

Valley–The Best Value



RELIABLE
DRIVE TRAINS

DURABLE
STRUCTURES

PRECISE
APPLICATIONS

ADVANCED
TECHNOLOGIES

RESPONSIVE
DEALERS

The Perfect Fit.

More sizes, more real choices.

As the worldwide leader in mechanized irrigation, Valley knows that one size does not fit all. That's why we offer the broadest range of machines in the industry. Our 8000, 7000, and 5000 series pivots fit more fields than any other manufacturer.



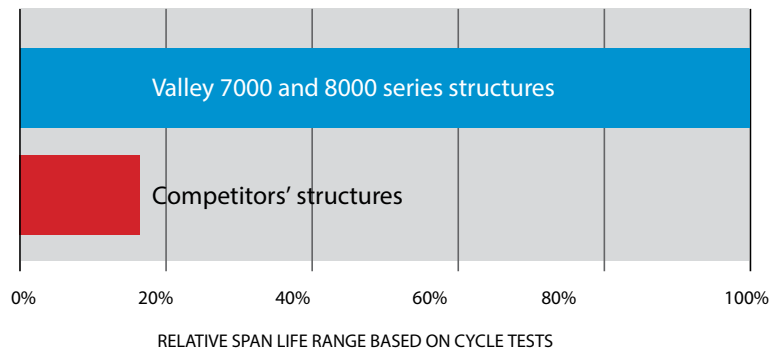
No one fits the way you farm like Valley.

Most Durable Structure

From pivot point to end tower, the entire Valley structure is engineered, constructed, and field-tested to handle the operating stresses that your machine may experience. Valley structures stand up to the toughest loads produced by rough terrain, furrows, and long-span machines better than any competitive machine. Tests supervised by an independent professional engineer confirm these results. With longer life and hot-dip galvanizing which provides the best overall corrosion protection available today, it is no wonder Valley pivots, corners, and linears command the highest resale value in the industry.



Accelerated Structural Life Cycle Test Comparison



Accelerated Life Test

Over the years, Valley has developed a standard accelerated life cycle test based on past field performance for both Valley and competitive spans. This test subjects the span to both pull-out and pull-in loads that the span could experience on rough ground with large tires. If a span passes our test requirements, you can feel confident that it will perform well in your field. Test results are a relative measure of future field performance. The span with the longest cycle test life can be expected to last the longest in the field under similar field conditions. The relative life ranges for both Valley and the competition were increased +/- 15% to account for span to span variability.

Tests certified by independent consultant Dr. James D. Summers, P.E. prove Valley spans on average last 5 to 6 times longer than our two closest competitors' spans.

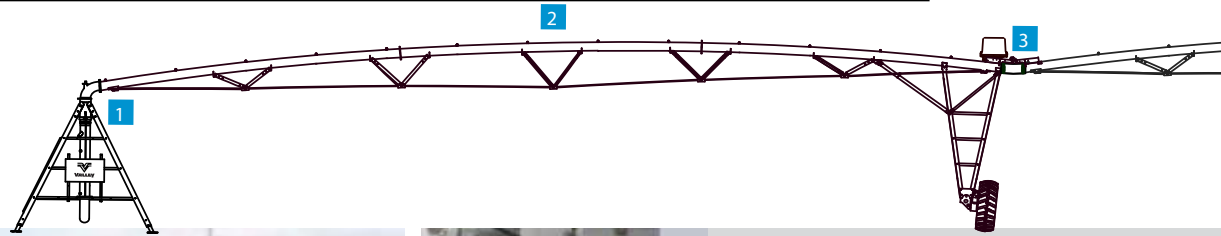
Engineered Spans

The Valley design philosophy has been developed over more than 55 years. We learned a long time ago that the key to long structural life is the strength of the overall design, not the strength of an individual component. By utilizing the latest computer design technologies, (3-D modeling and finite element analysis) Valley engineers are able to optimize the overall design for maximum life.

Custom designed pipes and trussing designed for each span length ensure a smooth crown and truss shape resulting in uniform component loads throughout the span. Other manufacturer's use of universal pipes and trussing force fits the components together resulting in non-uniform span shapes and uneven component loads. The use of universal component designs are good for simplifying manufacturing operations and reducing inventory costs but not for optimum span life.

Uniform loading combined with the best drive unit design makes Valley the most resistant to ruts, twisting as well as pull-out and pull-in loads.

It is why Valley pivots, corners, and linears command the highest resale value in the industry.



1 Pivot Point Choices

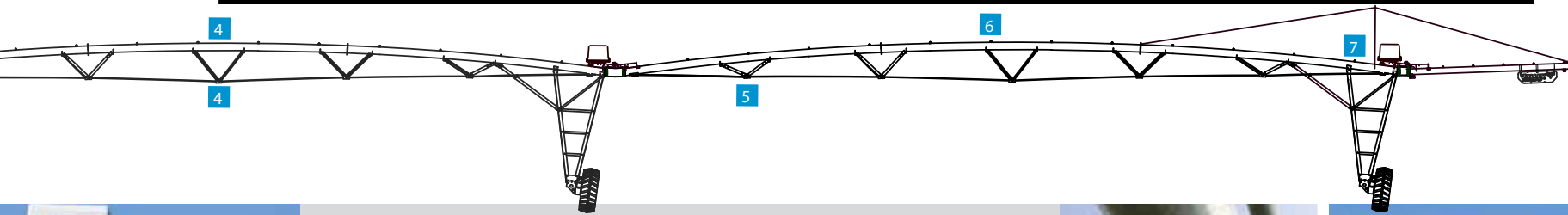
- Four pivot point choices to match your field requirements
- Teflon impregnated triple lip riser seals are standard for leak-free operation under all pressure conditions
- Smooth stainless steel internal rotating sealing surface for longer life

2 Material choices to match your farm chemical and water conditions to maximize the life of your investment

Galvanized Steel	Best choice for most applications.
PolySpan [®] lined Steel	Best choice for corrosive water or when chemicals are being added. Resistant to all chemicals.



PolySpan[®] Pipe



3 Ball and Socket

- Allows for movement in all directions, which minimizes pipeline stress
- No internal obstructions which minimizes pressure loss
- Forged ball for maximum strength and durability
- No lifting equipment is required to replace boot



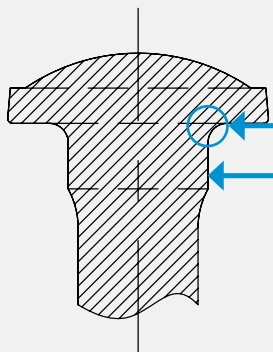
Wrap around welded assembly

4 Uniform Crown and Deep Trussing

- Custom designed pipes and trussing results in a smooth structural shape ensuring uniform stress on all components, unlike other manufacturers' forced fit and higher stressed universal pipes and trussing
- Deeper trussing reduces pipeline and truss rod stress
- Customized design for longest life
- Short extender pipes are not used to achieve multiple span lengths

5 Forged Truss Rods

- Larger root radius for increased life
- Increased diameter near head for increased strength
- Eliminates problems associated with welded and bolted assemblies



Larger root radius

Increased diameter

6 Welded Sprinkler Outlets

- Thick cross section to support all sprinkler options
- Doesn't protrude into pipeline – no pressure loss
- Proven design



7 Drive Unit

- Four leg design distributes the load over a wider section of pipe to reduce pipe stress and increase life
- Solid pipes with no flange between or near the legs is stronger and eliminates flange gasket leaks
- Equal bracing on each side provides balanced strength in both forward and reverse direction
- Wrap around welded attaching assemblies distribute the load over a larger area of the pipe for increased life
- Diagonal brace ties legs, braces, and tower supports together for maximum strength
- Rigid design provides improved span alignment on rough terrain



The Valley Gearbox... Made in the USA

Valley builds its own gearbox for two reasons:

1. Nobody else builds a gearbox that will meet our life requirements.
2. We have complete quality control over how it is made and the components that go into it.

Only Valley has their own staff of gearbox design and manufacturing engineers to monitor product quality on a daily basis plus an in-house test facility to continuously test random production gearboxes for quality.

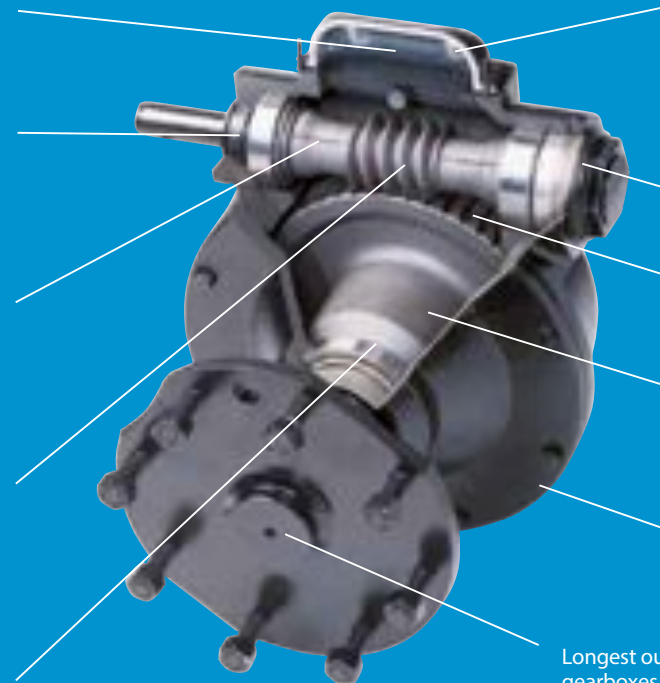
Large capacity rubber diaphragm — expands with heat and pressure to minimize water condensation.

Input and output bearings — American made and case hardened to provide the highest quality and load rating available in the industry to insure a long, trouble-free life.

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 engaged between gears.

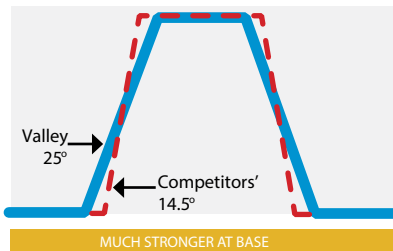
Bull gear — high strength cast iron provides the highest load capacity in the industry and longest life. Optional bronze gear is available for extreme conditions.

Multi-viscosity gearbox oil — exceeds 85w140 GL5 oil for long gear wear under extreme load conditions.

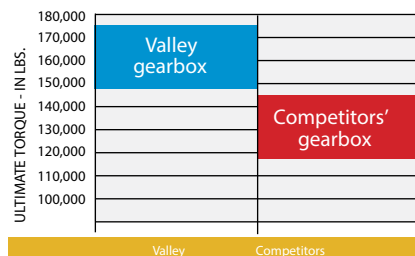
Longest output shaft (steel) — exclusive to Valley gearboxes. Provides extra clearance between the gearbox and wheel flange, reducing mud buildup, resulting in reduced seal damage and extended gearbox life. Special offset rims position the tire back close to the gearbox to minimize bearing loads...another Valley exclusive.



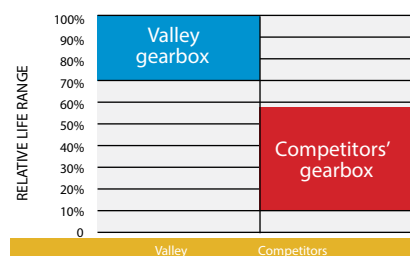
Tooth Comparison



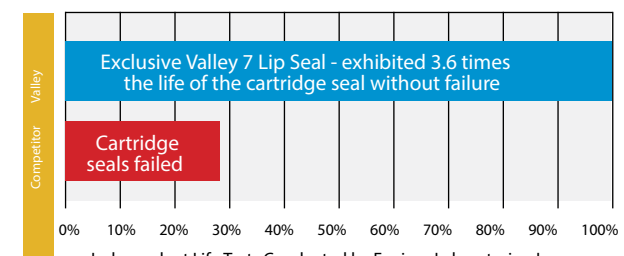
Gearbox Ultimate Output Torque Test



Accelerated Gearbox Life Comparison



Relative Seal Life – Seal Industry Mud Test



The Valley Center Drive...

Engineered for Reliability

Designed to Valley specifications to provide the industry's highest efficiency combined with long reliable life

- Helical gears provide more tooth contact than spur gears for longer life
- Precision machined steel gears are stronger than powdered metal gears
- Special windings are UL rated to produce 40% more torque than the competition
- Junction box is internally vented into motor so motor heat can keep it dry preventing corrosion
- Round junction box cover seals uniformly to keep water out
- Available from Bevattningsteknik.

Large 1 3/16" motor shaft

Pinion gear — integral with motor shaft.

Extra-large intermediate gear bearings — assure longer life.

25° gear tooth angles provides 40% greater load capacity and wear resistance than other manufacturers' 14 1/2° tooth angles.

Double output shaft seals

Built-in crop guard over U-joint — prevents crop wrapping in or near oil seals.

Double reduction gearing requires fewer gears, shafts, and bearings for greater reliability and efficiency.

Stator — can be replaced independent of rotor, and is held in place with corrosion-resistant, stainless steel bolts for easy maintenance.

Extra-large motor bearing

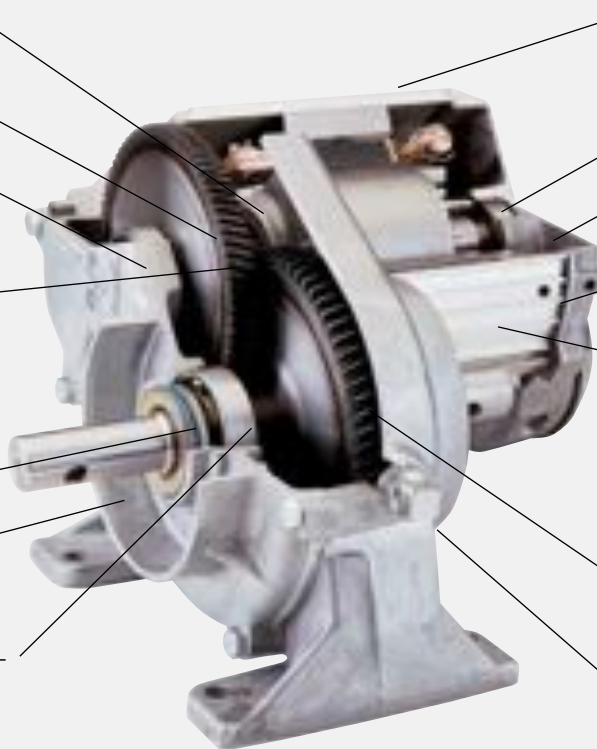
Exclusive coating — applied to internal surfaces to prevent corrosion.

Watertight seal — between housing components.

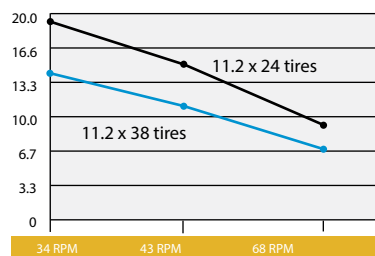
Finned aluminum housing — for cool-running efficiency. Operates at temperatures 20° F (11° C) lower than comparable motors with steel housing, because the Valley aluminum housing and fins dissipate heat more effectively. This doubles insulation life and increases motor life.

Case-hardened steel helical gears — much stronger than powdered metal for longer life.

Drain plug — easily accessible, extra large.



Minimum rotation time in hours



Valley provides the optimum choices to fit your farming practices. For normal irrigation, 34 RPM provides the lowest current requirement and minimum starts and stops to reduce inrush current. For growers who want to chemigate, 68 RPM is recommended so that a revolution can be completed in less time. A 43 RPM unit is also available for 7000 and 8000 series machines.

Valley backs our center drive with the best warranty in the industry – 8 years full parts and labor.

Valley Control Panel Choices

NEW

Valley offers a full line of easy to use control panels including the industry's first line of GPS Ready panels (panel does the GPS calculations so a separate computer is not needed). GPS offers enhanced management capabilities for the precise application of water, fertilizers, and crop inputs with the potential of higher yields and lower input costs.



Valley TouchPro Panel – GPS Ready

The most advanced control panel designed to simplify programming.

The user friendly Touch technology allows growers to custom-configure the full-color main screen. Designed for easy programming including: load management programming, a graphic view of the pivot position, end gun positions, and wide boundary positions.

5 Year, Industry Exclusive, Warranty



Valley ClassicPlus Panel

Provides all the features you need to control a pivot with easy to operate switches for manual operation. The Valley ClassicPlus panel is upgradable to the Select2 and Pro2 panels as your needs change.

2 Year Valley Warranty



Valley Select2 Panel – GPS Ready

A backlit keypad and display is standard. End gun, stop-in-slot, and auto reverse positions can be easily set right in the control panel. Other features include pivot position reporting and field sector controls that allow you to change water application for different crops or soils. Select2 incorporates the same field proven processor technology as the Valley Pro2. VRI - Variable Rate Irrigation is standard.

3 Year Valley Warranty



Valley Pro2 Panel – GPS Ready

Features include fully programmable functions based on date, time, and position. Additional inputs allow you to conserve and manage available water and get precise water application, fertilization, and chemigation. The flow meter option helps you track your overall water usage. A automatic speed adjustment allows you to set a defined number of degrees to be completed by a specified time. VRI - Variable Rate Irrigation is standard.

5 Year, Industry Exclusive, Warranty



AutoPilot – GPS Ready

Linear control panel measures the lateral position and direction of travel of the linear, allowing functions to be programmed to run automatically.

2 Year Valley Warranty



Technology Leader

Remote Communications

Monitor and control your pivot from anywhere saving both time and money. Remote communications allow you to keep track of your pivots while at the same time doing something else such as spending time with your family or doing other work on the farm. Valley offers you the choice of cellular communications or direct radio control .

Cellular Remote Communications – Valley Tracker Products

Alarm messages on all Tracker products sent to cell phone or Tracker website

TrackerLT

- Provides you the basic essentials when it comes to monitoring and controlling center pivots
- Can be installed on Valley and non-Valley pivots



Contact Bevattningsteknik for full description of tracker features.



Tracker2

- Allows the integration of Valley and non-Valley panels into the same management system
- Can be installed on Valley and non-Valley pivots

TrackerSP

- Offers monitoring capabilities and advanced control functions
- Designed specifically for Valley TouchPro, Pro2, and Select2 control panels

Valley BaseStation2-SM



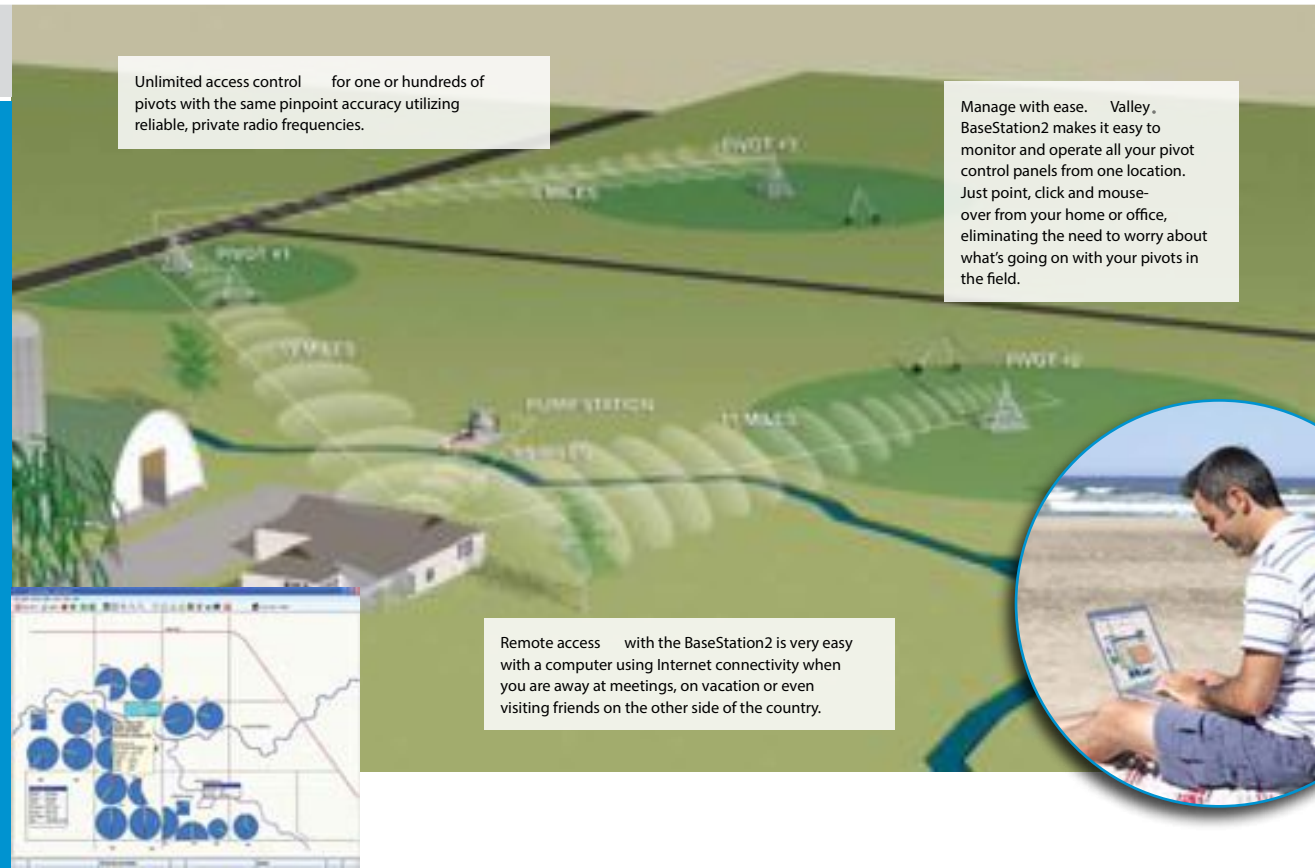
A centralized irrigation management system custom-designed to suit your needs.

- Direct radio communication
- BaseStation Mobile allows monitoring and control of center pivots and linears from a Smartphone or tablet
- Custom designed for your application by Valley engineers
- Full monitoring and control of your center pivots, linears, and pumps
- Can handle one to hundreds of pivots
- Stores reports for future reference
- Can be installed on Valley and non-Valley pivots
- Alarm messages sent to your cell phone
- Contact Bevattningsteknik for full description of features.

Unlimited access control for one or hundreds of pivots with the same pinpoint accuracy utilizing reliable, private radio frequencies.

Manage with ease. Valley BaseStation2 makes it easy to monitor and operate all your pivot control panels from one location. Just point, click and mouse-over from your home or office, eliminating the need to worry about what's going on with your pivots in the field.

Remote access with the BaseStation2 is very easy with a computer using Internet connectivity when you are away at meetings, on vacation or even visiting friends on the other side of the country.



New Product Innovations

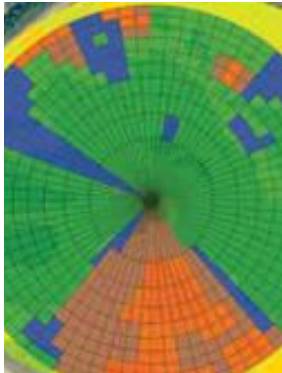


Variable Rate Irrigation



Speed Control

- Creates sectors around the field which are allowed every 2 degrees – up to a total of 180 sectors
- Can be based on yield maps, soil maps, Veris maps, or user defined conditions
- Standard on Select2 and Pro2 panels



Zone Control

- Individual sprinkler or span control allows up to 30 different pivot zones along the center pivot and over 5,000 management zones
- Can be based on yield maps, soil maps, Veris maps or user defined conditions
- Standard on Pro2 panels only



GPS Guidance

- Used in place of buried wire guidance
- Can use same GPS correction signal used for tractor guidance
- Can easily reprogram path with custom Valley mapping tool to match farm practices
- Uses RTK GPS satellite position correction for sub +/- 6" accuracy
- Available for Precision Corner and linears



New Span Lengths

- 6 5/8" X 205' 7000 series span
- 6 5/8" X 225' 8000 series span
- 8 5/8" X 180' 8000 series span
- 10" X 160' 8000 series span

Valley Benders



Bender30™ /Bender160™

- The Bender30 can bend up to 30° in either direction while utilizing existing structural components and can be retrofit to an existing machine
- The patent pending Bender160 can bend up to 160° in either direction and utilizes custom structural components
- Multiple bends per pivot are allowed
- Both options allow you to pick up additional acres while avoiding obstacles
- Valley exclusive speed up timer improves water application uniformity



Precision Corner Dual Drive

- Patented design
- More floatation and traction
- Uses 11.2 X 38 or 14.9 X 24 tires



Non-Directional Irrigation Tire

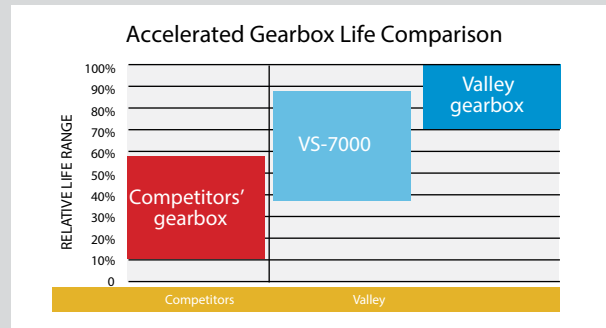
- Valley exclusive
- Designed specifically for irrigation applications
- More traction & less soil displacement
- Available in 11.2 X 38 and 14.9 X 24 sizes
- Can be used on Precision Corner Dual Drive

7000 series Options

VS-7000 Gearbox

Built Exclusively for Valley

- Cost competitive gearbox
- Built exclusively for Valley to the Valley specifications
- Built in China by a manufacturer who also builds gearboxes for John Deere
- Contains many of the same features that make Valley gearboxes the industry's leader
- Proven to be the second best gearbox in the industry
- Warranty – 6 years full parts and labor



Input and output bearings — Chinese through-hardened bearings.

Worm gear — high strength ductile iron worm gear provides significantly longer wear life than steel when combined with a cast iron bull gear.

Tooth Design — 14½° tooth angle.

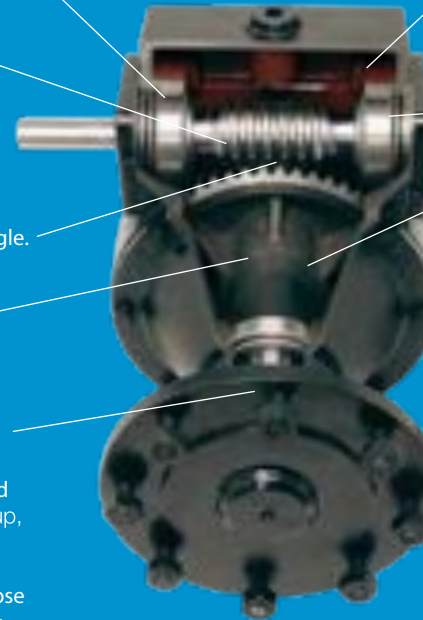
Shorter bull gear neck and keyway matching non-Valley gearboxes.

Long output shaft — 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.

Expansion Chamber — large open volume to reduce internal pressure changes with temperature changes. No diaphragm.

Shims used to set bearing preload.

52:1 gear ratio — full recessed tooth design keeps oil engaged between gears.



Valley Classic Panel

The Valley Classic Panel offers the lowest initial investment but still provides all the functions needed to manually operate a pivot.



VS-7000 Center Drive

- Cost competitive center drive
- Same helical gearbox
- Corrosion resistant painted steel housing
- Assembled and tested by Valley
- 34 RPM, 43 RPM, and 68 RPM
- Warranty – 6 years full parts and labor



And Other Great Options

- 6" and 6 5/8" spans
- 3 Wheel base beam
- All tire options
- Valley corner
- Motor cover

Superior Customer Support

Putting the grower first is not just a slogan at Valley but is part of our culture. Our founder, Mr. Robert Daugherty, built the company by making sure Valley always treated the customer fairly. Even though Valley has grown to be a worldwide company, this commitment has not changed. When you purchase a Valley, you are not just buying the best irrigation equipment available, but more importantly, you are buying dedicated support from Bevattningsteknik and Valley staff to support you after the sale. Valley stands 100% behind their products and if you feel something isn't to your expectations, they will work with you to resolve the issue.

- Strong dealer network that is focused on grower support
- Large dealer parts inventory to keep you running
- Two state-of-the-art irrigation manufacturing plants with the capacity to ship complete machines quickly

Valley equipment is the most reliable irrigation equipment available, however at some point you may need repair parts or replacement equipment. At that time, the availability of repair parts or complete machines is critical since any downtime during the hot part of the growing season may reduce crop yields. Valley and your Bevattningsteknik stand ready to get your Valley equipment up and running in the shortest possible time. We have invested significantly to make this happen.



Varalöv 262 96 Ängelholm
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Additional Product Choices

- Pivot Points – 6^{5/8}" , 8" , 8^{5/8}" and 10"
- Pipe Diameters – 6" , 6^{5/8}" , 8^{5/8}" , and 10"
(5" for 5000 series)
- Corners – Valley Corner and Precision Corner
- GPS position of end tower
- Flow meters
- Floatation Choices
 - Tire Sizes – range from 11 X 22.5 to 18.4 X 26
(tractor & turf tread)
 - 3-Wheel Drive
 - Articulating 4-Wheel Drive
- Sprinklers – Valley, Nelson, and Senninger product line
- Booster Pumps – 2 HP, 5 HP, and 7.5 HP
- End Guns – Nelson and Komet
- Linears – 4 wheel hose drag, ditch feed, swing around, and 2 wheel hose drag