

VALLEY 

VALLEY
7000 series

pivotpoint

SPRING 2009

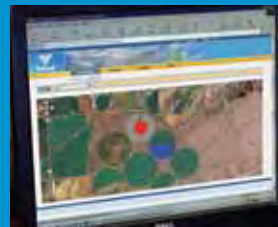
IRRIGATION
NEWS, TRENDS,
PEOPLE AND
PRODUCTS



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Gearbox Option -
VS-7000



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Investing in Each Other

Technology has put our world – and our industry – into fast forward. Tremendous opportunities await us in agriculture, such as advances in inputs, machinery and, of course, irrigation. Never before has the world seen crop production at the levels we’re now capable of growing. It’s truly a new paradigm we’re seeing. At Valley, we’re excited about this future. It only serves to solidify and strengthen our commitment to staying at the forefront of new technology. The development of our machines is intertwined with this overall technological boom in the industry.

Valley pivots have long been the best investment in mechanized irrigation machinery a grower can make. Their dependability and durability are legendary, and the service provided by local Valley dealers and at the company level is something that makes us proud. While we ask growers to make a significant investment in us, we also continually make a significant investment in them, as is fitting for any close partnership. Our engineering, research and product development teams work hard every day to determine how we can design, build and educate our employees and dealers, incorporating all that’s new and useful.

We are diligent in our efforts to help growers realize all that technology can add to their operations, and happy to know that much of that hard work is now evident in the fields across this country, doing just that. New digital methods of communications now provides feedback and control capabilities to growers about their pivots and linears that years ago was not available at an acceptable pricepoint. From offering equipment that supports low pressure irrigation and conserves resources, to exploring newer, better and more cost effective materials to use in our machines, we’re focused on giving growers the best – in quality, value and service.

When you invest in our equipment, you’re investing in our company. When we invest in research, development and education to harness new technology, we’re investing in you.

LEN ADAMS
President - Global Irrigation

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JIM REID – REID BROTHERS IRRIGATION
UNADILLA, GEORGIA

Your Sprinkler Package is Key to Success

What do you need for a successful season? One of the most important factors is water. And while you can't count on Mother Nature to deliver the precise amount of moisture your crops need, you can have peace of mind knowing your machine is equipped with state of the art sprinkler technology and designed for your specific field conditions. Delivering water efficiently and uniformly is important in every sprinkler package design. Visit your local Valley Dealer to determine if your machine is due for an upgrade...*before the irrigation season is at its peak.*

Learn more at
www.valleyirrigation.com

Leading the Way in Water Application



R3000 – LOW PRESSURE
SPRINKLER HEAD
NELSON IRRIGATION

I-WOB – LOW PRESSURE
SPRINKLER HEAD
SENNINGER IRRIGATION

Before the growing season begins is the perfect time to consider what new low-pressure sprinkler technology can do for your operation.

If your center pivot or linear machine is currently running at high pressure, consider this: new low-pressure sprinkler technology effectively operates at 10-20 psi, both reducing your input costs and protecting soil integrity. It also allows for precise application in different zones. This not only helps those producers in areas where water restrictions are an ever increasing concern, but any producer who is interested in more managed and uniform irrigation for crops, less soil disruption and lower operating costs.

“Efficiency and uniformity are important factors in water application,” explained Jerry Gerdes, Water Application Product Manager at Valley. “Water droplets must be large enough that wind won’t evaporate or blow them away, but not too large to create run off and soil disruption. The challenge for our sprinkler suppliers is to create sprinklers that work at the highest efficiency, getting as much water in the ground as possible, while avoiding those traditional problems.” According to Gerdes, rotating sprinklers available through Valley’s product line have been able to strike this balance.

Doug Muscott, a sales engineer with LAD Irrigation in Othello, Washington, agreed. “I’ve been designing and selling irrigation equipment for more than 30 years, and I know that what matters to the grower is good engineering. Sometimes people get caught up in the flash of what’s new, but in the end it is about delivering the right amount of water for that crop. The new technology being used at Valley does this.”

“The low-pressure equipment now available is designed to deliver optimal irrigation water within the important parameters – soil intake rate, water holding capacity of the soil, climate and water needs, and of course the type of crops being farmed,” he added.

There are additional benefits to using low-pressure sprinklers, according to James Burks, President of Senninger Irrigation, a Valley sprinkler supplier. “The trend is to cut back on water available for irrigation. Producers are asked to produce sufficient crops to feed a burgeoning world population and be profitable with less water, so water efficiently making its way to the plant is of huge importance. If we can provide high pattern integrity and low pressure application, we can help growers do so,” he shared.

Jim Reid, Co-Owner of Reid Brothers Irrigation in Unadilla, Georgia, sees low pressure sprinklers helping growers using zone application as well. “For the producers we work with who grow multiple crops, these low-pressure sprinklers are ideal. Using one of the Valley panels, like the Select2 or Pro2, they can put out different rates of water in each section, varying the amount of water on designated areas of the field. This eliminates the need to guess what time you must be in the field to slow the water down. It can now be

automatically adjusted, even at low pressure.”

Valley has long been a leader in developing this technology and bringing it to growers, along with their sprinkler partners, Nelson Irrigation and Senninger Irrigation, they’re bringing the latest solutions to growers nationwide. Muscott believes the leadership of Valley within the industry in the area of low-pressure sprinklers comes from their dedication to not only engineering research and development, but staying on the forefront of the technology involved.

“Water application specialists at Valmont Irrigation are certified by the Irrigation Association, which indicates their dedication to staying at the forefront of irrigation technology. This is important for growers, because these are the same people dealers call for assistance when they are helping growers determine how to build a sprinkler package that will meet their particular needs. If you tie a grower to the wrong sprinkler package, it can have damaging effects on their bottom line. All input costs have inflation factors – including irrigation water and the energy necessary to get it to the crops. Costs will inflate, but commodity prices do not – they are volatile,” Muscott explained.

“The good news is that Valley, and their dealer network, not only has the advanced equipment, but the knowledge, the engineering experience and the insight to understand how best to apply the technology to the bottom line: helping growers do more with less,” he concluded.

New GPS Guidance for Linear



Valley Irrigation, a technology leader in precision irrigation, introduces GPS Guidance for linear irrigation equipment.

GPS Guidance will increase accuracy and precision of linear irrigation equipment when compared with conventional linear irrigation guidance. It also will help eliminate some maintenance issues associated with existing guidance options.



JIM LEONARD
LEONARD WATER SERVICES
ABILENE, TX



LINEAR AUTOPILOT CONTROL PANEL
2008 TOP AG PRODUCT
IRRIGATION ASSOCIATION

“GPS has become standard for precision farming, from field mapping to the operation of tractors and farm implements,” said Jake LaRue, Valley Irrigation Linear Product Manager. “Producers deserve the same type of precision when it comes to irrigation, and Valley Irrigation is dedicated to helping them achieve such accuracy.”

In fact, while producers have always taken pride in planting straight rows, GPS Guidance has enabled them to plant even straighter. The precision of GPS Guidance technology is very evident when the grower compares the “straight line” guidance of GPS to the conventional linear guidance options — producers can now irrigate in the same straight lines they planted. This minimizes variances in water application, which in turn maximizes yields.

Linear irrigation equipment traditionally moves through a field by following one of several types of guidance options: below-ground cable, above-ground cable or furrow. While any of these are good, each has limitations. Below-ground cables can be damaged by lightning or tillage equipment, farm equipment can run into above-ground cables and furrow guidance can have its furrow damaged by rain or farm equipment.

Leonard Water Services, the local Valley dealer serving the Abilene, Texas area, had first-hand experience with Valley GPS Guidance on linear irrigation equipment last summer, as part of Valley Irrigation field trials. Jim Leonard, partner, Leonard Water Services, liked what he saw during the trial and agreed with LaRue that GPS Guidance reduces overwatering.

“When you reverse linears at the end of the field, there’s a tendency for non-GPS guidance options to overcompensate the steering of the linear machine during the repositioning, and that can lead to overwatering some parts of the field,” Leonard said. “But GPS Guidance from Valley held the linear to a much more accurate position. We didn’t see any overwatering. Everything about the operation was positive. We haven’t seen a drawback yet and will likely install GPS Guidance on more linear irrigation equipment that our dealership sells in the future.”

The linear GPS Guidance field trial that Leonard managed is owned and operated by The Samuel Roberts Noble Foundation (Noble Foundation), a non-profit research institution dedicated to exploring and improving production agriculture techniques and advancing plant science through research and discovery. LaRue said Noble Foundation has two end-feed, hose-drag Rainger linears — one that had used below-ground guidance and one that was using furrow guidance. Both linears are pulling 4 ¼ inch HDPE hose and are side inlet units.

Equipment



That compatibility was important to Steve Coester, farm manager of Ak-Chin Farm in Maricopa, Ariz., who also participated in the GPS Guidance field trials. In addition to eliminating the need for above-ground cable, he liked how Valley GPS Guidance worked with the farm's current setup.

"We use GPS in all our equipment," said Coester.

"So it was easy to integrate GPS Guidance with our operation, and the programming was simple."

True to the Valley Irrigation promise that its products are put through extensive field testing prior to their introductions, GPS Guidance has been tested on and proven compatible with linear equipment manufactured by other companies. Ed Stoltenberg, who has more than 20 years of experience with irrigation and owns Stoltenberg Irrigation in Cairo, Neb., last year installed Valley GPS Guidance equipment on a non-Valley linear.

"Our customer wanted to replace a furrow guidance system they had been using for years. As with many furrow guidance systems, it was just awkward and difficult to maintain," Stoltenberg said. "We had planned to install a below-ground guidance operation, but changed our minds after talking with our Valley Irrigation contact."

Stoltenberg said that the installation and operation was a truly joint effort between his dealership and Valley Irrigation. "This was the first time GPS Guidance was installed on a non-Valley machine in a real-world setting, so we did experience a few challenges," Stoltenberg said. "But a lot of those challenges can be attributed more to the characteristics of this particular linear and not to GPS Guidance itself."

He further explained that his Valley Irrigation representative was dedicated to walking them through all the fine points of installation and operation, continually helping Stoltenberg fine tune the equipment.

As for the end result, Stoltenberg and his customer saw a number of benefits from GPS Guidance. "The customer didn't like where his linear was starting and stopping with furrow guidance, and GPS Guidance fixed that," Stoltenberg said. "In fact, it displays actual footage on the screens and you can put in a stop anywhere you want." He also said the safety boundaries are adjustable, which was important when working with a large linear.

Stoltenberg also said customers tell him a common drawback of other linear GPS guidance operations is the fact that equipment continues to operate if the GPS signal is interrupted. But linears operating with Valley Irrigation GPS Guidance will stop if a signal is lost, resuming on its own as soon as the signal returns.

GPS Guidance for linear irrigation equipment is the latest GPS product innovation from Valley Irrigation. In 2008, Valley introduced GPS Ready control panels for center pivot and linear irrigation equipment that provide growers with another choice to determine field position by utilizing the accuracy of GPS technology. LaRue said Valley is currently field testing GPS Guidance for use with corner pivot irrigation. Pending trial results, the company anticipates GPS Guidance for corner pivots will be available in 2010.

Linear GPS Guidance is available through Valley dealers. Producers should contact their local Valley Irrigation dealer for more information about Valley linear irrigation equipment and GPS Guidance options. They can locate a dealer and learn more about Valley Irrigation by visiting www.valleyirrigation.com.

Russ Gentry, research operation manager for the Noble Foundation, was the on-site project manager. Similar to how GPS technology has been adapted on most farming operations, Gentry said the Noble Foundation began using GPS technology several years ago for field mapping and then later adopted such technology for tractor operations. He thinks there is opportunity for a number of additional GPS applications, including linear guidance.

GPS linear machines operated by the Noble Foundation historically operated on wire or ground guidance systems.

While these guidance systems have been effective, Gentry said they do have some drawbacks, such as the accuracy of start and stop points.

"We found that the machine guided with GPS technology had more accurate start and stop points," Gentry said. "And the more accurate those points are, the better off we will be and the closer the tolerances will be."

Valley GPS Guidance works with virtually all linear irrigation equipment and is compatible with John Deere™ Starfire™ RTK.





Replacing a gearbox? More options to choose from.

The Valley name has long been associated with innovation, quality and reliability. In 1975, Valmont chose to design and build their own gearbox specifically for Valley Irrigation equipment. The introduction of the VS-7000 gearbox continued the tradition of providing growers products that they can depend on to meet their specific needs.

Now the VS-7000 gearbox is available as a choice for replacement needs. Ask your local Valley dealer about the VS-7000 gearbox at their parts counter.

The Industry's Best Gearbox

The Valley gearbox is designed and built to perform under extremely demanding field conditions. Years of research, development and dedicated engineering have resulted in exclusive features that makes it far superior to competitive gearboxes. Based on independent testing, its superior design features work together to give it three times the life of competitive gearboxes.

Several features of the Valley gearbox contribute to its long life and well-earned reputation as a trouble-free, economical choice. The gearbox's expansion chamber features a cap made of non-corrosive cast aluminum and utilizes a rubber diaphragm that minimizes internal pressure changes. The patented shaft seals keep oil in and contaminants out.

Finally, the longer output shaft, exclusive to the Valley gearbox, increases mud and crop clearance, minimizing the chance of seal damage. For producers with especially challenging growing conditions, a heavy-duty bronze bull gear is an available option for severe applications.



A Cost Effective New Choice

The VS-7000 gearbox, available as an option on 7000 series irrigation equipment, was developed in response to requests from dealers and customers for a high quality, durable gearbox option at a lower price point.

While an outside company manufactures the VS-7000 gearbox, all technical specifications were defined by Valley engineers. In addition, Valley engineers conducted extensive quality testing to ensure the new product met Valley's stringent performance requirements. The VS-7000 gearbox is interchangeable with the standard Valley gearbox.

Rick McGee, one of the engineers who worked on developing the new VS-7000, explained that a unique and important design feature of the Valley gearbox has been carried over to the VS-7000 gearbox. "One reason this gearbox is superior to the competition lies in the materials used to make the worm gear. Typically, competitors used steel for the worm gear and cast iron for the bull gear. Both the new VS-7000 and the Valley gearbox use cast iron for the bull gear but ductile iron for the worm gear. Under load, the ductile worm exhibits significantly less wear than a steel worm against cast iron."

Overall, the development work on the VS-7000 has resulted in a product McGee believes is an excellent option for growers seeking a dependable gearbox with a lower investment. "I am very pleased with the outcome. We have really created a gearbox that has tested to be as good as or better than any of the competitors' offerings."

The VS-7000 does have some limitations on span weight and diameters compared to the Valley gearbox. Its life is about 80% of the standard box. However, this makes the new gearbox an excellent choice for those producers who have less demanding requirements. Jim Mikula, Product Manager – Special Projects at Valmont Irrigation, commented, "Valley wanted to offer a lower cost option that would still go into the marketplace as a superior product. This is exactly what we have been able to deliver."

Valley and their dealers continue to meet the specific needs of different growers by introducing the VS-7000 gearbox for the replacement market. Some growers are looking for lower price options that they can still count on to deliver lasting results in the field when it comes to replacement gearboxes. The VS-7000 continues to deliver on the promise of the 7000 Series as "Better than their best" at an attractive price for replacement needs.



Supplier Spotlight:



Saving resources – whether time, money or water – is a goal of every grower.

At Senninger Irrigation in Clermont, Florida, this goal is also at the core of what they do. As a Valley Authorized Provider, Senninger helps growers across America bring the benefits of low- pressure irrigation to their operations. Since the 1970s, they have led the industry with the development of these products, helping reduce the amount of energy required to irrigate and increasing the efficiency of the water used to reduce the total amount needed.



Senninger's relationship with Valley has been strong and proven very successful. They recently signed as an Authorized Provider with Valmont – a collaborative effort to promote the latest sprinkler technology through the Valley dealer network. "We have been an independent developer of agricultural irrigation products for more than 46 years. We've worked together with Valley to keep utilizing the most advanced technology to develop new, even more efficient products," said James Burks, President of Senninger.

Burks continued, "Because of the amount of research and development involved, our relationship is not just your basic vendor-customer relationship. It's truly a partnership.

We've enjoyed working with Valley to keep developing new approaches in mechanized irrigation. Since 1963, we've worked to create and improve the applicators and pressure regulators in our equipment, bringing together the benefits of lower pressure while keeping performance high."

"Our partnership with Valley is another step in getting this technology out to as many growers as possible. This is vital as water and energy resources are more limited and more expensive," he concluded.



In addition to development of mechanized irrigation equipment, Senninger has also developed an important tool that growers can use to determine how reducing irrigation pressure saves on fuel and energy costs. This online tool, the Energy Calculator, is available on their website, www.senninger.com

TOP New Products
World Ag Expo

On the Technology Track

When the Valley **Tracker Mobile** placed in the top 10 new products in the World Ag Expo this year, it pointed growers around the country to the entire Tracker line of communication tools from Valley.

Tracker Technology makes you more efficient!

Do you spend time driving around – just to check if your pivot is running?
Would you like to save on vehicle fuel and maintenance costs?
Are you interested in more free time – less worries?

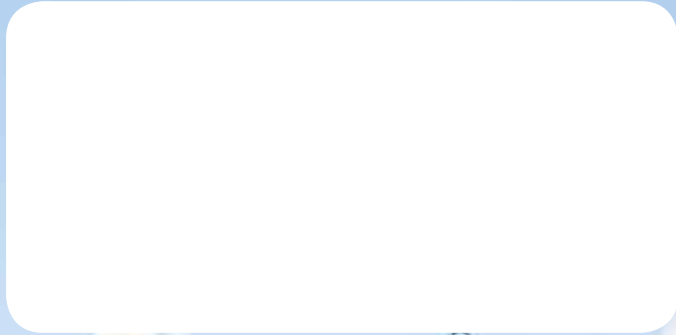
If you answered yes to any of these, here are **3 simple steps to get started:**

- 1 Purchase a Tracker2 or Tracker SP from your local Valley dealer for installation on your center pivot or linear.**
- 2 Sign up for airtime service for the irrigation season.**
- 3 Log on to the Web site , set up the machine and alarm parameters and your ready to go. Monitor and control your irrigation machines – from your Smartphone, cell phone or over the internet.**

Instantly view your irrigation equipment all through Valley Tracker *Mobile* or the New Web site. Demo the Tracker *Mobile* at: <http://m.valleytracker.com>.



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Valley® Drive Train

Best in the Industry

The Valley name has long been associated with innovation, quality and reliability. Back in 1975, Valmont chose to engineer and manufacture their own gearbox designed specifically for Valley Irrigation applications. Since that time, Valley has made continuous improvements to ensure the Valley gearbox remains the best gearbox available in the industry. It's the only one built in the US. Valley offers the most extensive line of drive unit choices in the industry.



Valley offers center drive choices to match your farming practices.

Need a new pivot for this growing season?

Large Cash Allowances for Spring Delivery.

See your Valley dealer today for a great value on a new Valley!