

PROCESS SCREENS

All process screens are similar:

- in the upper left zone is the process name
- in the upper right zone are located a number of fields and checkboxes which are used to set the process parameters: open or closed system, set flow process, observed process (these two notions are used for controlling the automatic recalculation engine).
- in the left side appear the inlet and outlet points, their main state variables being displayed.
- the type of energy (useful, purchased or other) corresponding to the process can be modified by double-clicking in the energy type field).
- the mass flow-rate value can be entered in the upper zone. By default it is set to 1. The unit is not indicated purposely, so that the user may consider mg/s, g/s or kg/s depending on the problem studied while keeping a good display accuracy. It is obvious that the calculation results concerning enthalpies and energies depend on the flow rate unit and may be expressed in mJ (mW), J (W) or kJ (kW). If you check the "set flow" box, the value you enter will be set. Otherwise, it will be automatically changed by THERMOPTIM if there is only one process connected at the inlet (refer to the recalculation engine section for more details).
- the parameters which are process-type specific are shown in the right part of the screen.
- finally a text field allows one to enter a description of the process.

process type

energy type

inlet point

T (°C)

P (bar)

h (kJ/kg)

quality

outlet point

T (°C)

P (bar)

h (kJ/kg)

quality

set flow

flow rate

closed system observed

open system

m Δh

Q

adiabatic non adiabatic

isentropic reference polytropic reference

isentropic eff.

polytropic exponent

compression ratio (>= 1) calculated set

Set the efficiency and calculate the process

Calculate the efficiency, the outlet point being known