



Topcon at Intermat

Topcon put on a major outdoor display at Intermat, demonstrating a variety of laser and GPS+ systems on dozers, scrapers, graders, levellers, and excavators.

(They've adopted the expression 'GPS+' to highlight the fact that their equipment can not only access GPS, but also the Russian Glonass satellite system when needed, improving reliability of 'lock', available working hours and accuracy).

To go into the range of sophisticated gear that's now available would take far more space than we have available, but two deserve special mention—

—the System 5 display/control box, recently introduced, is both terrifically user friendly for novices, and also very sophisticated in the hands of experienced operators. The touch screens are extremely clear, displaying the data and choices in an unambiguous way.

It's compatible with laser and sonic sensors and a choice of 3D machine systems including total station and GPS+. Fully 'plug and play', the upgrade from System 4+ is a piece of cake—about half an hour's work.

You might call System 5 the top of the range, but the great thing about Topcon gear is its modularity, meaning that you can enter with a low investment and limited functionality, and easily step up the rungs of the ladder as you need new features (without wasting your money on throw-away items).

Two features that we particularly like about the display, when used with GPS, are a screen showing all satellites currently 'in view' (identifying which are GPS and which are Glonass), and a mission planning presentation that tells the operator the times of day that he can expect best and worst satellite acquisition. A highly useful quick check when there's a degradation of performance, to tell him whether it's just a satellite availability problem, before he goes messing around with cables and other hardware to see what's causing the difficulty.

—the introduction of a GPS+ excavator system. Four of these are now at work with a German contractor who has a couple of jobs involving underwater excavation—they are of course invaluable in this scenario. The heart of the system is Topcon's automatic excavator control system TS-5, which allows the operator to cut under full automatic control to pre-set depths and slopes.

All control of bucket, boom and stick is taken over by the system the moment the operator presses the 'Auto' button. The additional use of GPS+ now offers position information, making finishing applications easier, and is a great help on jobs where the bucket cannot be seen.

