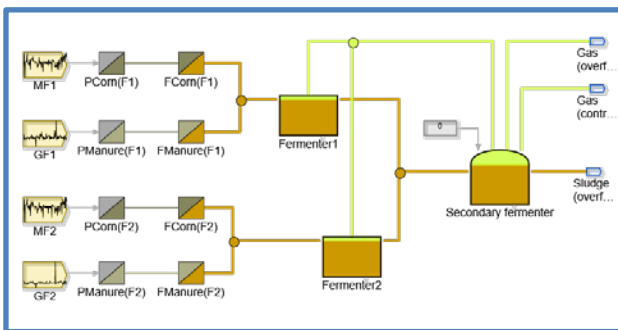




Simulation Platform for Biogas Plants

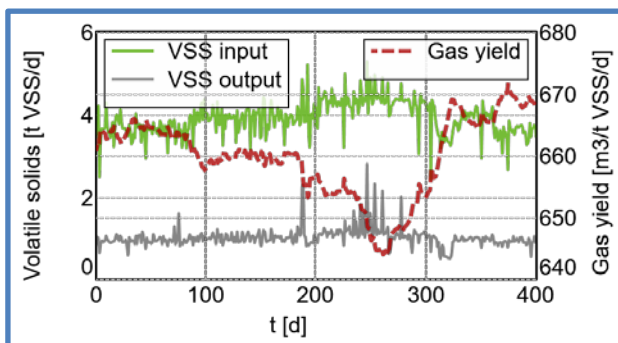
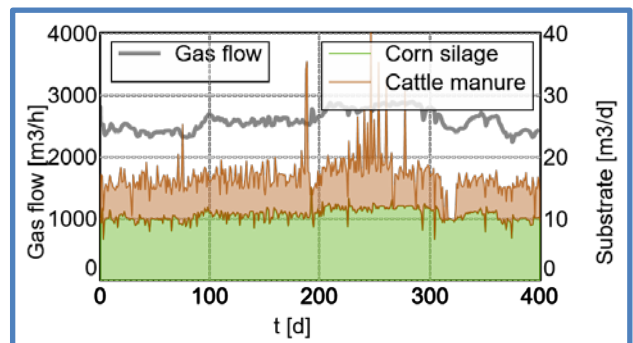
Modeling und Simulation of Biogas Plants Treating Agricultural and other Solid Waste



SIMBA# is the newest member of the SIMBA™ simulator family and provides a fully integrated simulation. SIMBA# biogas is a stand-alone simulator which takes the design and optimization of biogas plants (agriculture, waste) to another level.

Key functionalities include

- Design and evaluation of:
 - Process layouts
 - Control concepts
 - Operation and feeding strategies
- Analysis of bio-chemical processes
- Assessment of plant performance

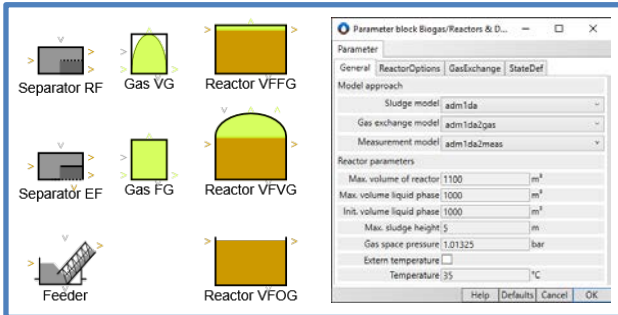


SIMBA#biogas history

- 2013: First stand-alone SIMBA# released
- 2016: New SIMBA# 2.0 version
 - Usability improvements
 - Full 32/64 bit support
 - Refined biogas library



Features and Support

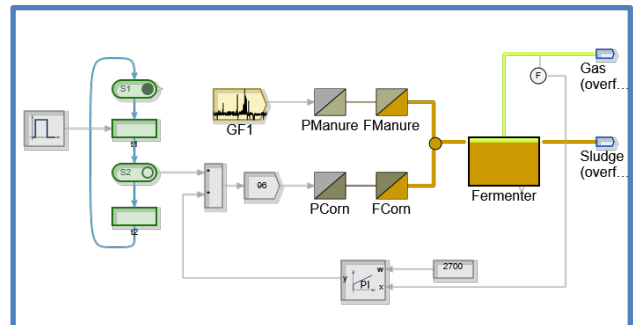


Model libraries

- Modules for all standard unit processes
- Flexible modules for substrate feeds
- List of predefined substrate parameters
- In-house biochemical conversion models
- Modeling of ICA with:
 - Classic function blocks (PID, PT1, ...)
 - PLC programming language (IEC 61131)
 - Petri networks for cyclic control

Selected Features

- Feeding of various substrate mixtures
- Mass loss due to substrate degradation
- Prediction of :
 - VSS, TSS, NH₄, N, VOA, TAC, pH
 - Gas flow, gas composition, gas yield
- Tools for result evaluation:
 - Time series and bar plots
 - Sankey diagrams
 - User defined scripts (C#, Python)



Training & Support

inCTRL offers industry-leading software support. We provide training sessions in our offices and at client sites to help you get started. With our Premium Support Package we make sure you get your simulation job done.



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