

## PIPe renews concrete sewer line ø 500 mm (20") trenchless

City: Contractor: Length: New pipe: Machine: Old pipe: Underground: Völklingen, Germany Karo-San/Germany 50 m (165 ft) Short pipes from PP-HM OD 485 mm (19"), 400 mm (15.75") long TERRA-EXTRACTOR X 400 with manhole frame Concrete ø 500 mm (20") Sand, gravel, stones, sandstone

The German city Völklingen a 50 m (165 ft) long concrete sewer line. The Civil Engineering Office of Völklingen looked for a environmentally sound trenchless method. Due to the low static bearing capacity of the old pipe cipp methods were not possible. A new pipe with full load bearing capacity should be laid.





Picture above:

The Cable Burster TERRA-EXTRACTOR X 400 and the automatic Cable Drum before operation. Installation of the job site at minimum space.

## Picture left:

The TERRA-EXTRACTOR X 400 during the pipe pulling on top of the manhole. The cable burster is remote controlled. No operator has to enter the manhole during pipe pulling.

## Cable Burster TERRA-EXTRACTOR X 400





The manhole frame, the front plate and the two struts are lifted through the opening  $\emptyset$  62.5 cm (24.6") and assembled at the bottom of the manhole.

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The next pipe module PP-HM DA 485 mm (19") is lowered into the manhole.





← The next pipe module is assembled.

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