

## EXECUTION OF PRE-DRILLINGS WITH SUCTION EXCAVATOR

The decennial experience of Gerotto Federico srl in the applications of the Suction Excavator, has recently been integrated thanks to the use of this particular technology in the execution of pre-drillings.

It's about point excavations necessary to individualize possible underground utilities and it can define therefore the points in which to perform subsequently geognostic borings in safety.

The Suction Excavator proved to be the most proper mean to carry out this type of work and his speed allows to meet times particularly close.

By the technique of "vacuum cleaner" it is capable of digging up to 2.50 m depth without creating a large hole, but with a maximum diameter of about 30 cm (Pictures 1 and 2).



Picture 1



Picture 2



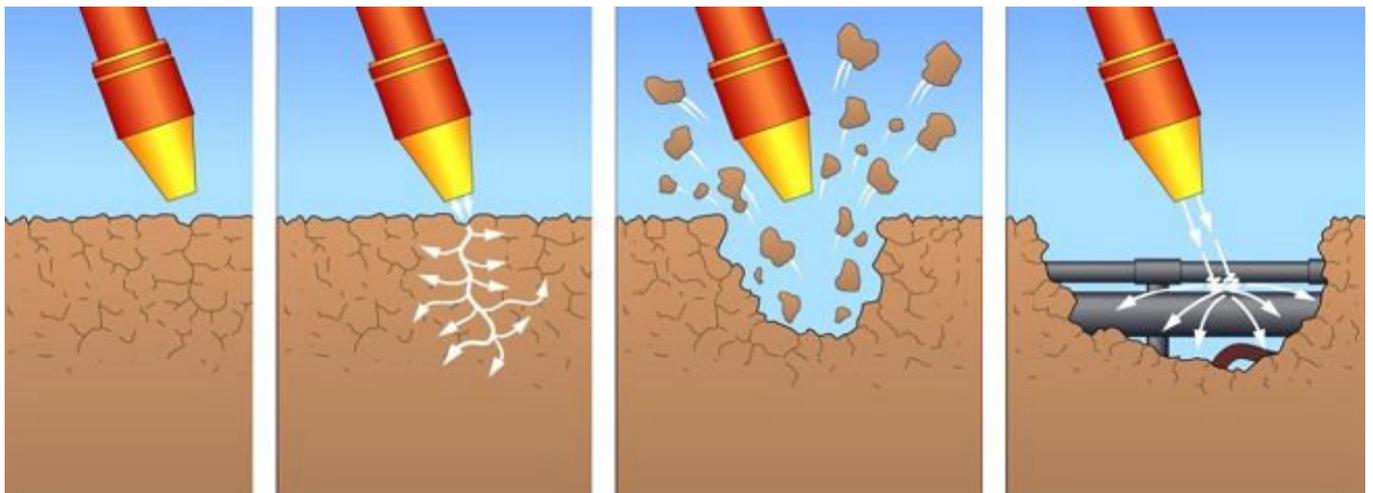
Picture 3

The execution of pre-drillings with Suction Excavator has numerous advantages in comparison to the normal methods of excavation. In fact, it is particularly indicated for all situations, as the urban spaces, which are intended for road users.

In these cases, the excavation must be performed ensuring, at the same time, a large space for movement of vehicles and people, and assuring the least trouble in acoustic terms to the surrounding activities (Pictures 3).

The Suction Excavator, moreover, allows to dig in safety and cleanliness conditions, both for operators and for external people, as the material is sucked directly inside a closed tipping body, and the filters, of which the machine is equipped, ensure that the air returns to the atmosphere free of dust.

Unlike classical mechanical excavators, the Suction Excavator guarantees to not damage possible underground utilities encountered since it is removed only the material that is around them (Picture 4).



Picture 4

The implementation of pre-holes provides the following processes:

- Perforation of the asphalt through pneumatic hammer (Picture 5)
- Aspiration of the ground up to the predetermined depth (1.50 - 2.50 m) (Picture 6)
- Filling of the hole with the extracted material
- Compacting of the ground by pneumatic hammer for following layers of around 20 cm
- Sealing of the hole with cold asphalt



Picture 5



Picture 6