

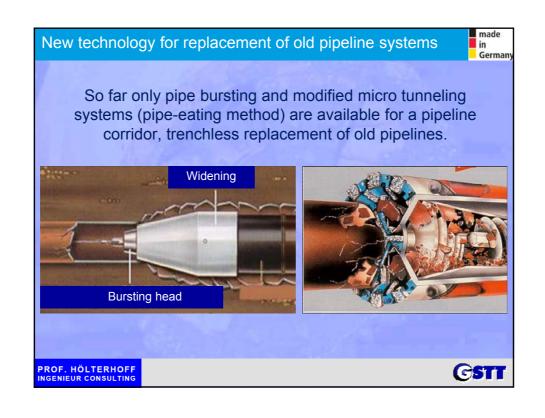
Trenchless Innovations from Germany

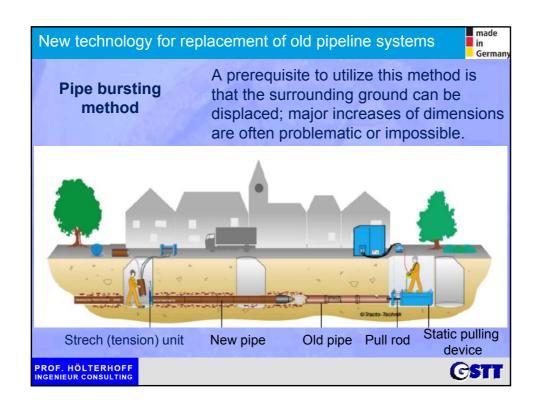
made in Germany

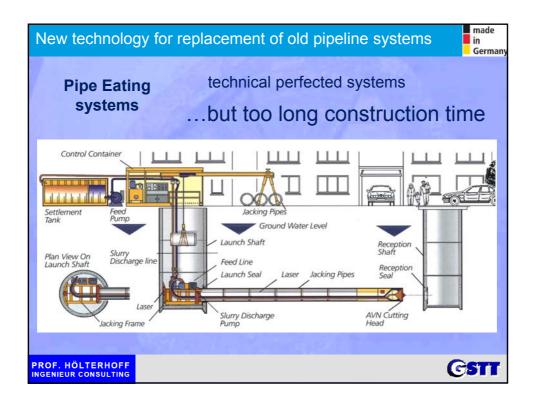
- New technology for replacement of old pipeline systems
- · CIPP Cured-in-place pipe rehabilitation
- · Jacking Pipes vitrified clay pipes
- Pipe jacking Systems Guided auger boring for non displaceable soils
- High speed pipe and cable plowing technology for open terrain
- · Manhole rehabilitation technologies
- Software for infrastructure networks



GST







New technology for replacement of old pipeline systems



Pipe Eating systems

The new inventive technology will especially be utilized when regular pipe - bursting can no longer be applied, because the soil cannot be displaced or because a necessary dimension enlargement is not sufficient displaced, or respectively if there is a guideline that the old pipe must be removed completely.

With this new technology it is possible to lower the construction time by 60 - 80%.

PROF. HÖLTERHOFF INGENIEUR CONSULTING



New technology for replacement of old pipeline systems



An Example: Advance length 60 meters, d = days

Pipe-eating method with slurry system:

set up 3.5 d, pipe eating 6.0 d, dismantling 2.0 d Σ 11.5 d

Pipe-eating method with guided auger system:

set up 2.5 d, pipe eating 6.0 d, dismantling 1.5 d Σ 10 d

The new Invention method with short pipes*:

set up 1.0 d, pulling process 2.5 d, dismantling 0.5 d Σ 4 d *for example polymer concrete jacking pipe

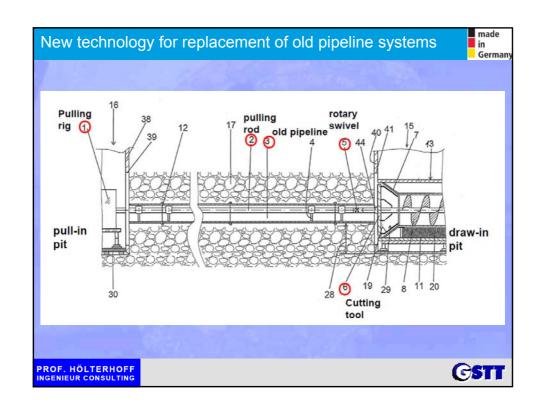
The new Invention method with PE Long pipes:

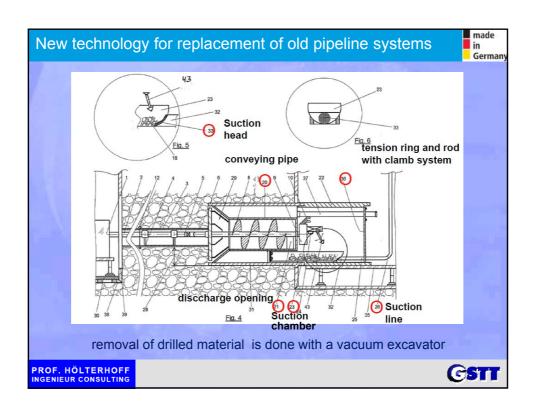
set up 1.0 d, pulling process 1.0 d, dismantling 0.5 d Σ 2.5 d

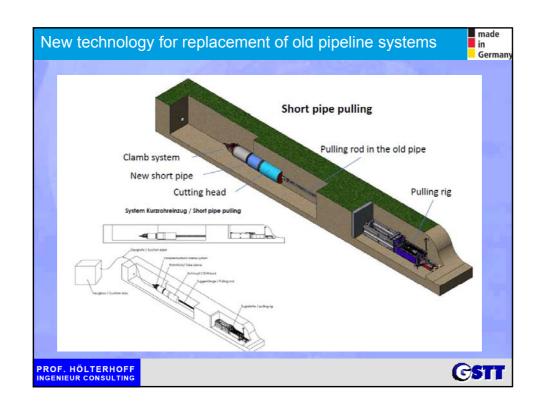
60 % - 80 % lower construction time!

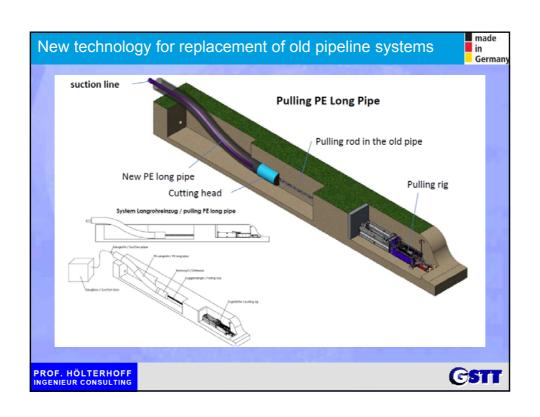
PROF. HÖLTERHOFF



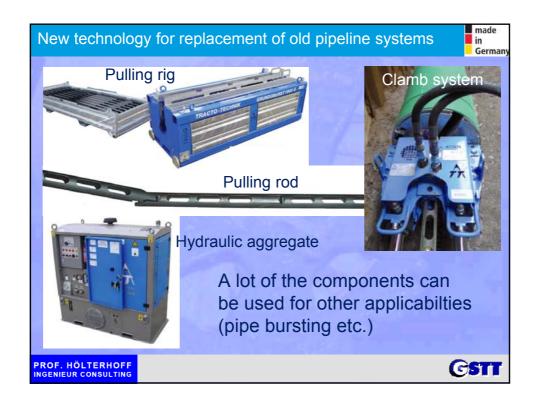




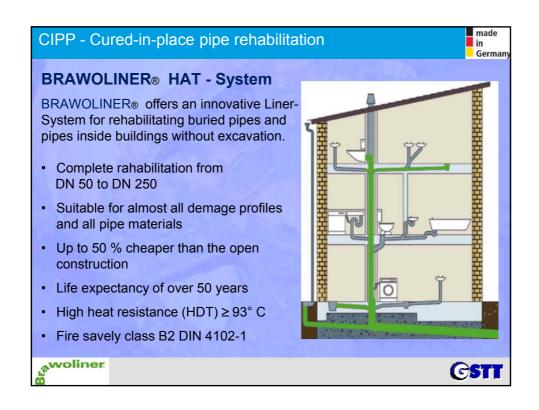


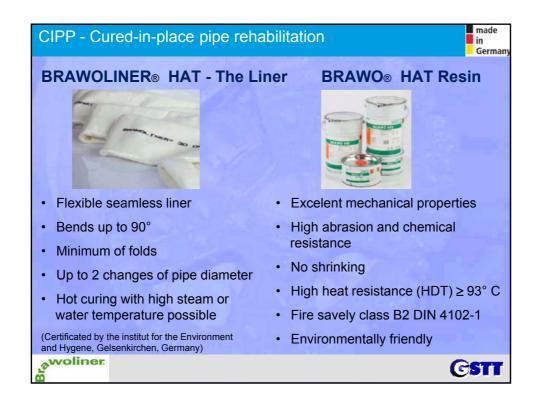












made CIPP - Cured-in-place pipe rehabilitation in German **BRAWO® SteamUnit** With the BRAWO® SteamUnit BRAWOLINER® offers a comparably compact but efficient steam generator. Diesel-fired device Heat output of 56 KW Steam quantity of 50 kg per hour Steam temperatures of up to 159° C possible Rapid curing (only 80 min. heating time in combination with BRAWO® HT Thus the curing of longer piping sections in buildings or buried pipes is possible woliner **GST**

