

GEO-INC-VISION

Vertical control system applied to bucket or hydraulic grab



GEO-INC-VISION measures and shows the drill inclination on bucket or hydraulic grab machines. The 2 axis inclination is expressed in the front-side chartesian system. The drilling inclination graphic is obtained performing a series of inclination measurements at different depth during the drilling procedure. The inclination measurement consist of a stop of 10 to 15 seconds at the desired depth. You can download the inclination measurements anytime the bucket comes out of the drill in order to monitor the way the drilling is going on.

PARAMETERS MESURED BY THE GEO INC VISION

- Drilling depth
- Depth of each inclination measurement
- 2 axis inclination executed at each depth
- Inclination measurement reliability for each step
- Drill inclination graphic

GEO INC VISION has a human interface unit that can acquire and show the actual depth at each time, the correct allignment of the bucket to the machine during the inclination measurements and the inclination measurements acquired by the precision 2 axis sensor placed directly onto the tool. The data transmission from the bucket to the central unit is performed using a Bluetooth protected communication. You can download the inclination measurement everytime the bucket comes out of the drill, so that you can decide to correct something in the drilling or even abort the drilling execution if something is going wrong and the drill is too inclined.



Data can be simply downloaded from **GEO INC VISION** to PC using a standard USB stick.

In the PC we can show graphics of the data and we can also print it using a simple software called **VISUAL-SGD**.

With this software we can also decide what we want to insert in the print report and what we don't want to show depending on the customer needs.

VISUAL-SGD is also usable to check data acquired in order to perform a quality check of the job for each drilling performed. The drilling inclination is showed with polar and chartesian graphics and also the single inclination measurements could be showed and printed.

GEO INC VISION has also some optional fetures that could be added to the standard configuration.

- Adding a **GSM modem** to the system you can directly send data directly to your central office and monitor the job in real time. You can also upload new configuration setting to the system directly from your office.
- By adding the **GPS** option you can express the inclination of the drill you are monitoring in absolut earth coordinate (North-East)

Technical Characteristics

Central unit:

- Colour 7-inch LCD Display, 800x480 WVGA and 21-key polycarbonate keyboard
- 2 GB internal memory (RAM).
- 2 RS-232 / RS 422 serial outlets + 1 CAN bus
- USB port for data download
- Data stored in the XML format, GM-Data
- Aluminium container (295 x 185 x 55 mm)
- IP65 mech. protection (DIN40050)
- 24 V DC voltage (18-36V), 8 W
- Service temperature: -10° to 60° C

Sensors:

- Depth sensor : Rolls type - 1cm precision
- Allignment sensor : Proximity
- Bucket 2 axis inclination sensor : 2 axis accelerometrics, 0.1° precision
- Wireless communication kit : Encoded Bluetooth