



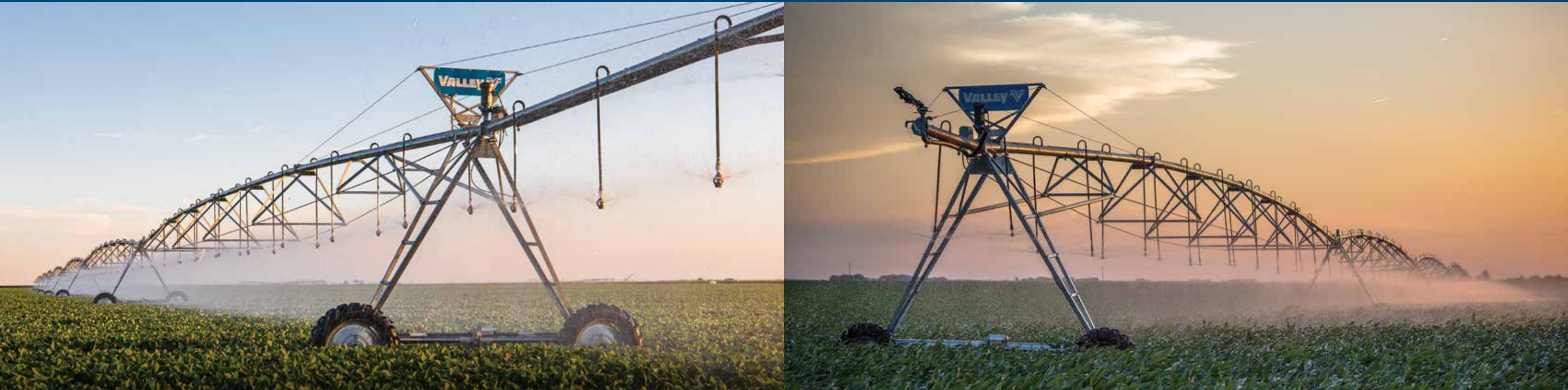
Center Pivot Irrigation

Industry-Best Durability and Reliability for All Fields



RELIABLE | DURABLE | PRECISE | ADVANCED | RESPONSIVE

The Leader in Precision Irrigation.®



From pivot point to last span, Valley® engineers and manufactures center pivots that handle the full range of operating conditions that today's growers need. Valley structures stand up to the toughest loads produced by rough terrain, deep furrows and long-span machines.

Valley 8000 series®

Simply put, the Valley 8000 series® is the best, most reliable center pivot available anywhere, giving growers the greatest return on their investment.

Exclusive options include:

- Ultra-high profile span option
- The widest range of pivot point options and pipe diameters to fit your field
- The longest span in the industry
- Precision Corner® and VFlex™ Corner options – maximize your irrigated acres
- Multiple drive train and floatation options

8000 series Benefits:

- Standard, low, high and ultra-high profile available
- 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 dealer for details

Model 8120*

The Valley Model 8120 is equal to the 8000 series in performance and reliability, and is available outside North America.

Small Field Option

For your small fields, we offer the 8120 5-inch (127 mm). It is engineered with the same quality of the Model 8120, with a smaller pipe diameter.

* Not available in all regions

7000 series*

Not all field conditions are the same, but growers still demand reliable irrigation and value they can trust. Engineered and manufactured as a solution for less-demanding terrain, the Valley 7000 series is second only to the industry-leading Valley 8000 series in reliability, durability and overall performance. The 7000 series is available with the patented, industry-best Valley gearbox or the VS-7000 gearbox.

7000 series Benefits:

- Cost-effective option for irrigating
- Ideal for fields with less-demanding terrain
- Standard, low and high profile available
- Exclusive Valley warranty – See your dealer for details





The Brand Trusted by Generations of Growers

The drive train is the most important part of your irrigation machine. Without it, nothing else matters, and Valley builds ours to handle the toughest conditions and most difficult terrain.

Valley Center Drive

The Valley center drive is built stronger, lasts longer and uses less energy than other irrigation drive motors. Standard-speed and high-speed options are available, with the standard-speed motor requiring the least amount of power in the industry.

Valley Center Pivots Lead the Way

Valley spans are independently field-tested to outperform other brands under all field conditions.

- Last 5-6x longer in accelerated life tests

Valley spans are designed for maximum durability.

- Hot-dip galvanized for additional corrosion protection
- Four-leg drive unit with braces on each side
- Heavy 8-bolt pipe flanges; competitor spans typically have six bolts
- Welded sprinkler coupler for greater strength and no flow restriction
- Full wrap-around weldments for less load on pipe
- Uniform pipeline and truss rod crowns maintain even distribution of loads
- Tight contact of truss rod head in the socket for even loading
- Polyurethane flange gaskets for longer, leak-free life

Riser options allow integration of a Valley Flowmeter or Nelson Valve into the riser pipe, and lower elbow options allow for in-line filter integration.

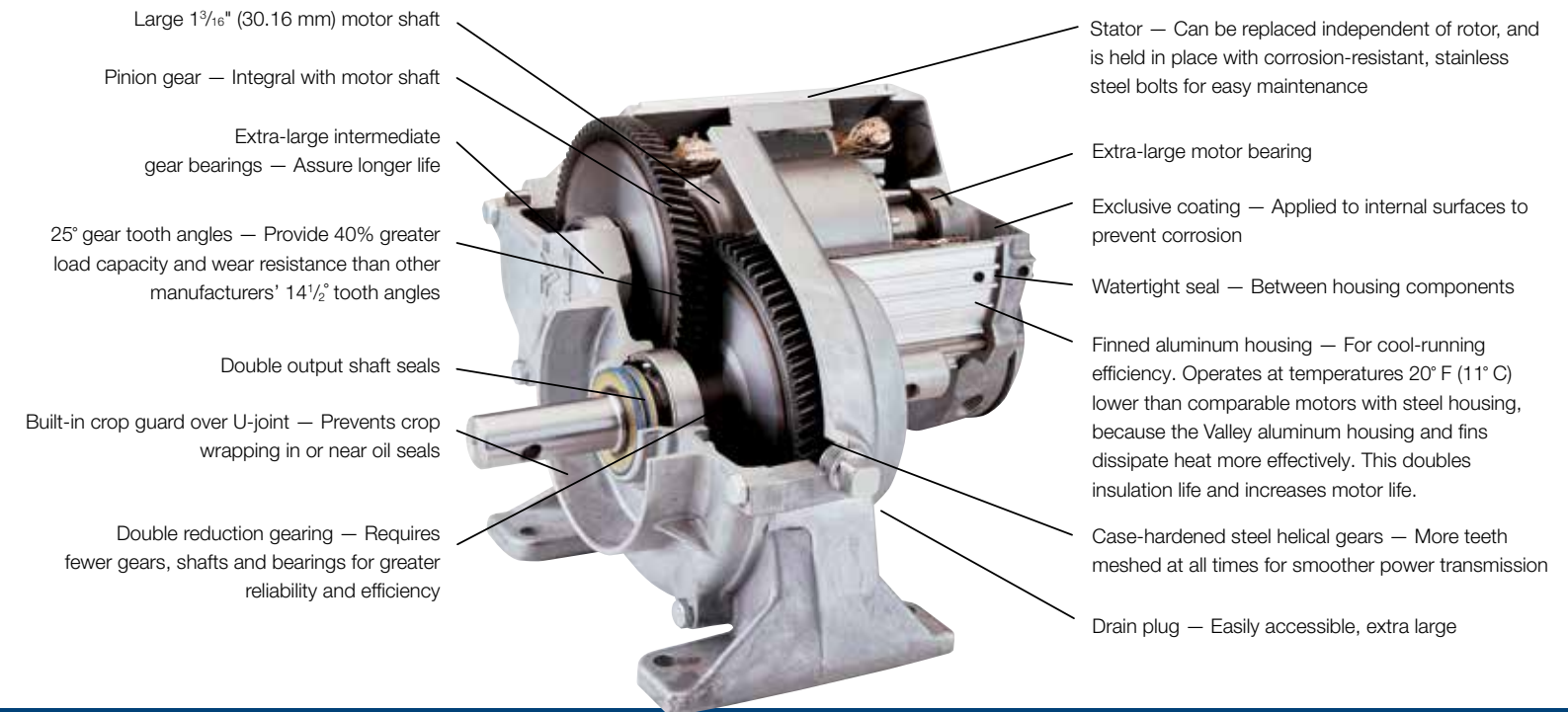
Key Features:

- Steel gears
- Internally vented junction box
- Integral pinion gear
- Helical gears
- Special motor windings for high-torque applications

Benefits:

- Prevents moisture and contaminants from corroding the wire connections
- Eliminates coupler, improves reliability
- More tooth contact than spurgears, providing more torque capacity and quieter operation
- 40% higher operating torque than the competition

Industry-Best Reliability that Keeps Your Machine Running Year After Year



DID YOU KNOW? The Valley center drive averages 3x the life of competitor products.

Valley Motor Cover

The Valley motor cover is made of tough, flexible material that protects your center drive from livestock, weather and corrosive water. Your motor will be completely covered while the vents on the bottom and top ensure the motor stays cool and dry. The cover can be easily removed when it's time to service your machine.

Field Tests Show Your ROI

- The Valley center drive averages three times the life of competitive center drives.
- 40% higher torque rating than competition
- Highest efficiency available
- Lowest power consumption available

Center Drive Application Guide

Model	Recommendations
34 RPM	Standard quarter mile machines where chemigation will not be used; lowest power requirement in the industry means energy savings
43 RPM	Replacement for non-Valley machines Not available with VS-7000
56 RPM	Used on high-speed linear (lateral) carts and LRDU
68 RPM	Long machines or when chemigation will be used; reduces time required to apply chemicals and move the pivot
136 RPM	Machines using Valley X-Tec® FastPass™ technology

The Strongest, Most Trusted Gearbox You Can Buy



11 Reasons the Valley Gearbox is the Best

- Large capacity rubber diaphragm — Expands with heat and pressure to minimize water condensation
- Input and output bearings — case hardened to provide the highest quality and load rating available in the industry
- Worm gear — High-strength ductile iron provides significantly longer wear life than steel when combined with a cast iron bull gear
- Tooth design — Industry-exclusive 25° tooth angle provides 40% longer life and better reliability in tough conditions compared to normal 14½° tooth designs
- Largest bull gear neck and keyway — For strength in critical load-bearing area
- Expansion chamber — Cap made of corrosion resistant cast aluminum; rubber diaphragm allows oil to expand and contract during operation. Vented cap 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 between engaged gears.
- Bull gear — High-strength cast iron provides the highest load capacity in the industry and longest life. Optional bronze gear is available for extreme conditions.
- Multi-viscosity gearbox oil — Exceeds 85w140 GL5 oil for long gear wear under extreme load conditions
- Longest output shaft (steel) — Exclusive to Valley gearboxes. Provides extra clearance between the gearbox and wheel flange, reducing mud buildup, resulting in reduced seal damage and extended gearbox life. Special offset rims position the tire back close to the gearbox to minimize bearing loads ... another Valley exclusive.

All these factors add up to one thing — the best gearbox in the industry, giving you long, trouble-free equipment life.

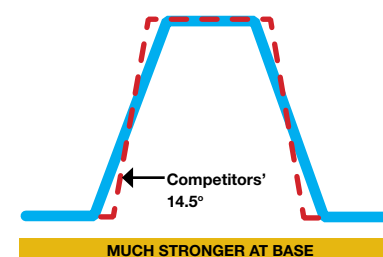
The Valley mission is to provide growers the most durable irrigation equipment in the industry. Valley is the only center pivot company that produces its own gearboxes. The industry-leading Valley gearbox is life-tested and quality checked throughout the process to ensure we are constructing the most reliable and structurally sound gearbox available.

The Valley Gearbox vs. Competitors' Gearbox

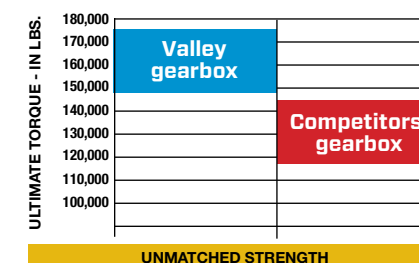
Features:

- 25° tooth angles — Provide greater load capacity and wear resistance than the competition
- Expansion chamber — Cap made of noncorrosive cast aluminum; rubber diaphragm allows oil to expand and contract during operation
- Ductile iron worm gear — Provides higher load capacity against cast iron versus a steel worm gear
- Bull gear — Highest load capacity in the industry and longest life
- Threaded endcap — Allows accurate bearing preload to increase bearing life
- 52:1 gear ratio — Full recessed tooth design keeps oil between engaged gears
- Longest output shaft — This Valley exclusive provides extra clearance between gearbox and tire to reduce mud buildup, which in turn prevents seal damage and extends the gearbox life

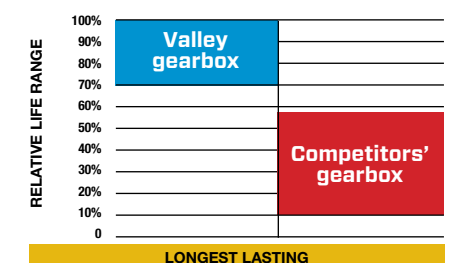
Tooth Comparison



Gearbox Ultimate Output Torque Test

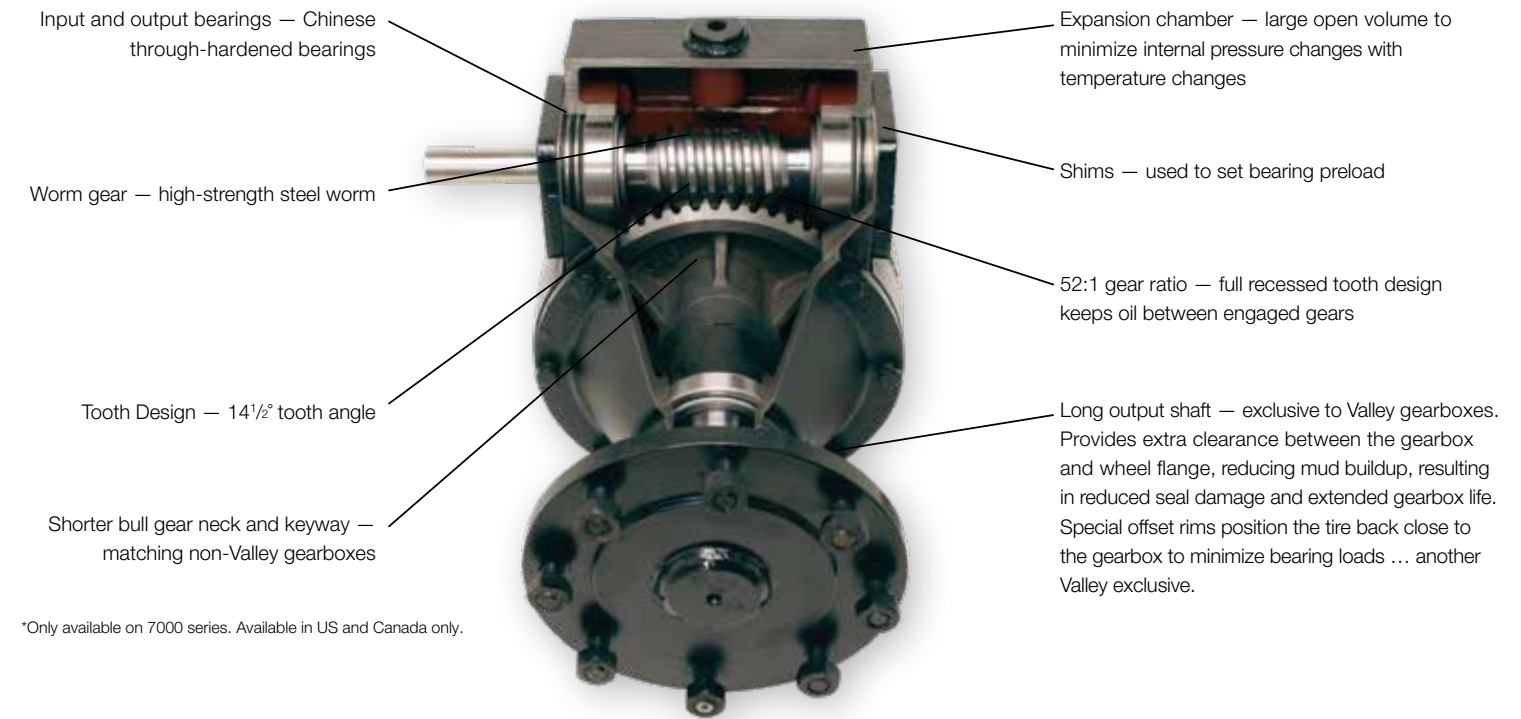


Accelerated Gearbox Life Comparison





Product Specifications:



Gearbox Comparison

VS-7000 Gearbox

The VS-7000 center drive is a high-quality, durable gearbox offered at a lower price point. It offers the performance you expect from Valley, for less demanding terrain. The VS-7000 is the second-best gearbox in the industry.

Features:

- Valley-certified performance specification
- Same helical center drive gearbox
- Same amp draw
- Same torque rating

Not available on the 8000 series. Only available in the US and Canada.



Gearbox Features	Valley Gearbox Benefits	VS-7000 Gearbox Benefits
Superior design	Three times the life of competitive gearboxes, based upon independent tests	Longer life than non-Valley gearboxes
Bull gear	20% higher torque capacity, based on independent tests; machined in Nebraska for optimum quality	Comparable to non-Valley gearboxes
Special offset rims	Positions tire close to gearbox to minimize bearing loads for longer life	Positions tire close to gearbox to minimize bearing loads for longer life
input and output bearings	Case hardened; industry's highest load rating for longer life.	Through-hardened that results – comparable to non-Valley gearboxes
Gearbox housing	More material in high-stress areas to handle extreme operating conditions	Comparable to non-Valley gearboxes
Bronze bull gear option	Provides additional load capabilities with hardened steel worm for extreme operating conditions or extended life under less-severe conditions	Not available



Fixed Pivot Points



Towable Pivots

Valley pivot point options are built for strength and reliability. Each pivot point comes standard with a full set of braces on all four sides and a corrosion-resistant sleeve to allow smooth rotation within the riser seal. With multiple options, you are sure to find the right pivot point to fit your operation.

6 5/8" (168.2 mm) Pivot Point

- Designed for pivots up to nine spans or 1,500' (457.2 m) long

8 5/8" (219 mm) Pivot Point

- Designed for pivots up to 2,800' (853.4 m) long
- Strong, durable roll-formed legs are standard
- Optional stainless steel riser pipe for corrosive water

10" (254 mm) Pivot Point

- Designed for pivots up to 2,800' (853.4 m) long
- Comes standard with heavy-duty legs, service platform and pivot flex
- Extended bearing length for longer life

New lower elbow and riser pipe options available to integrate:

- Seametrics® flow meters
- Nelson® valves
- In-line filters

Valley towable options allow you to irrigate two or more fields with one machine to reduce your installed cost per acre. Each towable machine can be towed from one field to another in less than an hour. You can choose from an on-board engine generator or public power supply to power your machine.

Four-Wheel E-Z Tow

- Maximum lengths up to 1,500' (457.2 m)
- Can be placed on a concrete pad or utilize earth anchors
- Comes standard with tongue hitch for quick, secure hookup without cables
- 8 5/8" (219 mm) pivot point can be towed in any direction

Skid Tow

- Low-cost option best used for infrequent towing
- Can handle even the longest towable units



Two-Wheel E-Z Tow™

- Ideal for part-circle fields or multi-directional towing
- Maximum lengths up to 1,000' (304.8 m)
- Comes standard with tongue hitch design

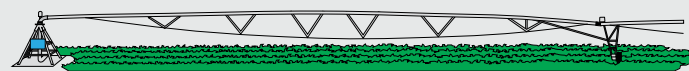


Traction & Floatation

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	✓	✓		✓	
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	✓	✓	✓	✓	✓
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		✓	✓	✓	✓
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
Series Availability		7000* 8000* 8120**	7000* 8000* 8120**	8000* 8120**	8000* 8120**	8000* 8120**

Superior Structures Made with Valley Vision

Valley engineers the structure to ensure field loads are uniformly distributed. Uniform loading, combined with the best drive unit design, make Valley pivots the most resistant to ruts and twisting in a variety of field conditions. Through engineering excellence, Valley is recognized as the industry leader.



Structure Options for Different Heights



Low-Profile Drive Units

- When standard clearances are not required
- Low-Profile clearance: 6' 1" (1.85 m)

Standard Profile Drive Units

- Clearance: 9' 7" (2.9 m)

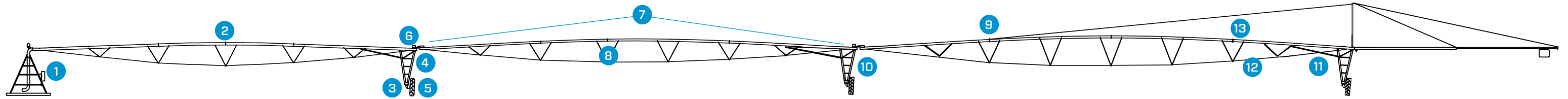
High-Profile and Ultra-High Profile Drive Units

- Provide increased crop clearance
- High-Profile clearance: 12' 11" (3.9 m)
- Ultra-High Profile clearance: 15' 7" (4.74 m)

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' (54.86 m), 6 5/8" (168.2 mm) span on level ground with 11.2-24 tires.

*7000 and 8000 series only available in US and Canada
**8120 series only available outside North America

Durable Valley Structures Designed for Long Life

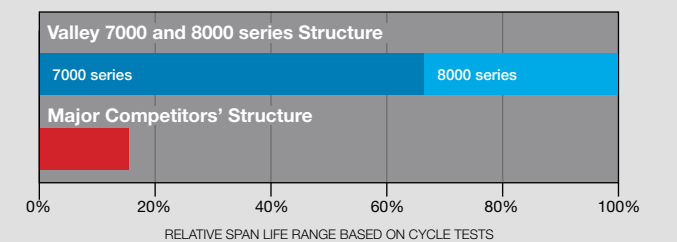


When making decisions that affect your yield and bottom line, look to Valley to provide the strength you need to achieve maximum productivity. In head-to-head tests, Valley machines consistently outperform the competition when exposed to a wide range of loads simulating the everyday rigors faced in the field. These include traveling through the field, going over crop ridges, and moving in and out of field tracks.

Valley has developed a standard, accelerated life cycle test based on past field performance for both Valley and competitive spans, so you can see how they match up. This test subjects the spans to conditions that the span could experience on rough ground with large tires. The span with the longest cycle test life can be expected to last the longest in similar field conditions.

These test results (shown to the right) were certified by an independent professional engineering consultant and prove Valley spans last an average of five to six times longer than our two closest competitors' spans.

Accelerated Structural Life Cycle Test Comparison



1. Field Flexibility

- Customized to fit your field conditions, a Valley can be configured as a pivot or a linear

Pivot Point	8000	7000	8120
6 5/8" (168.2 mm)	✓	✓	✓
8 5/8" (219 mm)	✓		✓
10" (254 mm)	✓		✓

2. Pipeline Flexibility

- Long-term value with the greatest versatility

Pipeline Material	PolySpan®	Galvanized
6" (152.4 mm)	NA	8000
6 5/8" (168.2 mm)	7000/8000	7000/8000
8 5/8" (219 mm)	8000/8120	8000/8120
10" (254 mm)	NA	8000



3. Unitized Base Beam

- Welded gearbox mounts transfer span weight and wheel torque directly to the drive legs



4. Four-Legged Design

- Design distributes the load over a wider section of pipe
- Wrap-around brackets used to distribute the load over a larger area around the pipe, along with attaching the pipeline to the legs



5. Drive Unit Braces

- Balance design for uniform loads on both sides of the drive unit
- Strength and ability to handle rough terrain



6. Ball and Socket

- Allows movement in all directions, which minimizes pipeline stress
- Reduces pressure loss
- Forged ball for increased strength



7. Uniform Crown and Deeper Trussing

- Reduces truss rod loads
- Reduces compression loads on the pipeline
- Design offers unmatched performance and durability
- Short extender pipes are not used to achieve special lengths



8. Flange

- Eight bolts for closer spacing to increase strength
- Thicker flanges to prevent bending



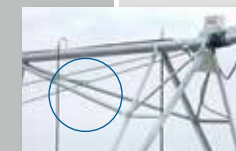
9. Welded Couplers

- Large number of threads on each coupler
- Thicker cross section for long-term life
- Provides strength to support all sprinkler options



10. Diagonal Braces

- Triangular shape for rigid strength, preventing legs from bending
- Ties legs together to act as one large beam



11. Tower Supports

- Attach directly to the pipeline (8000 series)
- Transfer drive unit loads to the pipeline and trussing
- Reduce span roll, enabling the drive unit to remain perpendicular to the pipeline for improved alignment
- Improve rough ground capability
- Share the drive unit loads with trussing and truss rods (7000 series)



12. Forged Truss Rods

- Truss rods – carry the weight of the span and water
- Valley truss rods have a larger radius for longer life and elimination of weld problems



13. Gussets

- Provide improved slope capability, reducing span roll along with improving alignment on rolling ground

Valley center pivots were the first, and continue to be the industry leader. They perform the best, last the longest and command the highest resale value in the industry. Generations of growers have trusted Valley products, technology and service. Experience the best for yourself.

Specifications	8000 series	7000 series	Model 8120
Maximum Machine Length	2800' (853.4 m)	2000' (609.6 m)	2800' (853.4 m)
Maximum Towing Length	1500' (457.2 m)	1500' (457.2 m)	1500' (457.2 m)
Pivot Point Options	6 5/8" (168.2 mm), 8" (203.2 mm) 8 5/8" (219 mm), 10" (254 mm)	6 5/8" (168.2 mm), 8 5/8" (219 mm)	6 5/8" (168.2 mm), 8" (203.2 mm) 8 5/8" (219 mm), 10" (254 mm)
Pipe Diameter Options	6" (152.4 mm), 6 5/8" (168.2 mm), 8 5/8" (219 mm), 10" (254 mm)	6" (152.4 mm), 6 5/8" (168.2 mm)	5" (127 mm), 6" (152.4 mm), 6 5/8" (168.2 mm), 10" (254 mm)
Span Length Options	115' (35.05 m) to 225' (68.58 m)	115' (35.05 m) to 205' (62.48 m)	123 ft (37 m) - 236 ft (72 m) for 6-5/8" pipe
Span Connection	Ball and socket	Ball and socket	Ball and socket
Overhang Options	9' (2.74 m) to 100' (30.48 m)	9' (2.74 m) to 100' (30.48 m)	9' (2.74 m) to 100' (30.48 m) for 6-5/8" pipe only
Towable Pivot Point Options	Two-Wheel EZ Tow, Four-Wheel EZ Tow, Skid Tow	Two-Wheel EZ Tow, Four-Wheel EZ Tow	Two-Wheel EZ Tow, Four-Wheel EZ Tow, Skid Tow
Booster Pump Options	2 HP, 5 HP, 7.5 HP	2 HP, 5 HP	2 HP, 5 HP, 7.5 HP
Tire Size Options	11.2 x 24" (284.48 x 609.6 mm) 11.2 x 38" (284.48 x 965.2 mm) 11 x 22.5" (279.4 x 571.5 mm) 14.9 x 24" (378.46 x 609.6 mm) 16.9 x 24" (429.26 x 609.6 mm) 18.4 x 26" (467.36 x 660.4 mm) Valley Revolution™ airless tire	11.2 x 24" (284.48 x 609.6 mm) 11.2 x 38" (284.48 x 965.2 mm) 11 x 22.5" (279.4 x 571.5 mm) 14.9 x 24" (378.46 x 609.6 mm) 16.9 x 24" (429.26 x 609.6 mm) 18.4 x 26" (467.36 x 660.4 mm) Valley Revolution™ airless tire	11.2 x 24" (284.48 x 609.6 mm)* 11.2 x 38" (284.48 x 965.2 mm)* 11 x 22.5" (279.4 x 571.5 mm) 14.9 x 24" (378.46 x 609.6 mm)* 16.9 x 24" (429.26 x 609.6 mm) 18.4 x 26" (467.36 x 660.4 mm) Valley Revolution™ airless tire
Drive Train	Valley and Valley HD	VS-7000 and Valley	Valley and Valley HD
157.5' Span Weight (lbs) – Wet	n/a	n/a	n/a
160' (49 m) Span Weight – Wet	6,200 (6 5/8" / 168.2 mm)	5,900 (6 5/8" / 168.2 mm)	6,200 (6 5/8" / 168.2 mm)
180' (54.9 m) Span Weight (lbs) – Wet	6,800 (6 5/8" / 168.2 mm)	6,400 (6 5/8" / 168.2 mm)	6,790 (6 5/8" / 168.2 mm)
205' Span Weight (lbs) – Wet	7,500	7,100	n/a
Truss Rods	3/4" (19.05 mm), 13/16" (20.64 mm), 7/8" (22.23 mm)	1 1/16" (17.46 mm); 3/4" (19.05 mm) (on 205' only)	3/4" (19.05 mm), 13/16" (20.64 mm), 7/8" (22.23 mm)
Truss Angle	2 x 2 x 3/16" (50.8 x 50.8 x 4.76 mm)	2 x 2 x 1/8" (50.8 x 50.8 x 3.18 mm)	2 x 2 x 3/16" (50.8 x 50.8 x 4.76 mm) on 6-5/8" and 10" pipe; 2 x 2 x 1/8" (50.8 x 50.8 x 3.18 mm) on 5" pipe
Drive Leg Options	3 x 3 x 1/4" (76.2 x 76.2 x 6.35 mm)	3 x 3 x 3/16" (76.2 x 76.2 x 4.76 mm)	3 x 3 x 1/4" (76.2 x 76.2 x 6.35 mm) on 6-5/8" and 10" pipe; 3 x 3 x 3/16" (76.2 x 76.2 x 4.76 mm) on 5" pipe
Floatation and Traction Options	Three-Wheel Drive, Articulating Four-Wheel Drive, Track Drive, agri-TRAC, RAAFT Track	Three-Wheel Drive	Three-Wheel Drive, Articulating Four-Wheel Drive, Track Drive, agri-TRAC, RAAFT Track
Corner Arm Available	✓	✓	✓
480v Engine Generator	✓	✓	380V/50Hz or 480V/60Hz gensets
Bender 30 / 160	✓	✓	✓
DropSpan	✓	✓	✓

* Restrictions may apply for spans 66m and longer or heavy spans (10")

See your local authorized Valley dealer for complete details.

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 brochure. 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 specifications at any time without incurring obligations.

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