

Thermal Conduction of Pipe Insulations According to DIN EN ISO 8497

for European product standards
EN 14313 Polyethylene Foam
EN 14303 Mineral Wool
EN 14305 Cellular Glass etc.

to determine

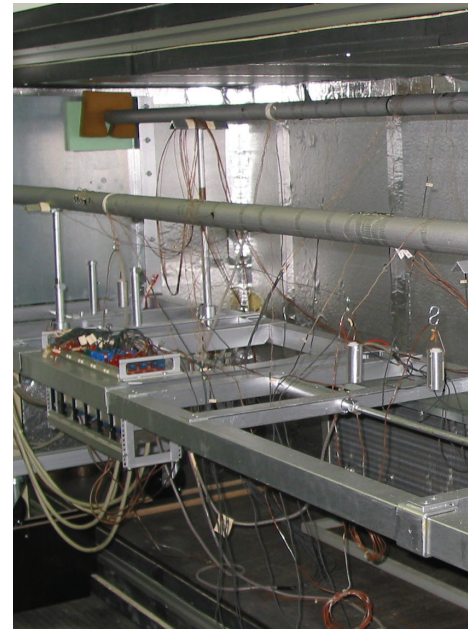
- energy savings
- prevention of condensation
- corrosion protection
- service temperature
- CE marking

Test Facility

The measurement method is applicable to tubular homogeneous and approximately homogeneous as well as layered test specimens (hollow cylinders) of a thermal conductivity smaller than 1 W/mK.

Test Procedure

The external jacket of a metal pipe is enveloped by the pipe insulation to be tested. The metal pipe is heated from the inside by constant electrical power. Due to the selection of an adequate measurement section, thermal losses at the pipe ends can be minimized. The ambient temperature of the test specimen varies according to the desired mean temperature of the test specimen. The thermal conductivity λ is determined from the heat flow through the test specimen, the temperature difference between the internal and external surface areas of the test specimen and the dimensions of the test specimen.



- measurement section 1.5 m, length of test specimen 3 m
- installed carrier pipe diameters: from 12 mm to 87 mm; specific dimensions on request
- external diameter of test specimen possible up to 500 mm
- mean temperatures of the test specimen possible within the range of -20 °C and +90 °C
- examples: PE cellular plastics, PIR rigid foam, mineral wool, PU cellular plastics, cellular glass, vinyl rubber, PS rigid foam in hoses, half shells, wound strands etc.

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