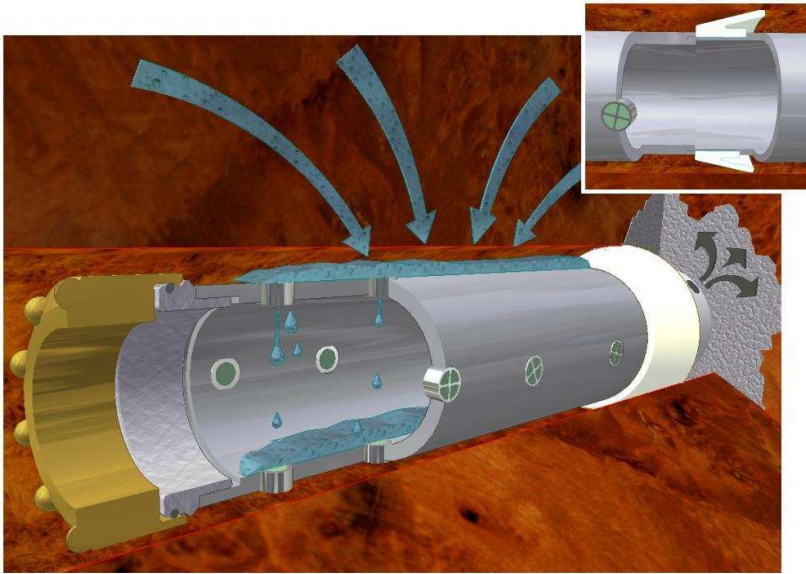


## SIDRA SYSTEM



In the last years **SIDRA DRAIN** has been upgraded and the slots protected by plastic inserts have been replaced by special pressure-proof valves **SIDRA VALVES**.

**SIDRA DRAIN** components and technical features:

- **SIDRA PIPE:** first quality steel pipe with draining holes protected by special “micro-filtering valves” **SIDRA VALVES**. Number of holes per linear meter goes, depending from diameter of the pipe and from kind of soil, from some ten to the max allowed by the required strength of the pipe during the drilling phase. For applications in “drinkable water field” the draining pipes can be made by stainless steel.
- **SIDRA VALVE:** truncated cone shape, made by ZAMA (zinc alloy with excellent resistance to the corrosion, in accordance with UNI-EN 1774 normative), with holes  $\varnothing$  about 1 mm. These valves are filled with **Hydrolene**, a water soluble and bio degradable plastic material in accordance with DIN 54900 normative, to be protected during the drilling phase. The dissolving time of this material is strictly related to the composition of this polymer and to the environment of utilization and in any case within the 24 hours. Main advantage of **SIDRA VALVES** is the pressure-proof: they can support a pressure till 25-30 bar and this allows the internal flushing of the drilling fluids during the drilling phase. This gives to **SIDRA PIPES** the double function of drill rods/drainage pipes.

The installation of the **SIDRA DRAINS** can be done using rotation or roto-percussion technology:

- With rotation system a **SACRIFICIAL BIT** complete with check valve is used. The bit can have different shapes in accordance with the kind of soil to drill.
- **PILOT BIT** and **RING BIT** (lost in the hole) with internal rods are used in case the pipes are installed with DTH method or top hammer with special system like Symmetrix or similar.

In both case the installation can be done under water level using a preventer.

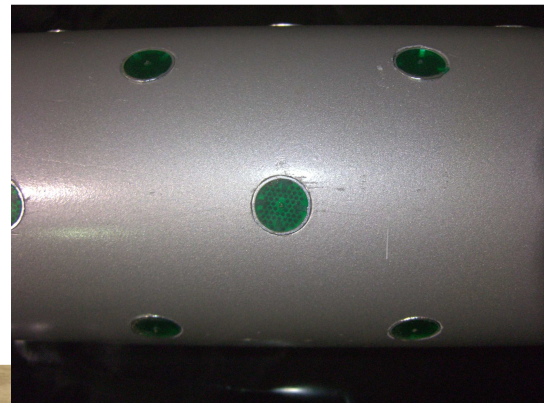
## SIDRA DRAIN

**SIDRA DRAIN** has been created in 1999: the aim was to install in the soil self-drilling steel draining pipes without using any casing.

Originally **SIDRA DRAINS** were steel pipes with slots (width 2÷3 mm, length 60 mm) protected by water soluble and biodegradable plastic insert.

Functions of this plastic:

- avoiding plugging of the slots during the drilling operations
- starting the dewatering once dissolved (the water soluble plastic dissolves within 24 hours of contact with the water)



**SIDRA VALVES**



**SIDRA DRAINS**

**TecSoil s.r.l.**

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