Valley® 7000 series - Better Than Their Best
Durable = Dependable

When pivot irrigation owners are asked to name the most important product attribute of their equipment, “durable” tends to be first on everyone’s list. And, when durability is mentioned in the irrigation industry, I’m proud to say that Valley is the brand most associated with that critical customer-demanded factor.

We know why. It’s because durable = dependable, and that’s really what it comes down to in the irrigation industry. Being able to put water when and where it needs to go. The expectation is that it will perform every time. Period. Since 1954, that’s been the very essence of the Valley brand.

It’s our goal to build a Valley pivot durable enough to handle all the demands it must endure — water weight, challenging terrain and soil conditions, crop diversity, wind, high use and whatever Mother Nature tosses its way. That’s a tough list of challenges to overcome and we pride ourselves on making durability inherent in the structure itself so we can deliver longer life, more reliable service and better overall satisfaction.

This issue of PivotPoint showcases the newest addition to the Valley line-up, the 7000 series. You may think it’s ironic that our focus on durability is paired with our “second-strongest” model. But we know better. We specifically designed the 7000 series to be “better than their best!” when compared to the competition.

For years now, the 8000 series has stood alone at the top, heralded as the most durable design on the market. What we were able to do with the introduction of the 7000 series was lower costs by slightly reducing material without compromising the structural integrity tied to the Valley brand.

Dealers and growers alike asked us for a simplified, more economical version for fields that aren’t as demanding. We now give you a choice of pivots.

See your local Valley dealer to review the selection of choices available for your operation. With Valley, durability is not just a claim; it’s a commitment we make to you, our growers.

Thank you
JIM BROWN
Vice President, Sales & Marketing
Why Give Growers A Choice?

WHAT MAKES A VALLEY PIVOT A VALLEY PIVOT? WHAT IS THE BRAND’S SECRET TO SUCCESS IN ACHIEVING AND MAINTAINING INDUSTRY LEADERSHIP FOR SO MANY YEARS? ASK VALLEY DEALERS AND CURRENT CUSTOMERS AND ONE THING IS ALWAYS CRYSTAL CLEAR – IT ALL COMES DOWN TO SUPERIOR PRODUCT QUALITY AND SUPPORT AFTER THE SALE.

Just as the old adage of “you get what you pay for” states, Valley pivots are not likely to be the lowest-priced option in the market. While extremely proud of their top-of-the-line product, Valley dealers expressed concern when hearing customers tell them they needed a lower cost option for certain applications.

Thus began the early discussions and requests for a model that was optimized for less demanding environments — meaning it uses slightly less steel for lower costs, essentially offering price-conscious customers a more economical edition.

Valley engineers were given the task of building not only the first, but now the industry’s “second-strongest” pivot, at a lower price. As engineer John Kastl put it, “allowed it to do just what it needed to.” By using advanced modeling analysis, cutting-edge technology as well as lab and field trials, the new 7000 series was able to go from concept to production in a year, which is a much shorter timeframe than with previous new product launches.

Extensive testing with computer models used techniques and processes from the aerospace and automotive industries for a more efficient and faster turnaround. “We were able to develop a better understanding of structural loads in the span itself and how the loads in the fields are transmitted or translated into loads in the various parts of the structure,” Kastl explains.

“That kind of computer modeling helped us to better understand really what the individual components were seeing when it was going through the field. And that really helped us optimize it, to put steel where it needed to be and only where it needed to be. It also helps us do it in a more efficient, effective manner,” he concluded.

“Before they were ever sent to the field, we tested the spans in our laboratory as well as used finite element modeling and performed extensive tests on rods and sockets for fatigue life and tensile strength,” shares Kastl.

According to Kastl, the 7000 series is “for those customers who need a machine that isn’t maybe as demanding as the top-of-the-line 8000 series. And the dealers have been doing well selling to customers with fields that aren’t the heavy-duty kind of fields with deep wheel tracks, high ridges and steep hills. It’s a nice machine that gets the job done.”

With truss rods as Kastl’s area of engineering expertise, he was responsible for their change and how it impacts the rest of the structural integrity of the machine. “The primary visual difference of the 7000 is that the tower supports moved down to the bottom of the first truss instead of the pipeline,” points out Kastl.

Speaking of the other brands in the industry, Kastl had to admit they are probably not thrilled with the addition of the 7000 to the Valley line. “I’m sure it presents some unique challenges to the competition because they’ve always sold against a Valley machine that’s an 8000. And now they’re being forced to sell against two Valley machines — one of them is as good as theirs and one is much better,” he adds.

“I really believe that Valley makes the most reliable machine in the industry. Not only that, but we stand behind our machines.”

– John Kastl, Valmont Engineer

“If there’s a service need in the summer, our dealer network is the best in the industry and will step up to the plate to get done what needs to be done,” boasts Kastl. “I think that’s probably the most important aspect or characteristic of Valley center-pivot irrigation. That a customer has the water he needs and that it’s reliably and precisely applied where and when he needs it without problem.”
The rapid growth in the ethanol industry is changing the agriculture industry. The amount of corn used for ethanol rose slowly from about 30 million bushels in 1980 to 1 billion bushels in 2002. Corn use rose by 550 million bushels from 2005-06 to 2006-07, but an increase of more than 1.2 billion is expected for next year. Corn use for ethanol will have more than tripled in the last five years and the expansion is far from over.

The effects of the boom in ethanol are just now spreading through the industry. With yields near trend in 2006, corn production fell more than 1 billion bushels short of use. The deficit made it clear that we needed more corn acreage to meet demand. Total demand is projected to rise another billion bushels, to 12.5 billion in 2007-08. Even with yields on the high side of the long-term trend, corn acreage needs to be in the 89 million to 90 million acre range to fill that demand.

High corn acreage will continue for at least the next few years. About 120 ethanol plants are in operation with production capacity of more than 6 billion gallons. Another 85 to 90 plants are under construction or being expanded. When all of these plants are completed, ethanol capacity will exceed 12 billion gallons, and the expansion in the industry will continue. With crude oil prices over $60 per barrel and Congress planning to boost biofuels mandates and provide more incentives to the industry, the amount of corn needed to fuel the ethanol plants will probably be 4.5 billion to 5.0 billion bushels by 2009-10. Even if feed use and exports are reduced, total corn use will continue to rise, keeping upward pressure on prices and acreage.

Biodiesel is having a similar impact on U.S. soybean prices. Meanwhile, world grain stocks have declined to their lowest levels in a quarter century. Over the past several years, grain production has simply not kept pace with demand and now demand growth is accelerating. The supply and demand fundamentals suggest that we have entered a new era in agriculture – one with a very bright outlook.
Your Valley Tracker Analog Service

It’s no surprise that technology continues to evolve and advance, especially in the communications industry. One significant development of late is that the FCC will permit cellular phone carriers to discontinue support of analog networks as of February 2008.

Valmont Irrigation is fully aware that this will affect your Valley Tracker™ and Valley Tracker™ SP service. At this time, many carriers have not yet chosen how to handle this sunset period. When it is determined that your area will be one to lose service, you can rest assured that your local Valley dealer will be ready to upgrade customers with a digital modem conversion.

We will make sure that your ability to communicate with your pivots and linear irrigation equipment will not be negatively impacted in any way during this transition in technology. We will keep you informed as we learn more. As always, it’s our commitment to support our products in any event. We appreciate your trust in our product excellence, warranty and superior service.
Growers Appreciate Having Choices

With the introduction of the 7000 series pivot in March 2006, Valley essentially gave growers choices within the Valley brand – the industry-leading 8000 or the second-strongest, 7000 series. Growers across the country have been proving the performance of the Valley 7000 series. Their reasons for purchasing a newly designed pivot came from their faith in the Valley brand and their trust in the local Valley dealer.
In his opinion, the name Valley means “superior quality” and he even thinks the Valley pivots are almost “over-built” given their durable design. “I shopped competitive brands before I bought my first Valley. Then I spoke with J.W. Kerns Irrigation (Klamath Falls, OR) and they brought over a Valley gearbox, a competitive gearbox and some other components, one vs. the other, and it was pretty obvious which one would hold up and last longest,” tells Menne.

“Some growers were in there, including a lot of names I’ve never heard of, but I don’t think I’ve seen a Valley one in there yet. If so, it would be real seldom. They’re made to last,”Menne.

“We put together all our pivots and there’s very little difference between the Valley 7000 and 8000. I’m sure there are some thickness differences in the steel but most people probably wouldn’t even know that. They’re very similar,” he explains.

“I’m not looking to buy any other brand as long as I’m farming. You look in the Capital Press for irrigation equipment in the used section … I see a lot of other brands but chose this model primarily for the reputation Valley carries, secondly for the size because it would work for the field we have, and the cost was the third factor in his decision-making process.”

The Person’s 7000 pivot currently waters grass hay, which will become an alfalfa mix next year so she can use all of it for her 110-horse boarding operation, Mountain View Stables. She’s been very pleased with the machine’s performance so far and with her relationship with Clint Fiscus, at Valley Irrigation of Greeley, CO. “Clint set up the programming for me and although I messed it up, Valley made it easy for me to figure out so it could get back to what it was meant to do – work hard,” laughs Person.

With superior durability designed right into its structure, gearbox and drive train, all Valley pivots outlast and outperform competitive units on diverse fields across the country. While the new 7000 series may offer a price-sensitive customer a better deal, the Valley brand commitment to quality and local dealer service and support still delivers a priceless package no matter which Valley model you choose to put in the field. As long as it wears the Valley blue sign, you can count on it to deliver precision irrigation made easy.

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Reliable electrical control conversions prevent costly shutdowns.

Regain control and monitor your old machine with easy-to-use upgraded technology.

Apply water precisely where needed and save energy with a low pressure sprinkler package.

Drive train updates and conversions prevent break downs in the heat of the season.

Make Everything Old New Again

No matter what trouble you encounter in the field, Valley has a solution to get your irrigation equipment up and running at peak performance. Your dealer is stocked with Valley components, ensuring parts availability and minimizing downtime. Plus, you can use Valley parts on competitive machines for maximum performance.

Contact your local dealer for more information.

Revive Your Pivots with Valley Upgrades and Conversions

See how V-Chart helps to maximize crop production.

Get solutions for water problems in a changing environment.

Learn why Valley BaseStation2 is the leader in data transfer technology.

Sent compliments of:

Valley

Precision Irrigation Made Easy®
Defining the choices offered by Valley

We offer a look at the details of the industry’s most durable span structure. You will see it represents the core Valley Values throughout the machine.

You can enjoy this superior structure regardless of choice, either the industry-leading 8000 series or the newer 7000 series. Of course, your Valley dealer has complete details and will lead you through the process of evaluating the available options. (Continued on next page)
1. **Field Flexibility**
   Customized to fit your field conditions, a Valley can be configured as a pivot or a linear.

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<thead>
<tr>
<th>Pivot Point</th>
<th>8000</th>
<th>7000</th>
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<tbody>
<tr>
<td>6 (\frac{5}{8}^{\prime})&quot;</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>8&quot;</td>
<td>X</td>
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<td>8 (\frac{5}{8}^{\prime})&quot;</td>
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<td>10&quot;</td>
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2. **Unitized Base Beam**
   Welded gearbox mounts transfer span weight and wheel torque directly to the drive legs.

3. **Four Legged Design**
   - Design distributes the load over a wider section of pipe
   - Wrap-around brackets used to distribute the load over a larger area around the pipe, along with attaching the pipeline to the legs

4. **Drive Unit Braces**
   - Balance design for uniform loads on both sides of the drive unit
   - Strength and ability to handle rough terrain

5. **Ball and Socket**
   - Allows movement in all directions, which minimizes pipeline stress
   - Reduces pressure loss
   - Forged ball for increased strength on 8 \(\frac{5}{8}^{\prime}\)" and 10" pipe

6. **Uniform Crown and Deeper Trussing**
   - Reduces truss rod loads
   - Reduces compression loads on the pipeline
   - Design offers unmatched performance and durability
   - Short extender pipes are not used to achieve special lengths

7. **Flange**
   - 8-bolts for closer spacing to increase strength
   - Thicker flanges to prevent bending
The Valley 7000 series is 86% as strong as the Valley 8000 series

You’ll never have to question the quality of a Valley. Devoted to upholding our reputation as the industry leader, our equipment must perform throughout all phases of our demanding engineering tests so they can pass the most important test of all – your approval.

Understanding loads is essential to good design. Spans are subjected to many different loads applied to tires by crop ridges, terrain and wheel ruts from one span to another, and twisting loads due to terrain.

Valley engineers were given the task of building not only the industry’s strongest pivot (8000 series), but now the industry’s “second-strongest” pivot (7000 series) that meets demanding specifications. By using advanced modeling analysis, cutting-edge technology as well as lab and field trials, the new 7000 series was able to go from concept to production in a year, which is a much shorter timeframe than with previous new product launches.
## Valley 7000 series differences

**Drive Unit Gusset**
- Requires two drive unit gussets for stability on rough ground
- Improves slope capabilities

**Tower Support**
Shares the drive unit loads with trussing and truss rods

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<table>
<thead>
<tr>
<th>Specifications</th>
<th>7000 series (Better)</th>
<th>8000 series (Best)</th>
<th>Benefits of 8000 series</th>
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<tbody>
<tr>
<td>Pivot Point</td>
<td>6 5/8&quot; and 8&quot;</td>
<td>6 5/8&quot;, 8&quot;, 8 5/8&quot;, 10&quot;</td>
<td>Ladder, Platform, 8&quot;-10&quot; Riser Pipe Options</td>
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<tr>
<td>Pipe Diameters</td>
<td>6 5/8&quot;</td>
<td>6&quot;, 6 5/8&quot;, 8 5/8&quot;, 10&quot;</td>
<td>Reduced Friction Loss; Increased Flow Options</td>
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<tr>
<td>Booster Pump Option</td>
<td>2 HP and 5 HP (optional)</td>
<td>2 HP, 5 HP, and 7.5 HP</td>
<td>Water Uniformity @ All GPMs</td>
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<tr>
<td>160' Span Weight - Wet</td>
<td>5892</td>
<td>6204</td>
<td>Increased stability in high winds</td>
</tr>
<tr>
<td>180' Span Weight - Wet</td>
<td>6408</td>
<td>6792</td>
<td>Increased stability in high winds</td>
</tr>
<tr>
<td>Truss Angle</td>
<td>2 X 2 X 0.125&quot;</td>
<td>2 X 2 X 0.163&quot;</td>
<td>More steel, improved alignment</td>
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<tr>
<td>Drive Leg</td>
<td>3 X 3 X 3/16&quot;</td>
<td>3 X 3 X 1/4&quot;</td>
<td>33% more steel for increased durability</td>
</tr>
<tr>
<td>Truss Rods</td>
<td>5/8&quot; Steel</td>
<td>3/4&quot;, 13/16&quot;, 7/8&quot; Steel</td>
<td>44% more steel, improved alignment</td>
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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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