Liebherr Positioning System

Exact positioning and precise execution of drilling processes are crucial for the success of deep foundation machinery. Using a factory-mounted add-on kit Liebherr’s positioning system LIPOS® allows for the direct integration of a Trimble or Leica machine control system into its process data recording and reporting systems. The external positioning systems from Trimble or Leica for drilling and piling rigs are based on state-of-the-art Differential Global Navigation Satellite Systems (DGNSS) technology and so creating the ideal conditions for a precise and efficient positioning of Liebherr machines and their working tools.

On the one hand, the LIPOS® add-on kit includes a fixture for the easy and quick installation of hardware without the need to change the machine structure. On the other hand, DGNSS data are integrated using a software enhancement of the process data recording system (PDE®).

The GNSS antennas are mounted on the pivot point of the leader inclination cylinders so enabling an optimum signal quality and intensity. The combination of the visualized digitized drilling plans with the actual DGNSS and machine data provides optimum assistance to the operator for the exact positioning and precise execution of the drilling process.

The integration of a Trimble or Leica system allows for a comprehensive and consistent recording of positioning data in PDE® as well as the visualization and analysis in the Process Data Reporting (PDR2) software: LiDAT® data transmission enables automated transfer of PDE® data via GSM and GPRS to the reporting software PDR2. Reports generated can be used for traceability, documentation and quality assurance. The positioning system LIPOS® is seamlessly integrated into existing Liebherr IT-solutions and compatible for a wide range of Liebherr deep foundation machines.