

MODLINK

Interactive Modeling Tool for Detailed Chemical Kinetics Computations Using Ideal Reactor Networks

MODLINK is an easy-to-use graphical user interface (GUI) for performing detailed chemical kinetics computations using the PSR®, SENKIN®, and CHEMKIN® packages.

APPLICATIONS

MODLINK allows efficient investigation of process conditions and inputs on the system using a detailed description of the chemistry.

SYSTEM REQUIREMENTS

MODLINK runs on Windows based PC's.

CAPABILITIES

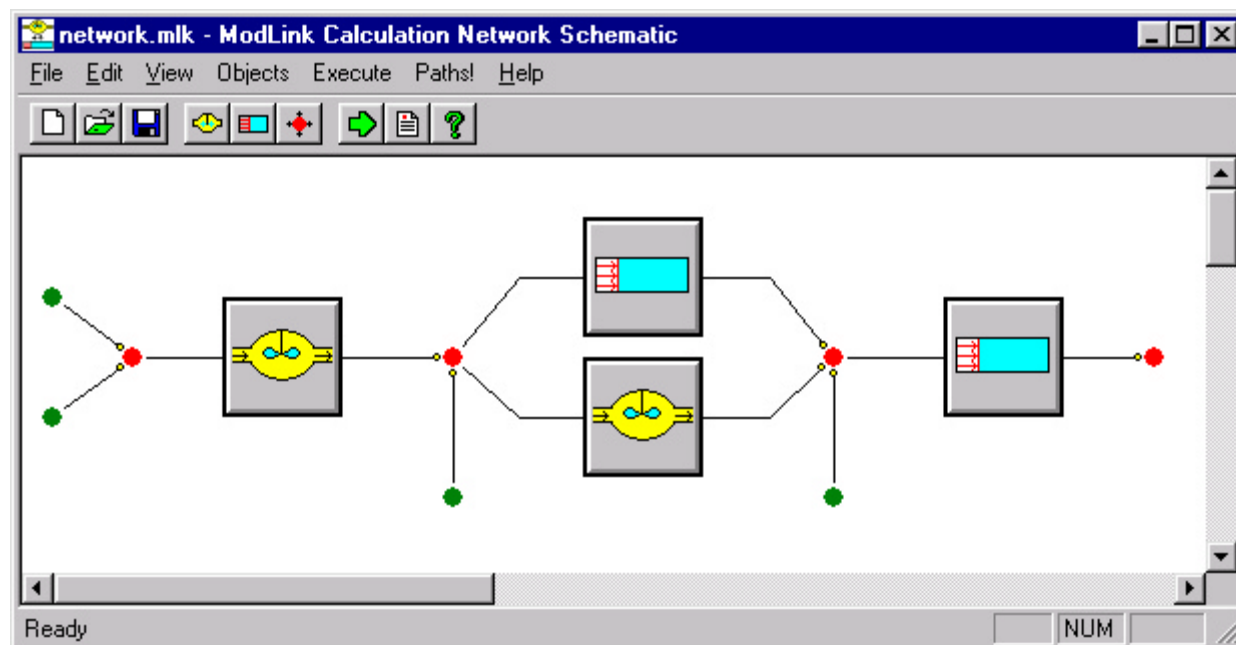
Easy to use GUI allows creating reactor networks containing linked Plug Flow Reactor (PFR) and Perfectly-Stirred Reactor (PSR) objects.

Nodes placed between reactors control stream input and output with ability to mix separate streams automatically and calculate mixing cup properties.

PFR Reactors: can be performed assuming constant pressure, temperature or volume; or variable volume or variable temperature conditions.

PSR Reactors: can be performed assuming adiabatic or constant temperature conditions.

Thermochemical properties at reactor outlets are easily extracted and imported into plotting packages.

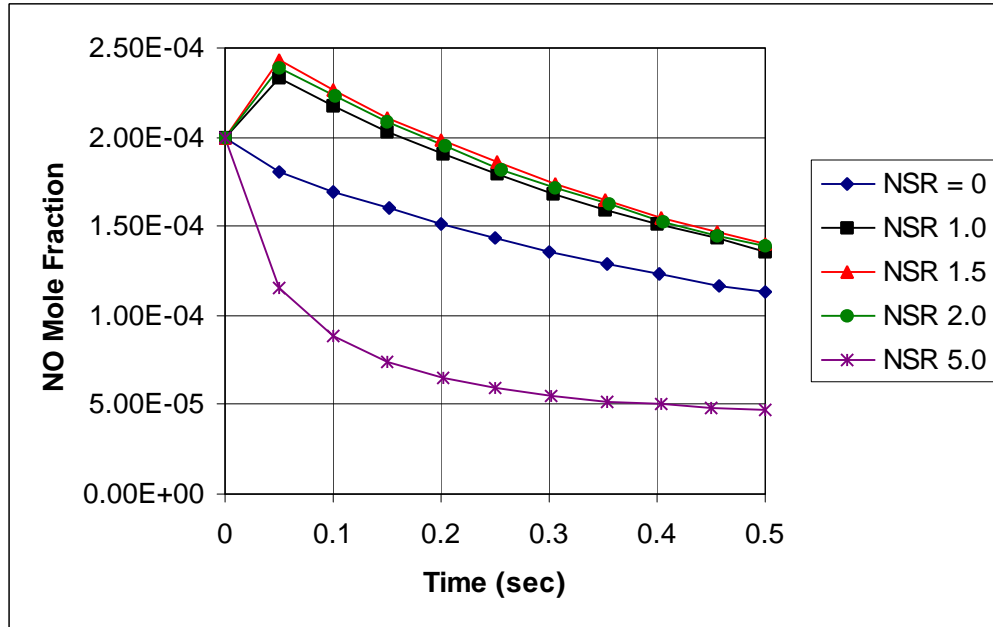


REACTION
ENGINEERING
INTERNATIONAL

77 West 200 South, Suite 210
Salt Lake City, UT 84101 USA
(801) 364-6925
<http://www.reaction-eng.com>
info@reaction-eng.com

MODLINK

Time variation in NO mole fraction for range of Normal Stoichiometric Ratios (NSRs) for a utility boiler application computed with MODLINK



PFR Calculation Parameters

ID Number:

Problem Type: CONP CONV CONT
 VTIM TTIM

Parameters:

Time, sec Delta t, sec

to, sec (TTIM) m, K/sec (TTIM)

to, sec (VTIM) m, cm³/sec (VTIM)

Override Upstream:

Temperature, K

Pressure, atm

OK Cancel

Example Reactor Input Panels

PSR Calculation Parameters

ID Number:

Problem Type: TGIV ENRG

Specify: Tau Flow Rate

Parameters:

Heat Loss, cal/sec

Volume, cm³

Residence Time, sec

Temperature, K (initial guess for ENRG)

Override Upstream:

Inlet temperature, K

Pressure, atm

Mass Flow Rate, g/sec

OK Cancel