

PVP-VISION

Measuring, storage and control device for single injector



PVP-VISION is a system for the measuring, storage and control in the soil consolidation process with grout injections. It can control and monitor one single injector.

For each concrete injection, the device allows to measure and store the following parameters:

Parameters measured	Plant Management
Injected mixture pressure	Injector START-STOP automatic control
Injected mixture instantaneous flow rate	HIGH-LOW pressure automatic control
Injected mixture volume	Proportional valve automatic management
Valve breakage pressure	
Max. pressure in low pressure phase	Pressure controlled injection, max. volume and GIN automatic management
Final pressure	

PVP-VISION controls the injector in manual (START-STOP) or automatic mode according to the achieved limit of pressure or volume or to the Gin number previously set up in the recipe in use.

The system also allows to manage the switch from high to low pressure and the continuous adjustment of the injection iflow rate by controlling the proportional valve of the injector (if the injector is equipped with these vale).

PVP-VISION is already equipped with the capability to be connected to a 3G, or wireless or ethernet network so that it could be remotely monitored giving the chance to load programmed injection recipes into the system, download data collected or run maintenance tests and procedure.



For each grout injection, the system stores the name of the injection, the valve number, the mixture type, the duration of the operation, the date and time of the jet operation, as well as the number of the injector used, the default limit values (max. pressure, max. volume and GIN number), and the cause of the injection stop. The full-colour LCD displays also graphically the trend of the pressure and grout flow rate.



Data is stored into internal memory and then downloaded to a PC using a standard USB key.

By using **VISUAL-SGD** software, it is possible to transfer the data from the HD unit 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 records with the typical graphs of each concrete pole so realized. Thanks to **VISUAL-SGD**, it is possible to customize the printing configuration by modifying the display scales, the printing colours, etc. following the customer needs.

You can display and print a final report (e.g., for the current day) such as a list of the injections carried out, including the main values for each operation as described above.

The START-STOP and HIGH - LOW PRESSURE controls is given by an electric contact The system is equipped with linear variable output for the direct control of proportional valve: these manage the flow rate of the injector in order to inject even minimum quantities of mixture at lower flow by achieving a higher level of refilling without the risk of sudden changes in pressure.

Main technical characteristics

- ✓ 7" display with polycarbonate keyboard
- ✓ USB slot used to download data stored
- ✓ Mechanical protection: IP65 (DIN40050)
- ✓ Power: 24 V DC (18-36V), 8 W
- ✓ Working temperature range: -10° C + 60° C
- ✓ Connector oriented design