

Valley®

# Structures

RELIABLE | DURABLE | PRECISE | ADVANCED | RESPONSIVE



**VALLEY** 

The Leader in Precision Irrigation

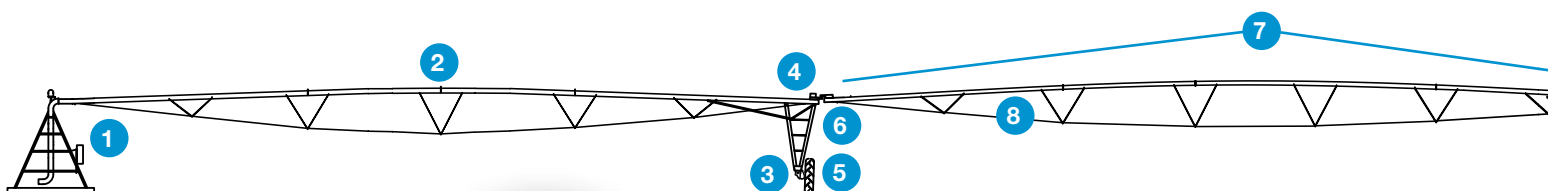
# Durable Valley® Structures De

When making decisions that affect your yield and bottom line, look to Valley® to provide the strength you need to achieve maximum productivity. Going head to head with the competition, Valley machines consistently outperform 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.

The relative life ranges for both Valley and the competition were increased +/- 15% to account for span variability.



## 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	

## 5 Drive Unit Braces

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



## 9 Welded Couplers

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



## 2 Pipeline Flexibility

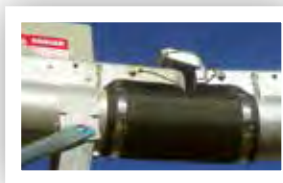
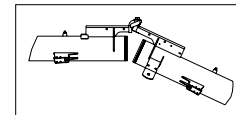
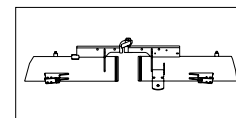
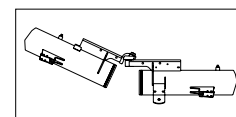
- Long-term value with the greatest versatility



Pipeline Material	6"	6 5/8"	8 5/8"	10"
PolySpan®	NA	7000/8000	8000	NA
Galvanized	8000	7000/8000	8000	8000

## 6 Ball and Socket

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



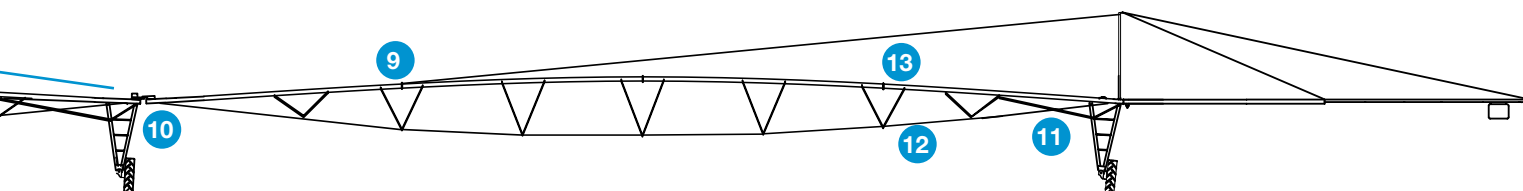
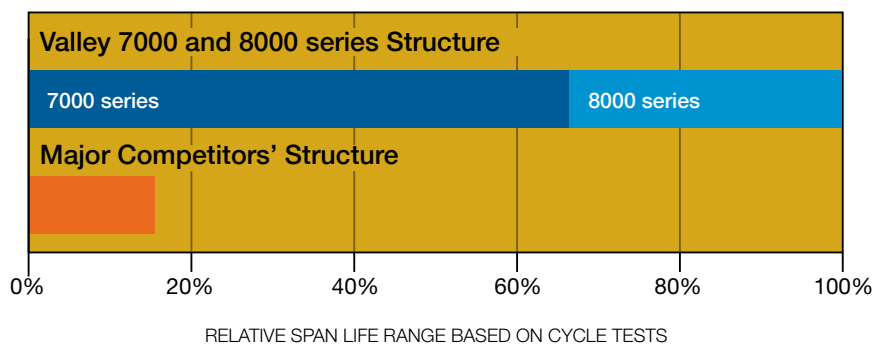
## 10 Diagonal Braces

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



# Designed for Long Life

## Accelerated Structural Life Cycle Test Comparison



### 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

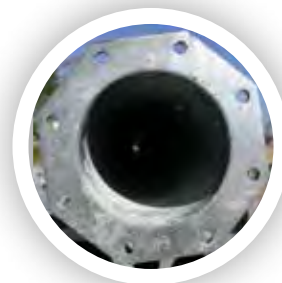


### 7 Uniform Crown and Deeper Trussing

- 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



### 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
- Shares 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

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



# Superior Structures Made with Valley Vision

Valley engineers provide the expertise and vision to create elements within the structural design that ensure field loads are distributed uniformly throughout the structure. 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 against which all others are compared.

	7000 series (Better)	8000 series (Best)	Benefits of 8000 series
<b>SPECIFICATIONS</b>			
Pivot Point	6 5/8" and 8"	6 5/8", 8", 8 5/8", 10"	Ladder, platform, 8 5/8"-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 at all GPMs
160' Span Weight (lbs) - Wet (6 5/8" pipe diameter)	5,890	6,200	Increased stability in high winds
180' Span Weight (lbs) - Wet (6 5/8" pipe diameter)	6,410	6,790	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	
VFlex™ Corner	Yes	Yes	



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.