

Precision Corner™



Performance. Period.

High Profits Within Reach



# Get the Most Out of Your Fields



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.

What's more, your Valley dealer's service technicians have received full training on servicing the Valley Precision Corner™. And they have the **parts in stock** for your corner arm.

You can order a Valley Center Pivot complete with a Valley Precision Corner. If you already own a Center Pivot, your dealer can **easily retrofit a Valley Precision Corner**. In addition to the standard model, a low-profile corner is available.

Your Valley dealer will work closely with you to make sure your Valley Precision Corner works in perfect harmony with your Valley Center Pivot to provide full-field irrigation. And that can mean greater productivity and more income for you.



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

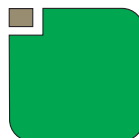
A Valley Precision Corner Swing Arm helps you **earn extra income** from the land you already have. No matter what crops you raise, the Valley Precision Corner Swing Arm takes those corners and other acres that are now wasted, and puts them into production—for far less than the cost of acquiring more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

For example, on a square quarter-section, the Valley Precision Corner Swing Arm 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 Swing Arm 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 Swing Arm is an investment that pays for itself in just a few growing seasons. This means added profit for you!



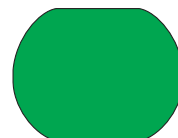
Squares



Buildings in Corner



Buildings in Center



Both Ends

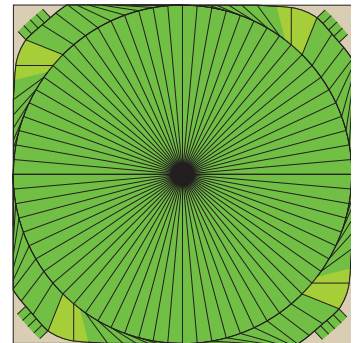


### Save on labor, too!

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

Forget about moving pipe and opening gates. The Valley Precision Corner™ machine lets you irrigate marginal or formally idle acres...and save both time and labor.

### Water Utilization Package



**Delivers 15% more water** to approximately four more acres for improved water uniformity and increases yields on selected fields.

Corner Machine Investment*			
Crop: Corn Price per Unit: \$2.40	Investment In:		
	Dry Land	Center Pivot	Center Pivot & Corner Machine
<b>Acres:</b>			
Irrigated	–	131	154
Unirrigated	160	29	6
<b>Total</b>	160	160	160
<b>Yield: (Per Acre)</b>			
Irrigated	–	180	180
Unirrigated	90	90	90
<b>Input Costs:</b>			
Seed, Fertilizer, etc. (Per Acre)	\$100	\$125	\$125
Total Pumping Costs: (Annual)	–	2,600	3,700
Maintenance: (Annual)	–	100	150
<b>Gross Revenue</b>	<b>\$34,560</b>	<b>\$62,856</b>	<b>\$67,824</b>
<b>Expenses</b>			
Seed, Fertilizer, etc.	\$16,000	\$20,000	\$20,000
Pumping Costs	–	2,600	3,700
Maintenance	–	100	150
Other	–	–	–
<b>Sub Total:</b>	<b>\$16,000</b>	<b>\$22,700</b>	<b>\$23,850</b>
<b>Gross Profit:</b>	<b>\$18,560</b>	<b>\$40,156</b>	<b>\$43,974</b>
<b>a.</b> Annual Additional Profit From Irrigating		<b>\$21,596</b>	<b>\$25,414</b>
<b>b.</b> Total Investment in Irrigation Equipment**		76,000	98,000
<b>c.</b> Expected Life of Irrigation Equipment (Years)		20	20
<b>Payback Period</b>	<b>b/a</b>	<b>3.52</b>	<b>3.86</b>
<b>d.</b> Annual Additional Profit From Irrigating	a	<b>\$21,596</b>	<b>\$25,414</b>
<b>Vs.</b>		<b>vs.</b>	<b>vs.</b>
<b>e.</b> Annualized Investment Extended over life of Irrigation Equipment	b/c	<b>\$3,800</b>	<b>\$4,900</b>
<b>Annual Profit in Excess of Irrigation Investment</b>	<b>d-e</b>	<b>\$17,796</b>	<b>\$20,514</b>

\*May vary by dealer and design.

\*\*Includes irrigation equipment, pump, well, pumping unit and installation.

# 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.

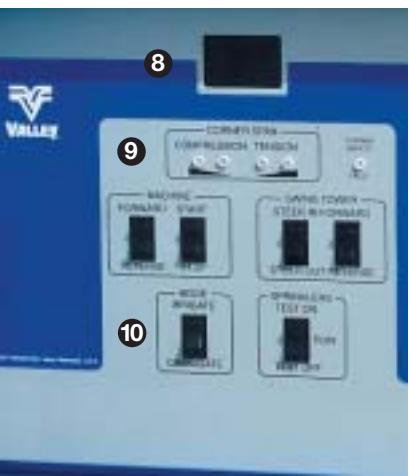
**3. Patented perpendicular basebeam and wider wheelbase**—increases stability and allows the corner arm to operate in either a “leading” or “trailing” mode to best fit the field.

**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 corner (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 easy user interface.

**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.

# Performance That Delivers

## Your Needs

## How the Valley® Precision Corner™ Swing Arm Delivers

### ● Reliability

**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.

### ● Uniform water application

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.

### ● Uniform chemical application

Crop protection chemicals and fertilizers can now be **uniformly distributed** 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.

### ● Irrigates the whole field

Longer 205' (62,48 m) span (287' [87,48 m] with overhang) provides **greater coverage**. The Valley Precision Corner Swing Arm 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 allows the Valley Precision Corner Swing Arm 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.

### ● Travels over high slopes

The Valley Precision Corner Swing Arm **handles the same field slopes** as all other span joints. 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.

### ● Electronic diagnostics

**Easy-to-use control panels** 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 **without a service call**.

### ● Faster revolution time

16.9 × 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.



The Valley® Precision Corner™ will likely become one of the most important pieces of equipment on your farm – and also one of the most crucial to your success. So when it's time to select irrigation equipment, you want to be sure you're making the best buying decision.

Valmont Irrigation is the world leader in the development and manufacture of mechanized irrigation equipment and technology. Of all the management decisions you can make in producing your crop, choosing Valley irrigation equipment will prove to be the most rewarding. Along with higher yield, quality and return from every acre, Valley delivers more experience, confidence and support with every product we sell.

To learn more about the Valley Precision Corner...and how it can turn "empty" acres into productive, profitable acres. . . see your Valley dealer today.

### Model 8098 / 8099 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		
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

	205' Span		185' Span	
Pipeline height @ Drive Unit	13 ft.	3.96 m	13 ft.	3.96m
Coupler Spacing	30 in.	.76 m	30 in.	.76 m
Overhang Length	82 ft.	25 m	82 ft.	25 m
Total Arm Length	287 ft.	87.5 m	267 ft.	81.4 m
Maximum Extended Reach	273 ft.	83.2 m	254 ft.	77.4 m
Wheel Base of Drive Unit	160 in.	4.1 m	160 in.	4.1 m
Qty. Standard Sprinklers	29		27	
Qty. Optional Sprinklers	22		19	
Qty. Sprinkler Sequences	11 or 13		11 or 13	



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See your local authorized Valley Dealer:

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