

TERRA-JET 3008 ES drills heating pipeline



The Swiss contractor Moser Tiefbau AG from Fischingen used its newly acquired steerable pit launch machine TERRA-JET 3008 ES to lay a pipe for long distance heating. For that purpose the machine was installed in the starting pit. From there the pilot bore was drilled with a length of 48 m (160 ft). Existing utility pipes and a carport were crossed underground. In a second step a HDPE pipe OD 225 mm (9") was pulled in as a casing. Later a long distance heating pipe with supply and return line were inserted in that casing pipe. The HDD rig TERRA-JET 3008 ES is equipped with drill rods of 1 m (3.3 ft) length, which allows a maximum bending to a radius of 40 m (132 ft). With a torque of 3000 Nm (2'215 ft/lbs) and with a thrust and pullback force of 8 tons (17'600 lbs, respectively 9 US tons) bore channels up to a diameter of 420 mm (16.5") are feasible.



The hydraulic power pack, the mixing + pumping station as well as the tank were installed separately. The power pack is driven by a PERKINS Diesel engine. Built-on is a diesel particulate filter that ensures compliance with the strict Swiss exhaust emission standards.



The bore run was continuously tracked with a locating system which also incorporates the target-in-the-box locating function.



↑ The backreamer \varnothing 300 mm (12") with attached HDPE pipe \varnothing 225 mm (9").



After the pilot bore the bore channel was extended to \varnothing 215 mm (8,5") in a first step and to \varnothing 300 mm (12") in a second step.



The Bentonite accumulated in the pits was removed by a Bentonite vac.



↑ The pulling in is completed. The back reamer is removed and the casing pipe re-pulled the last section. Then the PE-expander chuck is cut off.



After removal of the PE-expander chuck the supply and return line for the long distance heating are pulled in.