

FALL 2009

IRRIGATION
NEWS, TRENDS,
PEOPLE AND
PRODUCTS



2 GPS Guidance Now Available For Corners



6 World Food Demand



7 Rice Under Mechanized Irrigation



### **Never Lose Momentum**

No matter the conditions you face, you can never lose momentum.

As we've said many times, Valmont's goal is not simply to manufacture and sell irrigation equipment. Our goal is to lead the industry in implementing the newest ideas and technology, so that growers worldwide can reap the benefits. While the economy slowed over the last eighteen months, we did not. Our Research and Development team, our engineers and our product development experts have been working steadily to bring the latest innovations to life in our product line.

We've pressed forward with a commitment for the long-term, not for quick glory. With all our combined energies, we are reaching the finish line of the challenging economic period with even more to offer our customers. This issue will highlight just a few of these innovations, including GPS guidance for irrigating corners and the addition of the 5000 series machine now offered by Valley.

Innovation has always led change at Valmont. We never lose momentum. From our very roots, this is what has made us an industry leader for decades. We've been improving our existing products, developing new ones and refining our processes so that when the next challenge comes our way, you know that we have what it takes – the momentum to keep pushing forward.

#### **LEN ADAMS**

President - Global Irrigation

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Valmont Irrigation, 7002 North 288th Street, Valley, Nebraska 68064-0358 USA, Phone: 402-359-2201 (Ext. 3415), E-mail: irrigation@valmont.com Subscribe on the web at: www.valleyirrigation.com. To cancel a subscription email: irrigation@ valmont.com Special promotional offers valid only at participating Valley dealers in U.S. and Canada.

# The (

## **NEW! GPS Guidance**



GPS Guidance for corner irrigation equipment was introduced at the 56th Annual Farm Progress Show in September. It allows producers to install corner equipment where it previously might have been cost prohibitive.

As a technology leader in precision irrigation, Valley sees the new application of GPS to corner irrigation equipment as the next logical step in a long line of innovative advancements.

"Innovation is not new to Valley. We revolutionized agriculture with the introduction of the center pivot more than 54 years ago – it's that same innovative spirit that continues today with our full line of GPS products," Wade Sikkink, Equipment Product Manager for Valmont Irrigation, stated.

Valley introduced its line of GPS Ready control panels in November 2008; GPS Guidance for linears followed in March 2009.

GPS Guidance is available from select, GPS certified, Valley dealers.



# corners

## for Corner Irrigation Equipment

Over 30 years ago, Valley introduced the first corner machine to help growers answer the question of how to irrigate corners. The buried underground guidance wire was an innovative solution at the time, but wasn't perfect. With certain operational set ups however, it is still a key solution. Then again, some areas presented significant challenges for installing and maintaining the buried wire. Issues like subsurface rock or drainage tiles to rodent damage or lightening strikes meant some growers weren't able to take advantage of corner machines – leaving corners dry or using labor intensive forms of irrigation such as hand lines or solid set. Now, the engineers at Valley have delivered yet another innovative guidance solution for corner machines.

#### Field Tested, Grower Approved

Steve Oberg, a producer near Pelican Rapids, MN, decided to install the new GPS Guidance system. Growing potatoes, soybeans and corn require irrigation, and getting water to the corners in an efficient and convenient way was a long-standing dilemma for Oberg. Underground wires controlled his former mechanized corner irrigation equipment. In addition to navigating the usual threats to proper wire operation, such as accidental damage to wires during tilling, Steve had an additional problem to overcome.

One of his corner machines is located next to high voltage transmission lines. For years, this did not present any issues, until the local power company made some changes.

"Those lines started emitting more stray voltage this year. The change in voltage interfered with the antenna on our corner machine so it couldn't steer when it approached the lines," Oberg explained. "I talked with the power company and they acknowledged the voltage fluctuations, but they didn't make any immediate changes."

Frustrated, Oberg went in search of a solution and learned about the new Valley Corner GPS Guidance system. "The only option was to put GPS guidance on the machine," Oberg continued. "If GPS wasn't available, I'm not sure how we would have been able to steer through that part of the field. Now that it's installed and running, it doesn't get any interference. In fact, the corner machine has been steering as good as, if not better than it did on the wire."

The engineering process used in creating the Corner GPS Guidance system ensures it delivers the same reliability and durability growers have come to expect from Valley, according to Sikkink. "This GPS Guidance system uses unique algorithms that have been extensively tested for multiple years to prove their durability and reliability in agriculture," he explained. "It uses a unique, one-receiver design, unlike other products on the market that require the use of multiple receivers. That produces track-on-track accuracy."



"All hardware developed for this product has been developed to ruggedized environmental standards," Sikkink added.

#### Versatility, Durability and Value

Jim Aden, producer in Gothenburg, Nebraska, also made the choice to try the new Corner GPS system. "About 90 percent of our irrigation is pivot irrigation. We started with pivots about 20 years ago," he explained. His farm includes both hilly and flat terrain, and the pivots are used on both sandy and heavy soil. This variety put the Corner GPS Guidance system to the test.

One benefit Jim sees is that both installation and maintenance are easier with the Corner GPS Guidance, compared to underground wire controls. "With wires, you have to consider the cost to actually install the wire in the ground. And with the GPS, if something does go wrong, it's above ground to fix," he stated. Aden also likes the fact that he can utilize his existing RTK systems with the new GPS Guidance. This means lower overall investment and higher profitability. While the upfront cost of installing a Corner GPS Guidance system must be considered, the costs of these items should also be weighed into a decision, Aden advised.

For Shane Darrington of Declo, Idaho, the Valley 5000 series pivot was a simple answer to several problems. "We're trying to move everything we can to pivots," he explained. The challenge, however, was finding a cost effective irrigation solution for his smaller fields that didn't include the heavy cost of labor. "We use hand lines and wheel lines where we don't have pivots. Having solid set or hand lines in the corners takes people to do the work. When I put a pivot in a field, it doesn't make sense to me to put a pivot there if a pipe mover has to go to the field twice a day to manage the equipment in the corners. If I put automation in a certain field, I want to take care of it without the extra vehicle or extra help to do it."



After discussing the dilemma with his Valley dealer, Darrington opted to install two Valley 5000 series pivots on two 15-acre fields on his irrigated row crop farm, where he grows sugar beets, potatoes, malt barley, wheat and alfalfa. The 5000 series pivots were developed specifically for smaller fields up to 60 acres. Both of Shane's pivots are half circles that have auto reverse. "Our Valley 5000's are in corners of fields that already have 7000 and 8000 series pivots in the main parts of the fields. We put them in last fall and this is the first season they've been irrigating. We've been extremely happy with them so far," Shane shared.

Darrington sees a number of benefits from installing the 5000 series pivots in his fields. Besides the labor savings these smaller 5000 series pivots provide, he also reports that like all of his Valley equipment, the control panels are easy to use. He uses the Valley Pro2 Panel with his 5000 series machines; they are also available with the Classic and ClassicPlus non-programmable panels and the Select2 programmable panel.

Another challenge for irrigating small fields with center pivots is the availability of three-phase power. Jim Mikula, Product Manager for Valmont Irrigation notes, "If three-phase power is not available at the field, the cost per acre of having it brought in can be prohibitive," Valley addressed this issue by designing a single-phase option for the 5000 series. Mikula continued, "Oftentimes, even if three-phase is not available, single-phase will be. Developing a single-phase option allows Valley to give growers more flexibility in where they can put 5000 series machines."

Darrington's 5000 series pivots have also proven the Valley reputation for producing machines engineered for life to him once again. "I have some 35-year-old Valley machines that are still running strong," he commented about the durability of Valley pivots. "I think they are a top-notch company and they wouldn't put anything out there that wouldn't work well."











Valmont Irrigation engineered the Valley 5000 series pivots to provide a cost effective irrigation solution for smaller fields up to 60 acres.

The 5000 series is hot dip galvanized and includes a powerful VS-7000 drive train, welded sprinkler couplers, full wrap-around pipe brackets and a four-leg drive unit with braces, features that ensure it's durability and long life.

Created specifically for production agriculture it comes with the reliability and aftermarket support that only Valley Dealers can provide.

#### **SPECIFICATIONS**

- 5" diameter pipeline
- Single-phase power option
- 820' maximum machine length
- 108" outlet spacing
- 112.5' to 202.5' span lengths
- 2HP booster pump option (1HP single-phase)
- Towable options

If you're looking to convert inefficient irrigation methods – covering more acres and reducing labor – it's time to visit your local Valley Dealer.

## d for Production Ag

More Choices. More Irrigated Acres. More Value.

### **NEW! California Website Supports Water Savings**

For growers in California, the conversion from flood or solid set irrigation to mechanized irrigation is catching on. More and more Valley equipment can be seen in fields up and down the Golden State. Why the change? Mechanized irrigation – both center point and linear – provides proven savings in time, labor and perhaps most importantly, water usage.

In fact, because of the documented water conservation achieved with mechanized irrigation, some growers in California now qualify for significant financial assistance when completing a center pivot or linear conversion from other less efficient irrigation methods. The US Department of Agriculture's Natural Resource Conservation Service (NRCS) has already funded several California projects through the Environmental Quality Incentives Program (EQIP). Cost share rates vary depending on a number of factors including the size of the operation and the number of acres converted. Contact your local NCRS office for details.

You can also learn more on the all-new Valley Irrigation California website. The site provides a wealth of information for those growing crops from alfalfa and cotton to rice, vegetables, corn, wheat and even trees and vines. Be sure to check it out at:

www.valleyirrigationcalifornia.com

www.valleyirrigation.com FALL 2009 5



## World Food Demand – Still a Key Driver Irrigation to Play a Crucial Role.

Rich Pottorff, Vice President, Chief Economist, Doane Agricultural Services

RICH POTTORFF ANALYZES DEVELOPMENTS IN U.S. AND WORLDWIDE AGRICULTURE AND DEVELOPS FORECASTS, BRINGING PRODUCERS INSIGHTFUL COMMENTARY ABOUT THE AG ECONOMY. HE RECEIVED HIS DEGREES IN AGRICULTURAL ECONOMICS FROM COLORADO STATE UNIVERSITY.

Good crops and the global recession have caused significant declines in crop prices over the past year or so, pushing aside concerns about world deficits, at least for now. Global crop yields well above trends in 2008 allowed for some rebound in supplies following several years of declining stock levels. With limited growth in demand in 2009, another modest increase in total grain stock levels is possible for this year. However, the current stock buildup has not changed the underlying market fundamentals. The United Nations believes a 70% increase in food production will be needed to meet the demand expected

in 2050 and even if production can increase that much, there will be a greater reliance on world trade. Much of the increase in world food production will need to come from exporting countries, such as the U.S.

It is impossible to see the future clearly, but the oversupply of world markets is unlikely to last. What we know for sure is that population growth is highest in areas of the world least able to produce enough food. The population growth rate is highest in Africa, the Middle East, and the poor countries in Asia. More than half of the world's population will be added in these areas over the next decade. Add in India and China and more than 4 out of 5 new world residents are accounted for in these areas – more than 80%. Almost all of the countries in these regions are already severely grain deficit and will need to boost imports to keep up with growth in food demand.

Irrigation water plays a critical role in world food production. An estimated 50% of world grain output and 40% of all food comes from irrigated land. But in some areas, water resources are being tapped out. Interestingly, several countries where irrigation water is increasingly in short supply are the same countries with high population growth rates and already big food deficits. Irrigation water is a critical input for crop production here in North America and around the world and the value of water and the need for irrigation will probably rise in the years ahead.

It appears that the world food situation has taken a step away from the razor's edge of a couple of years ago, but we shouldn't get complacent. World carryover stocks of corn are actually expected to decline this year and the stocks-to-use ratio will fall. While not as tight as it was a couple of years ago, the stocks-to-use ratio has been lower than the projections for 2009-10 only three times in more than 30 years. With demand set to increase as diets for millions of people in Asia improve, the need for gains in food production has never been greater. It is undeniable that irrigated agriculture will play a crucial role in meeting world food needs in the years ahead.



## Supplier Spotlight:

## AgDirect. Simple. Fast. Flexible Financing.

According to Cory Nordhausen, a Relationship Officer with AgDirect. a company that provides financing of agricultural equipment and irrigation machines, financing can be a very smart financial move. This can hold true even for a grower who is not dependent on credit for the purchase. Why? "Today's interest rates are very low, so Valley customers can lock in low rates. By financing, they then know their fixed costs for the term of the loan – five years, seven years, or even ten years. This allows the grower to manage their cash flow from year to year and know their liquidity," Nordhausen explained.



From Left to Right: Chad Scebold, Cory Nordhausen, Carl Horne, Austin Klein.

AgDirect, a financial service of Farm Credit Services of America. has been helping growers find the best financing options available for 11 years now. For the past two years, the company has been a Valley Authorized Provider, giving them the opportunity to work with growers nationwide. Their relationship with Valley dealerships is a close

one. Their nine Relationship Officers travel throughout the country to meet with Valley dealership personnel, helping

AgDirect understand growers' needs - and how those needs are changing.

For growers who are seeking financing options for their irrigation machine purchases, AgDirect makes the process fast and easy. Each Valley dealership has applications on hand, and some dealerships are equipped to submit applications online. Once the application is submitted, credit decisions are typically made

within two hours or less. Other options, such as variable or fixed rates, delayed payments up to one year and even as low as zero down payments, make AgDirect a helpful resource for Valley customers as well.

For more information on financing options for your purchase of Valley irrigation machines, talk with your local Valley dealer.

Valley Irrigation has an effective *patent* pending process which outlines:

- Rice seed characteristics
- Chemigation and fertigation
- Irrigation scheduling and sprinkler options
- Floatation options for specific soil types

## **Rice Under** Mechanized Irrigation

**VALLEY V** 

Solving a Global Problem and Opening Markets to Producers

While rice holds the title of one of the world's most commonly produced grain crops and is the dietary staple for a large part of the world's inhabitants, it is understood that current production practices will not be able to keep pace with the growing population. While slight alterations to flood irrigation – such as furrow irrigation or multiple-inlet irrigation - can help growers reduce their water usage, they do not significantly change where rice can be produced. Varying soil types and the limitations of flood irrigation mean that increasing rice production to feed a rapidly expanding world requires innovation.

Enter mechanized irrigation. Recognizing the increasing demand for rice production, and also the new market opportunity the rice industry presents to growers - Valley Irrigation developed methods to deliver water efficiently over rice using center pivot and linear machines. Mechanized irrigation has achieved up to 95 percent water application efficiency as well as

> water savings up to 50 percent over traditional methods. It has also opened up rice farming to more growers. With center pivot or linear irrigation, rice can now be produced on sandy soils or rolling lands that cannot support flood irrigation.

www.circlesforrice.com



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## Stop by your local Valley dealer today!