

Program SINETZ

Module SINETZ-FW

Calculation of Pressure and Heat Loss in District Heat Networks

SIGMA Ingenieurgesellschaft mbH

SINETZ-FW District Pipe Heating Calculation Module

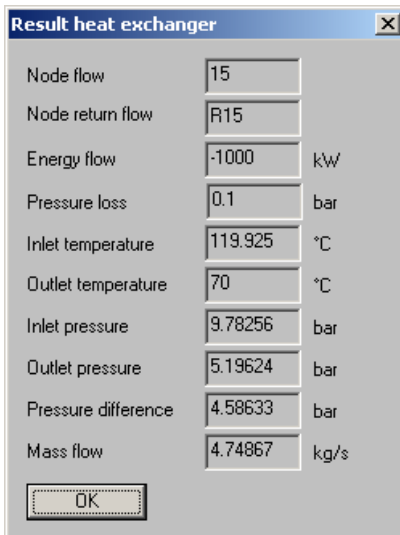
Program description

SINETZ-FW is a SINETZ program module for the calculation of pressure and heat loss in district pipe heating networks.

Program features

The module SINETZ-FW extends the capabilities of SINETZ by several options:

- In case of incompressible media the required mass flow is calculated at heat exchangers
- The return system is created automatically basing on the parameters of the flow.
- The flow and the returning system may be shown separately.
- The input- and output pressure and temperatures at heat exchangers are checked.



Result heat exchanger	
Node flow	15
Node return flow	R15
Energy flow	-1000 kW
Pressure loss	0.1 bar
Inlet temperature	119.925 °C
Outlet temperature	70 °C
Inlet pressure	9.78256 bar
Outlet pressure	5.19624 bar
Pressure difference	4.58633 bar
Mass flow	4.74867 kg/s
OK	

Inputs and results

The inputs at heat exchangers are:

- energy flow, output temperature and return node.

To check the pressure at the heat exchanger, the pressure loss of the heat exchanger may be entered.

The program analyzes the required mass flow by means of the heat exchanger parameters and the results at the input node.

The pressure and temperature results are checked. An error message occurs, in case of not allowable pressure or temperatures.

The output file includes the results at heat exchangers.

Program versions and System Requirements

The program module SINETZ-FW can be integrated into the single user license or the network license SINETZ.

For system requirements, Scope of delivery and copy protection module see main program SINETZ.

Software development, Sales and Support

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