

THERE IS MORE TO GUIDANCE THAN GPS ALONE

There is a great deal more to precision accuracy with an agricultural guidance system than the Global Positioning System (GPS) alone, according to guidance specialist Joe Arico from BEELINE Technologies.

“To achieve the accuracies needed for agricultural applications — from one metre up to a few centimetres — we need to use differential GPS data. A differential signal can be delivered either from a subscription source, such as Omnistar, or a static receiver, such as the BEELINE Beecon™, to supply the data required to bring you a lot closer to your target.”

The BEELINE Beecon is a portable receiver which is easy to set up and has the ability to automatically calculate and recall its position providing repeatability and consistency, which allows you to eliminate guess row errors with all types of equipment in the same field using its differential correction signal. It can also be set up as a permanent component in a tower network.

The accuracy and performance of any agricultural GPS steering system is also dependent upon a number of additional variables, such as the vehicle you are using, the implement being used at any given time and the field conditions you are operating in.

What really sets BEELINE apart is its patented Dynamic Measuring Unit (DMU) technology, which has been integrated into their systems to ensure these variables do not limit the accuracy of the system. Australian based BEELINE technologies were the first in the world to incorporate this technology into agricultural GPS applications.

According to Joe, BEELINE pioneered a system that incorporates a DMU to give real time updates to the guidance system 90 times per second, providing optimum accuracy for users.

“This allows the system to correct for errors introduced by the attitude of the tractor as it moves across the field. These errors are introduced by the terrain & forces that the implement places on the tractor,” Joe said.

“GPS alone does not update at a fast enough rate to correct for these errors as it typically only updates at ten times per second, therefore the integration of the DMU with both GPS and the differential signal is vital.” It is the combination of GPS, DGPS and DMU technology that provides optimum precision accuracy for agricultural guidance applications. It is due to BEELINE technologies relationship with Agline Distributor’s national network of precision ag dealers and “grass roots” contact with Australian farmers that they can match “real farming” market demands to their research and development.

It was through this kind of cooperative approach that saw BEELINE technologies Arro CM system the first to steer a cane harvester in Australia in 2004 in conjunction with Burnett Land and Machinery, Agline Distributors BEELINE dealer in Bundaberg. In late 2005 BEELINE technologies completed a network of base stations to support the entire Bundaberg/Childers region to aid its many Arro owners and operators. In the coming weeks Agline Distributors will announce its new BEELINE dealer to support the Burdekin region, with the appointment of Ian Muir, local auto electrician as its product specialist for service already made.

Felicity White, Northern Area Manager explained, “Our aim is to complete a similar project in the Ayr/Home Hill region to achieve the same results we have for the Bundaberg region. With greater numbers of cane farmers looking to diversify their cropping choices we want to be able to help them adopt and apply the right technology. Due to BEELINE’s extensive experience in not just the sugar industry but also the grains, cotton, horticultural and orchard industries we feel we can aid local farmers through this transition period.”

The B.I.G. Co-op and Agline Distributors will host a field day on Monday, 8th of May at 2pm at McDonald’s Farm. In field demonstrations, talks from current BEELINE owner/operators and onsite guidance experts will go a long way to answering any questions local farmers may have on how this technology can help make their farm more profitable.

For further information on the day contact Felicity White on 0428 537 934.