# GRUNDOBURST

## Pipe renewal

Small pit = minimal excavation costs. Here with extended rig shortly before the pipe is completely pulled in.

The bursting rods with spacer are pushed through the old pipe

(Single length 400 G - 70cm, 800 G - 75cm and 100 G - 150cm) are not screwed to gather in the conventional way. The simple click lock of the QuickLock rods has obvious time and labour saving advantages as there is no interruption and withdrawal making pipe bursting a single continuous operation. Power transfer problems and risk of damage to threads have now become a thing of the past. Due to the rod diameter of 54mm even pipes < ND 65 can be renewed.

## Pipe pulling and bursting process

After the QuickLock rods have been pushed forward the reverse bursting process can begin. Specially designed splitting roller blade heads and accessories are fitted together by a special elbow joint. This link assists to guide the roller cutter blade back even through offset pipes down to a minimal radius of just 48 m. As the roller blade is pulled back by the rods, the old pipe is shattered and the pipe fragments are radially displaced by the following expander. In an attempt to simplify the disassembly of the roller blade and expander frame is extended, the accessories removed and the new pipe reconnected with a short puling adaptor. Finally the pipe is pulled into place prior to the removal of the bursting rig from the pulling pit. New short or butt fused pipes of various lengths can be installed, even multi-duc pipes can be accommodated.

## The roller blade (Patented)

Can be adapted to cut other old pipe materials, such as steel pipes, ductile iron, HD-PE pipes or split the most difficult repair clamps or joints. Roller blades are available for pipe sizes DN 100, 125, 150, 200, 250 and 300. The photo show the roller blade with the new pipe attached prior to the commencement of the pipe splitting.

The roller blade is pushed through the old pipe which are the n cut open.

Different aspects determine the choice of the Grundoburst unit: diameter of the new HD-PE pipe, length of the individual pipe replacement job, compressibility of the neighbouring soil. As a rule of thumb, Grundoburst 400 G is applicable for pipes of ND 65 to 250 mm, Grundoburst 800 G for pipes pf ND 150 to 350 and Grundoburst pipes of ND 350 to 600.

## Rapid sewage pipe replacement

On the sewage network also the respective owner needs to become active when leaking mains (caused by pipe settlement, collapsed pipes, etc) lead to sewage exfiltrations into the neighbouring soil or to ground water infiltrations into the leaking pipe. Both situations can be saved by using the Grundoburst hydraulic pipe burster for installing new HD-PE pipes (Short-length)

## Environment Solutions

On the German market pipe bursting has been successfully put into use on deponies. Leaking pipes, such as depony drain lines or pipes for degassing purposes can be replaced efficiently and economically using the reliable Grundoburs pipe bursting system at large working depths up to 20m.

## Strong and versatile

Modules or butt-fused strings) Special pipe bursting pipes have been developed with an extremely hard and resistant outer coating for additional protection of the inner pipe core during the bursting application. This special Tracto/Botec sewage pipe is available for applications in neighbouring European countries. The pipe bursting technique is even applicable with partly collapsed pipes without the need for pre-cleaning or calibrating the old line.

Safe pipe installation with Grundolog tensile load measuring device

Latest European regulations for the tensile load applied to a water or gas mains be documentated. Written proof is now required for the respective water or gas company about the real tensile load applied to the new mains during installation by a HDD rig or during pipe bursting. Measurements are carried out with the Grundolog tensile load measuring device form TT, which is assembled inside the pipe to be installed. The data logger can measure and store 32.000 separate data values for a duration of 8 hours. The data is stored digitally and then calibrated with PC or a notebook directly on jobsite. The print-out of the tensile load documents the pipe installation is accordance to the pipe manufacturers and utilizes regulations.