FIELDNET
KEEPS IT ALL
UNDER CONTROL
PAGE 8
The best line of irrigation solutions is durable, rugged, easy to use and integrated.

Zimmatic® by Lindsay is your single source to make the most of your operation.
That’s our strong point. www.lindsayadvantage.com
LandMark Water

Though he no longer farms, Clark Bauer considers himself part of the farming community. As a boy, Clark grew up on a small gravity irrigated farm, raising corn, beans, cattle, and milking cows in south central Nebraska. As an adult, he spent 15 years traveling nationally and regionally, helping farmers become more efficient with irrigation and farm management, before becoming the irrigation manager of the LandMark Water dealerships.

Q: When did you know you wanted to be part of the Zimmatic by Lindsay dealership?
About nine months ago, shortly after the deal was put together with LandMark Water and Zimmatic. We went from two locations to six. The partnership gives us huge support. I saw being a part of it as a great opportunity, plus, I get to be home with my family every night, not far from the small town where I grew up.

Q: How has farming changed over the years?
Everybody is integrating management through connectivity, the Internet, smarter machines, and tracking it through telemetry. That in itself has been the biggest movement marker. I've really seen it in the last four to five years and expect even more in the next five years.

Q: What do you like most about helping farmers develop irrigation plans?
There's a satisfaction in knowing I can deliver solutions to help a farm run smoothly. Farmers want to know that what they are getting is reliable and easy to use. The hundreds of farmers we support are no longer worrying about the physical parts and pieces. They want to know about the tools that can help them be more efficient with their time and utilizing technology to maximize their yields. FieldNET by Lindsay is a great solution for that in the years moving forward.

Q: Are farmers embracing new farming equipment technology?
For the most part, farmers are embracing it, especially younger ones. Even farmers who have been doing it for years know they have to get there. Telemetry, GPS, it's really becoming a part of farming and they are adapting as they need to. It's used on today's tractors and other equipment, and irrigation is no different.

Q: What are the keys to success for your business?
We look for, and find, innovative farming equipment and people solutions. We are part of this community and dedicated to it. People recognize that and it's a building block for growth.

One example of what we've done for our FieldNET customers is to set up a radio network so that customers located within our geographical region can use it to access FieldNET, as opposed to purchasing an individual cellular subscription. It's saving them a little money.

Another example is ensuring our construction crews are working year round. The crew is building and installing pivots in the winter and spring, and designing and installing grain bins in the summer and fall.

Q: What do you see for the future?
Ensuring that the support I've received so far is a foundation to grow the company. We do that by serving the farmer even better for many years to come.

The issue features

- POSITIVE Attraction: Nebraska grower realizes benefits of flow meter
- GUEST COLUMN: Using your irrigation flow meter for better decision making
- LINDSAY PIVOT USED FOR INNOVATIVE RESEARCH: Texas grower makes the most of FieldNET
- MULTI-TASKING, MADE EASY, DONE RIGHT: The solution for drip and micro irrigation
- ON THE FARM: A New Look at Propane Power
- A DESIRE TO MAXIMIZE RESOURCES: Australian Farmer Recognized
MULTI-CONTROL Wins Multiple Awards

Since its market introduction in early 2014, Growsmart® by Lindsay’s MULTI-CONTROL for drip and micro-irrigation has received significant industry recognition:

- Top Ten New Product – World Ag Expo 2014
- One of the Year’s Most Innovative Designs in Engineering Products – The American Society of Agricultural and Biological Engineers AE50
- 2014 Best New Product, Agriculture – Irrigation Association’s Irrigation Show & Education Conference

$2.6 BILLION INVESTED IN IRRIGATION SYSTEMS IN 2013

$61.9 MILLION INVESTED IN:
- COMPUTERS
- CONTROL PANELS
- COMPUTER CONTROL VALVES
- HARDWARE FOR IRRIGATION MANAGEMENT

$1.9 BILLION SPENT ON PURCHASES OF NEW OR REPLACEMENT EQUIPMENT & MACHINERY

LESS THAN 10% IN 2008

TO

20% IN 2014

OF IRRIGATED FARMS USE ADVANCED ON-FARM WATER-MANAGEMENT DECISION TOOLS SUCH AS:
- Soil- or plant-moisture sensing devices
- Commercial irrigation-scheduling services
- Computer-based crop-growth simulation models

Source: Farm and Ranch Irrigation Survey, 2013
In November, Watertronics® retired founder and CEO Richard G. Reinders Sr., was awarded the Irrigation Association’s Industry Achievement Award at the 2014 Irrigation Association Show in Phoenix, Arizona.

Honored for his outstanding 45-year contribution to the development of the industry, Reinders was singled out for being an irrigation pioneer. He was integral in building Reinders, Inc. to one of the premier distributors over six Midwestern states. From his garage, he began Watertronics, now a Lindsay subsidiary, and developed it into one of the leading pump station manufacturers in the industry.

“I am proud of those employees who came through the ranks of my irrigation business to become designers, contractors, and industry sales representatives,” said Reinders.

“I am especially proud to have three of my sons active in various management roles – Rick Reinders, president of Watertronics, Craig Reinders, president of the Reinders Turf and Irrigation family business, and Joel Reinders, product manager for Reinders fountains, aeration and landscape lighting division.”

Reinders continues to operate an irrigated farm, growing sweet corn, soybeans, and an 1800 ft. (540 m) irrigated sod air strip.

“Richard has dedicated himself to advancing an industry he is passionate about,” said Lindsay President & CEO Rick Parod. “He’s been an advocate, forward-thinker, and mentor to many in the field. His life’s work will continue to benefit the irrigation industry long into the future.”

Richard G. Reinders with a WaterMax 5000 Pump Station.

WEB LINKS

National Corn Growers Association
www.ncga.com

National Potato Council
www.nationalpotatocouncil.org

USA Rice Federation
www.usarice.com

California Ag Network
www.californiaagnet.com

UNL Water
water.unl.edu

USDA
www.usda.gov

UPCOMING SHOWS

U.S. DATES

Commodity Classic
February 26-28, 2015
Phoenix, Arizona
www.commodityclassic.com

Empire Farm Days
August 11-13, 2015
Seneca Falls, NY
www.empirefarmdays.com

Dakota Fest
August 2015
Mitchell, SD
www.idealgroup.com/dakotafest

Farm Progress Show
September 1-3, 2015
Decatur, IL
www.farmprogressshow.com

Big Iron Farm Show
September 15-17, 2015
West Fargo, ND
www.bigironfarmshow.com

Husker Harvest Days
September 15-17, 2015
Grand Island, NE
www.huskerharvestdays.com

3i Show
October 8-10, 2015
Dodge City, KS
www.3ishow.com

CANADA DATES

Ag Expo
February 25-27, 2015
Lethbridge, Alberta
www.exhibitionpark.ca
Growsmart® by Lindsay’s Magnetic Flow Meter is one more solution helping Dirk Harberg be a good steward of his land, energy, and water resources. Harberg grows corn, wheat, and soybeans on his 4,000 acres (1620 ha) in Imperial, Nebraska.

“Every drop of water in the United States is very valuable and we need to be precise with what we are doing with it,” says Harberg. “We need a fair amount to raise our crops, but we don’t need to use extra. I honestly think that farmers are one of the best stewards of the ground and that 99.9% of all farmers are very interested in being conservative. If you don’t have a flow meter, you honestly don’t have a way to know how much water you’re using.”

INCREASED ACCURACY
Harberg has used traditional flow meters since the 1970s and likes the accuracy and ability to monitor water flow using the FieldNET® by Lindsay mobile app. “We look at it all the time. The well using the magnetic flow meter shows up on my FieldNET app, the other wells don’t. If this well is pumping 880 gallons (3,332L), it shows; when I pull up my app to see what my other wells are doing, it just says zero.

I have to go into the field to check those. The other flow meters aren’t extremely accurate, they bounce around a lot.”

In Harberg’s location, a flow meter is required. “After the other flow meters wear out, we’ll replace them with Growsmart magnetic flow meters – might as well have the best ones you can.”

“If you don’t have a flow meter, you honestly don’t have a way to know how much water you’re using.”

– Dirk Harberg

PREVENT WATER, INPUT AND MONEY WASTE
“If you didn’t have this flow meter [with FieldNET] in there and you just had the standard one, and you never looked at it, you probably wouldn’t know you had a problem until sometime in July or August when it gets very hot and your corn starts turning brown on top or starts looking dry or shorter. It would really affect your crop health.”

“This prevents issues before it gets to the point that you invested all the money in the inputs and you’re then faced with looking at your crop and saying – what’s going on?”

LINDSAY AND PIVOT ELECTRIC HAVE EARNED TRUST
“I’m tickled that Lindsay is taking on some of these challenges and they have the quality in all their products. I like that there’s one product, FieldNET, that helps us tie it all together. They make my life a little easier. I just appreciate that. That’s why I’m a loyal supporter of Lindsay.”

The individuals at Harberg’s local dealership have earned a position as friends. “The other Sunday afternoon I broke down and I was doing something else, and Pivot Electric fixed it. They are very helpful and they’re nice to be associated with. I know there are people like that all over the country, but these are the ones that I know and they’re family friends, they’re great people. They do a lot for our farm.”

To learn more, go to growsmart.com/magnetic-flow-meter.
Many growers are installing flow meters in response to increasing water restrictions and Natural Resource District (NRD) regulations, but growers may rarely look at them during the growing season. Having a flow meter on your irrigation system and not using it is like driving a car and not looking at the speedometer or odometer. Without periodically checking your irrigation flow meter, you don’t really know how fast you are pumping water and how much you have pumped.

Using your flow meter as a management tool will allow you to keep track of your water allocation, check your irrigation efficiency, determine pumping plant efficiency, and detect any well or pump problems before they become severe.

Keeping track of your water meter during the growing season can help you determine how close you are getting to the annual water allocation and track how much of your multiple year allocation you have already used this growing season. This can keep you from being penalized for using too much water in a given year. In a multi-year allocation, it can help you decide whether that last inch or two of the current year’s allocation would be worth more in future years. For example, the yield response for the last inch applied is usually less than the response to water applied during corn’s early grain-fill period.

You can improve your irrigation efficiency by keeping track of how much water was applied the previous week and comparing that number to the crop water use. If you applied more water than the crop used the previous week, you may not be making room to store potential rainfall or water may be leaching below the active root zone.

You also can use a flow meter to estimate pumping plant efficiency. A free brochure, Estimating the Savings from Improving Pumping Plant Performance, provided by the University of Nebraska-Lincoln Extension office guides you through how to estimate the cost of pumping water and how to compare the energy your pump is using with that of a well maintained and designed pump. Simply record how much fuel you used to pump a given amount of water and compare it to the your state’s pumping plant criteria to determine if your pumping plant is operating at peak efficiency. Noted differences can reduce fuel costs.

Also, keeping a record of how much water you pump for a given time period can help determine if your pump is delivering the planned amount of water. Compare pumping rates from previous periods to determine if your pump is experiencing problems and you can plan to correct the problem at a less critical time.

MAGNETIC FLOW METER’S BENEFITS

Compared to propeller flow meters, the Growsmart magnetic flow meter does not have any moving parts such as propellers or bearings that may break, causing interruptions in measurement and resulting in extra costs. Plus, the magnetic flow meter will not be affected by debris.

- Highly accurate flow measurement
- Superior IP68 enclosure seal
- No moving parts to replace
- No flow obstruction
- Range of sizes
- Minimal straight pipe run required
- Remote management capabilities with FieldNET® by Lindsay
- Optional battery pack featuring longer life than most competitive models
When it comes to selecting a pump for your irrigation system, size matters. The staff at the University of Missouri’s Fisher Delta research Center know this all too well.

OUTDATED EQUIPMENT
They were limping along with outdated equipment that was hampering their ability to conduct research and give students the education they need. They had a prescription for trouble – an older pump, powered by a diesel engine that was oversized for the area they were irrigating at the center operated by the MU College of Agriculture, Food and Natural Resources (CAFNR). “If we weren’t extremely careful, we would get too much pressure and cause a pipe to come apart or something to fail,” says Earl Vories, MU adjunct professor and USDA-ARS engineer.

NEW PIVOT ALLOWS FOR BETTER RESEARCH
Time spent troubleshooting issues meant less time for research so Lindsay donated a new pivot complete with Precision Variable Rate Irrigation (VRI), a fully customized Watertronics pump station including advanced controls, variable frequency drive, sensors, and a power monitoring system, and FieldNET wireless irrigation management so researchers could focus on, well, research.
By powering the equipment with an electric motor, the University is able to make better use of FieldNET’s capabilities for the whole system. “When the engine was diesel, you would still have to be there physically to start the system. You could shut it down or change the settings with FieldNET, but you weren’t able to start the diesel engine. Now that it’s electric, we can have total remote control,” says Vories.

The University installed FieldNET at the pumping plant and at the pivot. “If we try to turn the pivot on and nothing happens, we can troubleshoot it and see if the problem is at the pump or if it’s at the pivot. That’s important because you don’t want to be going back and forth a lot and damaging your experiments.”

FieldNET’s historical data capabilities help MU researchers keep records of experiment results. “We can look at the history using FieldNET and go back if we think there might have been a problem, or if somebody forgot to write down when they irrigated,” says Vories.

PRECISION VRI
Having VRI is a real benefit as well. “We have extremely variable soil where the pivot is sitting. It’s real common for our location,” says Vories. “If we were farmers we would be trying to match the prescription for the variable rate to the soil. In our case, because we’re doing experiments, we’re trying to match our experimental plan. We’re able to put different amounts of water on different areas. We’ve had different crops under there at the same time. At other times it’s been different water treatment and irrigation treatment for the same crop. Two crops might be an early-planted soybean and a late-planted soybean. It just gives us a lot more flexibility in the kinds of research that we can do.”

CHANGING THE WAY RICE IS GROWN
MU Plant and Sciences Professor Gene Stevens says that one of the more interesting experiments the university is conducting is growing rice – typically a water-intensive flood irrigated crop – under overhead pivot irrigation. “We can now grow rice in places we could never grow it before,” says Stevens, a cropping systems specialist.

PRECISION VRI
“WE’RE ABLE TO PUT DIFFERENT AMOUNTS OF WATER ON DIFFERENT AREAS . . . IT JUST GIVES US A LOT MORE FLEXIBILITY IN THE KINDS OF RESEARCH THAT WE CAN DO.”
– EARL VORIES, MU ADJUNCT PROFESSOR AND USDA-ARS ENGINEER

Rice is the third most important grain crop in the world following corn and wheat. He shares information with other researchers that are breeding rice and conducting weed science experiments. “We are collaborating on blending American and West African varieties of rice to see if we can get drought-tolerant rice. We collaborate on fertigation, weed control and irrigation to put together the pieces of the puzzle, because the weakest link is the thing that kills you,” says Stevens.

ARSENIC REDUCTION
But there’s another significant benefit besides water savings when it comes to converting from flood to pivot irrigated rice – arsenic reduction.

The bioaccumulation of arsenic compounds in rice is of great concern worldwide because rice is a staple food for billions of people and arsenic is one of the most toxic and carcinogenic elements at even trace amounts.

Pivot-irrigated rice produces kernels with lower arsenic concentration. Some experiments have even shown about thirteen times lower when compared to rice grown under continuous flood irrigation.

PIONEERING WORLDWIDE
“My goal is to continue narrowing the gap between flood and pivot-irrigated yields so that they are the same,” says Stevens. “We’re not there yet, but I think there are a lot of reasons for that. Almost all of our rice varieties were bred for flood irrigation. There hasn’t been any selection work until the work we’ve been doing, specifically trying to develop rice or select rice that works well under center pivots.”

Lindsay continues to provide support to the MU staff and students. “They’ve stayed on top of the system,” said Vories. “They didn’t just install it and then we never heard from them again. There’s no way we could have done this ourselves. ‘Helpful’ is not nearly a strong enough word. This donation enables us to do a lot of things we otherwise couldn’t do.”

For more information, visit http://delta.cafnr.org
FIELDNET
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KEEPS IT ALL
UNDER CONTROL
“Everybody’s on the phone, saying ‘What happened to it? What happened to it? Get it back up!’”

His operation can’t go a minute without FieldNET® by Lindsay, the wireless irrigation management tool.

THE MOST COMPLETE PRODUCT
With more than 10,000 irrigated acres (4046 ha), 57 pivots, 10,000 head of cattle, and seed sales, Bezner’s diverse operation requires an integrated approach. “FieldNET was the most complete product,” says Bezner.

Prior to FieldNET, Bezner spent 12 hours a day, as he would say, “chasing sprinklers.” Now it’s down to two or three. “I can get out my iPad or computer and can see what’s going on.”

“We did 14 machines the first year and tracked breakdowns. FieldNET alerted me at 4:00 in the afternoon – when would I have found that? 9:00 the next morning? How many hours is that? You start adding all that up on 14 machines, and you start calculating how long those sprinklers would have sat there in one place before you found it.”

“At the end of the year, in one growing season, it was like having one sprinkler parked in one place for over 90 days.”

As a FieldNET pioneer, Bezner’s been using FieldNET since its inception in 2007. “We use it on all different kinds of platforms – iPads, iPhones, smart TVs, laptops – every device you can possibly use it on.”

HOW FIELDNET ENHANCES HIS OPERATION
“The top three benefits of using FieldNET in our operation would be water optimization, not having things broken down in one place for a long time.”

“The second thing would be time. As diversified as we are, just not having to drive 30, 40 miles (48, 64 km) to go check on something, being able to do it from an iPad or iPhone.”

Throughout the crop lifecycle, Bezner can view his systems and control from virtually anywhere using a smartphone, tablet or laptop.

CONTINUED ON PAGE 10
“Then that takes you into saving wear and tear on vehicles. Just driving from one end of our farm to the other is about 45 miles.”

**WHAT FIELDNET CAN DO**

In addition to water optimization, time savings, and less wear and tear, Bezner has begun integrating FieldNET into other areas of his operation.

“FieldNET has freed up all kinds of time for the two seed businesses that I do now. It’s not just for sprinklers. We’re doing weather station monitoring, things like that. We’re putting rain gauges in remote areas. That way I can watch as it happens and make decision for the next day based on weather stations.”

“Soil moisture probes are integrated into it as well. I can go back and chart histories.”

“I found that we can save a little bit of water on the front end of the crop and little bit of water on the back. I can save 8 to 10 run days, and that’s quite a bit of water.”

“FieldNET has really helped us with our fertigation and chemigation on the farm. It just makes it so much easier for management to see what the guys in the field are doing. You can tell when a pump is on, when it’s off, where it started. It saves a lot of time in knowing that it’s made a full loop just by seeing the position of where they started it.”

“I think we do a lot better job of even chemical/fertilizer application with FieldNET. You can set your alerts differently and reduce skips or over-application/under-application.”

“**FIELDNET HAS FREED UP ALL KINDS OF TIME FOR THE TWO SEED BUSINESSES THAT I DO NOW. IT’S NOT JUST FOR SPRINKLERS.**”

— BRIAN BEZNER

**HIGHER YIELDS**

“FieldNET has helped us improve yields. A real critical time that you can’t have something broken down, sitting in one place, is about the first 20 days of corn planting, where you leech out all the fertilizer and herbicide protection.”

“I can take you back to that spot at the end of the year and you’ll see a 50-bushel yield reduction. You let it sit there in one spot for 12 hours and I’ll show you a 150-bushel yield reduction.”
A FAMILY OPERATION
With so many aspects to the business, Bezner’s family is a big part of the day-to-day activities. “I’ve got two brothers, a sister, a brother-in-law, and both parents out here all the time. FieldNET has let us have a little bit more time together as a family.”

Bezner’s 14-year-old son William uses FieldNET on a regular basis because it’s so user-friendly. “A few years ago, using Autosteer, some of the older guys here couldn’t figure it out. We were doing boundaries around circles, so William goes out and does the boundaries for them. Come to find out, he was the one moving the sprinklers as they plowed. He would do all the technical stuff and those guys were doing the back and forth easy stuff. That’s cool that a 10-year-old was doing that.”

ADVICE FOR OTHER GROWERS
Whether you have a large or small operation, FieldNET’s remote control features can enhance yields and save resources.

“I have recommended FieldNET to friends and customers alike. The business that I do, seed sales and grain buying and things like that, I’ve told them that the benefits of putting the water in the right place, the ease of use . . . you’re up and running in no time with FieldNET. After they’ve used it for a little while, they have all said, how did I get along without it?”

For more details about FieldNET, go to myfieldnet.com.

MARKET INTELLIGENCE

FieldNET integrates chemigation, weather and soil moisture with full monitoring and control.

C & J Irrigation
1001 Liberal St.
Dalhart, TX 79022
806-244-6359

CONTACT INFO:

IF IT’S REMOTELY POSSIBLE, FIELDNET CAN DO IT FOR YOU

- Quickly and easily monitor and control pivots, laterals, end guns, injectors and pumps
- Stay informed and boost productivity with real-time alerts
- Improve operations by monitoring and recording water/energy usage, tank/pond levels
- Boost efficiency through real-time weather updates
- Enhance decision-making with plug & play add-ons
- Minimize downtime by remotely managing groups of equipment and people
- Run reports to view trends

FieldNET is available web-based and as a mobile app. Search FieldNET on the App Store™ and Google Play™ for Android.

Apple, the Apple logo, iPhone and iPad are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc. • Google Play is a trademark of Google, Inc.
For more than 80 years, Steve Chapman’s family has been farming land near Lubbock, Texas. The crop of choice, cotton, has remained constant, but the farming methods haven’t. How has the Chapman operation changed?

“I really believe that we’ve seen more changes in the last 20 years than the previous 50 years. We really didn’t get irrigation out here until the 1950s,” Chapman said.

“More than anything, it’s just when you start using it, it opens up a whole other realm of possibilities of what we can do. We’re still learning. As we go on, we’re going to think of better and other ways we can do things. I’ve called Lindsay’s technical support team and learned from them what other growers are doing around the country.

I put FieldNET on my pivots several years ago, and at that time I had been driving by those pivots twice a day. Now I wake up, look at the computer and see if there are any problems with our pivots and know exactly where to go.

I have 600-700 acres (243-283 ha) under pivots, and before FieldNET, I’d probably spend two hours checking irrigation systems while driving 50 miles (129 km) a day.”
MULTI-TASKING
MULTI-CONTROL
“On the drip system, it’s multi-faceted in that it will control the pumps. I don’t even have to go to the drip system to be confident that everything is running. It gives me the flow, all the information I need, and which program it’s running. It’s even showing the valves.”

SPOTTING PROBLEMS IN REAL-TIME
Chapman described a case where he received an alert updating him about a problem with one of the drip valves. “With 12, ten-acre (4 ha) zones, I’m looking at my map on the iPad, and one of the valves is showing red—the rest are showing blue or gray. I checked the red valve and it had two wires that were disconnected, most likely by rats. I redid the wires and it worked. It turned blue.”

“It would have taken hours to find the source of that problem, and resulted in a reduction in yield.”

RIGHT TIME. RIGHT AMOUNT.
“I can plant a certain percentage of my acres in milo early and cotton late, so there’s a short time frame where I’m watering the milo and cotton. What MULTI-CONTROL allows me to do is write programs that fit the water needs of the specific crop at specific times and it’s simple. Otherwise, I’d be doing it on an old-type system, and I don’t know how well I could make those changes.”

THE FUTURE OF IRRIGATION
“There are a lot of farmers around here that don’t know or understand the technology is available to them. They still drive miles and miles to check irrigation systems. It’s not only labor savings, it’s peace of mind, and saves a lot of fuel and wear and tear on vehicles. They just don’t recognize the technology and what it will do for them.”

For details, visit your local dealer or www.growsmart.com/multi-control
Is your pivot ready for a new season?

No matter what brand of pivots are in your fields, proper maintenance provides better reliability, longer life, and a more productive growing season.

Taking care of some basic maintenance will keep your pivots running smoothly, avoiding downtime and higher operating costs.

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**SPRING MAINTENANCE PIVOT CHECKLIST**

2. Tires – ensure air pressures are to the recommended requirements per the manufacturer.
3. Driveline – look for any worn components.
4. Pivot Point – grease the head using half of a tube at the current location and the other half when the system is 180 degrees from the current location.
5. Drain Plugs – install plugs and flush the system.
6. Sprinkler Check – walk along the system and make sure that all sprinklers are operating correctly and not stuck in one position.
7. Grounding Electrode Conductor – confirm it is connected to the main control panel and the ground rod.
8. Surge Arrestor – before turning on electrical power, verify that it is installed and not damaged.
9. Electrical Power – basic panels should show 480 volts and the “Control Power” light should be on. Display screens for VISION and BOSS panels should be on.
10. Run the System – start the system without water in Forward; operate until every tower has cycled on and off several times. Repeat in Reverse.

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**SPRING MAINTENANCE POWER UNIT CHECKLIST**

1. Oil & Filters – change the engine oil, oil filter, air filters, and fuel filters.
2. Drive Shafts – grease shafts on pump and motor.
3. Spark Plugs – check them on gas, propane or natural gas motors.
5. Drip Oil – refill the reservoir and allow oil to drain into the drip line based on pump column length.
6. Run the Motor – operate at the normal speed for 45 minutes.

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The new Full Circle Maintenance Program is a valuable option that reduces downtime during irrigation season and can prevent costly emergency repairs. To ensure that your systems are always ready for peak performance, the Full Circle Maintenance Program offers two levels of service to meet your requirements. Ask your local Zimmatic dealer for details.

Your Zimmatic dealer is trained to service any brand of pivot using Genuine Lindsay Parts for necessary repairs or replacements. Genuine Lindsay Parts include a one year warranty from Lindsay.
A New Look at Propane Power

Technology is changing the way propane-powered engines are designed – they’re now more efficient, reliable and durable.

When compared to diesel or gasoline engines, these new engines produce fewer emissions and cost less to purchase and operate.

They can also provide growers with an immediate savings in fuel costs.

Benefits of using propane engines for irrigation

• Cost up to $4,000 less to operate than diesel irrigation engines
• New engines cost approximately 50 percent less than diesel for comparable power
• Ensure reliable irrigation without grid-related power interruptions
• Models are available for sale in all 50 states after EPA and CARB emissions certification
• Reduce irrigation engine maintenance costs by decreasing deposits on engine components
• Produce up to 24 percent fewer greenhouse gas emissions (GHG) than gasoline and 11 percent fewer GHG emissions than diesel engines

Source: http://www.propane.com/uploadedFiles/Propane/Agriculture/Products_that_Use_Propane/Irrigation_Engines/EnginesforIrrigation.pdf

For additional information about using propane for your operation, visit www.propane.com/agriculture for a cost savings calculator, case studies, events, training and more.

INCENTIVE PROGRAM OFFERS UP TO $5,000

Sponsored by the Propane Education & Research Council (PERC), the Propane Farm Incentive Program is a research program that provides a financial incentive up to $5,000 toward the purchase of new propane-powered farm equipment like irrigation engines and grain dryers. In exchange, participants agree to share real-world performance data with PERC. Find more details at www.propane.com/agriculture/programs-and-incentive/propane-farm-incentive-program/. 
A Desire to Maximize Resources

An enduring tenacity. A desire to maximize resources. A positive attitude. These characteristics apply to Zimmatic growers around the globe, including multi-generational Australian grower, Adam McVeigh.

McVeigh grows cotton, corn, sorghum, barley, wheat and occasionally mungbeans or chickpeas on his 1729-acre (700-hectare) dryland and irrigated farm on the Darling Downs, a world famous cropping area in Australia.

McVeigh, a respected leader and advocate in his community, recently earned the title of Darling Downs Cotton Grower of the Year because of his innovations around the farm and commitment to water and energy improvements.

Believing in innovation and greater efficiencies through conversion from flood irrigation to Zimmatic pivot irrigation. “I have been flood irrigating all my life and although we have achieved good results with flood, the benefits and flexibility that comes with overhead irrigators couldn’t be overlooked.”

The government was offering to pay 80% of the cost of an infrastructure upgrade that would include converting from flood irrigation to water-efficient Lindsay pivots in exchange for some of McVeigh’s water allocation. To get the funding, McVeigh had to apply and prove that he would save water for growers downstream to use. “I showed that we could save 1.4 million liters/ha or 149,800 gallons/acre (20%).” McVeigh used the funding to purchase two Zimmatic 9500CC custom corner systems, and a hose-fed lateral. “The brand of irrigator came down to where I was going to get the best, most reliable service and backup.”

“I already had a Valley pivot, but made the switch to all Zimmatic pivots and FieldNET remote irrigation management,” said McVeigh. “I changed the Valley machine to a Zimmatic control panel. Rather than having different operating systems, it made sense to change it all over.”

Achieving sustainable high yields from continuous double cropping with overhead irrigation is the goal. McVeigh recently grew 1050 acres (425 ha) cotton, 260 acres (105 ha) barley, 284 acres (115 ha) wheat, 161 acres (65 ha) sorghum and 161 acres (65 ha) maize. One of his properties has been completely flooded twice in the past four seasons, prompting him to rethink his reliance on a single annual irrigated summer crop.

As a result, McVeigh started growing winter grain (wheat or barley) and double cropping with a late-planted summer grain (sorghum or maize) in winter on the same center-pivot irrigated paddock.

How do the best growers maximize scarcer resources and increase yields while managing rising input costs? That’s a question on McVeigh’s mind. In February, McVeigh hopes to find some answers by embarking on a month-long journey to England, France, South Africa, Kenya, Asia, Germany, and the United States to meet with some of the best growers and researchers while also gaining a global perspective of agriculture. McVeigh will apply practices he learns to his own farm and share his research with the industry.

COTTON GROWER OF THE YEAR DARLING DOWNS 2014

Adam McVeigh, pictured with his wife, Edwina, and daughters, Annie (L) & Paige (R).
The trip is sponsored by GRDC (Grains Research and Development Corporation) and is courtesy of a Nuffield Farming Scholarship. McVeigh admits it will be a challenge to be away from his family and farm operation for an extended time.

McVeigh relies on FieldNET by Lindsay to remotely monitor farm activities. “All that technology will travel with me. That’s one of the great things with FieldNET.” McVeigh’s furthest field is a two-hour drive from his home. To save time, alert him to potential issues, and make data-driven decisions that guide his water usage, he placed his entire irrigation operation on FieldNET.

“All of the machines are operated with FieldNET from my iPhone. I regularly start and stop the center pivots without seeing the machines. I have soil moisture probes linked to telemetry and also a Lindsay weather station with FieldNET that helps me to schedule irrigations and monitor rainfall so I can turn off the machines over the phone before they get bogged.” In addition to accessing his operation remotely, McVeigh relies on his trusted workers and local Lindsay dealers.

The Zimmatic dealer is an important part of the team. Great dealer support is a primary reason why McVeigh made the conversion to Zimmatic. “It really came down to who was going to provide the big backup for me. We went with the Zimmatic pivot option and I’ve been happy with the equipment. It’s knowing that when you’ve got an issue, you can get on the phone and get a hold of somebody who really knows what they’re talking about. I have that confidence going forth with the Zimmatic dealer network.”

Growing up on a farm instilled values that McVeigh hopes to extend to his daughters. “My three-year-old daughter will ask me, ‘how high is that corn, is the corn up yet?’ She obviously sees that I’m enjoying what I’m doing. It amazes me what they pick up. You learn from a young age all about what you’re potentially going to do, and our family, the whole family, is passionate about that. We all love farming and I guess that’s why we’re all still doing it.”

FAST FACTS

ADAM McVEIGH’S OPERATION
Darling Downs, Australia
Grower
• 1700+ dryland and irrigated acres (688 ha)
• Cotton, corn, sorghum, barley, wheat
• Zimmatic pivots & laterals
• FieldNET wireless management
• Converted from flood to pivot irrigation

CONTACT INFO:

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Lot 6 Wilson Court
Goondiwindi, Queensland 4390
p: 61-7-4671-0235

Ackinclose Plumbing & Irrigation
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