

## Minimum Computer Requirements:

- Internet Explorer 10 and above
- Processor: 1.5 GHz
- .Net 4 Framework
- 1 GB RAM
- Free Disk Space: 1 GB

## Supported Operating System

- Windows XP, SP-2 (Pro)
- Windows 7
- Windows 8

## Our Company

**GreenSync Solutions** is technical consulting company which is working in Power, Energy and Research Domains. We provide software solutions for 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 the 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** also committed to environment and social cause and we undertake the Impact assessment projects, project evaluation, project assessment projects especially for non government agencies or for development sector

*For Cleaner Greener and  
Better Tomorrow*

## Our Other Products:

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

## Simple Heat Balance

Software of your need



*Towards Greener  
Tomorrow*



Simplifying  
Power Solutions



For more information mail us to: [info@greensync.co.in](mailto:info@greensync.co.in)  
OR direct your QR scanner to:



**GreenSync Solutions  
Pvt. Ltd**

[www.greensync.co.in](http://www.greensync.co.in)



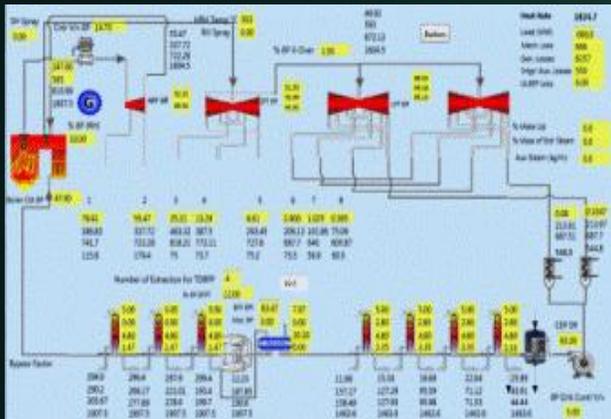
## What is Simple Heat Balance?

Simple Heat Balance is the Heat Balance Diagram software based on Rankine cycle. This is intuitive having single screen interface, user friendly software.

One can make himself/herself comfortable within few minutes and can configure and draw results in few hours even for the first time. it is designed in the way engineers are accustomed to 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 feels more in control and confident, that too in very short period. As a result, engineers can put more focus on the issues, which deserve their attention.

## Different Configurations

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



## Steam Circuit

Practically possible number of turbine and their different possible configuration like single LP/ Double LP, HP- IP combined, Single reheat/ Double reheat, Cylinder extractions and spray source

## 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 any combination) can be configured as per requirement.

## Gland Leakages

Gland leakages cal also be provided as inputs based on the configuration, however, most common values are already given as default values for HP/LP/IP turbines gland leakages and pressure

## Tools

Different tools have been provided in the software to estimate the stage efficiencies of turbine and back pressure of condenser depending on the condenser parameters as inputs, which can be provided as input to the HBD

## 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 equipments. These are inputs for engineers to finalize design of different cycle equipments

### Graphical Output

Software is provides the graphical output, the way engineers are accustomed to look 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

## Off – Design Mode

This software can work both in design mode and off-design mode at single mouse click. This provides seamless transition between these two modes and reduces efforts from the users' point of view. 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 cycles.

## Fewer Inputs, higher accuracy

Simple Heat Balance, requires fewer inputs. these 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. This is possible due to Simple Yet Powerful (SYP) Paradigm, which is used by our Software Designers.

## Modules

In addition to the base products, different customization options are also possible as per requirement, 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

## 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](mailto: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 please contact **GreenSync Solutions Pvt. Ltd** at [info@greensync.co.in](mailto:info@greensync.co.in)