

Tough Construction Sites



LEICA 3D GPS bulldozer system on a landfill site

RMD (Rhein-Main Deponie GmbH) operates the Floersheim-Wicker landfill. With a total surface area of more than 80ha., it is one of the largest landfills in Germany. With its landfill gas recovery and future biomass recovery for electricity generation, it is also one of the most innovative. The comprehensive vehicle fleet includes a Komatsu D65-EXL-12. Since August, this has been equipped with the 3D GPS guidance system *Dozer2000plus* from Leica Geosystems.

"Particularly during final filling, it is necessary to keep exactly to the profile data. Every lost cm costs money," states Peter Pohlen, head of landfill operations. The GPS guidance system can exploit its advantages to the fullest extent, especially when creating the surface seal. Increased precision,

increased fill capacity, and significantly reduced surveying costs are the end result.

With the GPS guidance system *Dozer2000plus*, the driver sees the site plan on the computer display along with contours, planned roads, engineering structures and gas wells, the machine position and the current height of the blade on the cross-section of the terrain. Deviations from the nominal terrain are indicated to the driver both as numerical values and using arrows. At the push of a button the driver can change between various views to select the optimal representation for his needs. A light beam fitted to the bonnet provides increased convenience. The Leica 2 frequency receiver MC500 and a dual axis tilt sensor on the blade enable the actual position to be determined. In this way maximum precision is ensured also on steep terrain. The

permanently installed reference station continually sends correction data and ensures 24h GPS availability, a feature appreciated by the surveyors and civil engineers with their Leica RTK surveying solution. Fill checks and staking out can be performed directly by the landfill personnel.

"Competent support by the supplier is also crucial for our decision to purchase. This includes the integration of our planning data from AutoCad in the GPS guidance system," continues Peter Pohlen. The bulldozer driver, Werner Specht, is very enthusiastic: "Now I can see the current fill at any point in the landfill. No pegs to drive around, no obsolete stake-outs due to settlement, quality and performance increase, no rework—these are convincing arguments for the Leica 3D GPS guidance system *Dozer2000plus*."