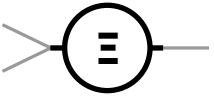

Figure 4.37: The Process Description glyph for *equivalence*. Only two inputs are repres
more would be allowed.

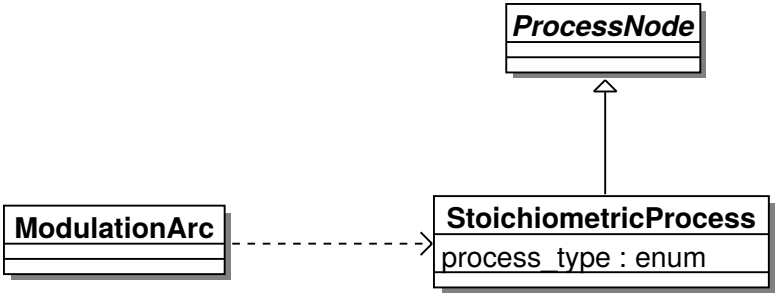

Figure 4.38: The UML definition of the StiochiometricProcess. The class interacts with
of FluxArc and ModulationArc.

4.5.27 StoichiometricProcess

A stoichiometric process[17] produces a measurable change in the quantities of entity
sumed and produced. This might imply modification of covalent bonds (conversion)
tion of the relative position of constituents (conformational process) or movement fro
partment to another (translocation). Such a process will have a basal rate at which t
occurs, which can be affected positively or negatively by the other entity pools, wh
late' the process. Examples of this include stimulation, inhibition and catalysis. In an
process the entity pools interacting with it can be grouped into inputs and outputs.
stoichiometric process can also be reversible and so for convenience we refer to these
as the "left-hand-side" (LHS) and "right-hand-side" (RHS) of the process[18] (figure 4.39)

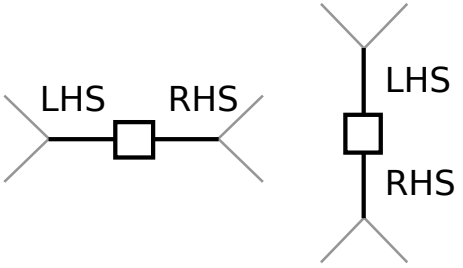

Figure 4.39: An illustration of the "sidedness" of a process. The designation of LHS
essentially arbitrary.

In the Process Description language this is represented by the StoichiometricProc
4.38). It can be one of several different types, which indicate the amount that is known