

## Technology increases precision of water application

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

“GPS has become standard for precision farming, from field mapping to the operation of tractors and farm implements,” said Jake LaRue, Valley Irrigation Linear Product Manager. “Producers deserve the same type of precision when it comes to irrigation. Producers can now irrigate in the same straight lines they planted. This minimises variances in water application, which in turn maximises yields.

Linear irrigation equipment traditionally moves through a field by following one of several types of guidance options:

- Below-ground cable;
- Above-ground cable; or,
- Furrow.

While any of these is good, each has limitations. Below-ground cables can be damaged by lightning or tillage

equipment, farm equipment can run into above-ground cables and furrow guidance can have its furrow damaged by rain or farm equipment.

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

“When you reverse linears at the end of the field, there’s a tendency for non-GPS guidance options to overcompensate the steering of the linear machine during the repositioning, and that can lead to overwatering some parts of the field,” Leonard said.

“But GPS guidance held the linear to a much more accurate position. We didn’t see any overwatering. Everything about the operation was positive. We haven’t seen a drawback yet and will likely install GPS guidance on more linear irrigation equipment that our dealership sells in the future.” Valley GPS guidance works with virtually all linear irrigation equipment and is compatible with John Deere Starfire RTK.

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

“We use GPS in all our equipment,” said Coester. “So it was easy to integrate GPS guidance with our operation, and the programming was simple.”

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

**Producers should contact their local Valley Irrigation dealer for more information about Valley linear irrigation equipment and GPS guidance options. They can locate a dealer by visiting [www.ValleyIrrigation.com](http://www.ValleyIrrigation.com).**



**GPS guidance is now available for Valley linear equipment.**