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T-L ... LIKE NO OTHER.

IRRIGATION VIEW

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T-L Pivots Are Cowboy Compatible

A cowboy first and a farmer second, Jim Felton prefers low maintenance, easy to repair T-L pivots.

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“To put it bluntly, we’re cowboys,” says Jim Felton, a third generation Montana registered Angus producer. “We own T-L pivots because we understand hydraulic systems and can fix them. They’re simple and low maintenance.”

Felton’s father, Rich, installed their first T-L in 1984. They’ve since put in 6 more with the most recent going up in August of 2017. “When we went to buy this one we didn’t even price out an electric pivot,” he says. And he laughed at another company marketing a lightweight system. “Until they make lightweight water I don’t see any benefit there.”

The Feltons farm roughly 850 acres of irrigated land growing mostly forage crops for their registered Angus herd, including alfalfa and alfalfa grass hay, triticale haylage, corn silage, and some grain corn. The irrigated acres are split between the Springdale ranch in central Montana where Jim and his family develop Felton Angus Ranch yearling bulls and heifers, and the Tongue River Felton ranch near Ashland where his parents, Rich

“With dependable irrigation we were able to produce the same amount of feed in a drought year as we could in a rainy year.”

and Karol, run the cow/calf herd.

The hydraulic T-L systems are well within their comfort zone for repairs. They’ve had plenty of experience with hydraulics thanks to years of do-it-yourself repairs on their tractors and haying equipment. If they can’t do the work themselves, it’s a problem. So is a system that needs a lot of attention. The Feltons are known for raising cattle that can hold their own in rough pastures and in challenging weather without being babied. They expect the same of their irrigation system and for good reason.

“Some ranches have an owner, a farm manager, a herd manager, plus hired help. Here I’m the farm



› Continued from page 1

boss, the cow boss, the manager, the feed truck driver, etc. It's just me and one hired man," Felton explains. On any given day he's fixing fence, spraying noxious weeds in the pastures, checking cattle, putting up hay, and managing the irrigation. He appreciates a bare minimum of time, and money, is devoted to running and repairing his T-L irrigation pivots.

He's seen for himself the same can't be said for electric pivots. Two electric pivots on some rented land had them calling out the dealer for repairs on average once a week.

"You have to be an electrical engineer to fix those things and I don't have time to learn how, so we had to call for service. Every time they came out it was around \$1,000. That's fine for absentee landowners. They don't care. But for someone trying to make a living on the land those fees get atrocious," Felton says.

One time at a repair shop, Felton witnessed a producer coming in for parts and they brought him out a dolly stacked with about 10 gear boxes for his electric pivots. With his T-Ls, there just aren't that many things that can, or do, go wrong.

"Maybe they'll get out of alignment but all I need is a 9/16th wrench and a 7/8th crescent wrench and 15 minutes later you're ready to go," Felton says. "The T-L pivots have been really reliable."

He stocks a bare minimum of parts and can fix most problems himself, allowing him to keep water moving to his fields day or night, weekend or holiday. He notes if an electric pivot goes out on a Saturday afternoon he'd have to wait until Monday to call in, and in peak season a technician might make it out to the field by mid to late week. "If you really needed the water, which you do when it gets hot in the summer here, you'd be out of luck," Felton says.

On the Springdale ranch, Felton runs four T-L pivots. One has a Precision Point control while the others have what Felton calls "Cowboy Controls" where he just hits the button and watches it go, he says. The

T-Ls on his farm have a lot of slope to tackle as the fields are nestled in the foothills of the Beartooth mountains. "There were only 40 acres of flood irrigated fields when Dad bought this place in 1972. He eventually broke out about another 180 acres for irrigation. He said he picked rocks for 30 days straight," Felton says.

It was worth the struggle as Felton says they have tripled production on the irrigated acres as opposed to raising dryland crops. The crops and the T-L pivots perform well. The constant movement of the hydraulic drives allows the T-Ls to navigate the terrain with ease while not burning through parts or getting stuck as is common for the constantly stopping and lurching forward movement of an electric pivot.

"The continuous movement was a major selling point. I've found when your pivot never stops moving the ruts are considerably smaller in the field and the pivots rarely get stuck," Felton says. With an electric system it sits still and waters the track then tries to shoot forward. The wheels spin in the muddy track getting stuck and digging deeper and deeper ruts, especially in alfalfa fields that aren't getting tilled and leveled every year.

Even movement results in even water and fertilizer distribution, too. "We get a lot of wind. When an electric system stops and the wind is blowing, there will be an area that got a lot of water and areas that didn't get much water resulting in spoking in the field," he says. The constant movement of the T-L combined with hose drops and i-Wob nozzles make sure more water makes it to the crop. "We used to have sprinkler heads on the top span to spray out like a wheel line, but with 30-40 mph winds we would lose a lot of water to the air. Now with the hose drops the vast majority of the water gets to the crop."

And that water is critical, more so on years like 2017 when Montana experienced a crippling severe drought.

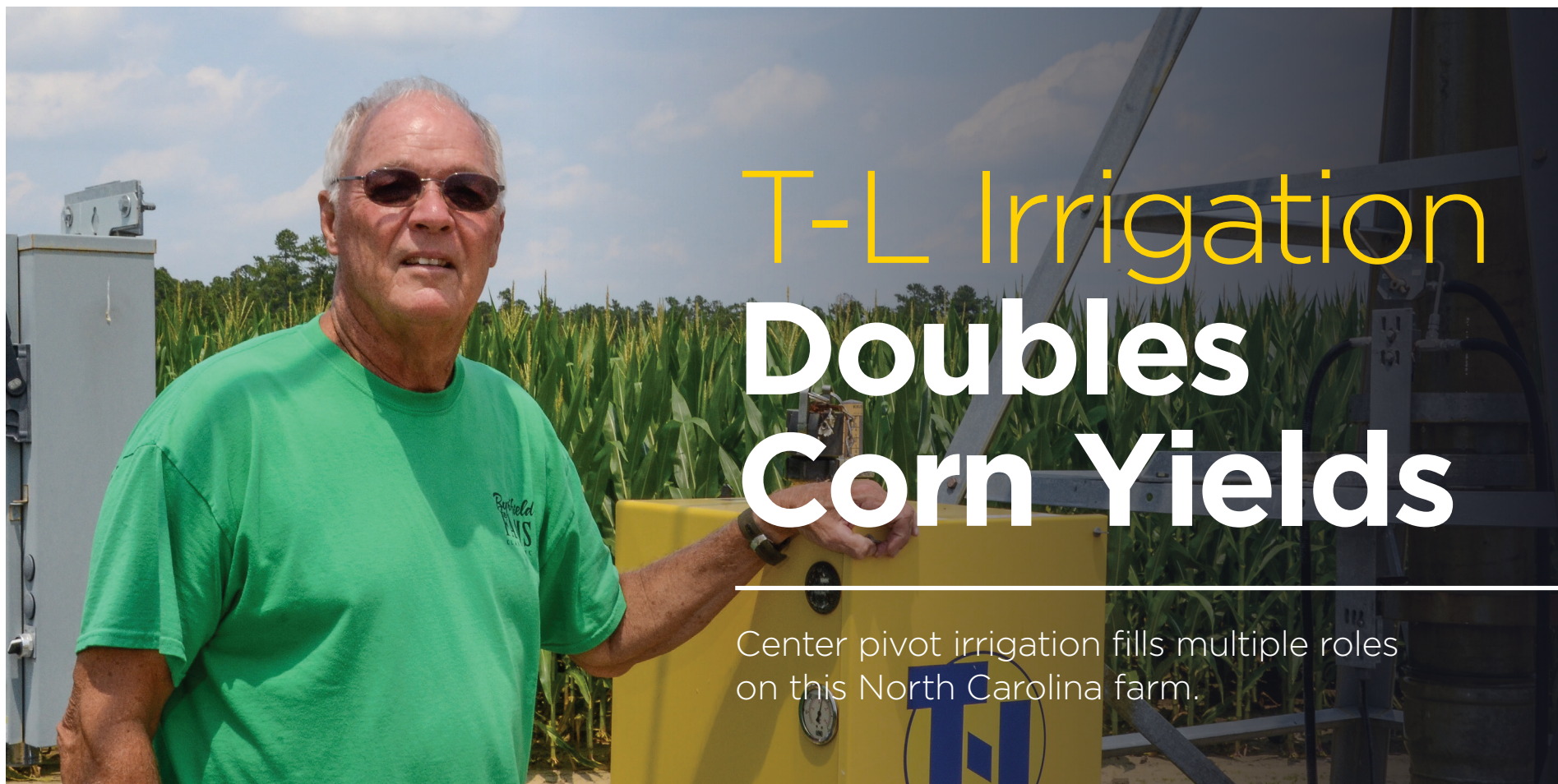
"With dependable irrigation we were able to produce the same amount of feed in a drought year as we could in a rainy year.



That makes a guy sleep a little better at night. There's peace of mind in knowing I can turn on the switch and get water," he says. There's also comfort in that his T-Ls occupy little of his time. "We farm to feed our cows, not because we like to farm. I've got a lot of things on my plate and getting a degree in electrical engineering to keep a pivot running or paying \$1,000 to replace a switch in a tower isn't something I have the time or money for. The T-Ls are much easier to run and fix. If you can't fix them, you shouldn't be farming." ■







**Robert Byrd** - Clarkton, NC

It's been nearly seven years since Wade Byrd and his son, Robert Byrd, decided to install center pivot irrigation on their 1,200-acre farm near Clarkton, North Carolina. It started with two T-L units in 2011, with the addition of one more pivot each year through 2016, for a total of five units that cover around 400 acres. Since that time, corn yields on Byrdfield Farms' irrigated fields have jumped to 200 to 250 bushels per acre.

"When we decided to put these pivots in, we were primarily looking at watering corn," says Wade. "We also grow peanuts and soybeans; and peanuts do fairly well on dryland acres. But in our area, if you average much more than 100 bushels per acre on dryland corn year in and year out, you're doing pretty well. However, we figure the irrigation guarantees us over 200 bushels with very few additional inputs. So, we feel like we're getting a very quick return on our investment."

Byrd notes that like a lot of farmers in his area, his main crop used to be peanuts. But as peanut prices have declined, more and more acres have been replaced by corn and soybeans. Today, the father/son team grows about 800 acres of corn and around 125 acres of peanuts, with the balance in soybeans. Unfortunately, irrigation is still limited to only about half the corn acres.

"There used to be good money in peanuts," he says. "But anymore, you have to have a pretty high yield to make much money. On the other hand, our hot, humid summers can be hard on corn when it's tasseling and filling the ears."

Fortunately, the Byrds' T-L pivots provide other benefits that help improve corn yields. As an example, they're often as valuable for keeping the crop cool as they are for providing water when rains are lacking. In fact, Byrd says water uptake is generally highest when the crop is tasseling. At the same time, he has seen a temperature difference of 10 to 15 degrees between dryland fields and fields in which pivots are running.

**"We've been extremely pleased with our T-L pivots and as we add more pivots in the future, they will definitely be T-L units."**

The five pivots on Byrdfield Farms also allow Wade and his son to put on a portion of their nitrogen fertilizer through the pivots, which helps provide nutrients as the plants need them. That, too, has had an impact on yields.

"We typically broadcast potash prior to planting and then put on about 225 units of nitrogen on irrigated fields in four different applications," Byrd explains. "Part of it is put on with the planter as liquid starter. We make another application as a sidedress and put the balance on in two applications through the pivot."

Of course, the continuous movement provided by the hydraulic drive, which

prevents "spoking" when applying fertilizer, is just one of the reasons Byrd decided on T-L units.

"We decided to go with T-L because of the reputation they have with the hydraulic drive," Wade relates. "We figured there would be fewer problems with the hydraulic motors and they would be easier for us to troubleshoot and maintain. Plus, we wouldn't have to worry about wire theft."


"We also knew that our T-L dealer had a good reputation for service," he adds. "So far, we've been extremely pleased with our T-L pivots and as we add more pivots in the future, they will definitely be T-L units."

Byrd says the biggest issue they face now is the lack of access to electricity in any of the remaining dryland fields. Even though the T-L pivots are hydraulically driven, the pump on any new wells would either require electricity to be run to an electric motor, or Byrd would need to install a combustion engine — most likely powered by propane — to drive the pump and a generator.

"The last T-L unit we put in is some distance from the home farm, so we added the Precision Link remote control to it so my son can control it with his cell phone," Wade adds. "So far, that has really worked well, too. We may even look at putting some of our older units on remote control in the future."

"We've just had extremely good luck with T-L products," he concludes. "From getting the pivots and controls set up properly to having them run when needed, we've had no problems at all. Now, we just need to figure out how to add more of them." ■





Local Dealer:  
**Ponderosa Irrigation**  
Dalhart, TX

## Superior Customer Service Sealed The T-L Deal

A quick and thorough response from the top down made Maxwell, New Mexico, farmer BJ Hoy a life-long T-L customer.

**BJ Hoy - Maxwell, NM**

Irrigation is life in Colfax County. The vast plains stretching out from the base of the Sangre De Cristo mountains — the southern-most tip of the Rockies — in northern New Mexico get little to no rain. There's no such thing as a dryland crop unless a person counts the prickly spires of cholla cactus dotting rangeland. Already an arid environment, a drought has held the area in its punishing grip for the last 14 years, making what water area farmers can get from mountain runoff for irrigation all the more precious.

BJ Hoy crops 412 acres of leased and owned ground near Maxwell, New Mexico, and T-L pivots provide nearly every drop of water his soils see. But that might not have been the case if Hoy hadn't been blown away by the customer service he received from T-L.

Hoy had 18 years of experience with T-Ls on leased ground, but when it came time to purchase his own pivot, he wanted to do his due diligence and shop around. He called all the pivot companies and didn't get much, or in most cases any, response. "One just sent me an e-mail quoting out their most

expensive option, which didn't suit my needs at all," Hoy says. "I called T-L headquarters and they had someone call me back in a hurry. I couldn't even get anyone on the phone with the other guys. You would think when you're going to make a purchase that big, they would want to talk to you."

### "The customer service really won me over."

Shortly after, Hoy was linked up with Kurt Haschke, the owner of Ponderosa Irrigation in Dalhart, Texas. Haschke made the 2.5-hour drive to his farm to look at Hoy's landscape, talk about his needs, and present the different options available to him with a T-L pivot. It was the first of many drives Haschke would make before, during, and after the sale.

"Kurt was very straightforward with the deal. He showed me the low end, the high end, what the differences were, and put it all down on paper. It helped me make the purchase that was right for me. It may

not have been the cheapest option on the market, but there's a big chain of support and everyone has answered the phone for me from the top down. The customer service really won me over," Hoy says.

True to what T-L and Haschke showed him during the purchase, they've continued to supply support after the deal. Hoy lauds Haschke as a great resource due to his knowledge of the machines. He can call Haschke from 200 miles away and he can talk Hoy through most repairs. And if a part is needed, he's there to help, too.

"We live in the middle of nowhere. My neighbor's electric pivot broke down and it was 4 days before he could get it fixed. When I needed a part, Kurt got it for me quick and even drove the 200 miles to deliver it to me himself. That's truly great service," Hoy says.

But Hoy finds he doesn't spend much time on repairs with his T-L pivots, not even the leased T-L that's been running steady since the 90s. He credits this to the constant movement provided by the planetary drives and the time he spends doing maintenance on his pivots over winter. During the off season he goes through each pivot tightening lines, checking gear boxes, greasing everything, cleaning nozzles and changing filters.

"By doing a little easy maintenance in the winter, I find I don't break down much more than maybe once per year during the growing season, and that's usually just a hydraulic seal or something easy," Hoy says. He notes, however, before he came along his leased T-L pivots didn't see much maintenance and he could still turn them on every year and they would run just fine.

Hoy runs four T-L pivots, two full circles and two wipers. There are two 1/4-mile pivots, a 1,200-foot pivot, and a 640-foot pivot. They range from 22 years old to less than a year. For his T-L purchase, he opted for planetary gears, a double reverse system, brakes on every tower, bigger tires, and drops to get water closer to the ground.

"We can get 90 mph wind gusts in the spring. With the planetary drives, we can still move the machine even in those conditions or have the brakes keep it in place," he says. The double reverse system is also a nice option for spring. The soils can be very dry and apt to blow, so directly after planting he can use the double reverse to make a quick pass over the field to settle the dust and ensure good seed-to-soil contact. Then, when the pivot hits the end of its pass it can be programmed to automatically reverse and apply a higher rate of water in a slower pass. "I can water day and night without constantly running out to the field."

Hoy runs 150 head of commercial cattle. He raises alfalfa for hay, oats for grain, and wheat for grazing. Oats is seeded first in the spring. After harvest, Hoy no-till drills wheat





into the oats stubble. Thirty days later he turns his cattle out to graze the wheat. He depends on those acres to produce winter forage for his livestock and pivot irrigation has helped him grow even more.

“Our irrigation water comes from mountain watershed captured in a lake. We only get so many allotments of water and we’re not guaranteed the full amount when it’s dry,” he says. “With pivots we’re able to make better use of our water than flood or side roll irrigation, which means I can crop a lot more acres with the water I do get.”

Cash is also a limited resource, but Hoy is certain he’ll come out ahead despite paying more up front for a T-L unit with some upgrades than he may have for an electric pivot.

“I have neighbors with electric pivots that are 10 years old that are rusting out and they’re already looking to replace. On my leased land there’s a T-L pivot that’s 18 years old and shows no signs of slowing down. I expect to get at least 20 years out of my investment and spend less money on repairs, too. You get what you pay for,” he says. But maybe the best return on investment came in the form of a bet won in part due to the simplicity of a T-L pivot as compared to an electric pivot and the customer service that comes as part of the T-L package.

Hoy and a neighbor were getting new pivots at the same time and made a friendly wager about whose would be up and running first. Hoy’s was a T-L. His neighbor’s pivot was not.

“He had a week head start, but once they started work on mine it was up and running in just four days. His wasn’t running for another two weeks. All I earned was gloating rights, but that’s worth every penny,” Hoy laughs. ■



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Local Dealer:  
**C.R. Enterprises**  
Newton, KS

# Nor Lightning Nor Thieves Nor Gloom of Night

Terry Jacob's T-L pivots keep trucking through events that would sideline electric pivots for days or more.

**Terry Jacob** - Wichita, KS

In Terry Jacob's experience, it would seem it requires nothing short of an act of God to take a T-L pivot out of commission, and even those don't fully stop them sometimes.

"One of the very first T-L pivots used in this area ran from the mid-70s to just a few years ago when a tornado came through and took it down. It wasn't scheduled to be replaced and it was still running great," says Jacob, who farms in central Kansas just north of Wichita.

Jacob got to watch that specific T-L pivot work for most of those many decades. As a young man he was working for neighboring farmer, Wilbur Kurr, when Kurr purchased the pivot. And it was located just 1 mile down the road from Jacob's own farm when it met its untimely fate.

"It was the oldest T-L around, one of the old yellow ones, and if it weren't for the tornado, I'm sure it would still be running today. I have no idea how many hours were on that machine, but it didn't have an easy life," Jacob says.

A true workhorse, the T-L pivot marched forward year after year consistently providing

critically needed water in a continuous cropping system. The field it called home wasn't forgiving. It was converted from pasture complete with filled in ponds, continuously making for an endlessly bumpy journey back and forth across the acres.

**"It was the oldest T-L around, and if it weren't for the tornado I'm sure it would still be running today."**

"The ground was marshy and rough, and it ran for hours and hours raising corn, wheat, and soybeans every year," Jacob says. He even tried to purchase the pivot from Kurr when he started his own farm, but Kurr rightly refused as it was in great condition and still working for him.

Kurr and Jacob together learned a lot about T-L pivots over the years. When Jacob first worked for him Kurr used flood irrigation but became a local irrigation pioneer by

installing one of the area's first center pivots—the very T-L taken out by the tornado.

As the farm grew, Kurr purchased more T-L pivots and eventually became a dealer. Jacob worked on Kurr's pivots and did custom work on other pivots. As center pivots became more popular in the area, Jacob did repair and maintenance on them, too.

"I never did like working on the electric pivots. I didn't like the combination of electricity, water, and steel," Jacob says. He once was nearly electrocuted while working on a unit he thought was turned off that suddenly kicked on. Experiences like that, including the frustrations of how frequently the electric pivots broke down and how complicated they were to fix, soured Jacob on electric pivots. When he purchased his own farm and it was time to upgrade the irrigation from a flood system, the choice was easy. He went with a T-L pivot. When he picked up another 1/4-section, he quickly replaced the existing electric pivot with yet another T-L pivot. It's a purchase decision he's been happy about ever since.



He's especially pleased with the constant movement of the T-L pivot for reasons both mechanical and psychological in nature. "I hate that off and on, off and on, I can still hear that to this day. With the hydraulic system it's slow, steady movement," he says. To him, the steady movement makes more sense. "Having a continuous load on the gears, bearings, and drive lines is a lot easier on them than all that stopping and starting. It's not rocket science."

His point was proven as he couldn't keep drives on the electric pivot that came with his land purchase, even under warranty. "I put a center drive motor on my 4-wheeler every time I went out to check because I knew I would have to trade one out. It was terrible. Once I got rid of that system and replaced it with a T-L I haven't had near as many problems or repairs and certainly don't have to carry drives with me when checking on the pivot. And there isn't so much noise. The mechanic in me says continuous motion is the way to do it," he says.

Jacob uses his T-L system to drive as much production as possible on his acres. He double crops triticale or wheat behind soybeans. There are plenty of cows in his area, so the triticale gives him the opportunity to lease out grazing in the fall.

In the spring, the triticale gets one allotment of water before a neighbor chops it for silage for his cattle. Jacob then plants soybeans again. He also raises corn.

"Irrigation is a tool we need to make this cropping system work," he explains. "We get 35 inches of rain per year, but it usually isn't timely. We're often very dry and being able to get water to our crops at the right time is pretty vital."

Jacob knows when it's hot and dry he can count on his T-L pivots to work even when faced with a wide variety of challenges. When copper theft was an epidemic in his area electric pivots got stripped of their wiring constantly while his hydraulically powered — and therefore light on copper — T-L pivots flew under the radar. And when lightening struck, it was a relatively minor blip in Jacob's day as compared to if he had an electric pivot.

"My T-L got struck by lightening last summer. It knocked out the control panel and the motor generator, but the system itself was OK," Jacob says. His dealer, Jeff Cordell of C.R. Enterprises in Newton, Kansas, was out to fix it right away and he was back up and running in just a day. "We didn't have to go through the system or climb up on the spans to repair anything. There weren't fuses

and control panels on each tower like the electric pivots would have. We were able to repair it fairly fast, which was good as it was hot and dry and we really needed the water. If it would have taken longer to repair, we would have potentially hurt our yields."

While his dealer is usually quick to be of help, Jacob is happy to lean on his years of experience to work on his own T-L pivot when necessary, too. Mostly because it's easy. "Jeff is great, but he can't always get here to make a repair. However, he can walk me through the repair over the phone," Jacob says. The repairs are generally straightforward and not very labor intensive, which is why Jacob stopped working on electric pivots. "I hate those center box drives and U-joint drives on the competitors. Let a dealer go out and put center drives on, that's hard work and I won't do it anymore!"

After being on the front lines of introducing pivot irrigation to the region, Jacob is confident in his decision to stick with the first pivot he worked with, a T-L.

"It took a tornado to take down a T-L," he says. "That says it all. It's a good system. I like the pipe, I like the dealer system, and as a mechanic I like their drives. If I was going to buy another pivot, it would be a T-L hands down." ■

# T-L is Leading The Way With Technology



## T-L GPS NAVIGATION CORNER SYSTEM

Featuring Real Time Kinematic (RTK) accuracy and Wheel Angle Sensor (WAS) for true tracking, the package includes the base station, eliminating the need for a subscription. The system tracks multiple constellations reducing the signal loss caused by tree lines and other obstacles and there is no electronic interference from power lines. Operators can easily change the path of the system through a simple "teach" function.

Users get "track on track" accuracy pass after pass, fast start up time, and real-time diagnostics so they can watch it work. Safety is assured through low voltage, DC(24VDC), and there is no buried wire.

**Combined with T-L's hydrostatic design, low maintenance, reliability and unmatched continuous movement, T-L's GPS Navigation Corner System represents the optimum in pivot Corner System management.**



## T-L GPS NAVIGATION LINEAR SYSTEM

Featuring Real Time Kinematic (RTK) sub-inch accuracy, the package includes the base station, eliminating the need for a subscription. The system tracks multiple constellations reducing the signal loss caused by tree lines and other obstacles, and there is no electronic interference from power lines.

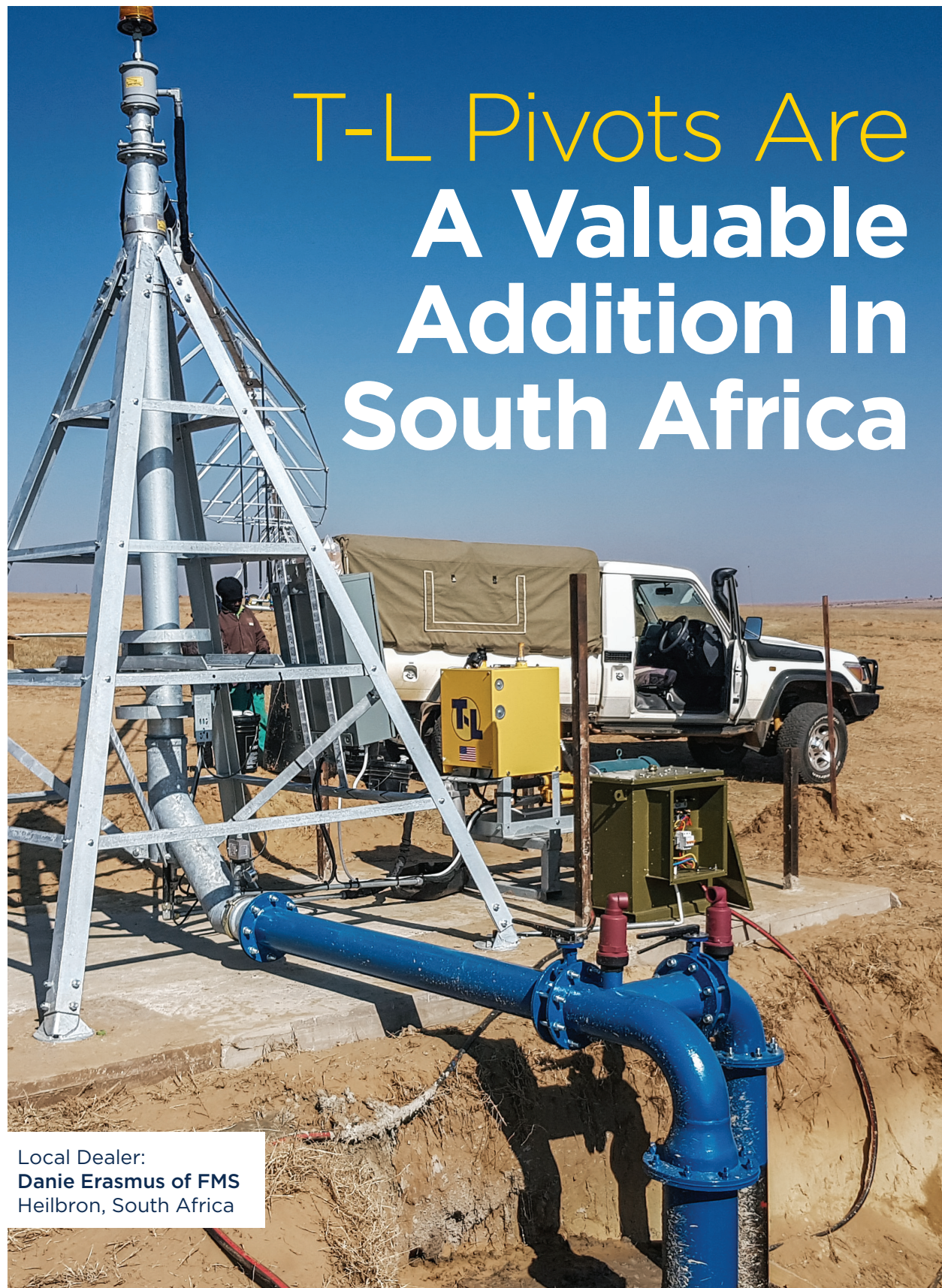
The GPS Linear system can store up to four (4) different paths for T-L Towable Ultra Linear Systems or T-L Pivoting Linears. It can also store up to nine (9) intermediate waypoints if needed.

Operators get fast start up time (less than one minute), and real-time diagnostics so they can monitor the system's performance. Safety is assured through low voltage DC (24VDC), and there is no buried wire, above ground cable or furrows with their associated installation and maintenance costs.

**Combined with T-L's continuous movement, low maintenance and reliability of T-L's exclusive hydrostatic design, T-L's GPS Navigation Linear System represents the optimum in pivot Linear System management.**



# T-L Pivots Are A Valuable Addition In South Africa



Local Dealer:  
**Danie Erasmus of FMS**  
Heilbron, South Africa

**Dr. Izak Hattingh** - Free State Province, South Africa



**D**r. Izak Hattingh can still recall when he bought his first T-L pivot for use on his farm in Free State Province, South Africa. It was in 2000 ... the same year his oldest son, Izak, was born. Today, his son is nearly a grown man at 18 years of age and the T-L pivot is still working like new.

Hattingh says he was first introduced to T-L systems when he and his wife, Sanet, visited the U.S. in 1997 with family friends, Boet and Yvonne van Tonder. During the trip, they were invited to visit the T-L Factory in Hastings, Nebraska, by T-L International Sales Manager, Randy George.

"Boet had just ordered his first T-L pivot for use in South Africa," Hattingh relates. "As we were shown around, we were especially impressed by the quality of material used for construction and galvanizing, as well as the unique hydraulic system. That was something totally new to us."

Consequently, Hattingh, who operates as Wilgepoort Farming, purchased a unit for himself to cover 89 acres (36 hectares) just three years later. Two years after that, in 2002, he bought a one-span T-L towable pivot that covers 2.7 acres (1.1 Ha) per revolution.

In addition to sheep, the farm produces corn, soya beans (soybeans), potatoes and Drakensberger cattle, which is an indigenous breed. So, while the stationary pivots are used on the row crops and potatoes, the towable pivot, Hattingh explains, is used to irrigate eight circles of pasture.

"We can easily move the pivot between the different locations, thanks to scissor jacks on each tower, to make sure we have enough grass for a good lamb crop," he explains. "Even though we have an annual rainfall of around 600 millimeters (23 inches) per year, drought at critical times is still our biggest concern, especially in our sandy soil."

Fortunately, irrigation water is never in short supply, since it comes from a reservoir with nearly 120 square miles of surface area behind the Vaal Dam. Constructed in 1938 and one of the largest dams in South Africa, it is located on the Vaal River, which, in turn, is one of South Africa's strongest-flowing rivers and the fresh water supply for Johannesburg. However, the pivots serve a role other than just providing water when it's critically needed. Most of the fertilizer is applied through the pivots, as well.



Although the crop rotation is generally between soybeans and corn, Hattingh says, they also incorporate potatoes into the mix under irrigation, which helps to control the weeds and insects through chemigation. We feel the continuous movement of T-L gives us uniform distribution of chemicals.

Unfortunately, Hattingh is only able to spend part of his time on the farm, since he also operates a veterinary practice that concentrates on beef cattle, wool sheep and horses. Meanwhile, his son, Izak, is just starting college, studying to be a veterinarian, while his son, Drikus, is starting 10th grade. And when his two sons aren't involved in school, they're participating in equestrian endurance rides, which additionally keeps Hattingh involved in their activities. Hence, running pivots that are relatively maintenance-free is especially important. That's also the reason he hired Johan Naude as a farm manager nearly 10 years ago.

"Johan is responsible for looking after the pivot maintenance — the very little there is," Hattingh says. "He always tells me how well he sleeps at night when a T-L is running. The other brands of pivot on the farm are like babies," he adds. "You have to check on them every hour — otherwise a colic baby is waiting for you in the morning."

The other brand Hattingh refers to are the two 123-acre (50Ha) electric pivots he purchased in 2008 when the South African Rand was weak against the U.S. dollar. That's when the problems started. The first issue, he says, was cable theft.

"Today, ten years later, we still experience a lot of problems with that brand," Naude adds. "If it is not a gearbox problem, it's drive shaft couplers, contactors on the tower control panel, or faulty span cables. It is a high-maintenance and costly pivot; where on the T-L pivot, we've never changed one single gearbox, thanks to T-L's hydraulic drive."

Hattingh says he hasn't made the same mistake twice, though. He has since gone back to T-L pivots, due to the simplicity of the system, the continuous movement and the exceptional reliability. The latest models include pivots that cover 49 acres (20 Ha) and 29 acres (12 Ha) respectively. In the meantime, FMS, his nearest T-L dealer has been surveying the farm for installation of two more T-L units — a 37-acre (15 Ha) model and another 49-acre (20 Ha) unit.

"Danie Erasmus, our dealer in South Africa, is always available for small spare parts and technical support," Hattingh adds. "Randy George is also ... after so many years ... willing to visit us here on the African continent. He always tries to support us in difficult times when the exchange rate bullies us."

"We appreciate T-L for providing us with quality machinery to help make food security a reality on the southern tip of Africa!" ■



NEW FROM T-L IRRIGATION:

## PRECISION POINT TOUCH

### PIVOT CONTROL HAS NEVER BEEN EASIER!

- › Full Color 7" Graphic Screen
- › Touch Screen for easy operation
- › Visual Programming
- › Two End Gun outputs
- › 4 VRI Auxiliary Application Areas Each Direction and up to 120 VRI Steps with Web Telemetry
- › Position Stop by Angle
- › "Soft Start" ensures slow start speed
- › Firmware update via USB



## WEB-BASED PIVOT CONTROL LIKE NO OTHER.

### PRECISION LINK ENABLES WEB-BASED PIVOT CONTROL FOR T-L PIVOT SYSTEMS.

The Precision Link works in combination with T-L's Precision Point Control III (PPCIII) to let you manage your pivot with your computer or mobile device and a simple internet connection. Pivot start/stop, direction, application rate and speed, and water pump control are but a few of the features available. VRI (Variable Rate Irrigation) can also be programmed through the website.

Precision Link and the PPCIII, combined with T-L's hydrostatic design and continuous movement, give you even water distribution, improved crop production, and efficient system management.







Local Dealer:  
**Lee Rain**  
Vineland, New Jersey

# Three Generations Of Vegetable Production

T-L units help ensure a steady supply of vegetables to this family owned farmer's market.

**Anthony Russo IV - Tabernacle, NJ**

**F**or nearly 70 years, shoppers have been stopping at Russo's Fruit and Vegetable Farm in Tabernacle, New Jersey, to pick up some of the store's famous apple cider donuts that are made fresh each day. However, hundreds of people also shop the market each day for bedding plants, garden supplies, hanging baskets and flowers ... not to mention the fruits and vegetables. The latter include everything from pumpkins, apples and peaches to sweet corn, cabbage, tomatoes and string beans. Part of the appeal to local consumers is the fact that the majority of the produce sold through the store is grown on the Russo's own farm.

According to Anthony Russo IV, the farm, which was founded in 1940 by his grandfather, Anthony Russo Jr., has grown from 86 acres to its present size of around 750 acres. During that time, the operation was passed to the next generation, which was Anthony "Tony" Russo III. Unfortunately, Tony unexpectedly passed away at the age of 74, leaving Anthony IV to manage the operation.

"Farming has not only been our livelihood for all these years, it has been our passion for three generations," says Russo. "We basically grow everything from A to Z, including the majority of fruits and vegetables we market."

The diverse operation has also grown to include two acres of greenhouses and two retail locations — the original market in Tabernacle and the Trenton Farmers Market in Trenton, New Jersey. Plus, the Russo family grows and markets both sweet corn and wheat straw through various wholesale buyers. In fact, sweet corn alone accounts for an average of 400 acres annually. Long-straw wheat, on the other hand, is

planted as a cover crop to protect the soil during the off-season and harvested as straw bales. While part of the bales are sold through the stores as mulch and for use in Halloween displays, much of it is sold commercially.

"We probably put at least 10,000 straw bales each year," Russo explains. "It's kind of like a bonus crop before we plant it to vegetables or sweet corn."

**"Thanks to the GPS guidance feature, we can run a linear unit to a certain point in the field and reverse it to water corn that is in the growth stage."**

Naturally, most vegetables, and sweet corn in particular, require adequate moisture to produce a dependable supply of produce to meet the demands of the market. That's what led Anthony and his father to install the first T-L irrigation systems nearly three years ago. Today, they have 10 T-L units, including three more Anthony purchased last year, which cover approximately 450 acres ... or more than half of the farm. Among them are four circle pivots and six linear units, including one that crosses a ditch via a bridge for each set of wheels.

"Virtually all of our sweet corn is irrigated in some manner," Russo relates. "Most of it is under the pivots or linears; but we still use a few reel guns on corners and pieces that are too small for a T-L system. On the other hand, we do have one more T-L center pivot on order, which will put us up to eleven units next year."

Russo notes that even though he doesn't yet have remote control of the units from his cell phone or computer, he does have most of the pivots and linears equipped with GPS guidance, which provides Russo's Farms with a unique advantage. In order to have fresh sweet corn available for their customers throughout the season, Russo and his staff plant a certain number of rows each week. As a result, a number of fields will have sweet corn at different stages of growth and maturity. That also means that different parts of the field have a greater or lesser need for water.

"Thanks to the GPS guidance feature, though, we can run a linear unit to a certain point in the field — often to where a new crop is just coming up — and reverse it to water corn that is in the growth stage," he explains. "We can do the same thing with the pivots. We can irrigate one side of the field where we have sweet corn in which the ears are filling and then reverse it or speed it up on the other side where we have vegetables or sweet corn in a different stage of growth."

Russo notes that while he appreciates the service from Lee Rain, his T-L dealer in Vineland, New Jersey, he hasn't had many reasons to call them — other than to order another pivot — thanks to the reliability of the hydraulic drive. He also likes the consistent speed provided by the hydrostatic drive, as opposed to the stop-and-go movement of electric pivots.

"They've certainly reduced the amount of labor required to water our crops and vegetables, compared to reel guns and gravity systems," Russo concludes. "Plus, they don't waste near as much water and provide much more consistent water application." ■