

MIX-VISION

Measuring System for Soil-Mixing



MIX-VISION measurement system is a new generation device used for the drilling and grouting parameters in the technology of soil mixing. It is based on Windows CE unit with a 7" color display. The system allows to measure and store the following parameters:

DRILLING PHASE	UPWELLING PHASE
<ul style="list-style-type: none"> • Drilling depth • Advance speed • Rotation speed • Hydraulic pressure rotation couple • Drilling mixture pressure • Injected mixture instantaneous flow rate • Injected mixture volume 	<ul style="list-style-type: none"> • Digging depth • Rising speed • Rotation speed • Injected mixture pressure • Graph of upwelling injected mixture pressure • KAPPA instantaneous rate • Graph of KAPPA parameter • Injected mixture instantaneous flow rate • Injected mixture volume • Automatic upwelling

MIX-VISION is installed into an aluminium robust small-size container; the User Interface includes a 7" colours display, with high brightness and a waterproof and scratch-resistant polycarbonate keyboard.

The connection to the field sensors is made possible through a multiple connector which allows for a fast disassembly and connection.

Automatic control of the device upwelling speed dependent on K constant value (rate of injected mixture units per meter) or the constant rising speed through the analog output.

The version equipped with built-in **GSM modem** allows for the **remote transfer of stored data**, the programming of work parameters and for **remote service**. Data can be stored in the **internal back-up memory** and in a removable **USB Stick**.

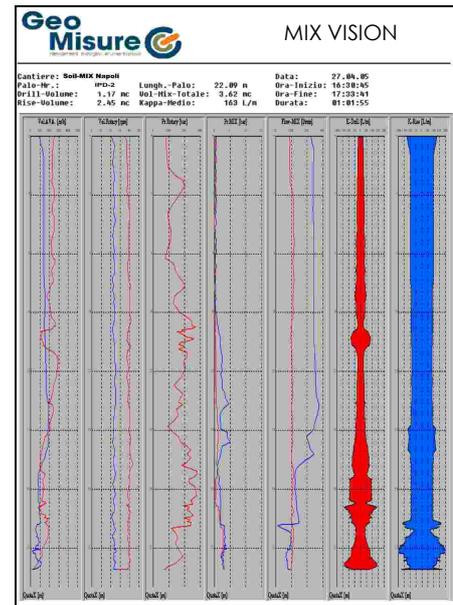


At the end of the storage phase, data can be transferred to any portable PC with a USB interface.

By using an easy-to-use software running in WINDOWS™ XP, 7, 8 or VISTA™ operating systems, it is possible to transfer the data from the memory card to the PC, and subsequently the operator can carry out the statistical analysis of stored data during the operation, as well as other quality controls, including the printing of the records with the typical graphs of each concrete rod so realized.

Thanks to the software supplied, it is possible to customize the printing configuration by modifying the display scales, the printing colours, etc.

Besides showing the records of the measurement values previously listed, the Report of each concrete rode identifies the following general data: the Building Yard, the Rode Number, the Max. Depth, the Date, the Start and End Time, the Duration, the Total injected and upwelling Concrete Volume, and the Total concrete volume, as well as the average "K" rate.



It is also possible to display and print a final report (e.g., for the current day), like for example a list of the drillings and concrete injections carried out, including the main values of each operation as described above. The sensors wiring system is composed of two shunt-connector blocks. The first block is integrated to the truck; the depth sensor, the couple measurement sensor, the concrete pressure/volume sensor and the propeller rev. number sensor are connected to the first group. A second connector block which includes the leakage protection circuits is installed into the cab; the flow rate and volume sensor, the central unit and the power supply are connected to this block.

Technical Features

Power supply	24 V dc (21 - 30 V)
Installed power	30W
Digital output for the automatic upwelling control	24V dc
Analog output for the automatic upwelling control	0-4...20 mA or 0...5 - 10 V
Service temperature	-10° C to 60° C
Protection standard	IP 65 in conformity with DIN 40050 standards
Central unit overall dimensions	295 x 185 x 55 mm