

## Piperoofing – Drilling instructions

1. Mark the drilling point in the face of the tunnel (be sure that the minimum distance to the roof of the tunnel is 50 cm). If the drilling is with boomer 282 make predrilled holes (40 cm) to support feed guide of the boom in tunnel face.



2. Prepare to assemble the drill string to boomer.
  - a. First you insert inner drill rod in the starter casing on the ground

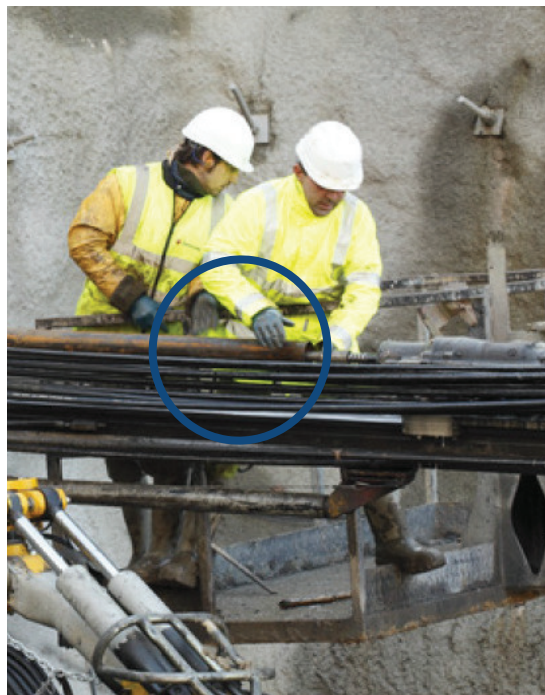


- b. Second you load both to the boomer and be sure that you lock correctly the pilot bit on the ring bit
3. Position the boom at the right place to start the hole and then start the drilling.

4. After finish the drilling of the starter casing (usually 2,95 meters) add the extension casing and drill rod. To do this follow the following steps (see the photos):
  - a. Stop drilling and unthread the inner drill rod (from the shank adapter)
  - b. Add to the boom the extension casing and inner drill rod (the inner rod should be inside of the casing)



- c. Thread the inner drill rod to the shank adapter and to last drilled rod





- d. Thread the extension casing to the drilled casing.



- e. Start drilling again.



5. Add the extension casings until you reach the desired hole depth (repeat the same process as mentioned on the point 4).

# Pipe Roofing

## Contents of the kit

- Available in two versions, for 89mm and 115mm
- One kit include
  - Conversion parts
    - Drill steel support
    - Two version of dowel
  - Larger hydraulic motor for rock drill
    - To be able to handle the larger diameters
  - Air kit
    - For external air supply

