

Valley® Corner Machines



Performance. Period.

High Profits Within Reach



Get the Most Out of Your Fields



Since its 1974 introduction, Valley® 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.

From the manufacturer of the world's first center pivot corner irrigation machine, comes the Valley® Precision Corner™.

A Valley Precision Corner helps you **earn extra income** from the land you already have. No matter what crops you raise, the Valley Precision Corner takes those corners and other acres that are now wasted, and puts them into production—for far less than the cost of acquiring more land.

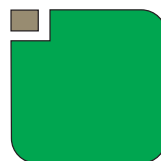
For example, on a square quarter-section, the Valley Precision Corner enables you to irrigate an extra 23 acres (9,3 hectares) that a center pivot alone can't reach. On odd-shaped and irregular-shaped fields,

you can add as many as 49 extra acres (19,8 hectares). On rectangular fields, the Valley Precision Corner can swing out to pick up both ends, adding an extra 37 acres (15,0 hectares).

Bringing this extra land under irrigation enables you to increase your gross income. "Do the numbers" for your own operation, and you'll discover the Valley Precision Corner or Mechanical Corner are investments that pay for themselves in just a few growing seasons. This means added profit for you!



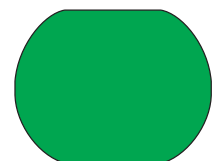
Squares



Buildings in Corner



Buildings in Center



Both Ends



Your Needs	How the Valley® Precision Corner™ Delivers
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<ul style="list-style-type: none"> ● Reliability 	<p>Simplified design eliminates need for complex mechanisms that were previously required to compensate for speed differentials between Last Regular Drive Unit (LRDU) and Swing Drive Unit (SDU). Plastic cams and mechanical switches have been replaced with control software that doesn't wear out.</p>
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<ul style="list-style-type: none"> ● Uniform water application 	<p>Sprinkler sequencing is no longer just monitoring the corner angle and mechanically turning on the sprinklers. Sequencing is now optimized by Compu-Spray™ software that accurately calculates the area being irrigated under the corner arm, based on corner angle, pivot length and corner movement. More sprinkler sequences than any other corner arm improves water application uniformity and delivers better crop yields. Operation of machines without pressure regulators has been enhanced by software that continuously adjusts the speed, based on available pressure.</p>
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<ul style="list-style-type: none"> ● Uniform chemical application 	<p>Crop protection chemicals and fertilizers can now be uniformly applied while using a fixed-rate chemical injection pump. In the "Chemigate" mode, software continuously adjusts the speed, based on the area being irrigated. A rocker switch on the Operator Interface panel allows you to select between "Irrigate" and "Chemigate" operating modes.</p>
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<ul style="list-style-type: none"> ● Irrigates the whole field <p>(See the Water Utilization Package graph on page 3.)</p>	<p>Longer 205' (62,48 m) span (287 ' [87,48 m] with overhang) provides greater coverage. The Valley Precision Corner can lead or trail to better fit special-shaped fields. An additional sprinkler package, the "Water Utilization Package," turns on when the corner arm is extending away from the fencerow. This package distributes the end gun water over the corner arm which allows the Valley Precision Corner to extend faster and deliver the additional water required under the corner arm just before the end gun turns on. This package delivers 15% more water to approximately 4 acres (1,6 hectares) of cropland that other sequencing designs typically under water.</p>
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<ul style="list-style-type: none"> ● Travels over high slopes 	<p>The Valley Precision Corner handles the same field slopes as all other span joints. A wider wheelbase gives more stability for rough ground applications. The proven underground guidance provides track-on-track repeatability and reliability, and allows you to irrigate odd-shaped fields and around obstructions.</p>
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<ul style="list-style-type: none"> ● Electronic diagnostics 	<p>Easy-to-use control panels on the Valley Precision Corner indicate the cause of safety shutdowns. Test switches provide a quick check of proper sprinkler operation. The LED screen is easy to read in all light conditions. Rocker switches allow the operator to recover from many safety shutdowns without a service call.</p>
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<ul style="list-style-type: none"> ● Faster revolution time 	<p>16.9 x 24" (60.96 cm) tires allow for faster revolution time. Easily adapts to standard or high-speed operation. High-torque variable-speed drives ensure reliable, high-speed operation even over rolling terrain and deep furrows.</p>
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Precision Corner™ Swing Arm



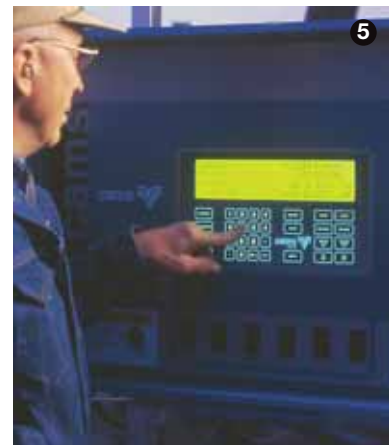
1. Water transfer connection and hose—eliminates pressure-robbing 90-degree turns of other designs, minimizing required water pressures.

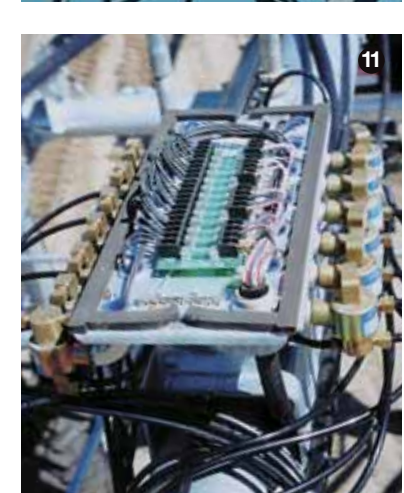
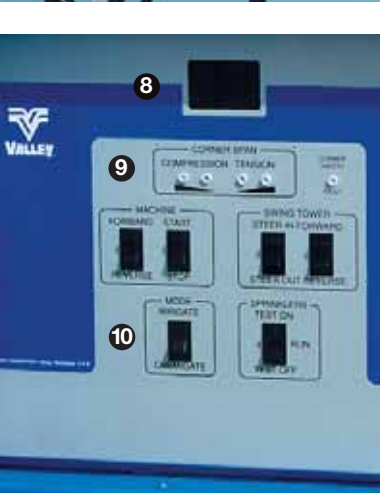
2. Low-profile corner model—available with 287' (87,5 m) or 267' (81,4 m) span.

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 cams™ 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.

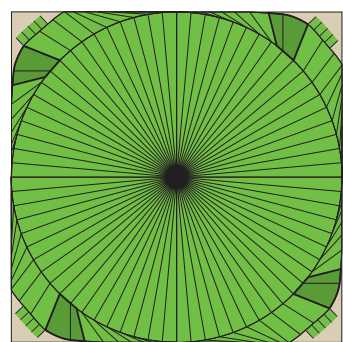
Operator Interface Panel™

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™ (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.



Choose the Corner that Fits



Valley® heavy duty V-3 drive option for increased traction.



Valley® Spider™ Dual drive tracked option for increased floatation.

Product Specifications

Pipe Diameter in. (mm)		Span Length ft. (meters)		Trusses No. of	Approximate Weight (Wet) lbs. (kg)		Allowable Slope 0-6" Ridges					Crop Clearance ft. (meters)		
							11 x 24.5	11.2 x 24	14.9 x 24	16.9 x 24	11.2 x 38			
Precision Corner														
6.625	168	204.9	62.45	8	8024	3639	8%	NA	8%	7%	6%	9	2.74	
6.625	168	184.8	56.32	7	7433	3371	9%	NA	9%	8%	7%	9	2.74	
Mechanical Corner														
6.00	152	184.8	56.32	7	7200	3265	10	10	10	9	7	8.6	2.62	

	Precision Corner				Mechanical	
	205' Span		185' Span		185' Span	
Pipeline height @ Drive Unit	13 ft.	3.96 m	13 ft.	3.96m	12 ft.	3.7 m
Coupler Spacing	30 in.	.76 m	30 in.	.76 m	102 in.	2.6 m
Overhang Length	82 ft.	25 m	82 ft.	25 m	86 ft.	26.2 m
Total Arm Length	287 ft.	87.5 m	267 ft.	81.4 m	271 ft.	82.6 m
Maximum Extended Reach	273 ft.	83.2 m	254 ft.	77.4 m	258 ft.	78.6 m
Wheel Base of Drive Unit	160 in.	4.1 m	160 in.	4.1 m	156 in.	4.0 m
Qty. Standard Sprinklers	29		27		34	
Qty. Optional Sprinklers	22		19		0	
Qty. Sprinkler Sequences	11 or 13		11 or 13		9	

Mechanical Corner

Mechanical 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.
- Solenoid valves for long life and uniform sprinkler application.

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.





Valley® dealer support

Every Valley® irrigation machine is backed by the dedicated service and parts commitment of your Valley dealer. Local Valley dealers combine their knowledge of your 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.

Your Valley dealer's service technicians have received full training on servicing the Valley Precision Corner™ and they have the parts you need.

You can order a Valley Center Pivot complete with a Valley Precision Corner or Mechanical Corner. If you already own a Center Pivot, it can easily be retrofitted with a Valley Precision or Mechanical Corner by your dealer. In addition to the standard model, a low-profile corner is also available.

Save on labor

Once your Valley® dealer sets it up in your field, the Valley Precision Corner™ or Mechanical Corner virtually operate themselves. So, you'll enjoy significant savings of labor and time. These days, those are both pretty valuable commodities!

Forget about moving pipe and opening gates. The Valley corner machines let you irrigate marginal or formally idle acres...and save both time and labor.



Conserving Resources. Improving Life.

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See your local authorized Valley Dealer:

Valmont, 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-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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