Scheme-9 Reactor-1

Part-2, Case-9

ta = 4500 sec, tm = 1200 sec
k1 = 0.1, k2 = 0.01

NBt/NAt = 1.12222

Exponent a = 1.5
Exponent b = 0.5
Exponent c = 1
Exponent d = 1

WA = 200
WB = 56.111
NBt = 2.99259
Vt = 2.12806
Vat = 1.02806
Tot.Solv. = 2
SolA/(SolR+SolA) = 0.5

NA0 = 2.66667
NB0 = 0

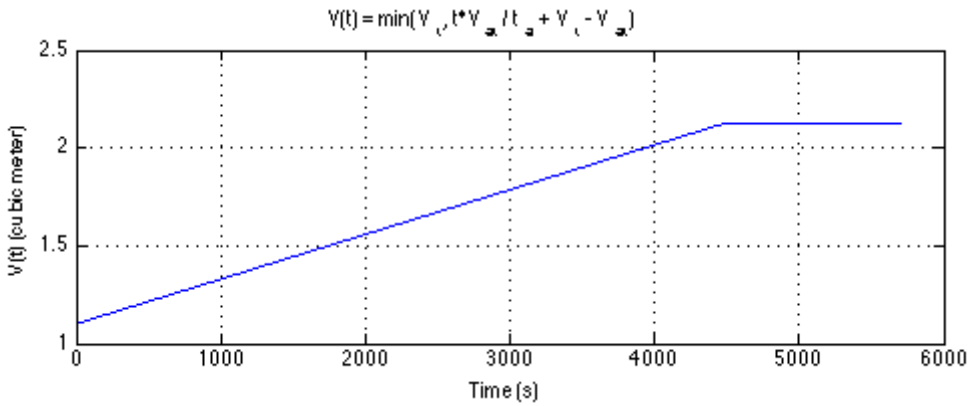
Total input = 256.111 kg
Total output = 256.111 kg

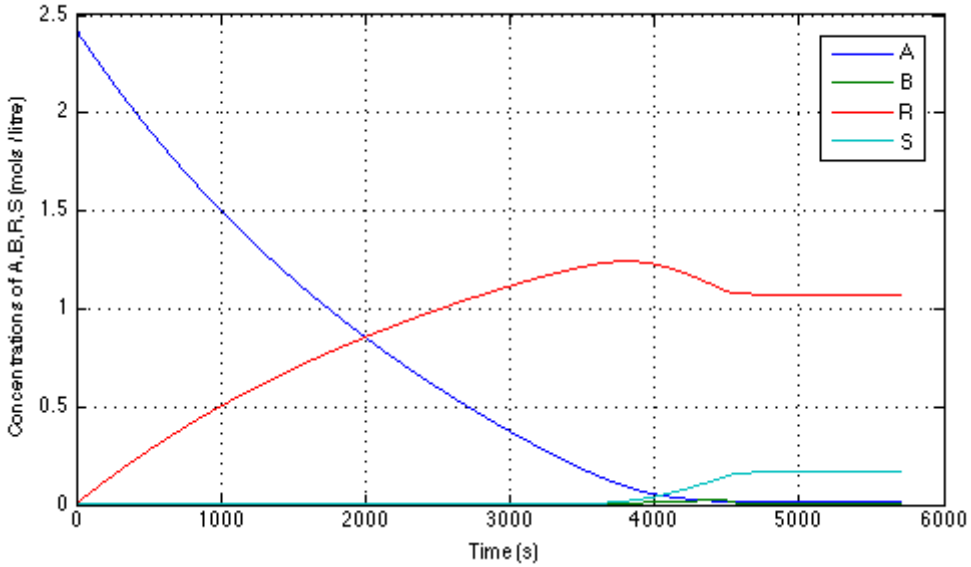
Chemical Balance Error = 0.000350914 kg (% 1.37017e-06)

Solver: Explicit Runge-Kutta (4,5) Variable step (Dormand-Prince Pair)
Error tolerance: 0.01%

Final Concentrations with Step Size limited to 0.001
NA (final) = 0.0266262
NB (final) = 3.91128e-15
NR (final) = 2.28749
NS (final) = 0.352547

Final Concentrations with Step Size limited to 0.01
NA (final) = 0.0266263
NB (final) = 3.91927e-13
NR (final) = 2.28749
NS (final) = 0.352547





Published with MATLAB® 7.12