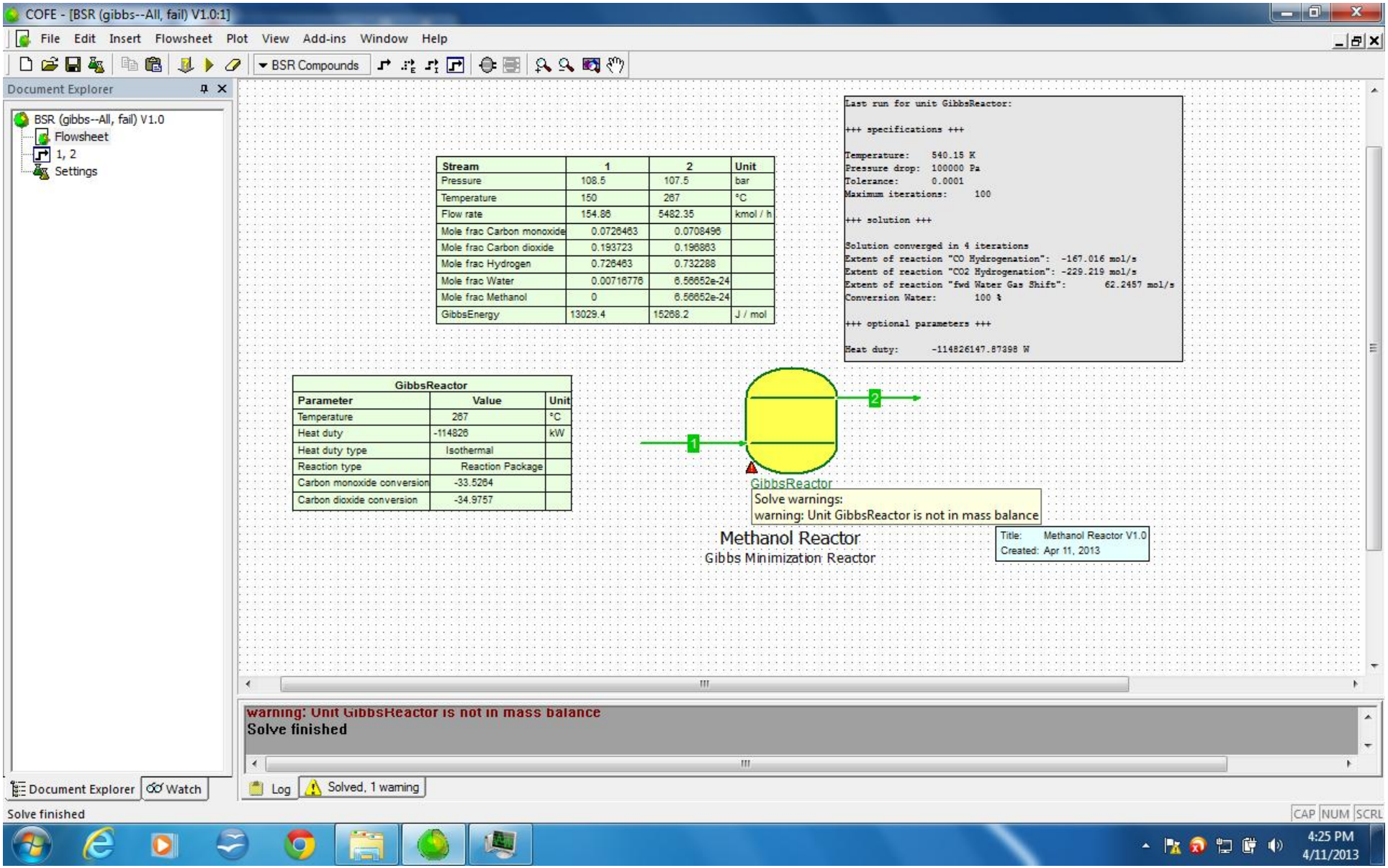
COFE - [BSR (gibbs--All, fail) V1.0:1]
File Edit Insert Flowsheet Plot View Add-ins Window Help
BSR Compounds
Document Explorer
BSR (gibbs--All, fail) V1.0
Flowsheet
1, 2
Settings
Stream 1 2 Unit
Pressure 108.5 107.5 bar
Temperature 150 267 °C
Flow rate 154.86 5482.35 kmol / h
Mole frac Carbon monoxide 0.0726463 0.0708496
Mole frac Carbon dioxide 0.193723 0.196863
Mole frac Hydrogen 0.726463 0.732288
Mole frac Water 0.00716776 6.56652e-24
Mole frac Methanol 0 6.56652e-24
GibbsEnergy 13029.4 15268.2 J / mol
Last run for unit GibbsReactor:
+++ specifications +++
Temperature: 540.15 K
Pressure drop: 100000 Pa
Tolerance: 0.0001
Maximum iterations: 100
+++ solution +++
Solution converged in 4 iterations
Extent of reaction "CO Hydrogenation": -167.016 mol/s
Extent of reaction "CO2 Hydrogenation": -229.219 mol/s
Extent of reaction "fwd Water Gas Shift": 62.2457 mol/s
Conversion Water: 100 %
+++ optional parameters +++
Heat duty: -114826147.87398 W
GibbsReactor
Parameter Value Unit
Temperature 267 °C
Heat duty -114826 kW
Heat duty type Isothermal
Reaction type Reaction Package
Carbon monoxide conversion -33.5264
Carbon dioxide conversion -34.9757
1
2
GibbsReactor
Solve warnings:
warning: Unit GibbsReactor is not in mass balance
Methanol Reactor
Gibbs Minimization Reactor
Title: Methanol Reactor V1.0
Created: Apr 11, 2013
warning: Unit GibbsReactor is not in mass balance
Solve finished
Document Explorer
Watch
Log
Solved, 1 warning
Solve finished
CAP NUM SCRL
4:25 PM
4/11/2013