

Valley Structures[®]



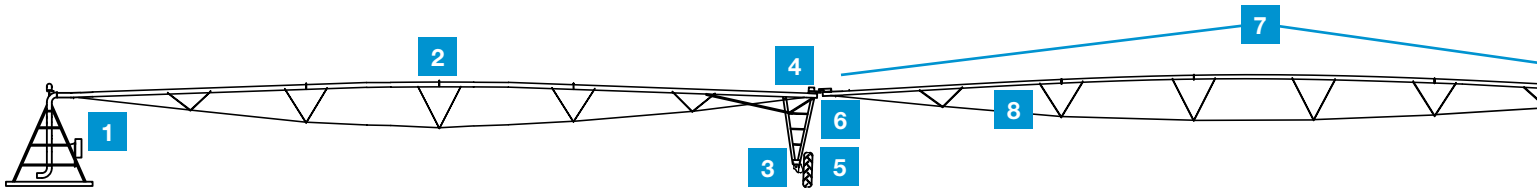
RELIABLE
DRIVE TRAINS

DURABLE
STRUCTURES

PRECISE
APPLICATIONS

ADVANCED
TECHNOLOGIES

RESPONSIVE
DEALERS



Superior Structures Made with Valley[®] Vision

When making decisions that affect your yields and bottom line, look to Valley to provide the structural strength you need to achieve maximum productivity. Valley machines have been put to the test against all types of field conditions. Going head to head with the competition, Valley machines consistently outperform when exposed to a wide range of settings simulating the everyday rigors you face in the field. Tested for safety, durability and strength, only Valley beats the competition, giving you the most value the industry has to offer.

Valley engineers provide the expertise and vision to create elements within the structural design that ensures the field loads are distributed uniformly throughout the structure. Uniform loading combined with the best drive unit design makes Valley pivots the most resistant to ruts, twisting, as well as pull-out and pull-in of loads. Through engineering excellence, Valley pivots are long-lasting structures that bring a return of long-term value to your operation.

1 Field Flexibility

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



	Pivot Point	8000	7000
	6 5/8"	X	X
	8"	X	X
	8 5/8"	X	
	10"	X	

2 Pipeline Flexibility

Long-term value with the greatest versatility



Pipeline Material	6"	6 5/8"	8 5/8"	10"
PolySpan [®]	NA	7000/8000	8000	NA
Stainless Steel	NA	8000	8000	NA
Weathering Steel	NA	7000/8000	7000/8000	NA
Galvanized	8000	7000/8000	8000	8000

3 Unitized Base Beam

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



4 Four Legged Design

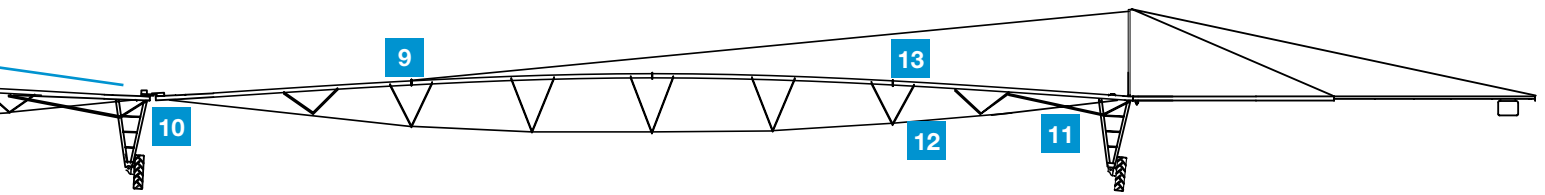
- Design distributes the load over a wider section of pipe
- Wrap-around brackets used to distribute the load over a larger area around the pipe, along with attaching the pipeline to the legs



5 Drive Unit Braces

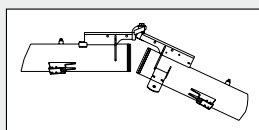
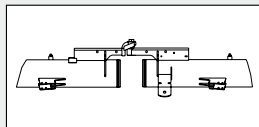
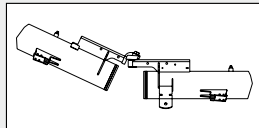
- Balance design for uniform loads on both sides of the drive unit
- Strength and ability to handle rough terrain





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

10 Diagonal Braces

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



11 Tower Supports

- Attaches directly to the pipeline (8000 series)
- Transfers drive unit loads to the pipeline and trussing
- Reduces span roll, enabling the drive unit to remain perpendicular to the pipeline for improved alignment
- Improved rough ground capability



8 Flange

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



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



9 Welded Couplers

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



13 Gussets

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



Valley 7000 series differences

Equipped for field versatility and affordability



Drive Unit Gusset

- Two drive unit gussets for added stability on rough ground
- Improves slope capabilities

Tower Support

Shares the drive unit loads with trussing and truss rods

	7000 series (Better)	8000 series (Best)	Benefits of 8000 series
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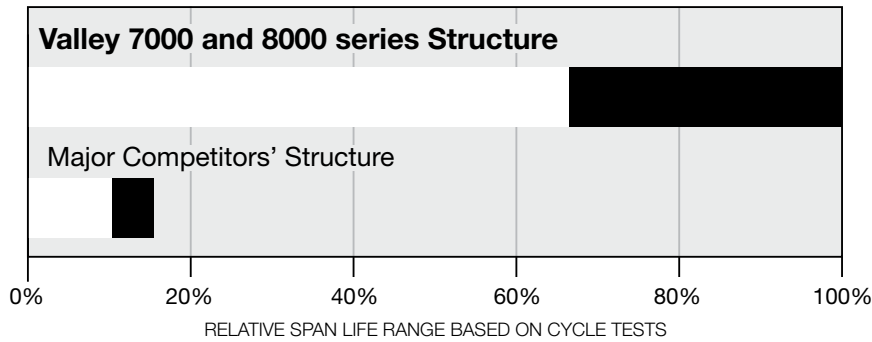
Specifications

Pivot Point	6 5/8" and 8"	6 5/8", 8", 8 5/8", 10"	Ladder, Platform, 8"-10" Riser Pipe Options
Pipe Diameters	6 5/8"	6", 6 5/8", 8 5/8", 10"	Reduced Friction Loss; Increased Flow Options
Booster Pump Option	2 HP and 5 HP (optional)	2 HP, 5 HP, and 7.5 HP (optional)	Water Uniformity @ All GPMs
160' Span Weight - Wet (6 5/8" pipe diameter)	5890	6200	Increased stability in high winds
180' Span Weight - Wet (6 5/8" pipe diameter)	6410	6790	Increased stability in high winds
Truss Angle	2 X 2 X .125"	2 X 2 X .163" (2 X 2 X .125" on 6" pipe)	More steel, improved alignment
Drive Leg	3 X 3 X 3/16"	3 X 3 X 1/4" (3 X 3 X 3/16" on 6" pipe)	33% more steel for increased durability
Truss Rods	11/16" Steel	3/4", 13/16", 7/8" Steel	20% more steel, improved alignment
Precision Corner	No	Yes	
Valley Corner	Yes	Yes	

Durable Valley Structures Designed for Long Life

Accelerated Structural Life Cycle Test Comparison

Test results certified by independent consultant James D. Summers, P.E.



NOTE: 100% represents the maximum value for the Valley 7000 and 8000 series cycle tests. The relative life ranges for both Valley and competitive spans were increased +/- 15% to account for potential span-to-span variability.

Introduced in 1994, the Valley 8000 series has proven to be the most durable, long lasting structure available. In 2006, the lower cost 7000 series was added to the product line. As the tests indicate, Valley offers you two structural choices, both of which exceed the life of the competition.

When it comes to investing in irrigation equipment, structural life is critical. You are making a long term investment that is expected to last for many years without requiring costly repairs. Valley has built its reputation by providing the most durable equipment available in the market. That is why Valley is recognized as the industry leader against which everyone else is compared and why used Valley equipment commands a significant premium over other competitive manufacturers' equipment.

To insure this leadership position, Valley continuously makes product improvements and regularly tests its products against the competitors' products using an accelerated cycle life test. Ultimately, the field determines how good a product is but it may take ten or twenty years for a design weakness to show up, well beyond the warranty period. It is impractical to wait that long to determine how durable a product is going to be long term.

As the structure moves through the field, going over crop ridges and potentially in and out of wheel tracks, the tires are subjected to repeated field loads. These repetitive loads can result in structural components developing cracks and ultimately failing. Over the past fifty years, Valley has developed a standard accelerated cycle test to simulate these field loads which can be used to predict the affect of future design changes on long term durability.

Certified test results of the industries most popular span (179' / 180') show Valley spans to last longer than competitive spans. The structure with the longest cycle life can be expected to exhibit the longest life in the field under similar conditions.

Valley long life is just one of the reasons Valley is your best long term value and why over 50% of the pivots sold are Valley.



Cycle test simulates the push in and pull out loads applied to the tire, as a pivot moves around a field.

*Outcomes may vary under different field conditions.

The Valley 7000 series is 86% as strong as the Valley 8000 series

Understanding maximum potential loads is essential for a good design. Ultimate strength tests measure the ability of the structure to withstand extreme loads such as deep wheel tracks, misalignment and towing. The lower cost 7000 series structure has been designed to be strong enough to handle typical field requirements. However, it does have certain limitations that would require using the stronger 8000 series for additional strength.

You'll never have to question the quality of a Valley. Devoted to upholding our reputation as the industry leader, our equipment must perform throughout all phases of our demanding engineering tests so they can pass the most important test of all – your approval.

Cutting-edge Confidence

With over 100 years of combined engineering experience, you can count on Valley products to uphold the promise of reliable mechanized components; durable, reliable structures; precise water application; easy-to-use controls; and products tailored to fit your needs.

Valley engineers are proud of their reputation to provide resilient structures that withstand everyday farming practices by engineering machines to go the extra mile when challenges are encountered in the field. It's their dedication to creating a final product that is not only structurally sound, but surpassing of even your highest expectations. Get the most return from your investment – get Valley value.



Rely on Valley® Dealers

Dedicated to decreasing equipment downtime, Valley dealers complement the structural integrity of the pivots through their extensive product knowledge, rapid responsiveness and flexibility to fit your particular needs.

Valley's dealer network with Valmont-trained technicians offer service you can count on. At Valley, your field's success is our success. With dealer strength equal to Valley's structural strength, you can always count on unbeatable equipment performance – it's precision irrigation made easy®.



Conserving Resources. Improving Life.

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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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