



# Welcome to Technical Visit District Heating Heiligenkreuz

Christian Engel  
Thermaflex Group



# Program

1. Site visit of the Biomass Boiler House (3MW and 0,8MW) located in the Forest service & production company
2. Presentation of the technical realisation of this project – Boiler House, DH network, House stations, operation experience over 30 years with Biomass (Bark and woodships) and pre-insulated full plastic network.
3. Questions and Answers – exchange of experiences
4. Short visit of the 850year monastery
5. Quick Lunch





# Heiligenkreuz





## Basic Information

Boiler: 3MW + 0,8MW (Summer)

Fired with: Bork, Woodchips (8-10.000 m<sup>3</sup>)

Totally connected: 2,2 MW for Heating

Wood dryer: 2MW

Sold Heat: average 1,2MWh/month

Net length: 3,6 km

Flow: 70-90°C

Net losses: temp. Drop < 1°C (Main line)





Connected Buildings: 75 (inkl. Abbey, School, Kindergarden, ...)

Pumps: 3 Pumps 10/12/16kW

Maintenance Net: none

Water treatment: yes



House stations: with Heat exchanger, return temperature limitation,

Heat Meter: Ultrasonic

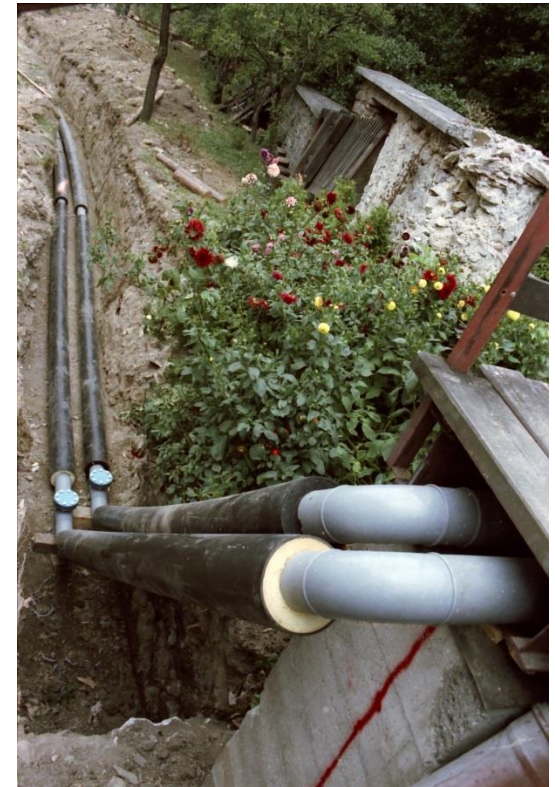


## Pipework – Maine line DA140 (DN 125)

2x850m

Flexalen in 12m

Butt welded





## Pipework – sublimes DA 25 – DA90

Up to 100m Flexalen from the coil

Connection with electrofusion sockets





## Experiences Network

- Fast installation with flexible, pre-insulated PB system „Flexalen“
- Zero connection failures - welded connections
- Low temperature loss
- No corrosion / No deposits
- Low load buildings at the ends of the network need extra pumps





## Experiences Boiler

- Boiler update in 2000 from 1 to 2 boilers (3MW and 0,8MW)
- Change from screw to hydraulic transverse feeders and hydraulic stokers
- Suitable for very inhomogeneous fuels, such as bark and off cuts from the saw



Thank you !

QUESTIONS ?

More Information:

Christian Engel: [c.engel@thermafex.com](mailto:c.engel@thermafex.com)