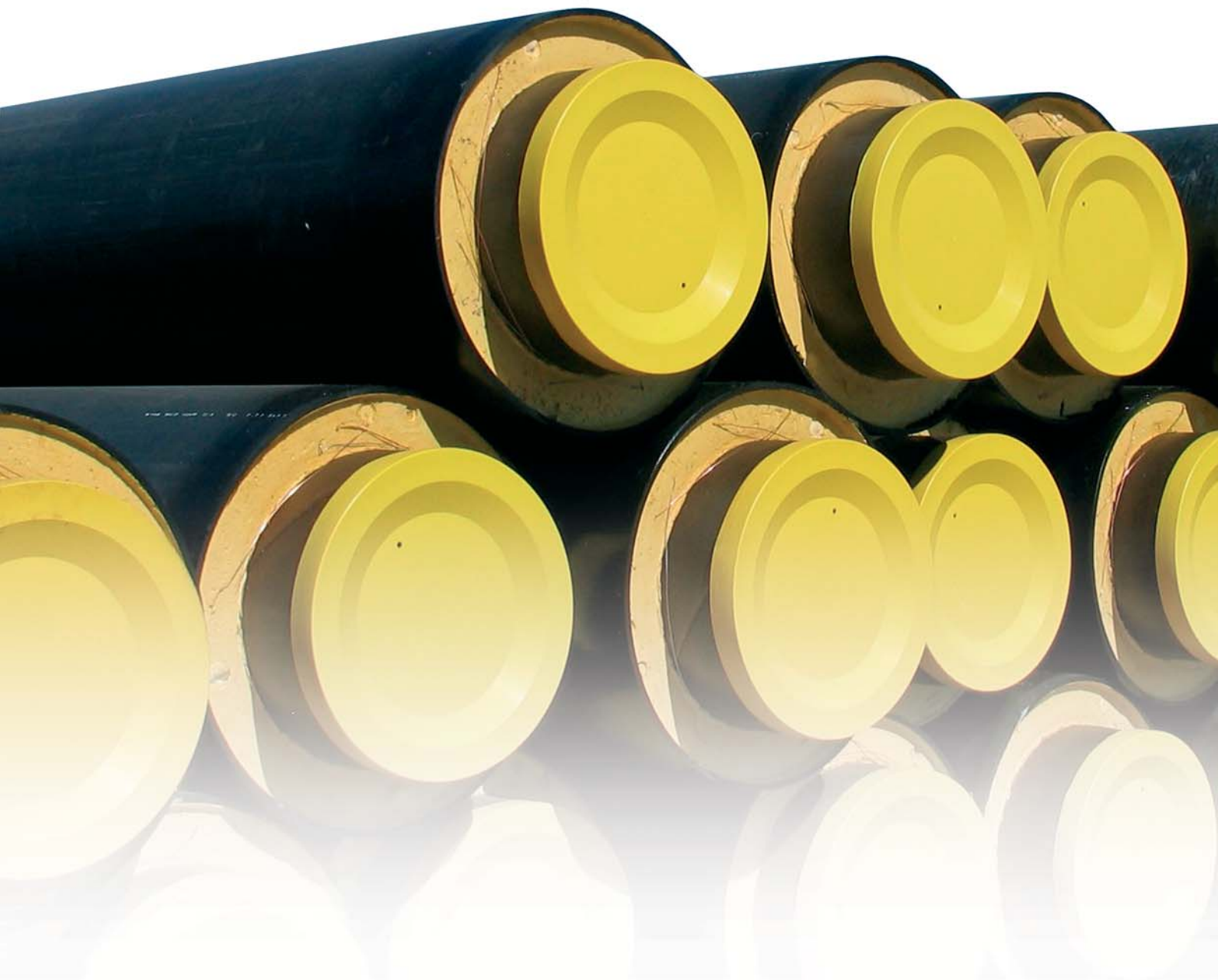




DH Pipe Production Technology

Technology for Preinsulated Pipe Production



All types of production solutions for preinsulated pipes, including training and support service, are available from Uponor Infra, former KWH Pipe. The product range consists of extruder lines for jacketing pipes, insulation of straight pipes, production of preinsulated fittings, machinery and equipment for insulation of pipe joints on site and quality control. The complete production package also includes machinery for flexible pipes for secondary networks using PE-RT pipe as carrier pipe with the insulation of polyurethane.



Extruder line for jacket pipes

Production of preinsulated pipes begins by manufacturing PE jacket pipes. Uponor Infra provides complete extrusion lines which are able to manufacture jacket pipes from 16 up to 1600 mm in diameter, which are normally made of polyethylene but can also be manufactured of galvanized or PVC coated spiral wound steel.



Insulation of straight pipes

Carrier pipes, made of various steel and plastic alternatives, are placed inside jacket pipes on receiver tables with an assembling and aligning machine. A band saw cuts the jacket pipes to their required length and after the installation pipes are then moved to a foaming table. End flanges and end flange holders are attached and the foaming begins with heavy duty dispensing units, which can produce polyurethane foam with the capacity of 450 kg/min.



Production of polyurethane

Uponor Infra manufactures machines and equipment for the production of polyurethane. Our product range consists of foaming machines, mixing stations for polyol, moulds and presses as well as other auxiliary production equipment.

The range of dispensing units for polyurethane is extensive. You can choose from heavy-duty units for workshop installation down to mobile units for on-site use. Machine output ranges from 1,5 kg/min up to 450 kg/min.



Production of preinsulated fittings

Uponor Infra markets a wide assortment of ready PU insulated fittings enabling any configuration of district heating networks. Uponor Infra delivers machinery and technology for your own manufacturing of preinsulated fittings, giving you the possibility to develop your business and keep your clients satisfied with custom made solutions. Your equipment kit might include the following machinery; jacket pipe cutting saw, welding table for manufacturing of PE jacket pipe joints, high pressure PU dispensing unit, fitting foaming table and special split flanges.



Machinery and equipment for on-site use

When preinsulated pipes are used most of the pipeline is already insulated and only the pipe joints require to be insulated on-site once the carrier pipe is connected. Uponor Infra manufactures and markets complete systems for this process, providing machinery and equipment for jointing that is easy to use.

- Mobile foaming machine
- Generator set
- Hand extruder

Quality control laboratory

- Testing of melt flow rate
- Wall thickness measuring during production
- Tensile testing
- Testing of density
- Testing of shrinkage
- Measuring tools



Production lines for flexible PU insulated pipes

Uponor Infra deliveries production technology for polyurethane insulated pipework systems and for energy transfer applications.

Main applications:

- district heating and cooling
- house connections
- agriculture
- plant construction, oil and gas pipelines
- heating and plumbing

WehoPUFlex technology enables continuous production for flexible pipes used in secondary networks of district heating systems using PE or PE-RT pipe as a carrier pipe, polyurethane as insulation and PE pipe as jacket pipe.



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