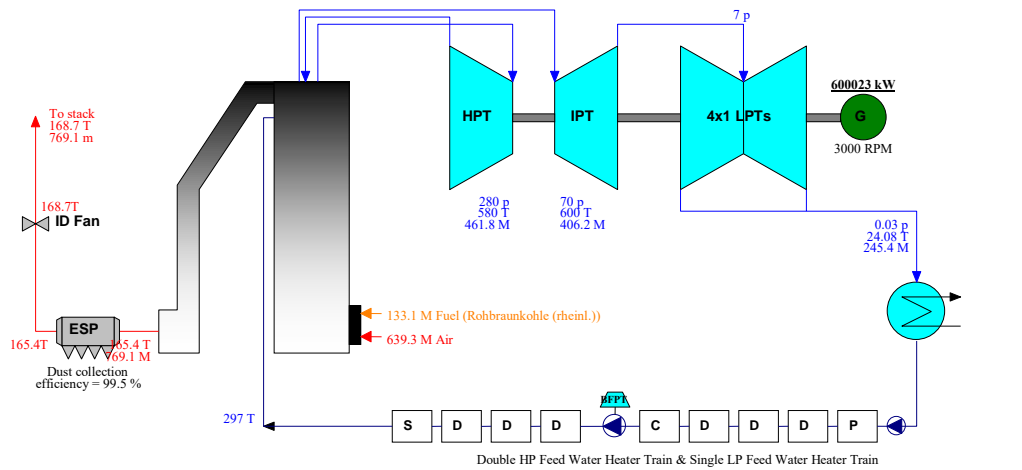


## Conventional Cycle Design, Simulation, and Cost Estimation

**STEAM PRO**® automates the process of designing a conventional (Rankine Cycle) steam power plant. It is particularly effective for creating new plant designs and finding their optimal configuration and design parameters considering the plant performance and total plant cost (**techno-economic optimization**).

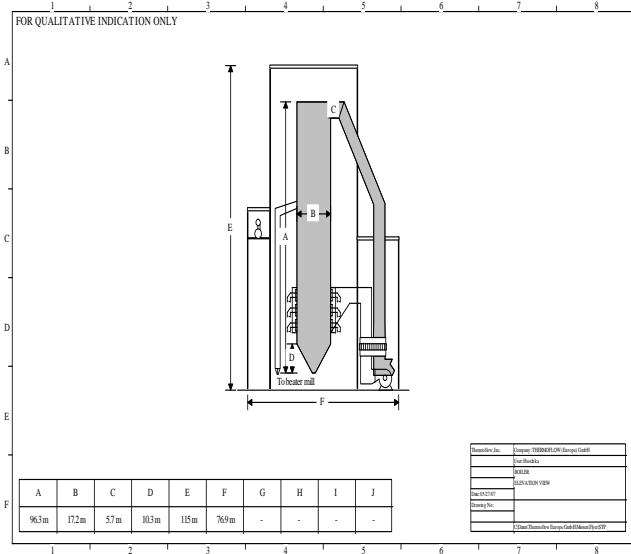
Plant net power	569992	kW
Number of units	1	
Plant net HR (HHV)	10003	kJ/kWh
Plant net HR (LHV)	8491	kJ/kWh
Plant net eff (HHV)	35.99	%
Plant net eff (LHV)	42.4	%
Aux. & losses	30031	kW
Fuel heat input (HHV)	1583803	kJ/s
Fuel heat input (LHV)	1344344	kJ/s
Fuel flow	11500	t/day

Ambient  
1.013 p  
15 T  
60% RH



STEAM PRO 17.0 Huschka THERMOFLOW (Europe) GmbH

p [bar] T [C] M [kg/s]



STEAM PRO 17.0 Huschka THERMOFLOW (Europe) GmbH  
C:\Data\Thermoflow Europe GmbH\Messe\Fp\STP 2007.ap 12-02-05-21-2007 21:16:28

The user inputs design criteria and assumptions and the program computes heat and mass balance, system performance, and component sizing. The scope and level of detail in STEAM PRO has been continuously growing since 1990, to the point that the latest Version has over 3,500 user-adjustable inputs. Most key inputs are automatically created by intelligent design procedures that help the user identify the best design with minimal time and effort, while preserving the flexibility to make any changes or adjustments.

STEAM PRO is truly easy to use, typically requiring only a few minutes to create a new plant design. It normally computes a heat balance and simultaneously designs the required equipment in under fifteen seconds. When run in conjunction with the optional **PEACE**® (Plant Engineering And Cost Estimator) module, the programs provide extensive engineering and cost estimation details.

