

# Valley® Long Spans

RELIABLE | DURABLE | PRECISE | ADVANCED | RESPONSIVE



**VALLEY** 

The Leader in Precision Irrigation

Valmont® Irrigation builds the longest and strongest spans in the industry. Our long spans provide the same strength and durability you've come to expect from Valley® products.

- Our engineers design and test Valley long spans to withstand the most demanding strength and durability requirements.
- Our long spans meet the same performance standards as all other Valley spans.
- Our span design philosophy incorporates 60 years of experience, as well as the latest computer design technologies, such as 3-D modeling and Finite Element Analysis.
- Valley spans far exceed the strength of other brands.

## Why Choose Long Spans?

Longer spans save you money by reducing the purchase cost of your machine and eliminating the ongoing operation and maintenance associated with extra drive units.

Fewer drive units mean:

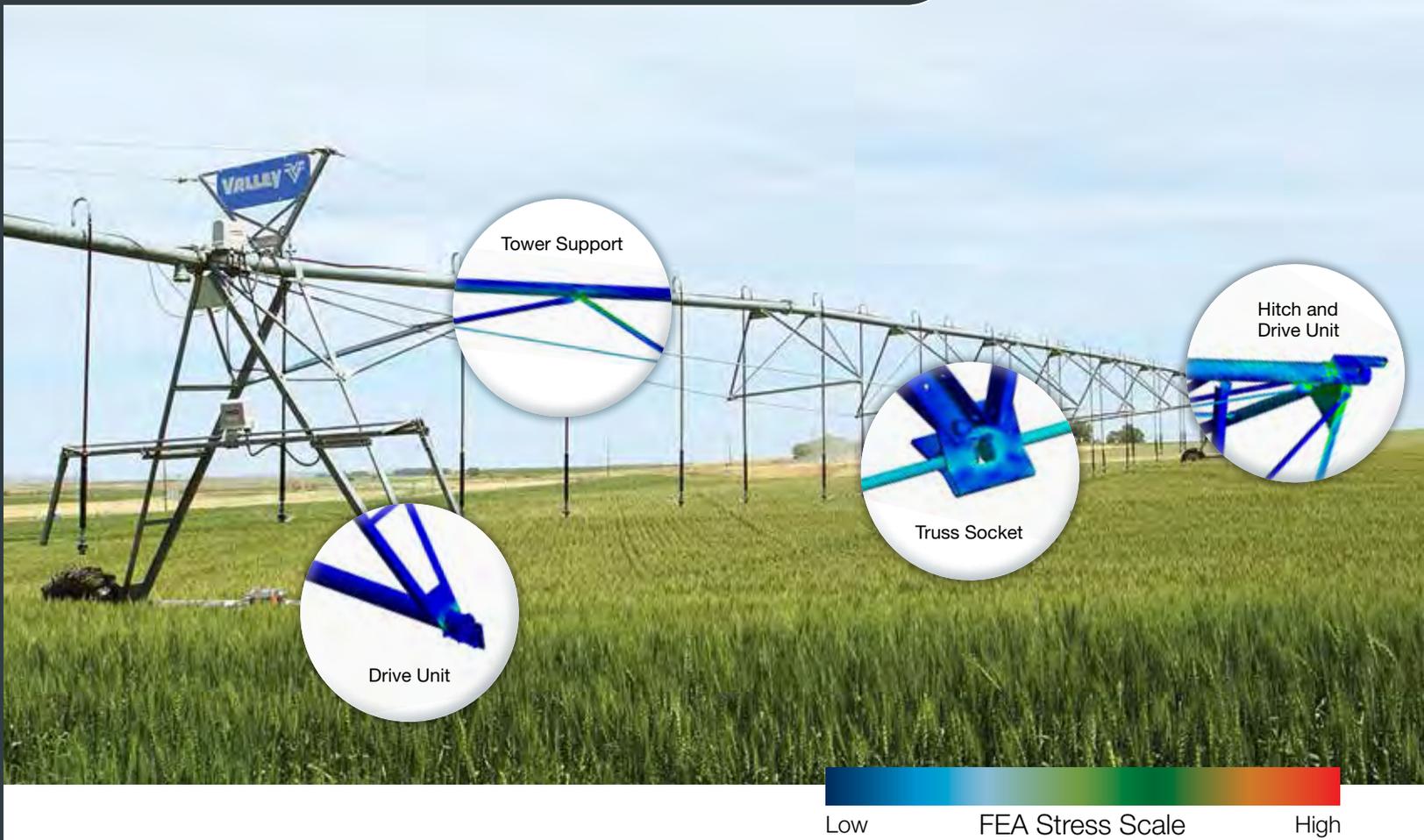
- Reduced purchase and per-hectares costs
- Fewer tires, gearboxes and motors to maintain and replace
- Fewer wheels mean fewer tracks in the field for less crop damage
- Lower energy costs with less center-drive motors to operate

Key Valley long span design features:

- Extra-deep trussing and special rods to ensure even loading throughout the span
- Close truss spacing and wide v-jack design to stabilize the pipe
- Valley-exclusive tower support and tie-brace design firmly anchor the span to the drive unit



# Finite Element Analysis (FEA)



The FEA drawings above illustrate stress points on the center pivot. Blue equals zero stress, while red indicates the highest level of stress. This sophisticated design technology allows Valmont Irrigation engineers to virtually simulate field loads on the structure to ensure strength and durability.

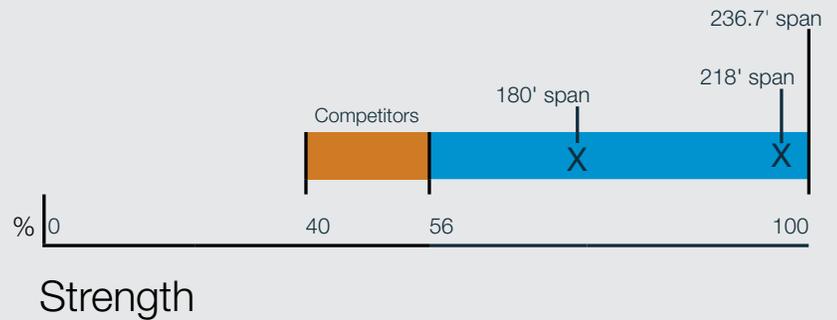
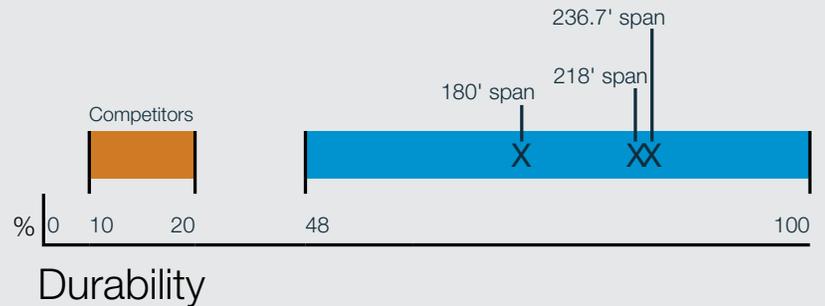
Model 8120 Span Specifications							
	6 5/8" Spans				5" Spans		
Length	54,86 m (180.0')	60,62 m (198.9')	66,45 m (218.0')	72,15 m (236.7')	54,86 m (180.0')	60,62 m (198.9')	66,20 m (217.7')
Trussing	8	9	10	11	8	9	10
Wet Weight	3,081 kg (6,792 lbs)	3,333 kg (7,348 lbs)	3,574 kg (7,880 lbs)	3,837 kg (8,459 lbs)	2,468 kg (5,442 lbs)	2,662 kg (5,870 lbs)	2,854 kg (6,292 lbs)
Slope Limits	11%	9%	7%	7%	15%	14%	7%
Crop Clearance	2,90 m (9.5')	2,83 m (9.3')	2,77 m (9.1')	2,65 m (8.7')	2,90 m (9.5')	2,83 m (9.3')	2,83 m (9.3')

# The Proof Is in the Data

The Valley brand has built its reputation by providing the most durable equipment in the market, and we have the test data to prove it.

We regularly test our products using an accelerated life cycle test. The test simulates field loads and predicts the effect of design on long-term durability. The test results prove that our long spans are just as strong and durable as shorter Valley spans.

These graphs illustrate the range of strength and durability for all Valley spans, which is significantly better than the competition. Within this range, the long spans perform as well as the Valley shorter structures.



## Long span myths busted

Don't be fooled by myths about long center pivot spans.

Some growers are concerned about wind resistance. Don't worry.

- Valmont Irrigation engineers test each span length to ensure it meets our rigid specifications for stability and wind resistance.

Growers often believe heavier spans have deeper wheel tracks. Not true.

- Wheel tracks are affected by ground pressure, tire width and tread style, not the span weight. Selecting the proper tire size and maintaining the correct inflation pressure will ensure minimal wheel rutting.
- Span weight (with water) for the 66 m 6 5/8" span is similar to the 43 m 8 5/8" span (3,575 kg).



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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