Pro2 Panel – v8.02 or higher firmware required; AutoPilot – v1.11 or higher firmware required; Touch Pro – Valley "Y" serial adapter or a parts kit required if GPS equipped.

#### Aqua Trac

Valley Aqua Trac gives you the power to track and measure soil moisture conditions in your fields remotely, so that you can manage your irrigation operations efficiently and effectively. The easy-to-understand user interface makes it possible to monitor and control all your Valley soil moisture-monitoring devices from virtually anywhere in the world.

- Easy-to-use interface
- Soil-moisture status at a glance
- User-configurable alarms
- Integrates with Valley Scheduling and Valley 365 – available on the App Store and Google Play

# Scheduling



Valley Scheduling is advanced management software that provides easy-to-understand irrigation recommendations based on real, scientific data about your soil, crop type, development stage and automatically updated weather conditions.

Improve your water application, save money and increase your productivity with the technology proven on 2 million hectares worldwide.

#### Water in the Right Place at the Right Time

Simple to use – Access the intuitive dashboard via your smartphone, tablet or desktop computer

**Save time** – Eliminate guesswork or complex calculations you used to have to do yourself and reduce time spent in fields manually gathering information

**Increase yield potential and profitability** – Use fewer resources by watering and fertigating the right amount in the right place at the right time

**Improve crop health and reduce disease** – Monitor potential crop stress due to over- or under-watering, and increase production and yield quality

#### Customizable options others don't offer:

**Modeled** – Recommendations developed from a proprietary algorithm with more than a decade of proven in-field results with real growers. There is no physical soil probe in the field.

**Measured** – A certified dealer or agronomy expert connects soil moisture sensors and weather station devices in the field to your software, then monitors the results, offering the most accurate data and forecasting available to calculate your irrigation schedule.

#### Smarter Decisions Based on More Complete Information

- Your farm information, field data and preferences are entered.
- Our industry-best software compiles the data, and shows how much water your crops need.
- Choose your interface simple map views or list views.
- Use the easy-to-understand recommendations to decide a schedule for smart irrigation application.

Valley Scheduling offers greater accuracy based on real data – hardware in the field, software at your fingertips, and experts by your side.

# Variable Rate Irrigation(VRI)



Valley Variable Rate Irrigation (VRI) allows you to customize your water application based on field topography data, soil maps, crop health yield data and other field-specific information.

#### This means you can:

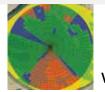
- Increase yields by bringing precision irrigation to all areas of your field.
- Reduce over-watering, under-watering and runoff.
- Increase efficiency of water and chemical application. Valley understands all fields are different, so we offer VRI options: **Speed Control, Zone Control and Individual Sprinkler Control**.



### VRI Speed Control

Valley VRI Speed Control is available for those who are interested in basic VRI control and want to receive the benefits of applying water more efficiently. VRI Speed control is included on all Valley ICON panels and within Valley 365, so VRI capabilities are at your fingertips.

- Your field is divided into a maximum of 180 sectors with optimized water application throughout.
- A customized VRI prescription speeds up or slows down the center pivot to achieve the desired application depth across each sector.



### VRI Zone Control

Valley VRI Zone Control allows you to maximize your water application efficiency in more challenging fields, such as those with varying topography.

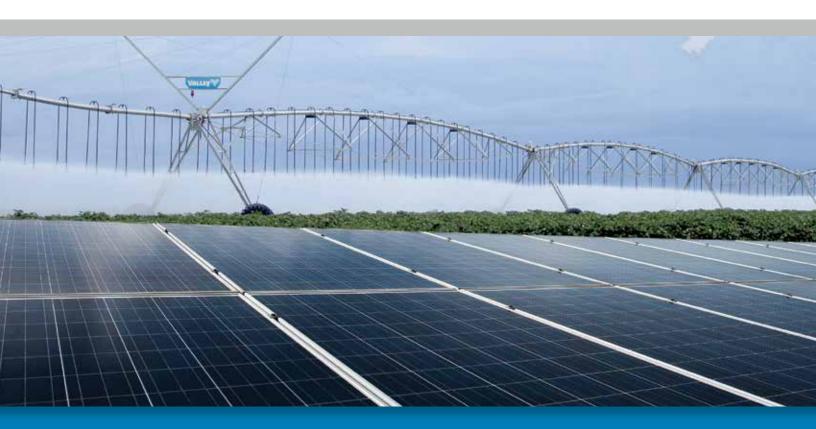
- Your field can be divided into sectors with optimized water application in every single zone.
- A customized VRI prescription pulses the sprinkler control valves along the center pivot zones to achieve the desired application depth.
- It can also be used for on/off control over areas in your field that don't need to be irrigated.



#### VRI Individual Sprinkler (VRI-iS)

- Available as part of Valley 365, our single sign-on connected crop management platform.
- Your field is divided into sectors every 0.1 degree.
- A customized VRI prescription changes application rates or turns off individual sprinklers over non-irrigated areas.
- Each sprinkler is assigned its own flow rate.

# **Solar Energy for Agribusiness**



Valley offers the most durable and advanced center pivots available, as well as a sustainable, low-cost energy source to provide power to them, with Valmont Solar™ Solutions.

The experts from Valmont Solar Solutions have completed hundreds of projects – with as many as 3,900 solar panels covering an area as large as a football field. We are a global leader in delivering clean, efficient power for agriculture – no matter your crop or the size of your operation.

- Distributed generation of photovoltaic energy (converting light into electricity).
- Valmont Solar Solutions handles everything, from engineered design and installation to financing and active monitoring of your solar setup.
- Consulting on new PV plants focusing on agri-business.
- Every Valmont Solar installation includes remote monitoring and control capabilities.

#### **Renewable Energy Meets the Durability of Valley**

- Efficiency Crops require more water when the sun is shining, which is naturally when solar panels are most effective.
- Energy Savings Because the panels convert the sun's rays to electricity, your operation will save on energy costs.
- Reduced environmental impact Less reliance on fossil fuels for power and pumping.
- Tax credits Depending on your state or region, you may receive tax credits for using solar energy.
- New Possibilities Where a traditional electronic network does not exist, the pivot can be powered by the sun.

# **Center Pivot Irrigation**

As the worldwide leader in precision irrigation, Valley knows one size does not fit all. That's why we offer the broadest range of machines in the industry.

### Valley Model 8120

Simply put, the Valley Model 8120 is the best, most reliable center pivot available anywhere, giving growers the greatest return on their investment.

- Field-tested to handle the most demanding terrain and toughest operating stresses
- Valley spans on average last five to six times longer than our closest competitors' spans
- Truss rod and angle design create a smooth crown that maintains even loading in the span
- Truss angle placement and lengths provide even loading on uneven terrain
- Exclusive Valley warranty See your Valley Dealer for details

#### Exclusive options include:

- The widest range of pivot point options and pipe diameters to fit your field
- The longest span in the industry
- Corner and Bender options to maximize your irrigated acres
- Multiple drive train and floatation options
- Standard, low, high and ultra-high profiles available

#### Standard Profile Drive Units

• Clearance: 2.9 m (9' 7")

#### Low-Profile Drive Units

- When standard clearances are not required
- Low-Profile clearance: 1.8 m (6' 1")

#### High-Profile and Ultra-High Profile Drive Units

- Provide increased crop clearance
- High-Profile clearance: 3.9 m (12' 11")
- Ultra-High Profile clearance: 4.7 m (15' 7")

Actual clearances in the field vary based on wheel track depths, tire size, span lengths, field terrain and operating conditions. The values shown here are typical for a 180', 6 5/8" span on level ground with 11.2-24 tires.



Many center pivots are customized for specific fields, but not every pivot has the special features that make Valley pivots the industry's best:

- Hot-dip galvanized
- Four-leg drive unit with braces
- Welded sprinkler coupler
- Full wrap-around weldments
- Forged truss rod heads
- Polyurethane flange gaskets
- Evenly loaded spans
- Full-length, properly designed pipe for each span length; no short extender pipes

#### Model 8120 Specifications

- 168, 219 or 254 mm (6 5/8, 8 5/8 or 10") pivot point options
- 152, 168, 219 or 254 mm (6, 6 5/8, 8 5/8 or 10") pipe diameter options
- 2, 5 or 7.5 HP booster pump
- Maximum machine length of 24 spans covering 853 m (2,800')
- Span lengths of 35-68 m (115'-225')

# **Center Pivot Irrigation for Small Fields**



### Valley Model 8120 for small fields

The Valley Model 8120 center pivot for small fields provides a cost-effective irrigation solution for fields of up to 24 hectares. Created specifically for production agriculture, this durable machine is engineered with the same quality of the Model 8120, with a smaller pipe diameter. The Classic control panel is available for the Model 8120 basic operations.

### Model 8120 Small Field Specifications

- 127 mm (5") pipe diameter options
- 250 m (820') maximum machine length
- 2.74 m (108") outlet spacing
- 34.2-61.7 m (112.5-202.5') span lengths
- Single-phase power option
- Hook-and-eye joint



# **DID YOU KNOW?**

More than 50% of pivots in use today are Valley pivots.

# Linears/Laterals



### Cover more area for greater yield

Linear/lateral irrigation machines are a great choice for efficient irrigation, and may be the right fit for your field. They provide high return on investment compared to other irrigation equipment, including increased coverage and flexibility.

- Maximize irrigated areas Typically irrigates 92-98% of a square or rectangular field.
- Increase profitability Can help reduce labor costs up to 50% compared to surface, side roll or hand move irrigation.
- Water conservation Conserve water by applying only the amount of water when and where needed.
- Various applications Linear/lateral irrigation does more than just irrigate. It can also be used to aid germination, prevent leaching, and for applying crop protectant. If you apply several times a season, this can add up to thousands in savings per year.
- Valley quality Each Valley linear/lateral comes standard with the patented Valley gearbox. Valley gearboxes provide you with the reliability, durability and quality you expect from the industry leader.

#### Valley Rainger™

Based on a common cart platform, the Valley Rainger<sup>™</sup> provides versatility by taking water from a ditch or a hose. Customize the cart by adding options such as chemigation and fertigation tanks.

#### Valley Rainger Swing-Around

The Rainger Swing-Around rotates 180° around the cart to irrigate the opposite side of the field. You can double the amount of land irrigated with one machine, saving you time and money.

#### Valley Universal Linear

Designed for swing-around applications. Gives you the ability to automatically switch from linear irrigation to center pivot mode.

#### Valley Two-Wheel Linear

Available in ditch or hose feed. Great for smaller fields.

# **Additional Pivot Options**

Every hectare of your land is valuable, so Valley offers durable products that cover corners, go around obstacles and even irrigate land behind buildings. With Valley corners, Benders and DropSpan, you can pick up additional hectares and earn extra income from land you already own.



### Valley VFlex<sup>™</sup>

The Valley VFlex<sup>™</sup> Corner is completely customizable. Our engineers developed it based on input from growers like you, with options including three span lengths, two types of sprinkler sequencing, multiple tire choices, trailing or leading orientation, high-profile or standard crop clearance and more.

With more choices than any other corner on the market, we can build the VFlex to fit the requirements of your field.

- Proven track-and-roller joint with large rollers and new wear plates for extreme durability
- Wide "T-Bar" mounted cradle for stability in high winds
- Steerable drive unit design with dual tower supports for industry-leading strength

### Valley DropSpan<sup>™</sup>

Valley DropSpan<sup>™</sup> allows the outer spans of your center pivot to be dropped from the machine, so you can irrigate additional land adjacent to large obstructions at the edge of the field.

- Avoid obstacles and irrigate more land
- Ease of use One person can drop or reattach the spans easily, with no tools, in 15 minutes or less
- No rewiring needed simple electrical connector manages span cable and control logic
- Simple winch-and-batten leg system to drop and reattach outer spans
- Stop switch automatically aligns base machine with dropped spans for easy reattachment
- Large, easy-to-access coupling with tethered plug
- Optional second end gun for additional reach







### **Valley Benders**

Valley Bender options maximize irrigated area at a low cost, allowing the outer portion of a pivot to continue moving even after fences, trees or other obstacles stop the inner portion.

- Pick up additional hectares on part-circle machines at a low cost
- Multiple bends per machine
- Optional valves shut off the water to stopped spans while bending
- Valley-exclusive speed-up timer improves water application performance while bending
- Integrated backup safeties prevent the machine from overextension and ensure return to normal operation after bending

#### **Bender Anchor**

Only Valley offers an anchor for its bending drive units. The anchor package provides the structural strength needed to use Valley Benders on longer machines, as well as on rough or rolling terrain. Now you can bend your machine up to 609 meters (2,000 feet) to irrigate even more land.

The ability to bring the whole field into production.



#### Bender30<sup>™</sup>

- Easy to retrofit no structural changes required
- Bends up to 30 degrees in both directions



#### Bender160<sup>™</sup>

- Integrated end gun and auxiliary controls for bending mode
- Bends up to 160 degrees in both directions

# **Towable Pivots**



Valley towable pivots provide another option for irrigating fields up to 457 meters (1,500 feet). Available for the Model 8120 and Model 8120 for small fields, these allow you to irrigate multiple fields with just one machine. Each pivot can be towed from one field to another in less than an hour. The Valley towable gearbox includes all of the features and benefits of the patented Valley gearbox. A lower-cost gearbox option also is available.

#### Four-Wheel E-Z Tow™

- Handles a wide range of field sizes
- Fixed wheels standard
- Optional pivoting wheels easily rotate to tow in any direction

#### Two-Wheel E-Z Tow

- Ideal for part-circle fields or multi-directional towing
- Allows for up to five spans
- Comes standard with tongue hitch design

#### Skid Tow

- Low-cost option best used for infrequent towing
- Designed for any size of towable unit
- Great option on long fixed pivots to relieve stresses caused by cold winters



### Small Fields

#### Single-Span Engine Drive

This single-span pivot is ideal for irrigating small fields, up to 2.4 hectares (six acres), where electric power is not readily available. All sprinkler packages are available for efficient, low-pressure water application to provide significant energy, labor and water savings.

# **Corrosion Protection**



### **PolySpan®**

- PolySpan<sup>®</sup> is made from an inert material, making it ideal for chemigation, fertigation and resisting corrosive water
- No leaking wide-gasket, self-locking couplers ensure a water-tight seal
- Long lasting the first machine with PolySpan, installed in 1992, is still operating
- All structural components from pivot pipe to last pipe are lined and poly protected
- · Not affected by abrasion from sand or sediment in irrigation water
- Highly resistant to sunlight and humidity
- Same weight as a galvanized span when filled with water
- Excellent, prorated, 20-year pipeline corrosion warranty with unconditional replacement due to corrosion during the first 10 years
- Manufactured in the USA
- Available on 168 and 219 mm (6 5/8 and 8 5/8") pipe for pivots, corners, towables and linears

### **Pipe Options**

- Choose from 152, 168, 219 and 254 mm (6, 6 5/8, 8 5/8, and 10") pipe diameters to minimize pressure loss and horsepower requirements
- A 127 mm (5") pipe option is available for the Model 8120 Small Field pivot

### Galvanized Steel

- Extends machine life in a variety of water conditions
- Prorated, 20-year corrosion warranty
- Available for all Valley equipment



### **Repiping - A Low-Cost Solution**

Repiping is the most economical way to significantly extend the life of your machine.

#### Valley repiping options:

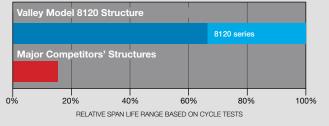
- PolySpan for any corrosive water, crop protection and soil treatment chemicals
- Galvanized steel for a variety of water conditions

# **Valley Structure**



From pivot point to end tower, the entire Valley structure is precision engineered, constructed and field tested to handle any operating stresses your machine may experience, including rough terrain and deep furrows. The superior structural design also allows Valley to offer the longest spans in the industry. That's why more than 50 percent of pivots in use today are Valley pivots, and why Valley pivots continue to deliver a significant resale premium over competitive brands. We build the strongest, most durable spans in the industry, and we have the certified test data to prove it.

### Accelerated Structural Life Cycle Test Comparison



# Valley Spans

When it comes to investing in irrigation equipment, structural life is critical. You're making a long-term investment that is expected to last for many years without costly repairs. Valley spans are precision engineered to have the strength you need to achieve maximum productivity. We've built our reputation by providing the most durable and longest-lasting equipment available in the market.

- Pipe diameters of 127, 152, 168, 219 and 254 mm (5, 6, 6 5/8, 8 5/8 and 10")
- Span lengths from 35-68.5 m (115-225'), including the industry's longest span
- Overhang options up to 30.4 m (100')
- PolySpan pipeline available for corrosive conditions

### **Fixed Pivot Point Options**

#### 168 mm (6 5/8") Pivot Point

- Designed for pivots up to 457 m (1,500') or nine spans
- Low and standard profile

#### 219 mm (8 5/8") Pivot Point

- Designed for pivots up to 609 m (2,000') long
- Heavy-duty option available for machines up to 853 m (2,800')
- Low, standard and high profile

#### 254 mm (10") Pivot Point

- Designed for pivots up to 853 m (2,800') long
- Standard and high profile

# New lower elbow and riser pipe options available to integrate:

- Valley flowmeters
- Nelson valves
- Clemons filters



# Special features that enhance the durability of Valley machines

#### 1. TRIPLE LIP SEAL AND STAINLESS NIPPLE

Provide long, leak-free life at low and high operating pressures.

#### 2. LATERAL AND RADIAL WELDS

Spread loads over a wide area for maximum durability.

#### 3. TRUSS RODS

Large transition radius and uniform loaded rod heads mean a lower concentration of stress and longer machine life.

#### 4. DRIVE UNIT LEGS

Four braces on each side ensure stable operation in hilly conditions.

#### 5. WRAP-AROUND LEG ATTACHMENT BRACKETS

Cradle the pipe to create added strength. Heavy-duty gussets eliminate pipeline twist.

#### 6. OPTIMIZED SPAN

Offers more machine strength and stability as a result of evenly loaded truss angles and hot forged truss rods.

#### 7. BALL-AND-SOCKET HITCH

The single-piece, forged steel ball ensures smooth span movement in all directions, minimizing stress on the pipeline for longer machine life.

#### 8. SPRINKLER OUTLET

The welded coupler strengthens the pipeline around the water outlet, minimizes pressure loss and provides better support for the sprinkler package.

#### 9. TOWER BOX

Galvanized steel base construction with stainless steel shaft and nylon bearing assembly ensures long life.















# **Drive Train**

## Valley Gearbox

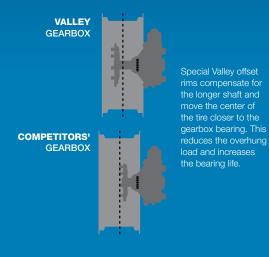
The gearbox is the heart of your center pivot. If the gearbox isn't working, the center pivot isn't working.

Rather than buying the lower-cost gearboxes from overseas that our competitors use, Valley is the only center pivot company that produces its own gearboxes. The industry-leading Valley gearbox is life-tested and quality checked throughout the process to ensure we are constructing the most reliable and structurally sound gearbox available. You can trust the Valley gearbox to provide you with long, trouble-free, economical equipment life.

- 1. Large-capacity rubber diaphragm expands with heat and pressure to minimize water condensation.
- 2. Input and output bearings case-hardened to provide the highest quality and load rating available in the industry.
- **3.** Worm gear high-strength ductile iron provides significantly longer wear life than steel and prevents gear tooth wear.
- Tooth design industry-exclusive 25° tooth angle provides 40 percent more strength, longer life and better reliability in tough conditions compared to normal 14.5° tooth designs.
- 5. Largest bull gear neck and keyway for extra strength in a critical load-bearing area.
- 6. Expansion chamber cap made of corrosion-resistant cast aluminum; rubber diaphragm allows oil to expand and contract during operation. Vented cap prevents pressure buildup and prevents seal from leaking.
- 7. Threaded endcap allows accurate bearing preload to ensure long bearing life.
- 8. 52:1 gear ratio full recessed tooth design keeps oil between engaged gears.
- **9.** Bull gear high-strength cast iron provides highest load capacity in the industry and longest life. Optional bronze gear is available for extreme conditions.
- **10. Multi-viscosity gearbox oil** exceeds 85W-140 GL5 oil for long gear wear under extreme load conditions.
- 11. Longest output shaft (steel) exclusive to Valley gearboxes. Provides extra clearance between gearbox and wheel flange to reduce mud buildup, which reduces seal damage and extends gearbox life.



9





### **Center Drive**

The Valley center drive is built stronger, lasts longer and uses less energy than other irrigation drive motors. That's why we back it with the best warranty in the industry – eight years full parts and labor. Plus, we offer a wide selection of center drive options to match your farming practices.



#### **Added Benefits:**

- More tooth contact for longer life, more torque capacity and smoother power transmission.
- Operates at temperatures 11° C (20° F) lower than competitive motors, doubling insulation life and increasing motor life.
- Valley-exclusive coating prevents corrosion.
- Internally vented junction box prevents moisture and contaminants from corroding the wire connections.
- Corrosion-resistant, stainless steel bolts mean easy maintenance.

### Valley X-Tec®

The Valley X-Tec drive, the industry's first high-speed pivot motor, enables you to do things with your center pivot that weren't possible before. Because X-Tec operates at up to twice the speed of a standard, high-speed AC center drive motor, it is ideal for commodity crops, for irrigation at certain growth stages, and for applying crop protection through the pivot.

### Do More with X-Tec:

- Ideal during germination Frequent, light application maintains surface moisture during germination.
- Keep crops cool A light mist creates a cooling canopy for high-value crops during the heat of the day.
- Electric braking technology Keeps the machine where you want it.
- Avoid erosion Proper moisture stops loss of topsoil, and prevents damage to leaves during early-stage crop growth.
- Simplify crop protection Apply crop protectant and fertilizer, reducing ground and aerial trips, as well as potential cross-contamination.
- Save time and money Apply crop protectant and fertigate quicker; avoid over-watering areas that don't need it; use less water overall; and manage split crops more effectively.

#### Valley FastPass<sup>™</sup> Technology

Typical Seven-Tower Machine Comparison



4 hours total to finish irrigating a field



Standard AC Drive 8 hours total to finish irrigating a field

# **Turnkey Water Management**

# Reliable Pump-to-Pivot Solutions from the Brand You Trust

Valley and your local dealer can design a high-efficiency pumping solution to meet your specific needs, from the water source all the way to the crop.

**Pump Stations** – From custom-engineered pump stations to small skid-mounted stations, we design solutions to meet your operation's specific needs, saving you money and making installation quick and easy. Everything you need to make the pump station work can be assembled on a single skid.

**VFDs** – Boost efficiency and energy savings with variable frequency drives (VFDs), which control your pump motor's speed to deliver only what your operation needs.

**Pump Command** – Automate pumping operations, control of all of your pumps and link them to your fleet of pivots or linears/laterals. All three tiers (Basic, Enhanced, Pro) offer an automatic VFD set point control solution that automatically matches output to demand for multiple pumps and pivots so you can save energy and water at all times by using only the pressure required.

**Soft Starts** – Slowly ramp up current to reduce wear and tear.

**Valves** – Hydraulically operated sleeve-type valves are highly efficient, resulting in low pressure loss and allowing for high-flow capacity.

**Flowmeters** – Precise measurements for irrigation, chemigation, agricultural automation, well usage monitoring and dairy and livestock lagoons.

**Integration with Valley 365** – Monitor and control from any smartphone, tablet or PC, plus benefit from comprehensive reporting capabilities.







# **Precise Water Application**

Depend on your Valley Dealer to ensure you get the proper sprinkler package based on climate, soil type, crops and topography.

- Precise, computerized sizing and spacing of nozzles ensure application uniformity and efficiency
- Low-pressure sprays operate as low as 0.41 bar, saving horsepower, energy and money
- Application efficiencies can reach 95 percent
- Additional sprinkler options include end guns, sprinkler drops, boombacks and part circle sprinklers

## Updated Sprinkler Package

Don't overlook the importance of sprinkler packages for precise and efficient water application.

- Exclusive V-Chart<sup>™</sup> software can design sprinkler packages for all brands of irrigation equipment
- New, low-pressure sprinkler technology provides efficiency and uniformity, and may reduce energy costs
- Droplet sizes designed for minimum wind drift
- New pressure regulators ensure proper flow from each nozzle

# Authorized Sprinkler Providers



#### Nelson<sup>®</sup> Irrigation

Nelson<sup>®</sup> offers a full line of water application products designed for your specific field conditions and crops that result in higher yield and quality at harvest. Innovation in irrigation by Nelson created Rotator<sup>®</sup> technology on drops and Big Gun<sup>®</sup> sprinklers.



#### Senninger<sup>®</sup> Irrigation

Under the concept of "Low Pressure – High Performance," Senninger<sup>®</sup> products ensure water is distributed uniformly and with low application intensity. With a variety of designs available, you can select the product best suited to your individual field, crop and installation needs.



#### Komet Irrigation

Komet Irrigation is a family company that has been constructing innovative irrigation sprinklers for more than 60 years. The decades of development have led to the Komet Precision Twister (KPT) and the new Komet Precision Spray (KPS). Both offer unmatched reliability and adaptability for growers.

# **Tire and Floatation**



Stuck pivot towers can cause costly downtime. Valley floatation options can reduce wheel track depth, increase traction and keep your machines moving through your fields. Different fields require different floatation options, so whether your terrain is rough or flat, or your soils are sandy, loamy or heavy, your Valley Dealer can determine what's right for you.



# **Non-Directional Irrigation Tires**

#### Firestone Champion Hydro ND

Valley is the only center pivot irrigation company to offer these innovative tires. Firestone designed the Champion Hydro ND specifically for irrigation machines.

- Increase traction and decrease rutting.
- Patented, non-directional tread design has equal traction in forward and reverse directions, so you no longer need a front and rear tire.
- Available now in 14.9-24 and 11.2-38 sizes.



### **Floatation Options**

- Valley Two-Wheel Drive
- Valley Three-Wheel Drive
- Valley Track Drive
- Valley Articulating Track Drive
- Valley Articulating Four-Wheel Drive





Feature	Benefit	Two-Wheel Drive	Three-Wheel Drive	Track Drive	Articulating Four-Wheel Drive	Articulating Track Drive
Wide wheel base	Improved span stability on rolling ground and in windy conditions	~	✓	✓	~	✓
Wide range of tire sizes	Traction and floatation options to match field conditions	~	$\checkmark$		~	
Heavy-duty base beam	Strength to support center tires on ridges		✓	✓		
Increased traction	Helps prevent stuck drive units	~	✓	✓	~	~
Heavy-duty steel tracks	Distributes weight over a wider area than tire options, minimizing ground pressure			~		~
Increased floatation	Lower ground pressure, minimizes soil compaction and rut depth	~	~	$\checkmark$	~	~
Rough ground capability	Maneuver through varying field conditions	~	✓		~	~
Articulating drive base beams	Tracks and tires maintain contact with the ground and follow sudden changes in field terrain				~	~
Two center drives	Reduces motor load for longer life				~	~
Four-wheel drive tires	All four tires are driven, providing better traction and less downtime				~	~
Tracked drive unit with longer wheel base	Increased track length for more floatation					~
Adaptable to tracks	Can add tracks in the future with minimal effort				~	
Conversion packages	Can retrofit existing Valley drive units		✓	$\checkmark$	~	~
Drive						
Traction	Prevents Getting Stuck	Good	Better	Best	Best	Best
Floatation	Reduces Wheel Rut	Good	Good	Best	Better	Best
Rough Ground Capabilities		Best	Better	Good	Best	Best



# **Conversions and GPS**



#### Gearbox and Center Drive Conversion

- Significantly improve reliability and extend the life of your machine
- Minimal investment for maximum improved performance
- 8-year/8,000-hour drive train warranty for complete conversions
- Complete and partial conversions available, including oil hydraulic conversions
- Almost all pivot brands can be converted



#### **Tower Box Conversion**

- Substantially reduce electrical shutdowns on older pivots
- High value for a minimal investment
- Proven reliability and durability on non-Valley pivots
- Almost all pivot brands can be converted

# Global Positioning System (GPS)

We offer two GPS products to enhance your farm operation: GPS Position for center pivots and linears/laterals, and GPS Guidance for corners and linears/laterals.



#### **GPS** Position

**Saves time and money:** You don't have to invest in applying crop inputs where they aren't needed, or you can apply extra, if needed.

**Easy to use:** Enhanced management capabilities.

**More accurate:** Precision application of water, fertilizers and crop inputs.

**Options:** Valley ICON series and AutoPilot Linear control panels are shipped to you with GPS Position capability.

#### **GPS** Guidance

**Better communication:** Valley GPS Guidance eliminates the need for radios, leveraging PLCs for greater dependability in communication.

**Flexible:** The guidance path can be easily reprogrammed with the exclusive Valley mapping tool to match changes in farm practices or field boundaries.

**More consistent performance:** Built-in terrain compensation reduces over-steering on rolling terrain or high ridges, resulting in a straighter and more consistent wheel track for less crop damage.

**Reliable technology:** With direct connection to the control panel, Valley GPS Guidance can provide highly accurate pivot position for help with end guns, VRI and stop-in-slot.

**Versatile:** Valley GPS Guidance is compatible with all Valley control panels and corner models. It also easily retrofits into an existing John Deere/NavCom or Trimble multi- or single-frequency system.

# **Your Trusted Partner**

# **DID YOU KNOW?**

Each member of the Valley Water Application team is a Certified Irrigation Designer (CID).

Putting the grower first is not just a slogan at Valley, it's part of our culture.

When you purchase a Valley, you are buying the best irrigation equipment available, and receiving a dedicated team to support you after the sale.

### Servicing All Brands

Since the mid-1950s, more than 50 irrigation equipment manufacturers have come and gone. But it's no problem if you have an "orphan" machine. Valley dealers are trained to service and install Valley parts on most other pivot brands. Our goal is to keep your equipment moving and doing its job – enabling us to earn your trust and your business, day after day.

#### Valley Genuine Parts

Maximize your irrigation up-time with Valley Genuine Parts

Made stronger – Maximize up-time with the most durable parts in the industry; tested to outperform other brands' spare parts

Peace of mind – Every Valley Genuine Part is backed by our leading warranty

Availability – An entire catalog of parts is available to meet your specific need in a timely manner

Valley service – Valley dealers are certified annually and trained to service all brands of irrigation equipment

# The Leader in Sustainable Irrigation Technology

Environmental Responsibility Drives our Solutions

Valley founded the center pivot industry as a way to irrigate more efficiently, and we have always been dedicated to providing solutions that help growers produce greater yields while using fewer resources – and maximizing their operation's profitability.

Join us as we continue to transform agriculture in your back yard and around the world.





Visit **valleyirrigation.com** or contact your local authorized Valley Dealer for more information about our products and solutions.



#### The Leader in Precision Irrigation.

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