# **Product Catalog**



# Choices that fit your field and your life.



# Valley<sub>®</sub> 7000 series

# Valley<sub>®</sub> – the standard by which all others are measured.

It doesn't take long to see why the competition tries to copy what Valley has done. The Valley 7000 offers the same technology that makes Valley the smart choice for growers, while offering a timely return on their investment — it's precision irrigation made easy. Meet your demands and start measuring your success with a Valley 7000 series pivot today. See your local Valley dealer.

# The Start of an Industry Mechanized Irrigation

- Water Drive
- Improved Water Drive
- First galvanized Water Drive Model 4000 pivot with





• Valley Gearbox

• 2-wheel E-Z Towable

Pivot introduced

with Corner

1964

# **New Product Highlights**

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Global Leadership

### Valley BaseStation2 - Monitor and Control

- · Save time and money. Control your pivots without driving to the field.
- Save labor. Monitor 24-7
- Security. Alarm messages sent to your cell.
- See for yourself what BaseStation2 can do. Order a Free DVD at www.valmont.com/basestation



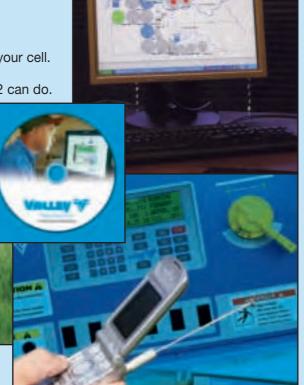
#### **Track Drive**

- Prevents downtime with improved traction and floatation.
- Keep moving where standard drive units stop.

Model 6000 pivot

• Valmonitor - computer

aided scheduling



#### Valley Tracker SP - Monitor and Control

- Control and monitor from phone or internet.
- Compatible with Valley Select and Pro panels.

#### Linear (Rainger) System

- Introduced Universal Linear - ditch or hose feed
- Low pressure sprinklers

- cams<sup>™</sup> Pro Panel
- cams<sup>™</sup> Base Station
- Modular Panel Design
- Remote Pivot Control
- 4-wheel E-Z Towable
- Model 8000 pivot

- Pocket Pro
- Data Radio & Auxiliary Link packages
- Valley Tracker
- 3-Wheel & 4-Wheel

#### • 7000 series

- Valley Tracker SP
- Track Drive
- Valley Linear



- - POLY-SPAN<sup>™</sup>
  - Precision Corner<sup>™</sup>
  - Remote Link

# Water Application Control

Growers count on Valley<sub>®</sub> to irrigate more acres with less water...to improve irrigation management...and to meet environmental concerns. All while reducing costs and improving productivity.

Valmont<sub>®</sub> Irrigation has its own staff of sprinkler engineers and application specialists. We design our own spray nozzles—specifically for mechanized irrigation equipment. We inventory all Valley products and parts for quick turnaround and delivery. We also test, certify and inventory a full range of components from other sprinkler manufacturers.

Whether you're looking at a new pivot, or expanding or upgrading an existing one, Valmont Irrigation and Valley Dealers combine experience with forward-thinking technology and research to ensure that we can meet your specific water application requirements.

### **Application Efficiency and Uniformity**

- Precise, computerized sizing and spacing of nozzles—from 30'' to 226'' (0,76–5,74 m) ensure application uniformity
- Low-pressure sprays operate as low as 6 psi (0.4 bar), saving horsepower, energy and money
- Application efficiencies can reach 95% or greater depending on the sprinkler package design
- Water pressure sensors shut your machine down if water pressure drops below preset position. (Available as a mechanical shutoff or with panel pressure readout on Pro2 and Select.)

#### **Booster Pumps**

Choose 2, 5 or 7.5 hp. Pumps are located at the last drive unit for stability and service accessibility. Increased end gun pressure extends water coverage.

Your ValleyDealer provides trained, knowledgeable personnel who can assist you with your water and chemigation equipment needs.





#### **Chemigation/Fertigation Equipment**

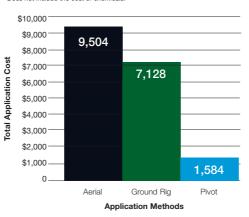
Enables you to apply agricultural crop protection products and fertilizer uniformly and efficiently, above or below the crop canopy. You save on labor, application costs and up to 25% on some products.

# Save Thousands on Chemigation

Big and small operations across the country can see substantial savings when chemicals are applied through center pivots instead of via traditional methods such as ground rigs, which can result in crop loss, and aerial sprays, which can be expensive. This is especially true in the case of crops that require numerous applications in the course of a season.

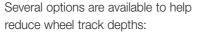
#### **Chemical Application Costs\***

(Based on 132 acres and 12 applications) \*Does not include the cost of chemicals.





#### **Dry Wheel Track Packages**



- Utilize "boombacks" to place water behind tire
- Part-circle sprinklers on boombacks or each side of drive unit





#### Valley<sub>®</sub> Low-Energy Nozzles

- Unique shape for movement through crop
- Only pivot company with exclusive sprinklers
- Easily exchangeable nozzle
- Outstanding uniformity for precision application
- Chemigation pads available





#### Low/Medium-Pressure Revolving Sprinklers

- Provide a larger wetted diameter
- Selection of distribution pads available

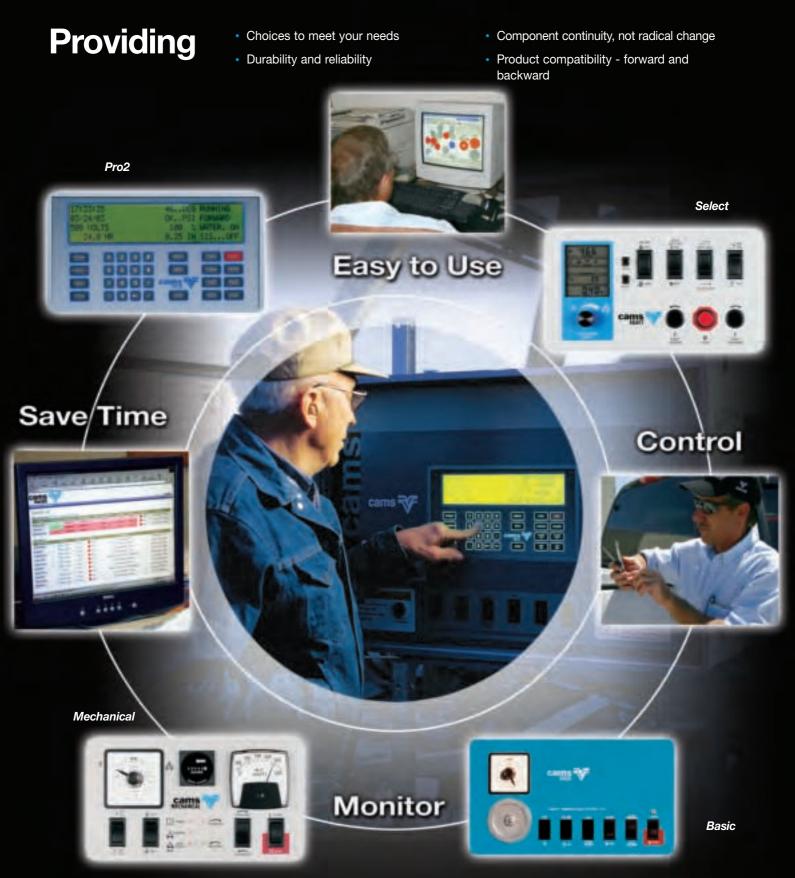




### Valley "All Range" Regulators

- 0.5 to 15 gpm (.03–.95 lps) capability
- Available in 6 to 30 psi (0,4–2,1 bar) outlet pressures
- Valley offers a variety of regulators to meet your application requirements.

# **Valley Controls**





# Panel control options and key features





- Programming based on date, time, position and other inputs
- Advanced diagnostics
- · Backlit screen and keypad
- Industry exclusive 5 year warranty
- Advanced sensor and auxiliary functions



### Select

- Combination of digital display and push buttons
- Endgun, stop-in-slot and auto reverse set in the panel
- Application depth changes automatically by field position
- 3 year warranty

## **Endgun Control**

 Select and Pro2 panels offer direct panel control for one or two endguns.

## Part Circle Control

 Easily enter commands directly into the Select or Pro2 for split crops.

## **Application Control**

• Select and Pro2 panels let you adjust percent and depth by entering commands directly into the panel.



## Mechanical

- Available with Valley center pivots, corners and linear equipment
- · Mechanical autoreverse
- Upgradeable to Valley Select or Pro2



### Basic

- Entry level panel
- Push button, manual operation
- Available with center pivots only

## Endgun Control

• **Stop-In-Slot (SIS)** Basic and Mechanical panels require optional mechanical switches to be set on the pivot swivel.

## Part Circle Control

• Basic and Mechanical panels require additional hardware.

## **Application Control**

• Set a percent timer by dial on the Basic or Mechanical panels.

# **Remote Communications**



# Monitor with the Valley Tracker<sup>™</sup>

- Alarm messages sent to your cell phone and the web
- Low monthly service fee
  - Compatible with all Valley control panels and most competitive panels
  - Service activated for only the months you need.
  - Sold and serviced by your Valley dealer.

# Monitor and Control with the Valley Tracker<sup>™</sup> SP

- Monitor and control pivots from the web or your cell phone by contacting the Tracker communications center
- Use with Valley Select and Pro panels
- Easily mounts inside the panel





# Monitor and Control with **BaseStation2**

Save time, save labor, reduce downtime and improve crop yield all with an irrigation management system.

- Check pivot status at a glance
- Control your pivots without driving to the field
- Monitor and control 24-7: pumps, valves and other devices with no additional labor
- Alarm messages sent to your cell phone
- Control your BaseStation from your cell phone
- Each installation custom designed by Valmont Engineering



# Strong component details offer long-term reliability



contact with waterWatertight seal

**Collector Ring** 

 Located above pivot swivel to minimize

- Stainless steel electrical conduit ensures years of trouble-free service
- High accuracy resolver provides position information for Select and Pro2 panels



#### **Span Cable**

- 8, 10, 12 gauge for power, 14 gauge control
- Shielded cable standard
- Standard color coded wire for easy service and maintenance
- 11 conductor standard, 12 conductor optional



#### **Tower Box**

- Galvanized steel construction with stainless steel shaft and nylon bearing assembly helps ensure long life
- Dependable field-proven cam and micro switch assembly
- Suppressor circuits reduce contact arcing to extend life

# **Control Panel**

- NEMA 3R enclosures
- Transient and induced voltage protection
- Control panels with lockable inner door
- Heavy duty disconnect



# Safety Comes First!

- · All components clearly labeled
- · Manuals contain all safety measures

# Specialized sensors and management tools



Resolver

 Provides position information in the Pro2 or Select panels



### Pressure Gauge

 Gauge, or transducer, which allows monitoring of your sprinkler package



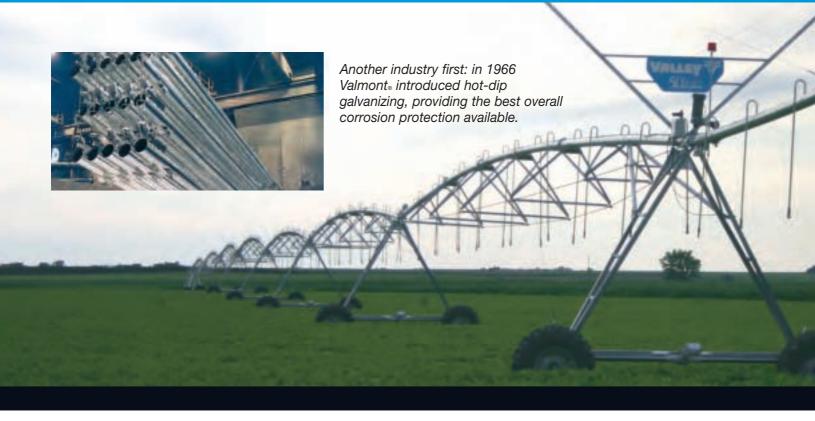
#### Wind Speed

Monitor wind speed to minimize
 drift and conserve water

#### Antenna

 Remote antenna package for phone or radio saves trips to the field

# Pivots that are built to last.



From pivot point to end tower, the entire Valley<sub>®</sub> structure is engineered, constructed and field-tested to handle the normal operating stresses that your machine may experience in its lifetime. Valley structures stand up to the toughest loads produced by rough terrain, furrows and long-span machines. Hot-dip galvanizing provides the best overall corrosion protection available today. No wonder Valley pivots, corners and linears command the highest resale value in the industry.

#### **Valley**<sub>®</sub> Spans

- 109' to 205' (33,2 m–62,5 m) spans built to last
- Pipeline and truss rod arches maintain even distribution of weight
   and loads
- Full contact of truss rod head in socket for even loading
- Polyurethane gaskets for longer leak-free life
- Locations of truss angles provide even loading on each angle, especially important with uneven terrain

#### **Valley**<sub>®</sub> Pivot Point

- Full set of braces on all four sides are standard for strength
   and stability
- Optional pivot flex available for rolling ground applications
- · Corrosion-resistant sleeve rotates smoothly within riser seal.
- Triple lip Teflon impregnated seal for leak free operation
- Positive contact of brushes in collector ring ensures reliable transfer of power to drive units
- Optional access ladder makes it easy to lubricate swivel and to make mechanical position control adjustments
- Optional Stainless Steel riser pipe and Delrin seal nipple are available for corrosive water applications





6 5/8" Pivot Point



8 5/8" Pivot Point



# **Field Specific Pivot Points**

## 6 5/8" Pivot Point

- Designed for pivots up to 1300' long
- Used with 6" and 6 5/8" diameter spans
- 6 5/8" riser pipe to match span diameter
- Low profile (9') and standard profile (12') heights available

## 8" Pivot Point

- Designed for pivots up to 1500' long
- Used with 6" and 6 5/8" diameter spans
- 8" riser pipe for reduced pressure loss at higher water flows
- Low profile (9'), standard profile (12.5'), or high profile (16') heights
- Optional ladder available for easy servicing
- · Heavy duty legs available for rough ground applications
- Skid tow option available for towing pivot from one field to another

# 8 5/8" Pivot Point

- Designed for pivots up to 2800' long
- Used with 6", 6 5/8" and 8 5/8" diameter spans
- Heavy duty legs are standard
- 8 5/8" riser pipe for reduced pressure loss at higher water flows
- Optional Stainless Steel riser pipe available for corrosive water
- Low profile (9'), standard profile (12.5'), or high profile (16') heights
- Optional ladder available for easy servicing
- Skid tow option available for towing pivot from one field to another

## **10" Pivot Point**

- Designed for pivots up to 2800' long
- Used with 8 5/8" and 10" diameter spans
- Heavy duty legs are standard
- Extended bearing length for longer life
- 10" riser pipe for reduced pressure loss at higher water flow
- Pivot flex is standard
- Service platform is standard
- Optional ladder available for easy servicing



**Dual Span Pivot Point** 

# **Quality Components**



Triple lip seal provides long leak free seal life at both low and high operating pressures.



Lateral and radial welds give additional stability to the Valley<sub>®</sub> span.



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



A full set of four braces on each side of the drive unit ensures stable operation under rolling field conditions.



Full wraparound leg attachment brackets at each drive unit provide added strength. Heavy-duty gussets eliminate pipeline twist.



More strength and stability as a result of evenly loaded .163" thick truss angles and forge-formed truss rods.



Ball and socket hitch allows movement in all directions: side to side, up and down, and rotation to minimize stress on the pipeline while ensuring maximum flexibility. One piece forged steel ball ensures long term durability.



Welded sprinkler outlet along pipeline adds strength and durability.



Longer ouput shaft and offset rim provide clearance between gearbox and tire to reduce mud buildup and extend seal life.









# Choose a drive unit to fit your application.

### Valley Standard 2 Wheel

- Wide wheel base for stability on rolling and windy conditions
- Set of four braces on each side to provide stability when crossing deep ridges
- Valley flex-joint forged ball hitch assembly minimizes pipe stress on rolling terrain
- Several tire sizes available to match your field conditions

## Valley 3-Wheel Drive

- 50% more traction than standard drive unit
- Available with all current tire sizes to provide increased flotation
- Heavy duty center wheel gearbox for long life
- Base beam only and conversion options available

## Valley Articulating 4-Wheel Drive

- All four wheels are driven with Valley Gearboxes
- Wheels articulate to conform to field terrain
- Twice the traction of a standard drive
- Twice the flotation of a standard drive
- Minimizes wheel rut depth
- All tire sizes available

## **Tracked Options**

### **Valley Track Drive**

- Provides a solution where other options have not worked
- Higher flotation and traction then regular wheel drives
- Minimizes rut depth
- Heavy duty base beam
- Base beam only and conversion options available
- Retread tires with steel tracks for long life

### Valley Articulating Track Drive

- Tracks articulate to conform to field terrain
- Maximum traction available
- Maximum flotation available
- Minimizes wheel rut depth
- Steel tracks for long life





# **High Performance Drive Train**

Largest capacity rubber diaphragm — expands with heat and pressure to minimize water condensation.

**Input bearings** – large input bearing for long life

**Worm gear** – 25° tooth angle gives higher torque and load capabilities. Provides 40% longer life and better reliability in tough conditions.

Largest bull gear neck and keyway – for strength in critical load-bearing area

**Exclusive output seal** – 7-barrier construction keeps dirt and moisture out and oil in for longer life. Best performance in the industry.

All these factors add up to one thing — the best quality gearbox in the industry, giving you long, troublefree economical equipment life.

#### **Expansion chamber** — cap made of noncorrosive cast aluminum; rubber diaphragm allows oil to expand and contract during operation.

**Vented to the environment** prevents pressure buildup, prevents seal from leaking.

**Threaded endcap** – allows accurate > bearing preload, to increase bearing life.

**52:1 gear ratio** – full recessed tooth design keeps oil engaged between gears.

**Bull gear** – highest load capacity in the industry and longest life. Longer keyway and thicker hub.

 Multi-viscosity gearbox oil – exceeds 85w140 GL5 oil for long gear wear under extreme load conditions.

 Heaviest gearbox housing – more material in high stress areas.
 Designed to distribute loads more evenly.

**Longest output shaft (steel)** – exclusive with Valley<sub>®</sub> Gearboxes. Provides extra clearance between gearbox and tire, reducing mud buildup, which in turn prevents seal damage and extends the life of the gearbox. The shaft, combined with special offset rims, provides a reduced overhung load... another Valley gearbox exclusive.

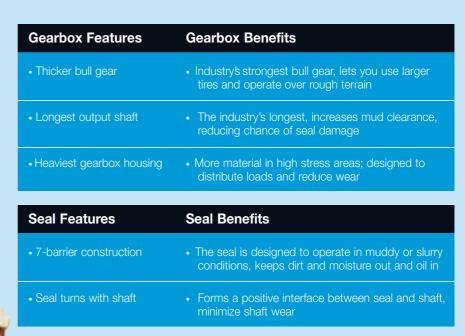
### Valley<sub>®</sub> Gearboxes... built to last

The Valley<sub>®</sub> Gearbox is designed and built to work under today's most demanding growing conditions. There's a stronger, heavier bull gear...pre-loaded worm gear...and our new patented shaft seals that keep oil in and problems out. A heavy-duty bronze bull gear is an available option for severe applications.

# Exclusive Valley<sub>®</sub> Gearbox Input and Output Seals

These are the seals designed for Valley<sub>®</sub> Gearbox applications to help ensure long life for gearbox components. A Valley exclusive...

these seals are standard on all new Valley equipment... or you can retrofit any existing Valley Gearbox.





**Stator** can be replaced independent of rotor, and is held in place with corrosion-resistant, stainless steel bolts for easy maintenance

#### Large 1 3/16" motor shaft \

**Pinion gear**— integral with \_ motor shaft

**25° tooth angles** – provides 40% greater load capacity and \_ wear resistance than other manufacturers' 14° tooth angles

Extra-large intermediate gear bearings – assure longer life

Double output shaft seals

Built-in crop guard over U-joint – prevents crop wrapping in or near oil seals –

**Case-hardened steel helical gears** – More teeth in mesh at all times for smoother power transmission. Gears require fewer reductions, fewer gears, fewer shafts and bearings. Fewer reductions also mean greater operating efficiency. Extra-large motor bearing

**Exclusive coating** – applied to internal surfaces to prevent corrosion

 Watertight seal – between housing components

**Finned aluminum housing** – for cool-running efficiency. Operates at temperatures 20° F (11° C) lower than comparable motors with steel housing, because the Valley aluminum housing and fins dissipate heat more effectively. This doubles insulation life and increases motor life.

**Exclusive trapped gasket**— gasket is trapped in a formed slot to insure a water tights seal. Junction box is vented to inside of motor.

**Drain plug** – easily accessible, extra large

#### Valley<sub>®</sub> Center Drive... engineered for reliable service

The Valley<sub>®</sub> Center Drive is built stronger, lasts longer and uses less energy than other irrigation drive motors. The standard-speed motor has the lowest power requirements in the industry. The high-speed motor has a nine-hour rotation. Valley Center Drives are designed for easy maintenance in the field.

Center Drive Features	Center Drive Benefits
Steel gears	Increased strength for longer life
Aluminum finned housing	<ul> <li>Runs 20° cooler for a longer motor life</li> <li>No paint to chip, scratch or corrode</li> </ul>
<ul> <li>Internally vented junction box</li> </ul>	Prevents moisture and contaminants from corroding the wire connections
Crop guard	Protects shaft seals to extend seal life
Integral pinion gear	• Eliminates coupler, improves reliability
Helical gears	<ul> <li>More tooth contact than spur gears, providing more torque capacity</li> </ul>
Motor windings designed for high-torque applications	40% higher operating torque for increased motor life

# Valley<sub>®</sub> Corners maximize the productivi

Since its 1974 introduction, Valley<sub>®</sub> corner machines have been irrigating square, rectangular and odd-shaped fields...efficiently and economically. The steerable corner arm lets you match the unit to your field's configuration. You can irrigate more of your acres!

Along the way—20 million hours of operation in more than 5,000 different applications— Valley has made continuous improvements, assuring that the Valley corner you buy today is the best on the market. You can order your Valley corner configured to specifically match the needs of your field.

# Valley Corner

## **Corner arm connection**

- Low-profile flexible joint connects corner arm to the basic unit.
- Rugged design to handle stress.
- Extended cradle to handle deep ridges.
- Long travel intervals with fewer starts for smooth movement.
- Run cycle box encloses factory-set 10-million cycle microswitches to reliably control corner unit movement.

## Sprinkler sequencing

- Each sprinkler's on-off sequencing is controlled for accurate water application.
- Self-flushing filter continuously removes contaminants.
- Dependable, triple-walled hydraulic tubing connects sequencing control with sprinkler control valves.

### Guidance system

- Forward and reverse guidance antennas provide accurate tracking in both directions.
- An independent antenna monitors guidance signal strength and the unit's path for additional safety.
- Low-voltage monitor and high-voltage suppressors protect guidance components.
- Buried guidance wire protected by stainless steel shield.
- Guidance wire surge protection.





# ty of your land

# Precision Corner<sup>®</sup> Swing Arm

From the manufacturer of the world's first center pivot corner irrigation machine comes the Valley<sub>☉</sub> Precision Corner<sup>™</sup> Swing Arm.

Your Needs	How the Valley₀ Precision Corner <sup>™</sup> Swing Arm Delivers	
Uniform water application	Sprinkler sequencing is no longer just monitoring the corner angle and arbitrarily turning on the sprinklers. Sequencing is now optimized by Compu-Spray <sup>™</sup> software that accurately calculates the area being irrigated under the corner arm, based on corner angle, pivot length and current status. More sprinkler sequences than any other corner arm <b>improves water application uniformity and delivers better crop yields.</b> Operation of machines without pressure regulators has been enhanced by software that continuously adjusts the speed based on available pressure.	ſ
<ul> <li>Uniform chemical application</li> </ul>	Crop protection chemicals and fertilizers can now be <b>uniformly distributed</b> using a fixed-rate chemical injection pump. In the "Chemigate" mode, software continuously adjusts the speed based on the area being irrigated.	
<ul> <li>Irrigates the whole field</li> </ul>	Longer 205' (62,4 m) span (287 ' [87,4 m] with overhang) provides <b>greater coverage</b> . The Valley Precision Corner Swing Arm can lead or trail to better fit special-shaped fields.	
<ul> <li>Improved slope capabilities</li> </ul>	The Valley Precision Corner Swing Arm <b>handles the same field slopes</b> as all other span joints. Wider wheelbase gives <b>more stability</b> for rough ground applications.	
<ul> <li>Electronic diagnostics</li> </ul>	<b>Easy-to-use control panels</b> on the Valley Precision Corner Swing Arm indicate the cause of safety shutdowns. Test switches provide a quick check of proper sprinkler operation. LED screen is easy to read in all light conditions. Rocker switches allow operator to recover from safety shutdown <b>without a service call</b> .	
<ul> <li>Faster revolution time</li> </ul>	Modern technology yields <b>faster revolution time</b> . Easily adapts to standard or high- speed operation. New variable-speed drives ensure reliable, high-speed operation even over rolling terrain and deep furrows.	17

# **Precision Corner Swing Arm**



1. Water transfer connection and hose—eliminates pressurerobbing 90-degree turns of other designs, minimizing required water pressures.

**2. Low-profile corner model** available with 287' (87,5 m) or 267' (81,4 m) span.

3. Patented perpendicular basebeam and wider wheelbase—increases stability and allows the corner arm to operate in either a "leading" or "trailing" mode to best fit the field.

**4. Operator platform**—Steps on vertical legs and platform on basebeam allow easy access to operator interface panel.

**5. Service/Run rocker switch** permits quick and easy recovery from a safety shutdown without a service call.

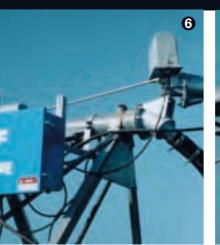


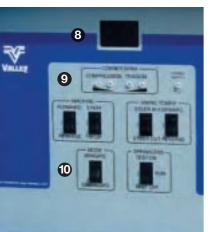
















**6. Angle sensor**—measures angle between swing span and pivot to ensure proper water application in corners.

#### 7. Patented Corner control

**panel**—calculates irrigated area under the swing arm (800 times in a quarter-section) and monitors speed and pressure for efficient use of pump gpm (lps). Our patented, reliable, high-speed, motionless joint and variable-speed drives minimize time required to apply chemicals and fertilizers.

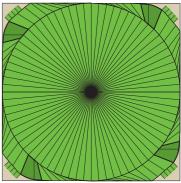
#### **Operator Interface Panel™**

**8. Diagnostics displayed** on LED screen for easier service.

**9. Indicator lights**—display machine status, tension and compression.

### 10. Patented Chemigate/

**Irrigate selection switch**—in "chemigate" mode, the machine continuously slows down as the corner arm extends, which allows the use of a fixed-rate injection pump to apply crop chemicals and fertilizers uniformly. 11. Patented Water Utilization Package<sup>™</sup> (optional) – additional solenoids control 22 more sprinklers for maximum water application uniformity in selected applications. Delivers 15% more water to approximately four more acres for improved water uniformity and increased yields on selected fields.

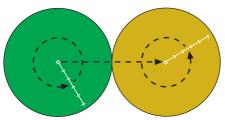


For more information see the Precision Corner brochure.

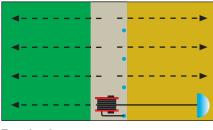
# **Towable Pivots**

The reliable, field-proven design of Valley<sub>®</sub> towables enables you to irrigate five- to 300-acre (121,4 hectare) fields easily and economically. Use a "builtto-take-it" Valley towable unit to irrigate two, three or more fields and reduce your irrigation cost per acre. Valley towables can be towed from one field to another in less than one hour!

- Operate your Valley towable using a control module.
- Set a stop-in-slot so the pivot will stop at the preselected location. Then tow it to the next starting point.
- Four pivot options—4-wheel straight tow, 4-wheel swivel, 2-wheel, or skid—plus your choice of power source on-board engine generator or public power supply.



Valley, Towable-2 moves



Traveler-8 moves



#### 4-Wheel E-Z Tow 85/3" (219,1 mm)

- Fixed wheel-or swivel option, easily rotates to tow in any direction
- Tongue hitch for quick, secure hookup—no cables!
- Handles a wide range of field sizes economically up to 1500'
- Position on concrete pad or use optional earth anchors



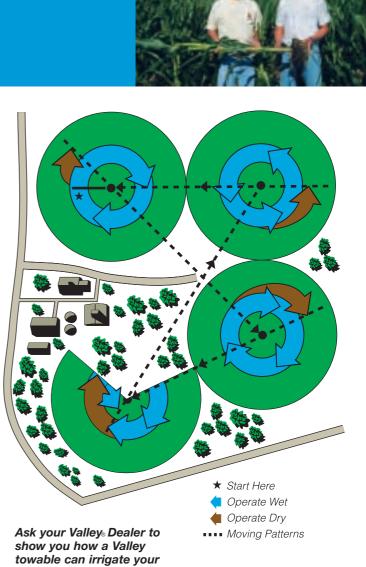
# 4-Wheel E-Z Tow 6<sup>5</sup>/<sup>"</sup> (168,3 mm)

• For machines up to 1000' (304,8m) in length.



#### 2-Wheel E-Z Tow

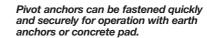
- Multi-directional towing
- Tongue hitch design for up to 40-acre (16,2 hectare) fields
- · Ideal for part-circle fields or multi-directional towing situations





#### **Skid Pivot**

- · Low-cost option best for infrequent towing
- · Handles even the longest towable units



# Linears can cover more of your field.

Introduced in 1977, Valley<sub>®</sub> linear irrigation equipment now irrigates over one million acres (405 thousand hectares) of grain, forage, fiber, vegetable, and sugarcane worldwide.

The Valley linear uses many of the same field-proven components as the Valley center pivot...components known for their simplicity, strength and longevity.

#### Linear irrigation equipment:

- Provides water and energy savings with minimum labor. **Save money.**
- Designed for easy conversion from surface, solid set, side roll or traveling gun irrigation. **Conserve resources.**
- Suitable for fields of 10 to 1,000 acres (4–405 hectares) with slopes to 6%.
   Maximum efficiency and profits.
- Promotes greater uniformity for higher yield.



Linears offer a choice of guidance — above ground cable, furrow and below ground guidance. Valley linears are one of the most durable and highly efficient mechanized irrigation machines in the world for conserving water.

### **Ditch Feed**

- On-board diesel engine with generator and direct-coupled pump provide electrical power and water pressure
- Rolling inlets fit level
   or stepped concrete canals and floating
   inlets for earthen ditches
- Rolling inlets with moving dam for slightly sloping concrete canals
- All pumps use dry run seals.
- Machines up to 3,200 feet (975 m) in length
- Capacities of 500 to 4,800 gpm (31 to 302 liters per second)
- Inlets in floating or rolling, self cleaning or non-self cleaning

### Hose Feed

- Electrical power supplied by on-board diesel generator or cord drag option
- Polyethylene hoses with inside diameters to 6 inches (152mm), in variety of lengths connected to a pressurized mainline
- Water flows from 200 to 1,400 gpm (12 to 88 lps)

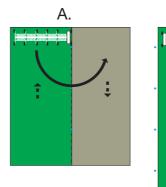
#### Valley Linear- Four-wheel Cart

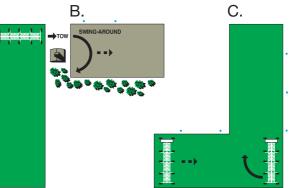
- For larger fields with machines up to 2,600 feet wide providing maximum cart traction
- Dual water inlet on each end of cart

#### **Two-wheel Cart**

- Towable and swing-around options available
- Great versatility in irrigating smaller, varied field shapes and sizes

- A. The Valley<sub>®</sub> Linear hose drag can cover large fields by traveling down one side, then pivoting around the cart and reversing direction to cover the other side of the field.
- B. The forward/reverse tow option and swingaround can be combined to give you the flexibility to irrigate odd-shaped fields with only one system.
- C. A swing-around package can be ordered, which gives you the capability to irrigate L-shaped fields with one system.











Valley Linear ditch feed on concrete ditch



2-wheel cart - hose feed, Genset



Valley Linear hose drag

# **Available options**

# **Control Options**

As part of the Valley controls – the following options are available to help you customize your irrigation equipment to meet your specific needs.

#### **Auxiliary Control**

Factory-installed switches and hardware can control injection pumps or other electrical devices.

#### **End Gun Test Switch**

Allows you to check end gun operation (Pro2 and Select models).

#### **End Gun Shutoff**

Control your end gun operation from the pivot. A switch package set on the pivot is available for Mechanical panels. The Pro2 and Select panels have it incorporated into the panel.

#### **Position Control**

Lets you set and control position functions such as stop-in-slot and end gun (standard with Pro2 and Select).

#### **High-Voltage Surge Protection**

Provides additional protection from power surges (standard with Pro2 and Select modules).

#### **Phase Loss Protection**

Protects components from damage due to loss of voltage.

#### **Running Light**

Indicates that your pivot is operating. Choice of 100-watt rough service bulb or flashing strobe.



# End of Field Stop and/or End of Field Auto Reverse

Either stop or reverse your machine precisely. Required for all partial circles. Auto delay for this option is standard in Pro2. Both post and skid barricade styles are available.



**Modified Alignment** Provides additional alignment sensitivity for your machine. Recommended for units 1,500 to 2,000 feet (457–610 m) long. Required on units over 2,000 feet (610 m).



**Remote Panel Mount** Locate your panel where it is most convenient. (Specify distance from panel to pivot when ordering.)

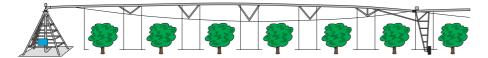


#### **Pipe Options**

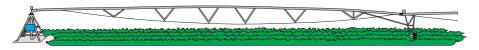
Choose from 6" (152,4 mm), 65%" (168,3 mm), 85%" (219,1 mm), and 10" (254,0 mm) pipe diameters to minimize pressure loss and horsepower requirements. 10-inch pivot assembly is available.



# Structure options for tall crop and small field.



Ultra-High Profile and High-Profile Pivot and Drive Units Provide increased crop clearance. Ultra-High Profile clearance: 16' 3" –16' 6" High-Profile clearance: 13' 0" –13' 3"



Low-Profile Pivot and Drive Units When standard clearances are not required. Low-Profile clearance: 6' 2"–6' 5"



# From rich loam to clay or sandy soils - tires that fit.



#### **Tire sizes**

Choose the tire size and width that fits your needs: from 22.5 to 38 inch (571–965 mm) wheels and 11 to 16.9 inch (279–429,3 mm) wide turf or tractor treads.



#### 38" Rim Reinforcement

Heavy duty rim standard on 38" tires. Valley adds an industry exclusive, .3" reinforcing plate to the industry's standard rim to insure long life under extreme field conditions.

#### Heavy duty gearbox

Optional bronze gear and hardened steel worm provides longer life under severe field conditions.

# **Corrosive Water Solutions**

# Facing tough choices?

Do environmental regulations require new treatment options for process water or livestock waste?

Does your water supply contain corrosive chemicals?

Do you add chemicals for crop or soil management?

Valley has the solution for you.

Your Valley dealer will help you decide which solution is best for you. Here are the pipe options available:

- POLY-SPAN
- Weathering Steel
- Cathodic Anode
- Galvanized Steel





### **POLY-SPAN**™

- Resists effect of acidic, alkaline, corrosive, and saline water
- 20/10 -Year prorated pipeline corrosion warranty with first 10 years unconditional replacement
- Available with Valley pivots, towables, and linears (8 5/8" and 6 5/8" pipe)
- Produced in the USA



### Weathering Steel

- Extends machine life in soft water
- Prorated 20 year corrosion warranty
- Available with Valley pivots, towables, and Valley Corner (6" pipe)



## Cathodic Anode

- Replaceable anode extends machine life in salty water conditions
- Available with all Valley equipment
- Amount of protection (number of anodes) can be customized for your installation

# **Dealer Support**

We've been working on it for five decades now—building, training and supporting the most extensive worldwide network of authorized, "value added" dealers in the irrigation industry.

Today, a hallmark of the Valley<sub>®</sub> distribution network is the longevity and commitment of every Valley Dealer, each working to provide dependable, efficient customer support.

Valmont<sub>®</sub> Irrigation offers rigorous and extensive ongoing training to dealer personnel. Service Seminars are held throughout the year at locations around the world. Hundreds of service technicians receive up-to-the-minute parts and service manuals, and extensive hands-on training.

Valley Dealers who achieve outstanding performance in three key operational areas—sales, service and parts—are eligible for membership in the Valley Dealer Performance Program. It's an opportunity for Valley Dealers to continually improve on their own performance and set ever-higher standards of excellence for themselves, their dealership and their employees.

## Designing a Valley® for You

Valley Dealers combine their knowledge of your local agricultural practices and field conditions...with Valmont's extensive irrigation experience and training...in order to design the specific application that will best meet your needs. Valmont provides computerized design tools to assist with the design and layout process. Valley Dealers work sideby-side with you to help you select and maintain the Valley equipment that's right for your operation.

### Installation

Factory-trained Valley Dealers make sure your equipment is installed correctly and meets Valmont's specifications and guidelines for unmatched performance and reliable service.

## **Parts and Service**

Valmont and Valley Dealers recognize that the ongoing availability of parts and timely, quality service are critical in making Valley equipment your best value. That's why we've instituted Valley RealParts<sup>®</sup>, RealParts<sup>®</sup> Conversion, RealParts<sup>®</sup> Availability, and RealService<sup>®</sup>.

**Valley RealParts:** This program is our guarantee of the best quality and value for all of your parts needs.

**RealParts Conversion:** Drive train, electrical control, structural and sprinkler conversion packages are available for any brand, using Valley RealParts.

**RealParts Availability:** Valmont maintains four distribution centers, plus four regional parts outlets to support local Valley Dealers' inventory requirements.

### We Service 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 RealParts for most other brands. Our goal is to keep your equipment moving and doing its job—enabling us to earn your business, day after day.

## Valley Dealer Service Technicians

- Factory trained
- Well stocked service trucks
- Quick and quality service



# **Water Management Solutions**



Valmont<sub>®</sub> Irrigation has long been a leader in the use of center pivot and linear equipment as an effective tool for distribution of wastewater in agricultural, industrial and municipal applications. Cascade Earth Sciences (CES), a wholly owned subsidiary of Valmont Industries, has expanded this role by offering environmental consulting services and turnkey wastewater reuse to clients in the United States and around the globe.

CES brings over 25 years of experience in land application and beneficial use of wastewater, sludge and other biodegradable by-products. The knowledge and expertise of CES personnel in soil-waste interactions and crop management alternatives make CES uniquely qualified for land treatment and application projects. CES employs Engineers, Soil Scientists, Geologists and Hydrogeologists, and Hydrologists who work with regulators, agricultural producers, consulting engineers and facility managers to develop successful land application programs with guaranteed performance.

### **Design-Build-Operate**

CES has extensive experience in all facets of conceptualization, design, construction, and management of irrigation projects. Our "Design-Build-Operate" package provides a range of

> **CES** Natural Solutions for Water

single-source project management options designed to maximize your control and scope of choice – from project inception through turnkey completion.

Traditionally, facility construction or upgrade projects involved contracting with multiple entities. This can create complicated lines of communication and redundant effort, which often turn counterproductive. With the Design-Build centralized management of CES, every phase of design and construction can be coordinated and dovetailed to realize savings in both time and money. Owners may choose whether or not to own, operate, lease or lease-to-buy the completed project. We can also assist with the securing of funding.

For in-depth information on CES "Design-Build-Operate" programs, please contact CES at 1-800-728-8322 or Valmont Irrigation at 1-800-825-6668, ext. 6008.

### **Municipal**

From small villages to large metropolitan areas, Valley equipment is used to apply wastewater from municipal facilities to thousands of acres of land, providing responsible solutions to the wastewater management issues every city faces.

- Valley<sub>e</sub> equipment helps growers meet water needs and nutrient requirements when effluent is used to produce forage and field crops, increasing yields and profits.
- City benefits from lower-cost system.
- Environment benefits from elimination of discharge to streams.
- CES can provide complete system design, permitting, construction and operations for wastewater reuse systems with environmental guarantees.

www.cascade-earth.com

### Industrial

Industrial facilities directly benefit from effective wastewater management by CES and Valley irrigation equipment.

- Reduces or eliminates discharge of wastewater into overloaded municipal facilities and/or streams.
- Potential to reduce capital investment required for conventional treatment facilities.
- CES offers over 25 years of experience and turnkey water reuse services with options for leasing.

Industries turning wastewater into an asset are:

- Meat packers and vegetable processors
- Paper, pulp and wood product manufacturers
- Electrical generators and oil and gas producers

## **Agricultural**

The agricultural industry realizes significant benefits from the effective management and distribution of wastewater.

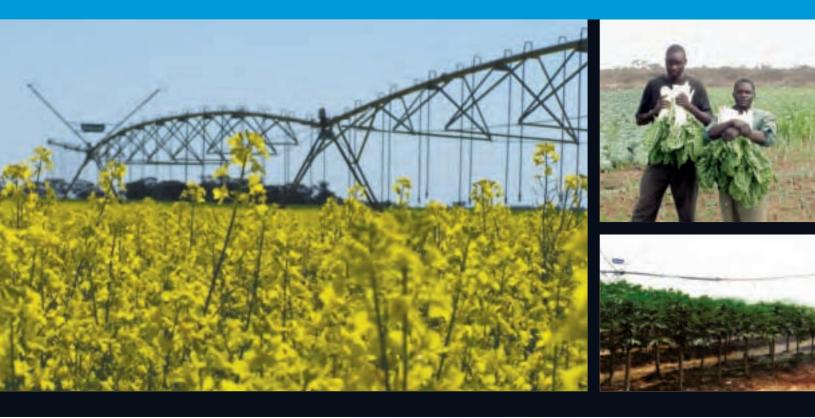
- Livestock confinement facilities use pivots to handle liquid manure and help meet EPA and state environmental standards.
- Plant nutrients in wastewater reduce the need for commercial fertilizer.
- A Valley pivot or linear unit can be used for multiple purposes – to apply wastewater, fresh water and crop chemicals.

Soil Surface: Traps fine waste: UV destoys pathogenic organisms. Root Zone. There up recludents a uch es nitrogen & observice us. Also startes moster and oxygenates westerwater

An groundwater Additional storage and instalation

Groundwater: Can be recharged with clean water from the Land Application site

# **Worldwide Leadership**



Valmont<sub>®</sub> Irrigation is the world leader—yes, the world leader—in the development and manufacture of mechanized irrigation equipment and technology.

The Valley<sub>®</sub> brand has been recognized worldwide as the leader in sales, service, quality and innovation since Valmont founded the mechanized irrigation industry. This leadership position is demonstrated by sales of more than 145,000 center pivots, linears and corner machines worldwide, irrigating approximately 15 million acres (6 million hectares) around the world.

### **Proven Technology**

In almost all conditions — whether terrain is flat or hilly, soils are sandy or silty on all major crops — Valley irrigation equipment is a proven method of increasing profitability and food production. Irrigating with Valley offers proven savings of valuable resources — water, labor, energy and chemicals.

Whether you are looking for one pivot, corner or linear machine, or several hundred, no one else in the world can offer you more expertise and more years of experience and service than Valley.



(6 million hectares) around the world.

# **Global Leadership**

Since its founding at the end of World War II, Valmont Industries, Inc., parent company of Valmont<sub>®</sub> Irrigation, has taken new ideas and turned them into products that meet the growing needs of our customers.

We aggressively participate in two specific markets—food production and infrastructure development—and we are #1 in both.

First, Valmont Irrigation is the world leader in designing and building efficient irrigation equipment for agriculture, industrial and municipal applications...to improve productivity and conserve scarce water resources. We founded the mechanized irrigation industry and remain dedicated to providing innovative solutions now and well into the future. We have the financial strength and resources to maintain our leadership role in the manufacture of irrigation equipment. And Valmont provides full support to our network of Valley Dealers—and to our customers—wherever they are in the world.

Valmont Industries, Inc. is also the world's leading producer of engineered metal structures and provides other products and components to various industries including communications, lighting and utility... improving the world's infrastructure.

During its first five decades in business, Valmont has continuously sought the best ways to apply advancing technology to products and processes. And at each step along the way, it has been, and will continue to be Valmont people making the difference...smart, hard-working pioneers dedicated to helping improve life around the globe.



#### **Cascade Earth Sciences**

Corporate Office 7150 Supra Drive S.W. Albany, OR 97321 USA Telephone: 1-541-926-7737 Toll Free: 1-800-728-8322 Fax: 1-541-967-7619 www.cascade-earth.com

#### South America

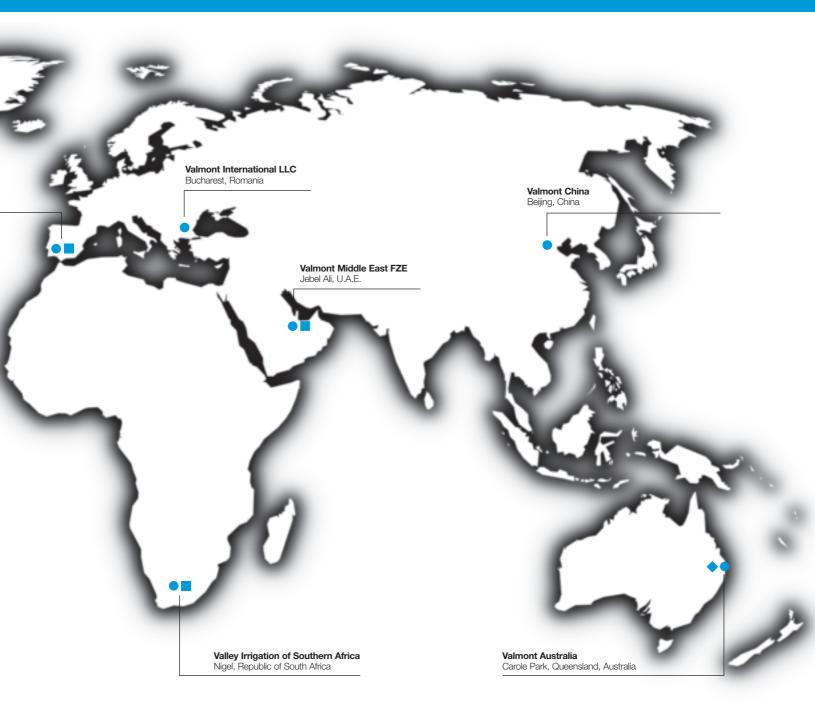
Valmont Industria E Comercio LTDA Av. Francisco Podboy, 1600 Distrito Industrial I Uberaba/MG - Brazil CEP 38056-640 Telephone: 55-34-3318-9000 Fax: 55-34-3318-9001 E-mail: comercial@valmont.com.br

#### Mexico & Central America Valmont International Corp. 2105 Mannix Drive San Antonio, TX 78217 USA Telephone: 1-210-829-7971 Fax: 1-210-824-3233 E-mail: meellis@valmont-vice.com

Australia-Pacific Valmont Australia P.O. Box 125 Carole Park, Queensland 4300 Australia Telephone: 61-7-3879-3622 Fax: 61-7-3879-3655 E-mail: vaus@valmontinternational.com.au

#### China Valmont China Rm 8-1-11 Building #8 Jianwan Diplomatic Compound 1 Xiushui Street, Chao Yang District Beijing, China Telephone: 86-10-8532-3512 Fax: 86-10-8532-3510 E-mail: vint@valmont.com

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Valmont S.A. Sdad. Unipersonal Ctra. Mejorada a Velilla KM. 0.64-Apdo. Correos 91 28840 Mejorada del Campo (Madrid) Spain

Telephone: 34-91-679-4300 Fax: 34-91-679-1677 E-mail: info.riego@valmont.es

#### Eastern Europe

Valmont International L.L.C. Representative Office in Romania Str. Trilului 65 030401 Bucharest, Sector 3 Romania Telephone: 40-21-3250919 Fax: 40-21-324328 E-mail: vladimir.harminc@valmont.com

#### South Africa

Valley Irrigation of Southern Africa (PTY) Ltd. P.O. Box 1234 Nigel, 1490 Republic of South Africa Telephone: 27-11-814-7007 Fax: 27-11-814-4533 E-mail: info@valleyirrigation.com

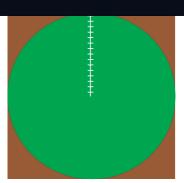
#### Middle East

Valmont Middle East FZE Plot # MO0781 & 782, R/A/ #12 Street #1245, JAFZA P.O. Box 17937 Jebel Ali, Dubai, U.A.E. Telephone: 9714-88-39740 Fax: 9714-88-39567 E-mail: valmontme@valmont.com

#### World Headquarters

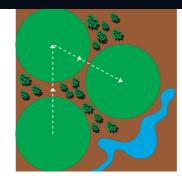
Valmont Irrigation 7002 North 288th Street P.O. Box 358 Valley, Nebraska 68064-0358 USA Telephone: 1-402-359-2201, Ext. 3415 Fax: 1-402-359-4429 E-mail: irrigation@valmont.com International Fax: 1-402-359-4948 E-mail: vintl@valmont.com www.valmont.com

# **Options for Irrigating Any Field**



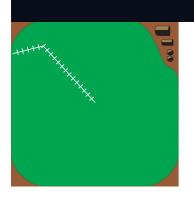
### Center Pivots

- Available to fit all field sizes
- Custom designed to fit your field and irrigation needs
- Wide range of options and features available



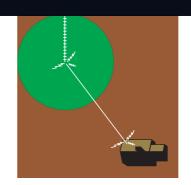
#### Towables

- Irrigate more than one field and all different sizes
- Quick and easy tow design
- 4-wheel, 2-wheel and skid tow options



### **Corner Arms**

- Irrigate square, rectangular and odd-shaped fields
- Irrigate 19 extra acres (7,7 ha) in a quarter section even more "corner acres" in a larger square field
- Can be retrofitted to existing Valley<sub>®</sub> units, plus many other manufacturers' brands

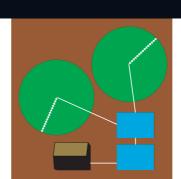


### Valley Controls

- Four control panel choices
- Can be retrofitted to existing Valley units and many other brands
- Monitor and control with the BaseStation, Tracker, or Tracker SP

#### Linears

- Irrigate up to 98% of square or rectangular fields
- Irrigate 10 to 1,000 acres (4 to 405 hectares) with slopes up to 6%
- Towable and swingaround options



## Wastewater Reuse

- Municipal, industrial and agricultural applications
- EPA-approved alternative
   to conventional treatment
- Environmentally sound waste disposal through land application
- CES/Valmont is your source for turnkey solutions for wastewater management projects.



#### Conserving Resources. Improving Life.

P O. Box 358 Valley, Nebraska 68064-0358 USA Phone: 402-359-2201 (Ext. 3415) Fax: 402-359-4429 E-mail: irrigation@valmont.com

International Fax: 402-359-4948 E-mail: vintl@valmont.com

www.valmont.com/irrigation/

See your local authorized Valley Dealer:

Valmont<sub>e</sub> Irrigation has a policy of continuous product improvement and development. As a result, certain changes in standard equipment, options, price, etc., may have occurred after the publication of this catalog. Some photographs and specifications may not be identical to current production. Your local Valley<sub>e</sub> Dealer is your best source for up-to-date information. Valmont Irrigation reserves the right to change product design and specification at any time without incurring obligations.

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