SPIRAL FLUSH®

NEXT GENERATION
FOR DTH DRILLING

DTH is a perfect solution for Over-burden-drilling in complex ground conditions. To be able to utilize the superior technology in urban and environmentally sensitive areas the air used in drilling should not escape to the surroundings.

Patented Spiral Flush –technology is a perfect solution to control air in DTH applications. All air is directed crosswise and there are no air channels forward to the drilled ground.

- No pressure against ground
- No air escape
- No over drilling

SPIRAL FLUSH® *DESIGN*

Environmental

- All cuttings and flushing air is kept inside of the casing
- Removes the danger of over drilling (sandy formations)
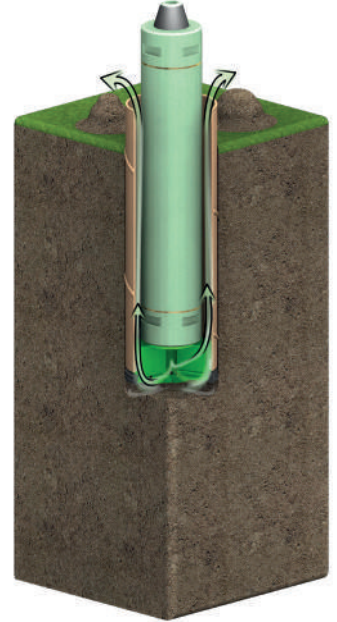- Removes danger of air escape (clay formations)

Efficient

- Flushing improves drilling speed
- Drilling speed enhances pilot bit life
- Cutting edges improve drilling in hard clay
- Spiral groove pushes material out when rotating

SPIRAL FLUSH®

- Flushing channels are crosswise to the drilling direction
- Back flush creates vacuum to the pilot bit face area
- Air channels are above the ring bit cutting edge

» **No pressure to the ground**

» **No air leakages**
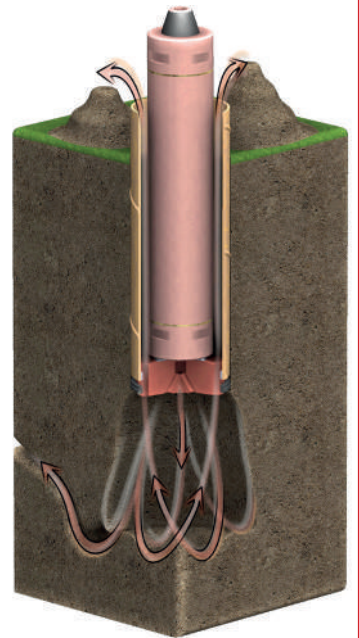
» **No over drilling**

AIR CONTROL

THE FUTURE OF DTH-DRILLING

Conventional DTH drilling has two problem areas:

1. Pressurized air over drills material. Over drilling removes more material than anticipated changing ground's original characteristics hazarding nearby structures.

2. Air that is blown forward travels long distances in loose ground or soft clay. This can cause severe damages in nearby buildings and structures.

» **As a result the use of conventional DTH drilling is limited already in several city centers, shorelines and other sensitive areas around the world.**

» *Spiral Flush has been tested and approved also for the areas where conventional DTH drilling is restricted*