

Minimum Computer Requirements:

- Internet Explorer 9 and above
- Processor: 1.5 GHz
- .Net 4 Framework
- 2 GB RAM
- Free Disk Space: 1 GB

Supported Operating System

- Windows 8
- Windows 10

Our Company

GreenSync Solutions is a technical consulting company working in Power, Energy and Research Domains. We provide software solutions for the power sector; our flagship product *Simple Heat Balance* is known for its simplicity, ease and accurate solutions.

We also undertake energy auditing for compliance and for improving efficiencies to save costs. We also provide complete solutions for energy efficiency i.e. from energy auditing to optimization solutions to business plans and carbon financing projects.

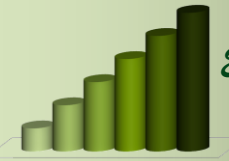
GreenSync Solutions is also committed to the environment and social cause and we undertake impact assessment projects, project evaluation, project assessment projects especially for non-government agencies or for the development sector.

*For Cleaner Greener and
Better Tomorrow*

Our Other Products:

- Boiler Efficiency Calculator
- Feed water heater modeling
- Generation Cost Calculator: CostGenCal
- Psychrometric Chart
- Steam Table based on IAPWS1997 formulations for steam properties etc

Simple Heat Balance



Efficient and Economic Power



For more information mail us to: info@greensync.co.in
OR direct your QR scanner to:



**GreenSync Solutions
Pvt. Ltd**

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Simple Heat Balance

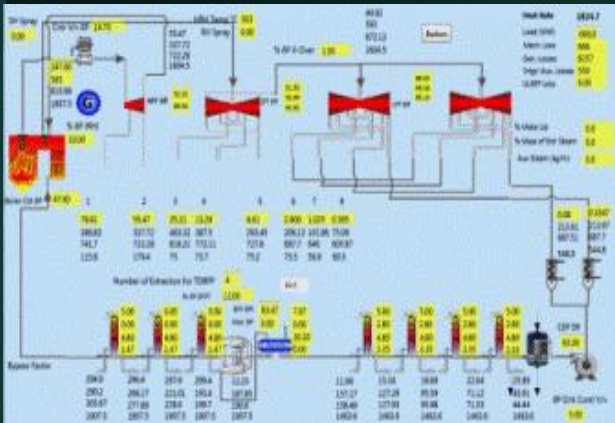
What is Simple Heat Balance?

Simple Heat Balance is a Rankine-cycle based Heat and Mass Balance software for thermal/nuclear power plants. With Single user interface and intuitive design, it provides great ease of use feature to the users.

One can make himself/herself comfortable within an hour or two and can configure and draw results in short duration even while using the software for the first time. It is designed in the way engineers are accustomed to think and work on HBDs. There is no need of moving from one screen to other, one component to another and putting lots of inputs and getting lost, you need to feed inputs which are less than 100 in numbers and chosen so carefully that you get results with unmatched accuracy. All the inputs are just in front and the user remain more confident and in control. As a result, engineers can put more focus on the issues, which deserve their attention.

Different Configurations

Simple Heat Balance is the software capable of dealing with the any Rankine Cycle Based heat and mass balance equation through different configurations.



Steam Circuit

Steam circuit can be configured by selecting number of turbines and layout. Selection of single/double reheat, Single/double LP, HP-IP combined or not can be configured in addition to the putting the values for extractions from turbines.

Feed Water Circuit

Number of LP and HP heaters can be configured, including their cascading (backward or forward), Type of BFP (Turbine / motor driven or combination of both) can be configured as per requirement.

Gland Leakages

Gland leakages (leakage and pressure) can also be provided as inputs based on the configuration. Some probable dummy values are given in sample input files and can be used as default values for HP/LP/IP turbines.

Tools

The software also has tools to estimate the stage efficiencies of turbine and back pressure of condenser. Available information can be provided to calculate the inputs for the Simple Heat Balance.

Capabilities and features

Latest Steam Table

In built steam Table based on IAPWS1997 lets user design the HBDs for 800 deg C and 1000 bar pressure, which is suitable not only for sub and super critical turbine cycles, but also for Ultra super critical turbine cycles.

Interface Parameters

Simple Heat Balance provides the interface parameters of different component of steam cycle. These are inputs for engineers to finalize design and specifications of various steam cycle components.

Graphical Output

Software provide the graphical output, the way engineers are accustomed to look at HBDs along with the text output, where it should be. Add-on modules add to these outputs like Temperature Entropy graph can be added through module

Efficient and Economic Power

Off – Design Mode

This software can work both in design mode and off-design mode. Modes can be switched with single click of mouse. This provides seamless transition between the modes and reduces efforts required for providing inputs. Variation of load, steam parameters, stage efficiencies, make up water and extraction steam, valve conditions etc can be varied to simulate different conditions of the turbine cycle.

Fewer Inputs, higher accuracy

Simple Heat Balance, requires fewer inputs as compared to other software. Inputs are in the range of 100 as compared to 2,000 to 5,000 inputs in other similar class software. Against the conventional belief that more inputs give you more accuracy, Simple Heat Balance provides results with extremely higher accuracies with minimum number of inputs. Thanks to our Simple Yet Powerful (SYP) paradigm.

Modules

In addition to the base products, different customization options are also possible as per requirement as add-on modules, e.g.

- Calculation of standalone equipments e.g. cooling towers, heaters, Boiler, condensers etc
- Estimation of specific cost data
- Display of different graphical representation, etc.

In future also technically possible customization can be done as per client requirements

Technical Support

Even though we know that you won't be requiring this, however, our technical support team is always available to make sure that your work won't suffer. In case of any software related issue, you can mail us to softwarecare@greensync.co.in, and we will set ourselves to resolve your issue, through remote troubleshooting or through personal visits, depending on the nature of the issue

For more power related software solutions and services please contact GreenSync Solutions Pvt. Ltd at info@greensync.co.in