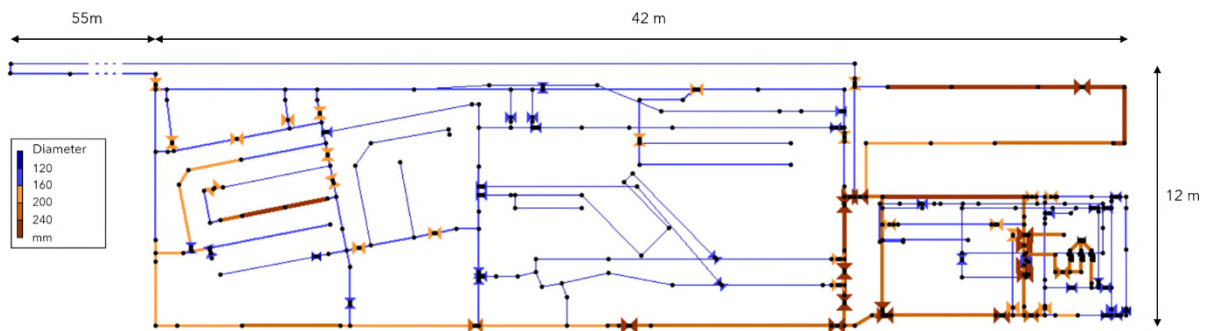


TUBES technical characteristics

The development and testing of technology for/in real drinking water distribution networks can compromise the infrastructure itself or the quality of the water transported. The option of testing and further developing technology and methodologies, in a facility that is positioned between the lab scale and actual practice is therefore extremely valuable. KWR's TUBES experimental facility provides that option.

Network layout



Main characteristics

- Reconfigurable network topology
- More than 400 meters of pipes
- Pipe diameters from 80 to 400 mm
- Different pipe materials: ductile iron, PVC, PE, PE-AL, GFRP
- Presence of multiple bends, joint types, T-sections, valves, hydrants, etc. found in real distribution networks
- Powered by 3 pumps
- Pressure up to 10 bars
- Flow speeds greater than 2 m/s in parts of the network
- Possibility to introduce sediment, bubbles and solutes in the flow
- Able to incorporate used pipe sections in it
- Equipped with adjustable pipe alignment sections
- Possibility to simulate leakages
- High level of control on hydraulics
- Installed almost completely above ground, allowing easy access
- Data-centric online architecture, with a soon-to-be-rolled-out Digital Twin