

Valley® the Best Value

RELIABLE | DURABLE | PRECISE | ADVANCED | RESPONSIVE



VALLEY 

The Leader in Precision Irrigation



Since 1954, Valley® Irrigation has been providing the most reliable irrigation equipment in the agriculture industry. Valley center pivots and linears provide precise water, chemical, and fertilizer applications that improve crop yields, reduce labor costs, reduce runoff, and conserve water and energy. The Valley brand is known for having the most durable structures and the most advanced technologies, making it the first choice of growers wishing to increase the value of their land with irrigation equipment.

We have built our reputation by providing the most durable equipment available in the market, and we have the certified test data to prove it. That's why 50% of center pivots in use today are Valley pivots.

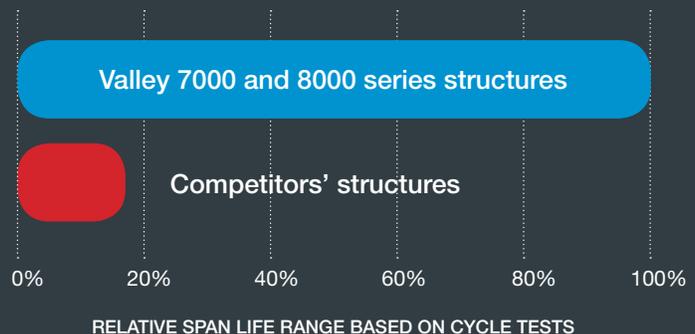
The Leader in Span Design

When it comes to investing in irrigation equipment, structural life is critical. Valley spans are engineered to last for many years without costly repairs. We design and build the strongest, most durable spans in the industry.

Benefits for you:

- Best long-term life and value
- Significant resale premium over competitive brands
- Engineered with the strength needed to achieve maximum productivity

Accelerated Structural Life Cycle Test Comparison

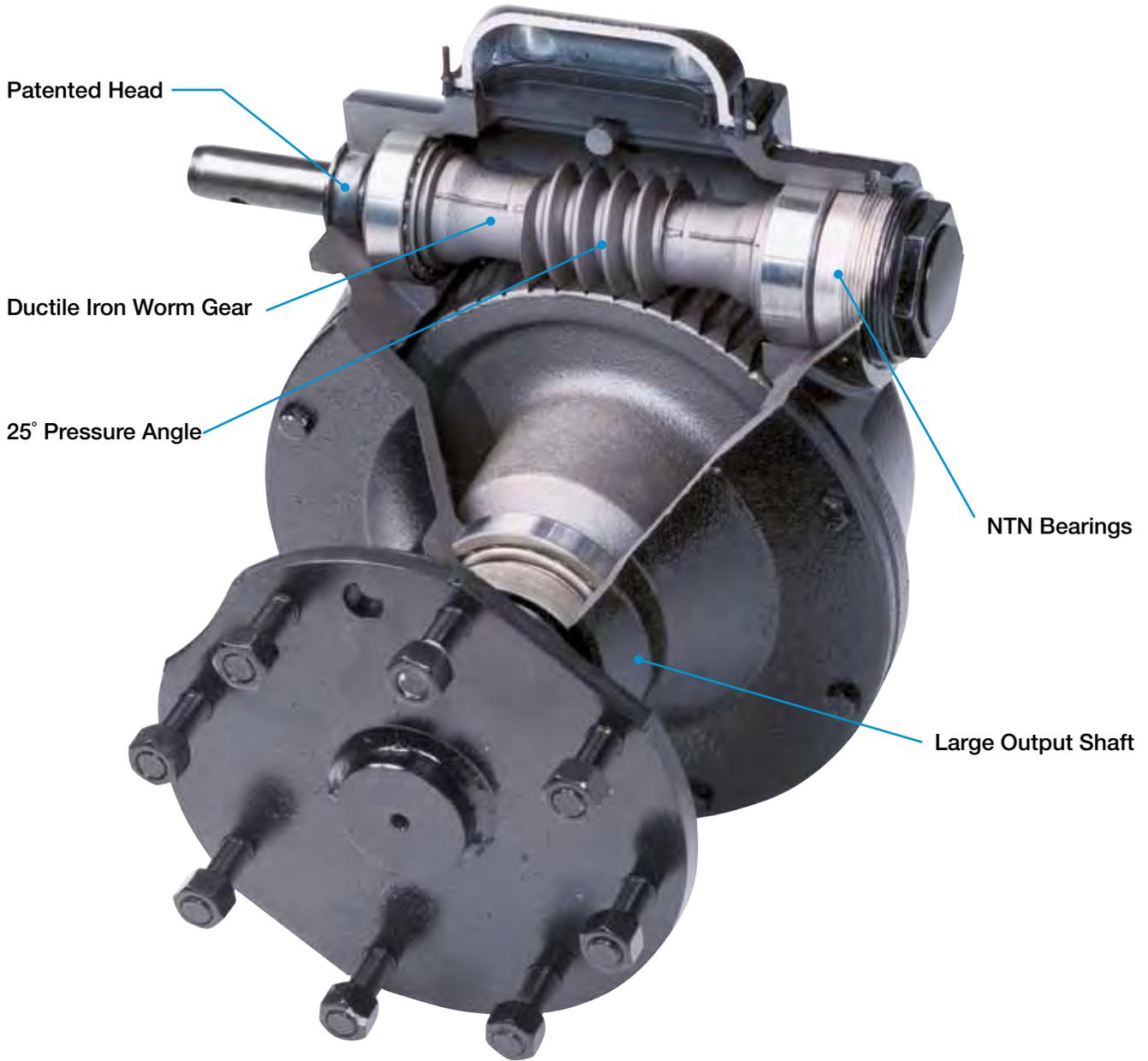


Test results certified by independent consultant Dr. James D. Summers, P.E.

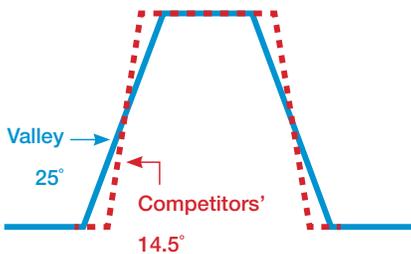
Valley the Best Value



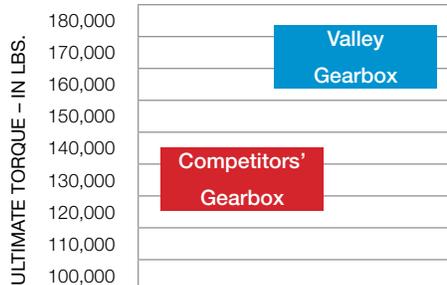
Valley Gearbox



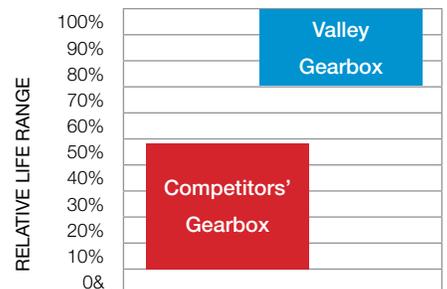
Tooth Comparison



Ultimate Output Torque Test



Accelerated Life Comparison





Gearbox Design Philosophy

You know the gearbox is the heart of your center pivot. If the gearbox isn't working, the center pivot isn't working. The Valley philosophy is to provide you with the most durable gearbox in the irrigation industry. That's why Valley Irrigation is the only center pivot company in the world that manufactures its gearboxes in the USA.

Rather than buying the lower-cost gearboxes from overseas that our competitors use, the Valley gearbox is manufactured in Nebraska using only U.S. vendors that meet our quality standards.

Benefits for you:

- Each gearbox is tested before being shipped
- Random gearboxes are life-tested
- Multiple levels of component quality control, including on-site inspections, that can't be performed overseas



25° Tooth Pressure Design

The Valley gearbox uses an industry-exclusive 25° tooth design. According to the American Gear Manufacturers Association's worm gear design guide, a 25° pressure angle provides 40% more strength at the root than a 14.5° pressure angle, which is the design our competitors use. While the 14.5° tooth looks stronger, the wider width at the root of a 25° tooth actually provides more strength.

High-Strength Ductile Iron Worm Gear

The Valley gearbox uses high-strength, ductile iron worm gears instead of steel worm gears. The American Gear Manufacturers Association's worm gear design guide states that the allowable load for ductile iron worms operating against a cast iron bull gear is 60% higher than a steel worm operating against a cast iron bull gear.

NTN Bearings

The Valley gearbox uses only NTN bearings made in the United States. They are made using ultra-pure steel that is precision ground and surface hardened. This is one of the unique features that makes the Valley gearbox the strongest and longest-life gearbox available.

Longer Output Shaft

The Valley gearbox has an exclusive, longer output shaft that moves the wheel hub 2 inches away from the output seal. You won't find this on competitive gearboxes made overseas! Our offset rims compensate for the longer shaft and actually move the center of the tire closer to the gearbox output bearing, reducing the overhung load on the bearing.



Truss Rods



Valley truss rod heads are forged from a solid rod. For maximum fatigue strength (i.e. long cyclic life), we take two unique steps in manufacturing our truss rods:

- 1) the rod diameter is increased under the rod head
- 2) a larger radius is forged where the rod head meets the rod diameter.

Benefits for you:

- Eliminates problems associated with welded assemblies
- Hot-dipped galvanized for maximum, long-term corrosion protection
- Rod diameters larger than competitors for additional strength

Truss Rod Sockets

Valley truss rod sockets are two-piece, precision-stamped assemblies sized to fit the individual rod diameters and firmly hold the truss rods in the center of the socket. The socket assembly is held together with three bolts to prevent misalignment and ensure the truss rod heads are uniformly loaded.



Benefits for you:

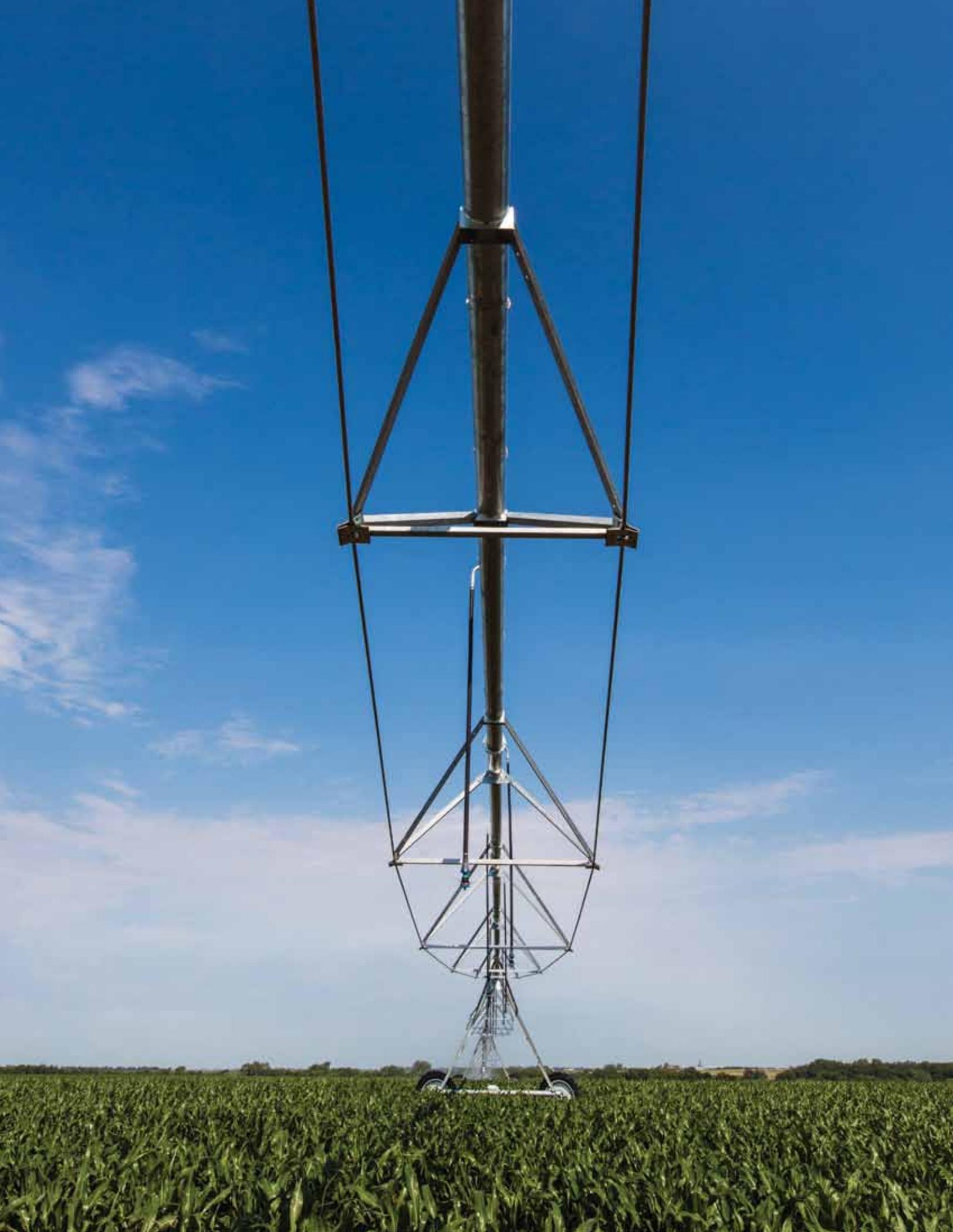
- Truss rods remain centered for uniform load
- Uniform load on truss rod heads result in longer machine life
- Keeps your machine standing and operating correctly

Valley Truss Angle Attachment Assembly

Valley truss angle attachment assemblies are precision-welded with significantly more weld area on the pipe to distribute the truss angle loads over a large section of pipe. Other center pivot manufacturers just weld a small angle on to the pipe, which concentrates the load on a small section of the pipe. Our truss angle attachment design is more expensive than that of our competitors, but, by distributing the load over a larger section of pipe, 12-gauge pipe can be used, providing your best cost-value.

Benefits for you:

- Significantly reduces the pipe's stress
- Reduces the load concentration
- Results in longer span life on rough terrain
- Longer center pivot life
- Best cost-value





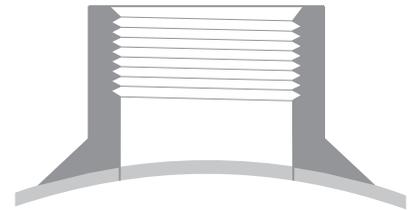
Reliable



Components Built to Last

Welded Sprinkler Outlet

The strength of your sprinkler outlet is crucial. The sprinkler outlet and pipe connection are subject to stress from wind moving the sprinkler drops, the machine traveling over ridges, and the sprinkler drops being pulled through the crop. Anticipating these stresses, Valley engineered its sprinkler outlet to better withstand the forces encountered in the field.



Benefits for you:

- Standard pipe coupling welded onto the pipe for much stronger design
- No pressure loss due to couplings
- No protrusion into the pipeline restricting flow

Valley Tower Box

The Valley tower box is built for a long, trouble-free life. Our competition uses cheaper components, such as a plastic base, that can degrade over time. Our environmental testing ensures our tower boxes will operate reliably in rugged, outdoor environments for many years.

Benefits for you:

- Galvanized steel base provides:
 - Long, trouble-free life
 - Accurate alignment
 - No distorting or cracking over time
 - No degrading over time due to environment
- Stainless steel shaft and nylon bearings for smooth operation and long life
- Steel cam and heavy return spring for safety
- External emergency on/off switch to shut down pivot





Remote communications from Valley allow you to monitor and control your center pivot from anywhere, saving you time and money. Valley offers you choices, so you can select the best technology for your operation.



Valley TrackNET™

The Valley TrackNET™ family of products provides tools to remotely monitor and control your center pivots.

TrackerLT – Designed specifically for non-Valley, Valley Classic, and Valley ClassicPlus control panels

TrackerPro – Can be used with Valley mechanical control panels and most non-Valley control panels

TrackerSP – Designed for the TouchPro™, Pro2, and Select2 control panels

Benefits for you:

- Communicate with your center pivots via mobile phone, smartphone, laptop, or tablet
- Receive alarm messages when issues arise
- Avoid trips to the field to check pivots
- Save time and money
- Variable Rate Irrigation (VRI) ready

Remote Communications

Valley BaseStation3™

Valley BaseStation3™ is the most comprehensive, state-of-the-art irrigation management solution available. This innovative technology gives you unprecedented control over your operation.

Benefits for you:

- Host on a centralized PC or choose a cloud-hosted installation - a choice no one else offers
- Select cellular, data radio, or satellite communication technologies
- Access from any computer, laptop, tablet, or smartphone
- Native iOS (iPhone, iPad) and Android apps available
- Manages all types of irrigation equipment, including pivots, linears, solid set, subsurface, pumps and gensets
- Enhanced, soil moisture monitoring

Valley SoilPro™ 1200, powered by AquaSpy™

SoilPro 1200™ leverages advanced technology for soil moisture monitoring to provide current data and practical advice on when and how much to irrigate.

Benefits to you:

- High-quality capacitance probe reaches 48 inches underground
- Analyzes information and provides irrigation scheduling recommendations
- Increases yield, while reducing input costs
- Affordable, easy to use, and convenient



Variable Rate Irrigation

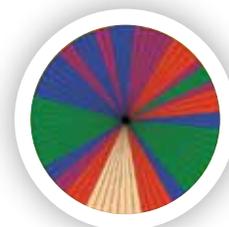
Valley Variable Rate Irrigation (VRI) allows you to customize your water application based on topography information, soil data maps, yield data, and other information that you select. With VRI, you can optimize irrigation on every acre by automatically adjusting water application depths to account for field variability and real-time crop demands, therefore maximizing your crop yields and profit potential.

Valley understands that not all fields are the same, and not all growers' needs are the same, which is why we, exclusively, offer two VRI options.

Speed Control

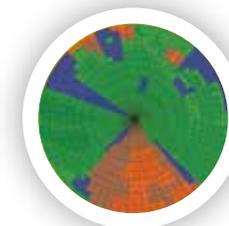
For those who want to minimize costs, but still receive the benefits of applying water more efficiently.

With Speed Control, fields can be divided into 180 sectors.



Zone Control

For more challenging fields that include differing topography and soil types. With Zone Control, fields can be divided into more than 5,000 management zones.



Benefits to you:

- Compatible with third-party agronomy companies
- Yield improvements up to 15%, along with savings on water and pumping costs
- Built into your control panel, completely integrated with your pivot
- Can be based on yield maps, soil maps, Veris® maps, or user-defined conditions

Innovative Technology

VALLEY
TouchPro



⚠ DANGER ⚠
High Voltage!
Do not work with all
locks. Switching Power
to the "OFF" position
before opening cover.



⚠ CAUTION ⚠
Do not touch the
cover when the
system is running. (See
manual for details.)



Valley Control Panel Choices

Valley offers a full line of easy-to-use control panels, including the industry's first line of GPS Ready panels. Valley control panels are designed to withstand the most extreme temperatures, high humidity, and transient voltage requirements, as well as provide you with uninterrupted performance and durability to keep your center pivot running year after year.

Valley designs control panels for all kinds of growers – from the most advanced computer technology to non-computerized control options.

- TouchPro™
- Pro2
- Select2
- AutoPilot Linear
- ClassicPlus
- Classic

Benefits to you:

- Multiple options allow you to choose the best panel for you
- Field-proven technology
- Upgradable for minimal investment



Valley TPMS (Tire Pressure Monitoring System)

Valley TPMS is the first product in the irrigation industry that monitors tire pressure on a center pivot.

Benefits to you:

- Detects slow leaking tires and sends you an alert
- Reduces irrigation down time due to low or flat tires
- Identifies which tires need attention
- Prevents tire, rim, and/or wheel gearbox damage



Non-Directional Irrigation Tire

This Valley-exclusive tire is designed specifically for irrigation applications. The patented, non-directional tread design has equal traction in forward and reverse directions.

Benefits to you:

- Increases traction
- Reduces soil displacement and rutting
- Eliminates need for front and rear tires



Valley is committed to helping you make the most of your land, so we offer durable products that cover corners, go around obstacles and even irrigate land behind buildings.

Valley Precision Corner®

Our patented, computerized corner option

Benefits to you:

- Electronic sprinkler sequencing for industry-leading uniformity
- Patented, optional Water Utilization Package provides maximum water application
- Patented perpendicular base beam and wider wheelbase increase stability
- Patented Dual Drive offers more floatation and traction



Benders

Our Bender products allow the outer portion of your pivot to continue moving while the inner portion is stopped by an obstacle. We offer Bender30™ and Bender160™.

Benefits to you:

- Bend in either direction
- Increase irrigated acres
- Valley exclusive speed-up timer improves water application uniformity



Valley VFlex Corner™ (shown at right)

New, completely customizable corner option

Benefits to you:

- Simple and reliable start-stop controls
- Industry-leading strength and durability
- More options and features than any corner on the market

DropSpan™

The Valley DropSpan literally “drops” one or more of your machine’s spans to continue irrigating around an obstacle. You can easily detach the spans from the rest of the machine in less than 15 minutes.

Benefits to you:

- Spans can be dropped and reattached by one person, without tools
- Allows you to irrigate extra acres



Increasing Irrigated Acres



GPS Guidance

Patented Valley GPS Guidance uses the latest in satellite-based RTK to accurately steer your machines around your field for the most precise application of water and other crop inputs. GPS Guidance also allows you to install corner and linear irrigation equipment where it used to be difficult or too expensive to do so.

Benefits to you:

- Increases the number of acres available for production
- Replaces buried wire guidance
- Can use same GPS correction signal used for tractor guidance
- Path easily reprogrammed with custom Valley mapping tools



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.

www.valleyirrigation.com

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