

## Pipe rehabilitation with threadable short pipe modules



The pipe rehabilitation of a dilapidated sewer in Rothenthurm, canton of Schwyz (Switzerland) was carried out by Rudolf Frutig from Mühlethurnen, a company specialised in berstlining. In the start pit the space was limited, therefore the choice of pipe system were threadable short pipe modules. After preparing the pits and installation of the cable burster, the pulling in of the 12 m (39 ft) pipe was executed within 30 min. This pipe went underneath a concrete slab.



←  
The cable burster TERRA-EXTRACTOR X 400 installed in the pulling pit. The hydraulic drive and the power supply for the machine as well as for the cable drum came from the hydraulic power take-off of a 5-to excavator.



## Cable Burster TERRA-EXTRACTOR X 400

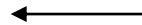


→  
The TERRA-EXTRACTOR X 400 starts to pull in the expander cone.



→  
The cable burster TERRA-EXTRACTOR X 400 with a pulling forces of 400 kN (40 tons) easily pulls in the pipe stepwise.

The HDPE-pipe OD 180 mm (7"), ID 140 mm (5.5") after uninstalling of the cable burster in the pulling pit.



The expander cone OD 220 mm (8.7") is mounted to the steel rope  $\varnothing$  25 mm (1"). Behind the cone the expander chuck is attached.



The first half-metre (19.7") short pipe module is screwed in and tightened with the strap wrench. After pull-in steps of a half-metre the further short pipe modules were threaded in.

