

## Innovative New Products at LOGOV



**L**ogov Expo 99, held on September 15/16, attracted about 160 exhibitors and many bus loads of visitors to Meakin Park, Logan City, for the sixth time in eight years. A good selection of heavy equipment was on show and exhibitors reported a high level of interest.

Simon Balemi of **JB Sales** at Loganholme showed off the remarkable German Grundoburst trenchless pipe renewal system. Old or faulty water, sewer, or gas mains of any material including cast iron or steel (collars and all) are burst and expanded by a roller blade on quick-lock telescopic rods, the new main being drawn in as part of one continuous process.

### GPS Guidance for Dozers

Amongst the many innovative items was a new guidance system called '**SiteVision**' for earthmoving machines based upon differential GPS which enables the operator to "see" design surfaces from within the cab.

Boating enthusiasts will know that the Global Positioning System (GPS), using military satellites, provides navigational information to a normal accuracy of some tens of metres. Differential GPS (now being installed on the Barrier Reef shipping channels) involves the addition of a transmitting station to service a given local area, sending out correction data to supplement the satellite signals from a known location. A further enhancement, RTK differential, improves

accuracy to about 20mm (less than an inch) in any plane., ie., vertically as well as horizontally.

U.S.-based Trimble, the world's largest manufacturer of GPS systems (named the partner of choice on GPS by such companies as Bosch and Caterpillar), designed and developed SiteVision. In simple terms, it involves fitting each machine – at the moment dozers, but graders and scrapers are being added – with dual GPS antennas, a colour monitor showing a 'map' of the terrain incorporating the job in hand, and a group of guidance lights in the cab something like traffic lights which indicate to the driver whether he is left or right of a pre-planned path, and needs to raise or lower his blade to achieve the desired cut. A highly mobile (6-8kg.) battery powered base station is set up at a datum point to service the chosen area.

At Logov, Paul Bright's team from **Herga** (the local distributors based at Bowen Hills) were giving demonstrations on a simulator only slightly less impressive than Qantas' 747 simulators, but stressed that the equipment is rugged and that operators learn its use very quickly.

Trimble claim the advantage of this system is that they can load up a complete topographical database for a given area to facilitate accurate operations within roughly a ten kilometre radius. Unlike lasers, which operate only in one plane and within line of sight, the GPS operates in all planes. Taking too much or too little is a thing of the past with this system, which

was pioneered in open cut mines. Apart from eliminating re-work, they claim economies can also be achieved by needing only one surveyor to supervise a number of machines spread over a wide area.

### Participants Sought for Trials

Local distributors **Herga Instruments** made the point in discussions that they are keen to give operational exposure to SiteVision GPS in Australia and would be willing to trial a system on a suitable project for a pre-arranged fixed period. If this interests any of our readers, please contact **Bulletin** publishers Thorne Media, or Allan Archbold, National Sales Manager (Machine Guidance Systems) for the Herga/Ultimate Positioning Group, to discuss the suitability of your particular application to this new technology.

### New Protec Rollers

Also seen at the Logov Expo was one of **Q-Pave's** very smart looking new Protec rollers, gleaming in its two-pack paint. The modern moulded shape gives exceptional operator visibility, added to the general comfort and quietness. As you would expect from a German machine, apart from legendary reliability there are other innovative features, such as the soft start and stop of vibration which is achieved through the use of small steel balls as the vibratory mass. Russell Sly of Q-Pave says the Protec rollers also have a maintenance-free articulation joint, the rollers having only two grease nipples which need no attention between 400-hourly services.

Bruce Glover of **HyLyte**, Nerang, had some very snappy new lightweight fold-away plastic road signs ('Men at Work', etc.) and a range of low-cost reflective plastic road markers which slip down over star pickets.

**Barron & Rawson** of Revesby (NSW) have what they claim to be the first Australian-made lightweight plastic interlocking road safety barrier which is not simply a traffic delimiter, but complies with AS/NZS 3845:1999 as an impact resistant seamless safety barrier for the protection of site and road work personnel.