

Freeware
**Dynamic Model of
 an Industrial Scale
 Stirred Tank Reactor
 (CSTR)**

The CSTR model (see figure 1) is a spin-off from a control design project which we have carried out for a swiss chemical company. It provides an excellent starting point for your own dynamic simulations within the Matlab/Simulink framework.

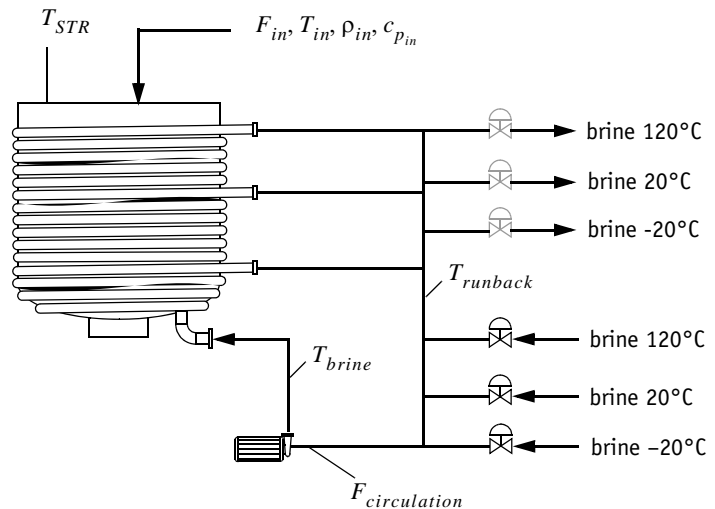


Fig. 1: CSTR drawing

Features

The model is a rather precise representation of the CSTR dynamics and has been verified against experimental data. It handles up to three brine flow rates, a feed flow and a virtual "heat of reaction" term.

The detailed parameter files for a 7m³ reactor and the heat transfer medium can be easily customized to your own purposes. Please note that all model inputs are in terms of SI units.

Prerequisites

Matlab 6.5, Simulink 5.1 or higher

Licensing

You are free to use and modify the model within the terms of the BSD license.

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