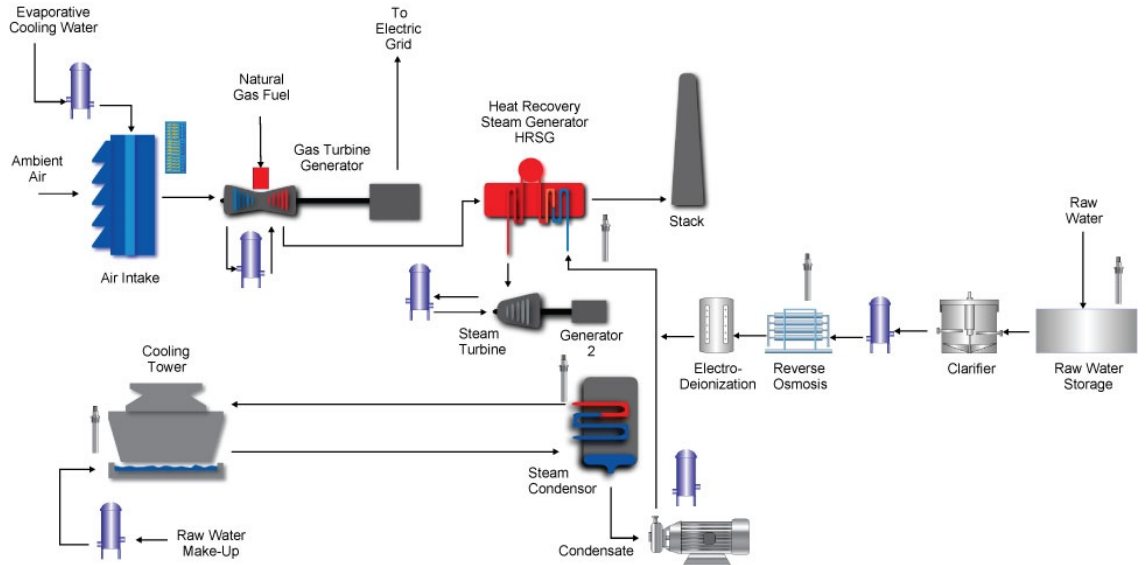


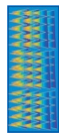
# CLASSIC

FILTER & EQUIPMENT LTD

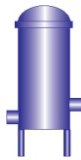
## GAS TURBINE POWER PLANT



### PRODUCT KEY



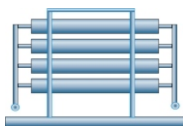
Air Filters



Liquid Filters



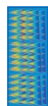
Sensors



Membranes

### APPLICATION

Compressed Air and Natural Gas combine in the combustion chamber to fire and drive the Turbine. The Turbine shaft is connected to the Generator and drives the Generator to produce electricity. Exhaust heat from the Turbine is harnessed to generate steam to drive the Steam Turbine. Downstream of the Steam Turbine, the steam is captured and condensed. The condensate is recycled back to the Heat Recovery Steam Generator to be converted back to steam.



Ambient air is filtered through a pre-filter and a final filter to provide clean air to the Turbine Inlet. This allows the turbine blades to remain clean and function more efficiently. Classic Filter and Equipment offers MERV 8 pleated pre-filters and High Efficiency final filters for this application.



Evaporative Cooling is often used to condition the air flow to the Turbine to allow it to operate more efficiently. The cooling water is filtered to remove any particulate contaminants that would otherwise settle onto the turbine blades robbing them of efficiency. Classic Filter and Equipment can provide filters ideally suited for this application.



Turbine lube oil is filtered to remove wear contaminants generated during operation. Classic Filter and Equipment can provide lube oil filters that will maintain the proper ISO specification for your lube oil.



Reverse Osmosis membranes require a pre-filter to remove contaminants that would clog the membrane spacer and foul the membrane. Most membrane manufacturers recommend maintaining a Silt Density Index (SDI) number less than 3. Classic Filter and Equipment recommends a 5 micron pre-filter for this application.



Condensate recovered from the Steam Turbine should be filtered to remove contaminants generated during the process. This will help prevent clogging and fouling of the HRSG boiler and system pipework.



Raw Water Make-up to the Cooling Tower should be filtered to remove contaminants that could foul heat exchange equipment downstream. Contaminants vary with the source of the make-up water. Surface waters are more prone to biological contaminants and well waters are more prone to salts and minerals. Classic Filter can provide the right filter for your application.



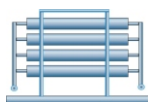
pH Sensors are used in multiple points in the process. They include Make-up Water, Waste Water, Heat Exchange, and stator coolers. Classic Filter and Equipment can provide the proper pH sensor for these applications.



Conductivity Sensors are used to monitor Condenser water, Ion Exchange, Distillation, and Reverse Osmosis systems to verify the proper range of water conductivity. Classic Filter and Equipment can provide the right Conductivity sensor to fit your application.



Dissolved Oxygen sensors are used in areas including Distillation, Waste Water and Check Water before Turbines. Classic Filter and Equipment can provide both Amperometric and Optical DO Sensors for these applications.



Classic Filter and Equipment can provide RO membranes, Membrane Housings, Membrane Cleaning, Anti-scalants and other products necessary to maintain your RO system in top shape.

**CLASSIC FILTER AND EQUIPMENT, LTD.**

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