

ROADWORKS TODAY: GPS for dummies

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SIMPLICITY of use is being spruiked by Californian positioning technology group **Novariant for its new GPS guidance technology for excavators.**

By providing real-time positioning of the machine's bucket teeth, the Logic7D Excavate removed the need for survey stakes, and even allowed an operator to continue work while survey crews were absent.

Bucket grade and location were collated by the dual antennae array 78D Duo GPS receiver, before being cross-referenced through a controller area network bus to refine the bucket's location, and finally displayed in the cab through a 264mm colour touchscreen display.

Information on the Linux-based operating system could then be overlaid onto maps or design data.

"Construction zones often work with road designs," **Novariant** said. "Logic7D Excavate visually displays centerline, station/chainage, and horizontal and vertical offsets to the operator."

"The operator can easily toggle between design files or select a new alignment from any polyline on the display.

"In addition, several tools are available to the operator to design complex roads or ramps on the fly, given a starting point, heading and slope percentage/ratio."

Chief executive officer Shashi Raval said controller simplicity was the priority when designing Logic7D Excavate.

"Logic7D Excavate is a natural extension to what we have already delivered worldwide with our auto-steering solutions for agriculture, a turn-key solution that is open and builds on industry standards," he said.

"For excavators and earthmoving equipment, the key to success is keeping the user interface simple and easy-to-use, which ultimately translates to operator confidence and improved quality of work."

Mobility was also a key feature of the GPS-powered tool, with data able to be saved and transferred to a PC or laptop using a compact flash card, while the entire system could be removed from the machine at the day's close for safekeeping.

Raval expects the system to be available by the fourth quarter of 2005.



The Logic7D Excavate system as seen from the cabin