

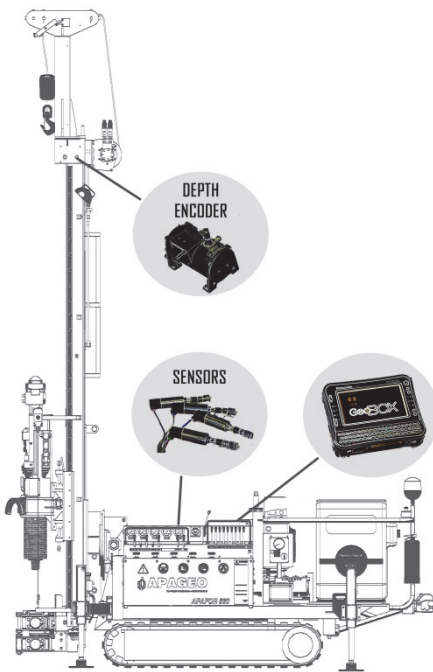
# ExploFOR<sup>®3</sup>

## GENERAL PRESENTATION

Like previous versions, ExploFOR<sup>®3</sup> enables the **recording of drilling parameters** during the drilling process with a view to collecting **real time information** on the soil profile. These data can also be used to choose adapted soil testing investigations (Pressuremeter, SPT, etc.) to the soil at hand.



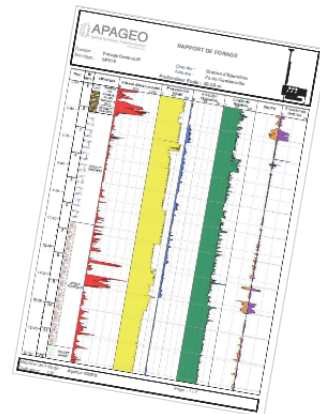
APAFOR<sup>®</sup> - APAGEO's range of drilling rigs - are equipped in series with quick hydraulic couplings for connecting ExploFOR<sup>®</sup> system (APAFOR<sup>®</sup> 400 series or higher).



ExploFOR<sup>®3</sup> is a **highly advanced edge equipment** that centralizes drilling data right through the central unit GeoBOX<sup>®</sup>. The whole device is **handy** and can be **quickly mounted** on the drilling rig.

## EXPLOFOR<sup>®3</sup> IS MADE OF :

- Rugged depth encoder: penetration rate/depth sensor, compact and light, it is equipped with an electromagnetic rewinding brake to avoid damages.
  - Junction box that will be mounted on the drilling rig for centralized connection of ExploFOR<sup>®</sup> sensors and communication with GeoBOX<sup>®</sup> via WIFI.
  - 3 pressure sensors for hydrolic pressur acquisition.
- The central unit GeoBOX<sup>®</sup> and accessories are sold separately.



## EXPLOFOR<sup>®3</sup> RECORDS THE FOLLOWING PARAMETERS:

- Advance rate (depth and penetration speed)
- Rotating torque of the rotary head
- Pushing force (thrust) on drilling bits
- Injection pressure of drilling fluid
- Optional: VIR<sup>®</sup> - a rotation speed sensor (APAFOR<sup>®</sup> 400 or higher), holding pressure, flow, GPS



Data from ExploFOR<sup>®3</sup> can be processed directly using our geotechnical data processing software, GeoVISION<sup>®</sup>.

*ExploFOR<sup>®3</sup> and GeoVISION<sup>®</sup> are registered trademarks of APAGEO*

## IMPLEMENTATION

### 1. SET UP THE EQUIPMENT EXPLOFOR<sup>®</sup>3 ON THE DRILLING RIG



### 2. ENTER THE DRILLING PARAMETERS IN GEOBOX<sup>®</sup> AND LAUNCH THE DATA ACQUISITION



### 3. FOLLOW THE DRILLING PROFILE IN REAL TIME ON GEOBOX<sup>®</sup> PRINT OR SAVE DATA ON A USB KEY TRANSFER DATA TO THE OFFICE VIA GPRS SYSTEM (OPTION)



As soon as the equipment ExploFOR<sup>®</sup>3 is connected to the drilling rig (hydraulic connection, depth encoder on the mast, sensors etc...), GeoBOX<sup>®</sup> orders the record of drilling data through WIFI. Data can be instantaneously watched on the screen until the desired depth is reached. At the end of the drilling, results can be printed on GeoBOX<sup>®</sup> mobile thermal printer or sent to the office **via GPRS** (option).

## OPTIONS

- VIR<sup>®</sup> [Rotation speed sensor]: rotation speed sensor, 2 models are available:
  - The 1<sup>st</sup> is suitable for use on all APAFOR<sup>®</sup> 400 series and higher geotechnical rigs. This system is made up of a display unit positioned near the control panel of the rig and a sensor inserted directly into the rig's rotating head, offering maintenance-free operation while eliminating all outside disturbances. This system can be used independently from the recorder ExploFOR<sup>®</sup>3.
  - The 2<sup>nd</sup> is composed by an optical sensor with installation kit, in order to be fixed near the shaft of the rotation head.
- Flowmeter.
- Onboard GPS for localization of sounding position.
- Extra pressure sensors with various measuring range: 10, 20, 70, 100 or 400 bar.
- Digital Inclinator to control the inclination of the mast.



ExploFOR<sup>®</sup>3 is 100% compatible with your existing ExploFOR<sup>®</sup> sensors and depth encoder.