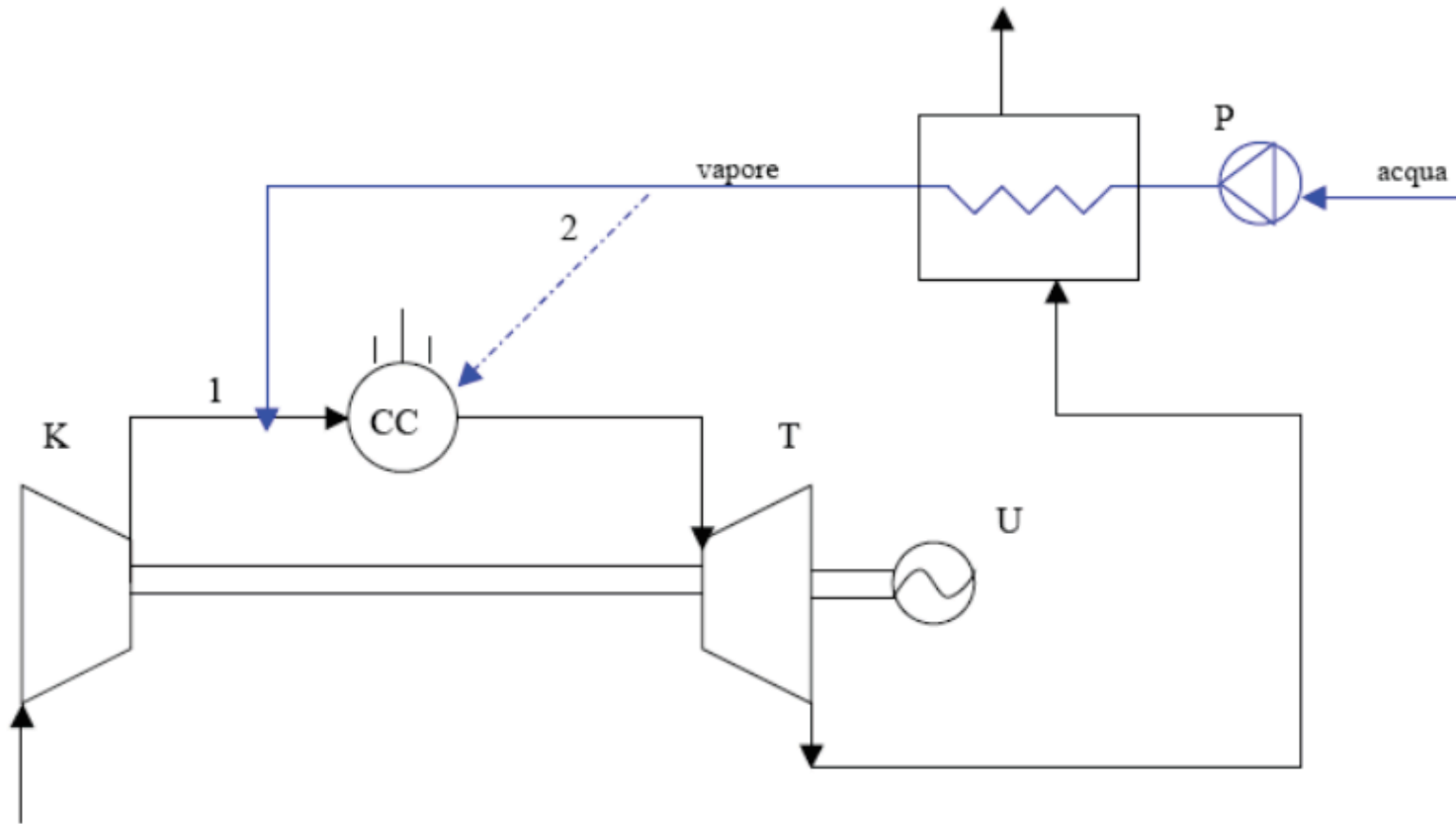
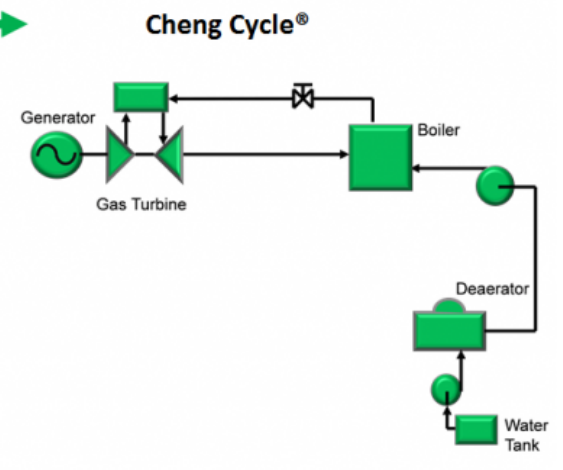
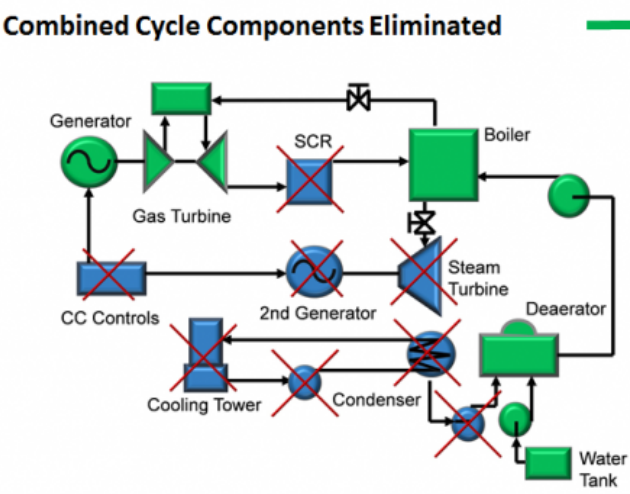
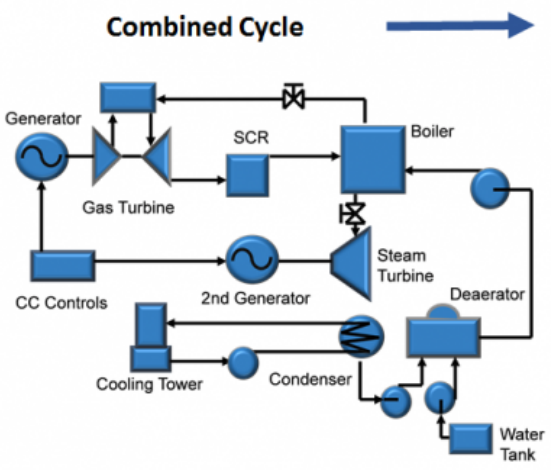
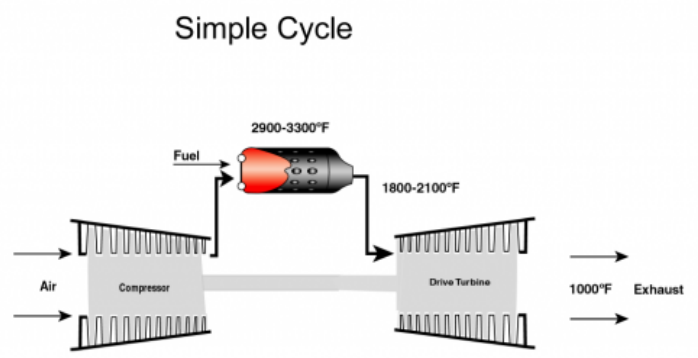
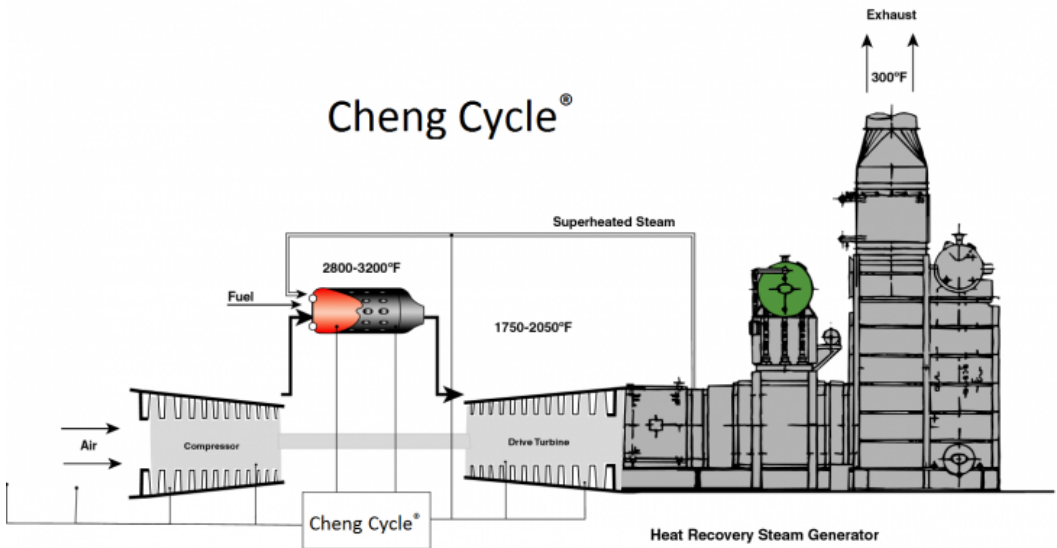


GTCC

Steam injected gas turbine

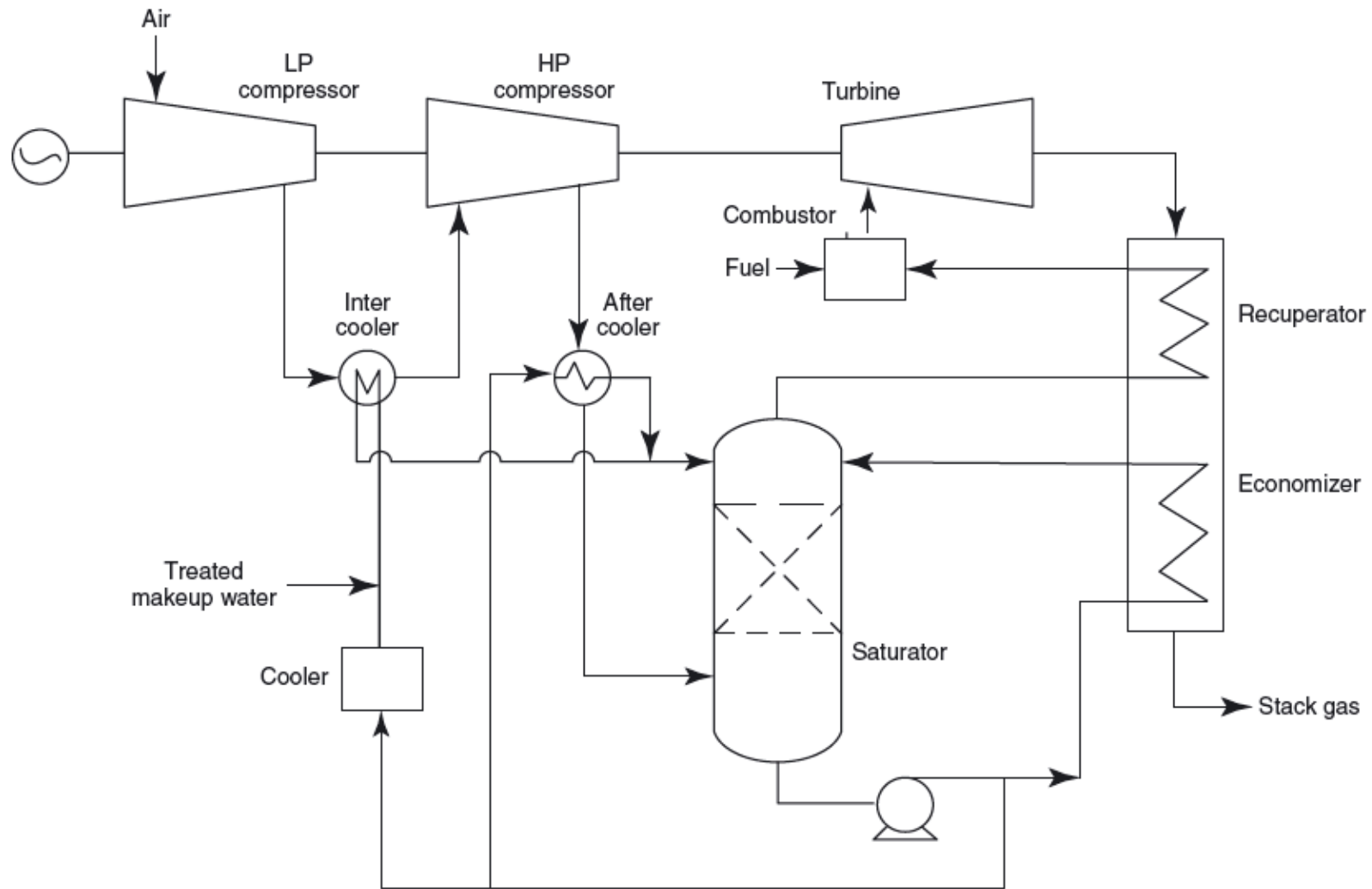


Cheng cycle

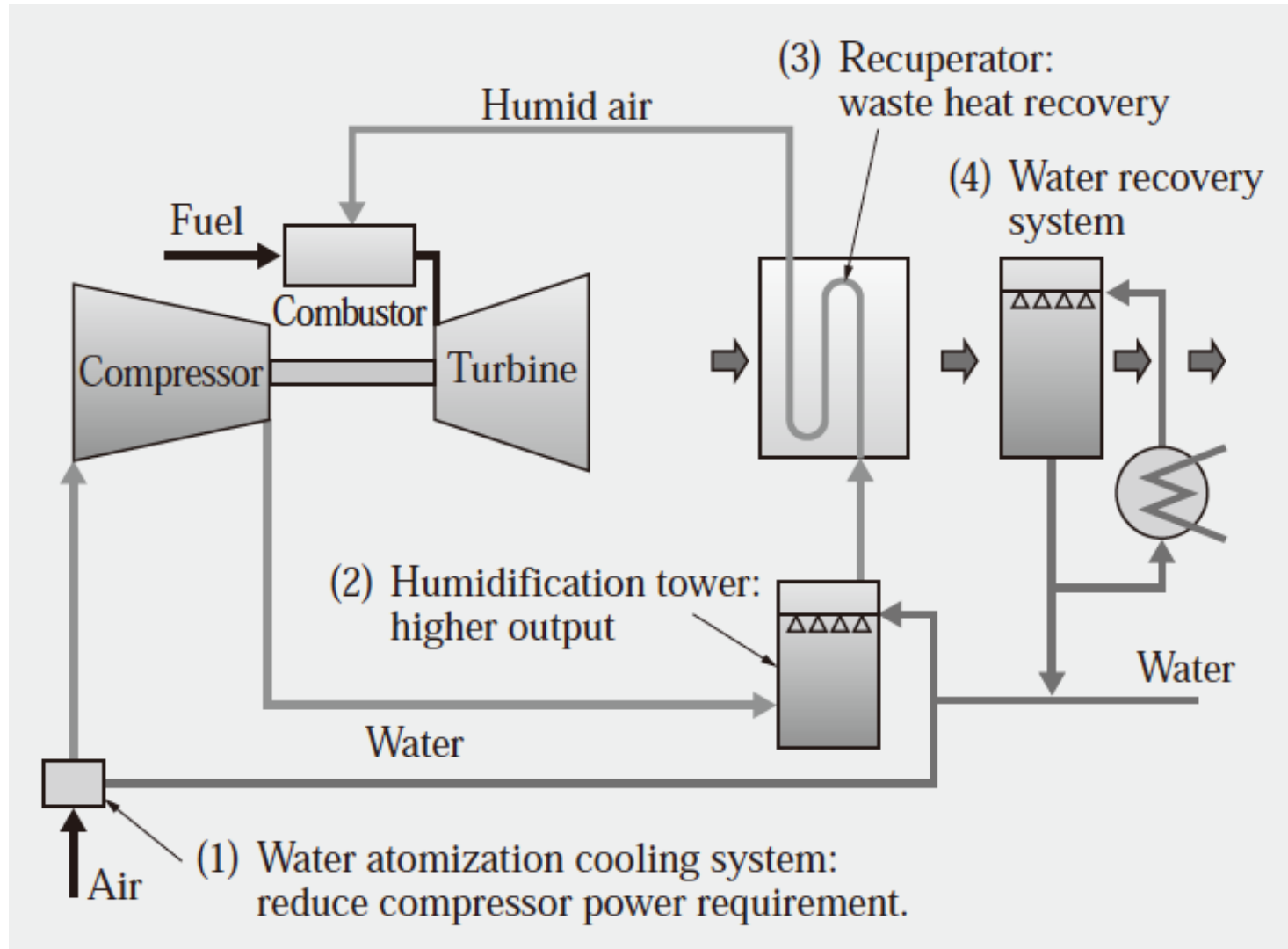


COMBINED CYCLE COMPONENTS ELIMINATED

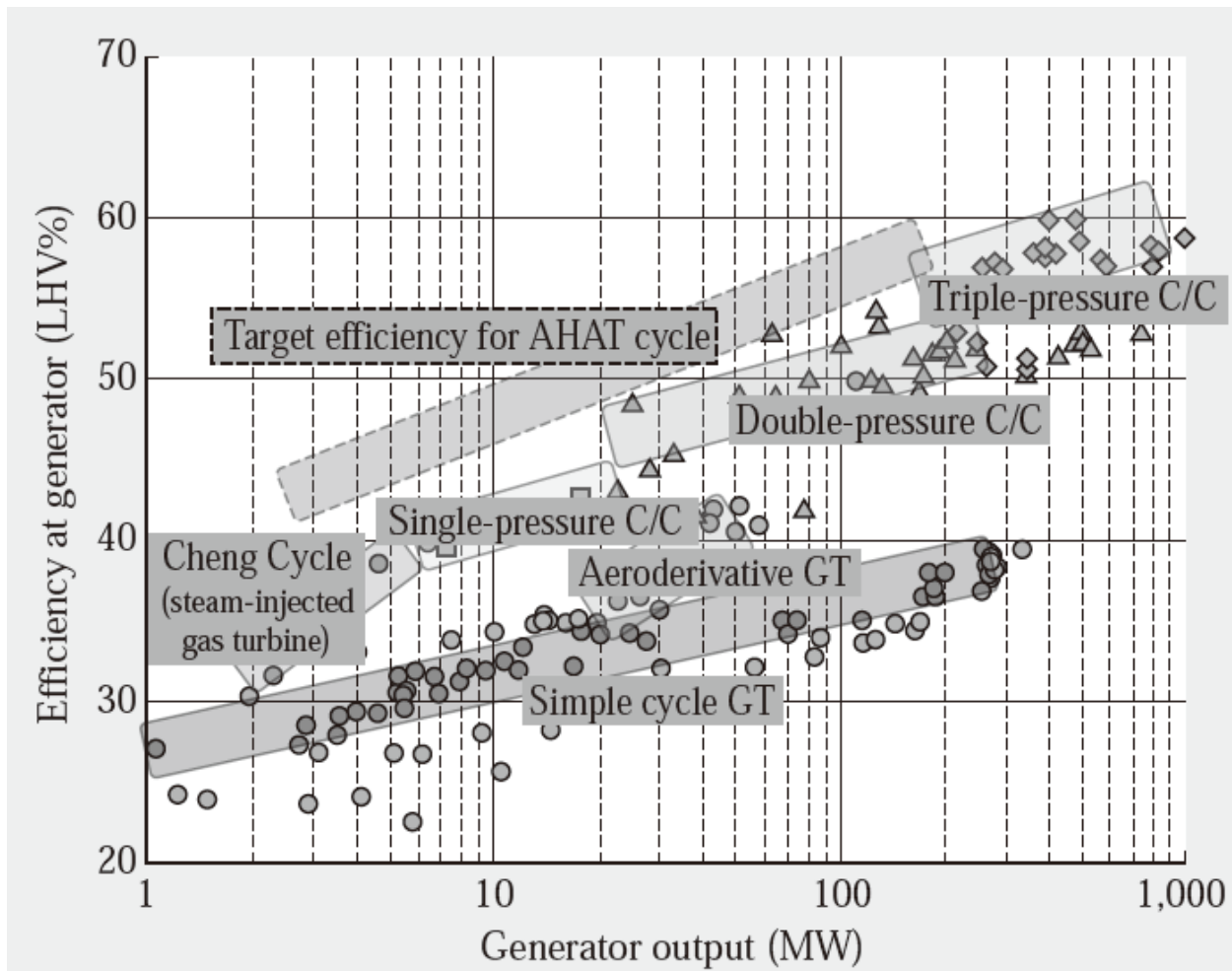
HAT cycle



AHAT Cycle (Hitachi)



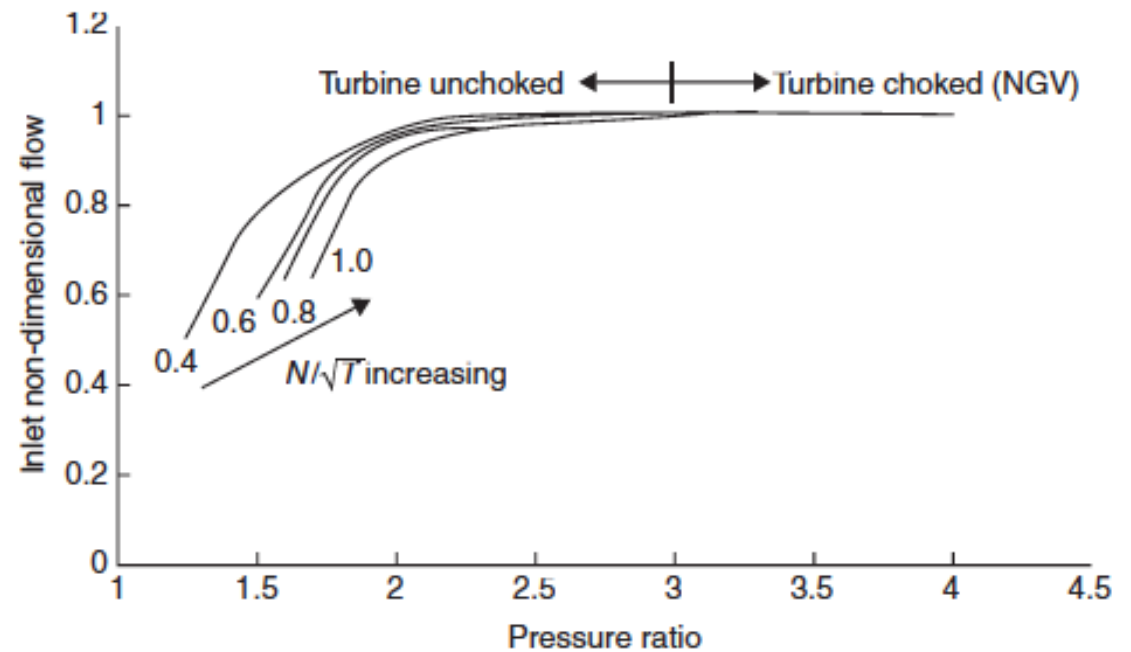
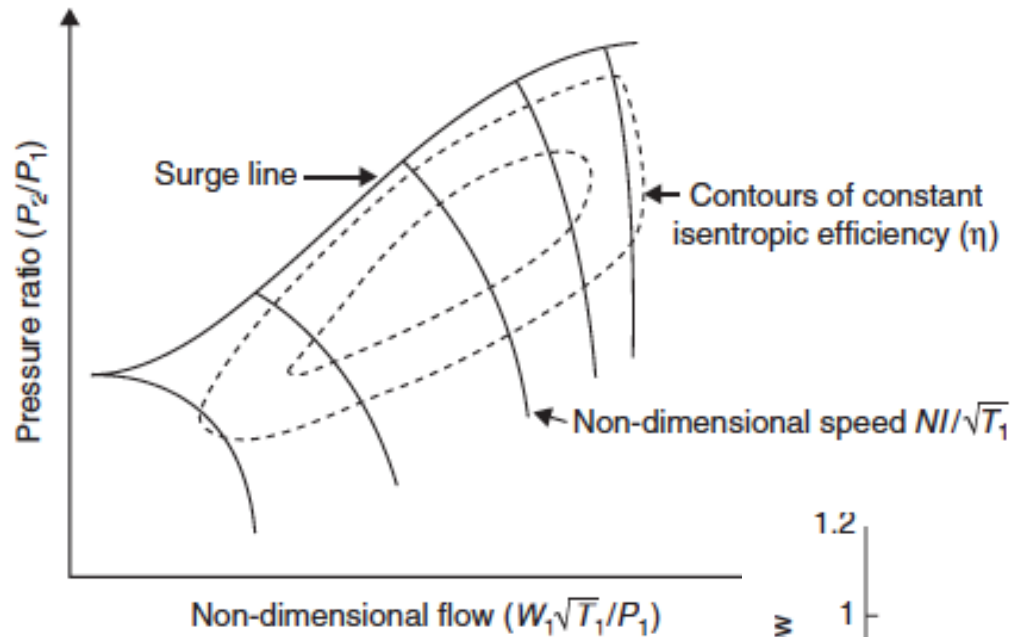
AHAT Target Efficiency



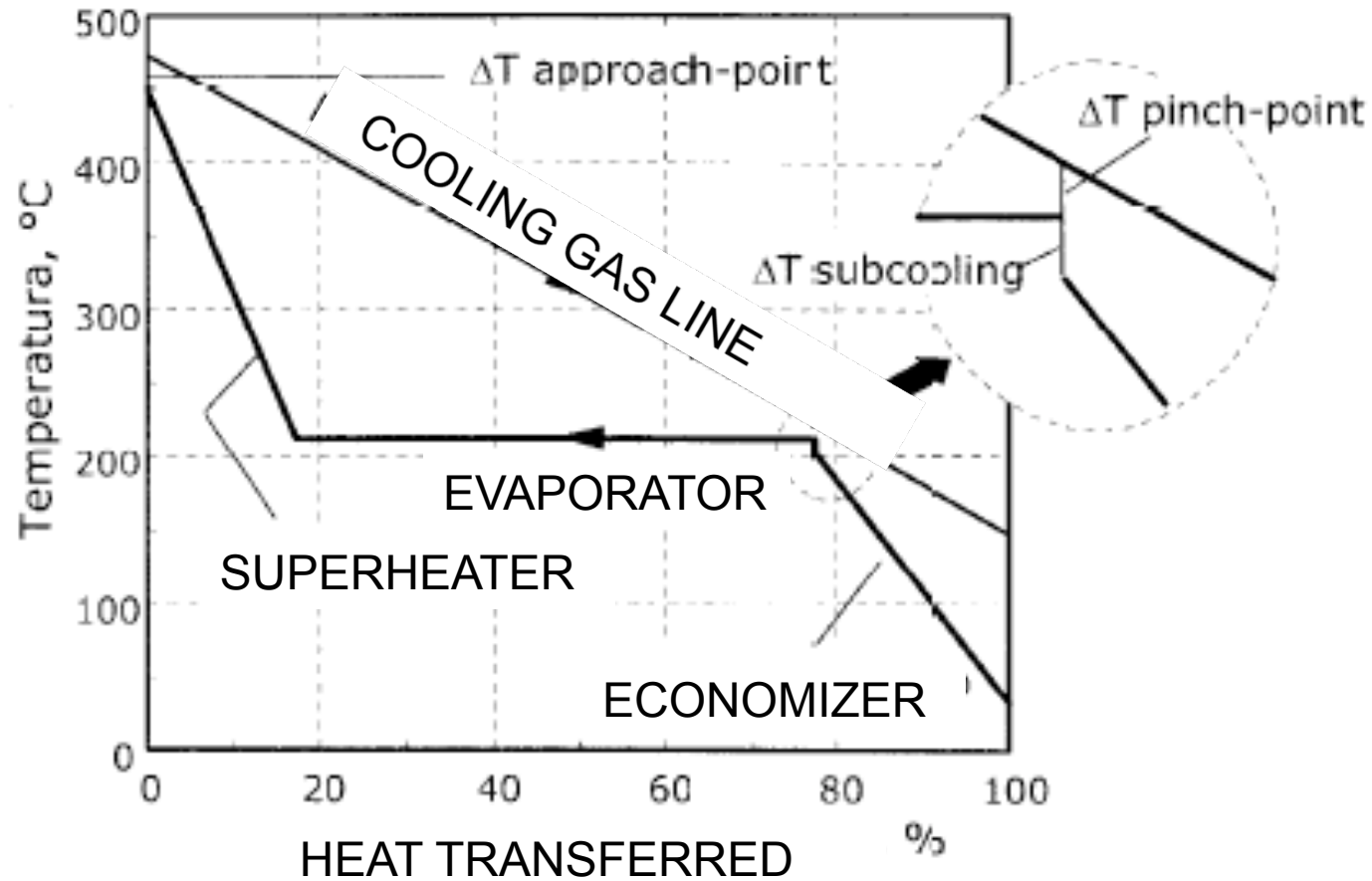
Source: Gas Turbine World (2010 GTW Handbook)

C/C: combined cycle LHV: lower heating value

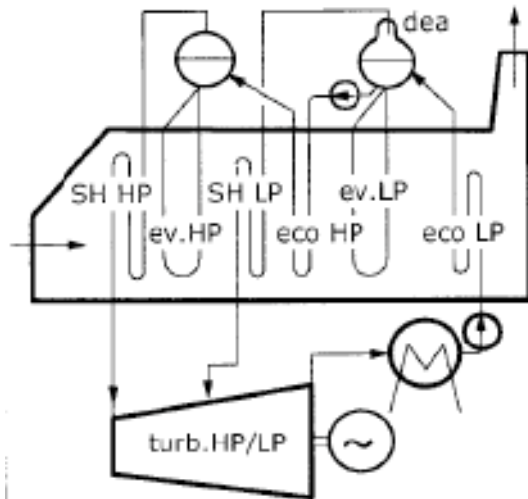
Problems of off-design operation



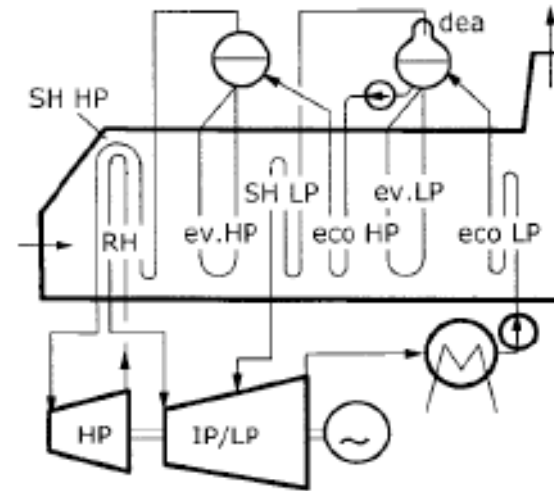
Temperature profiles



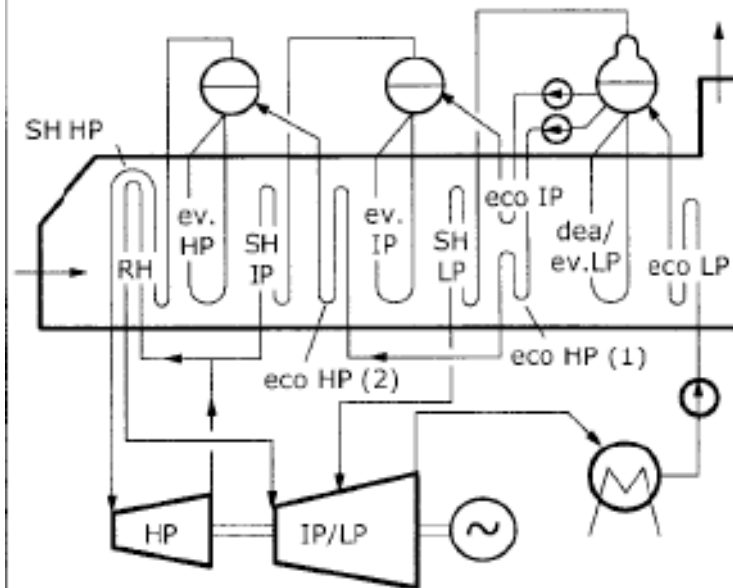
Improvements to CC



2 pressure levels (no reheat)

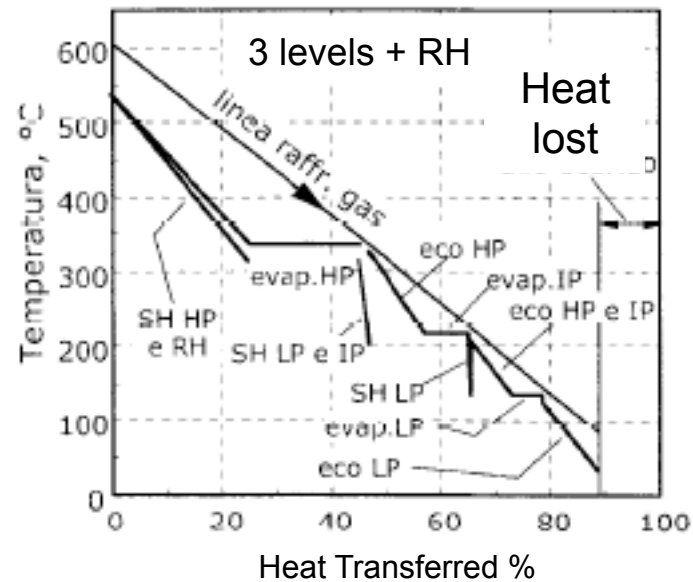
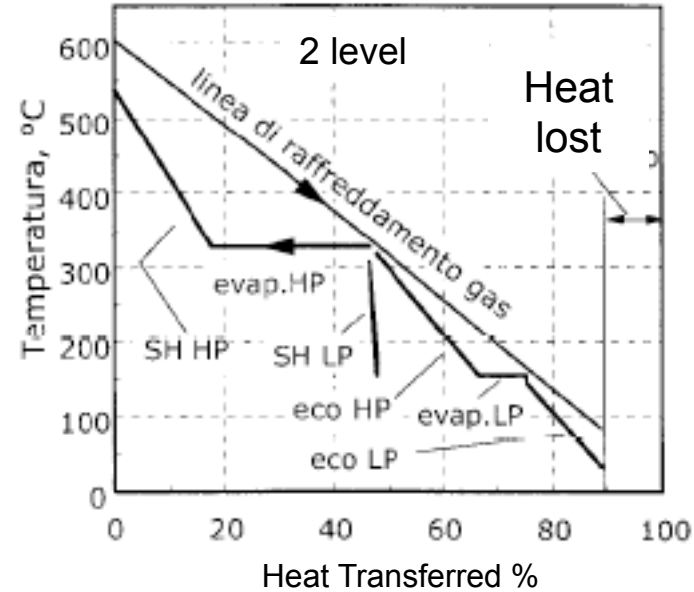
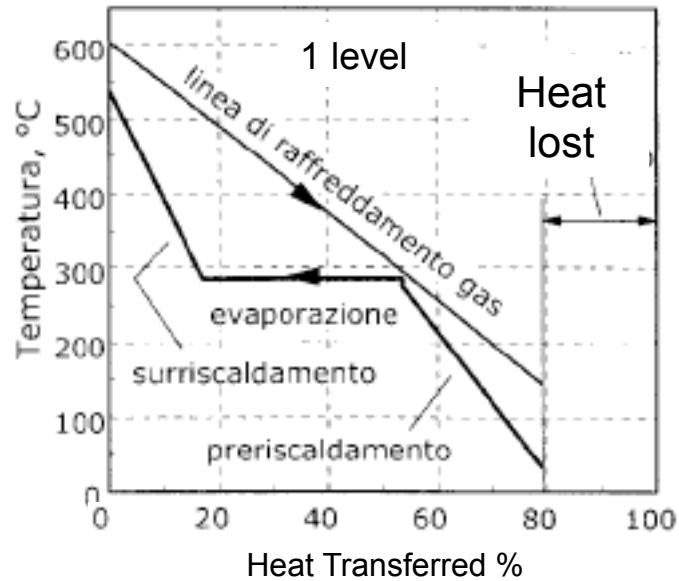


2 pressure levels (with reheat)



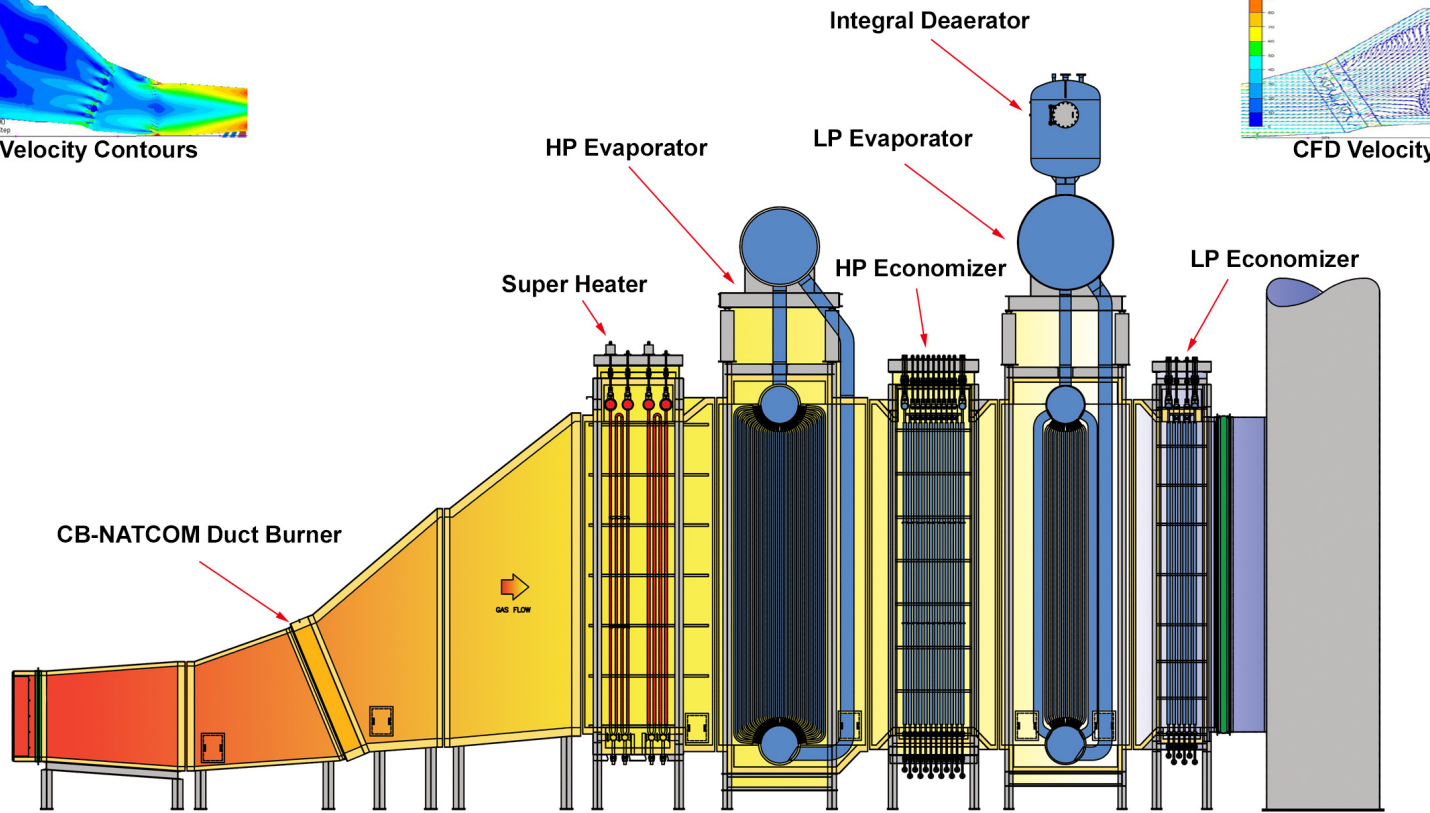
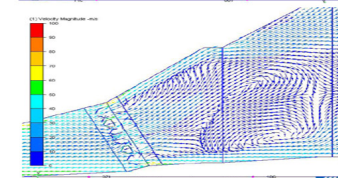
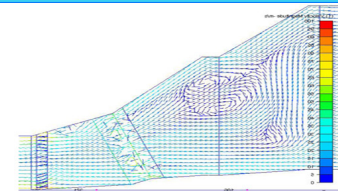
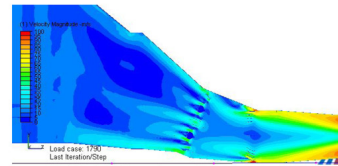
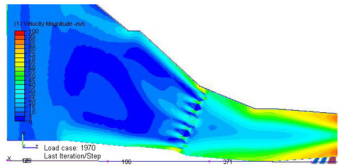
3 pressure levels
With reheat

Temperature profiles



HRSG

Modular HRSG

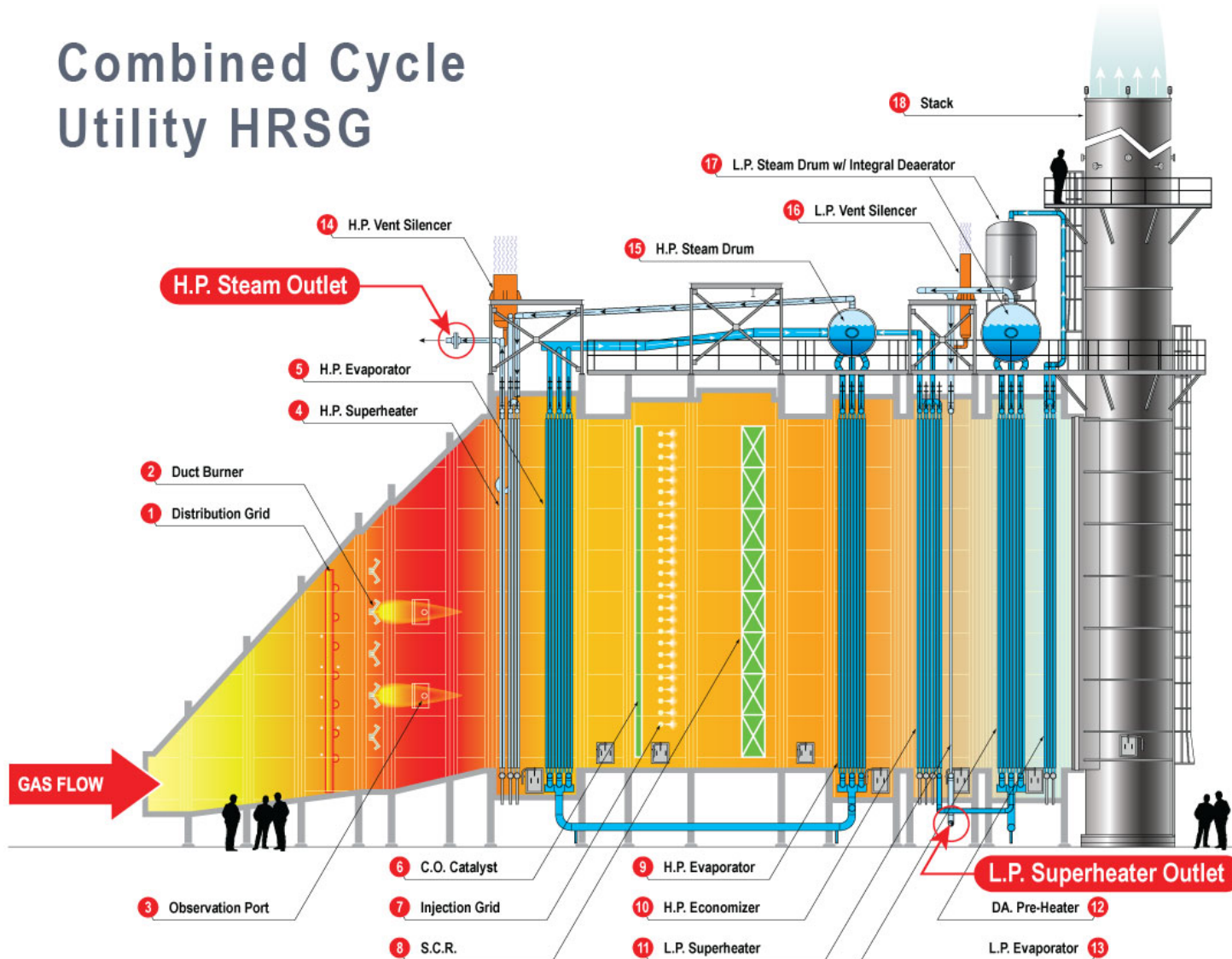


HRSG

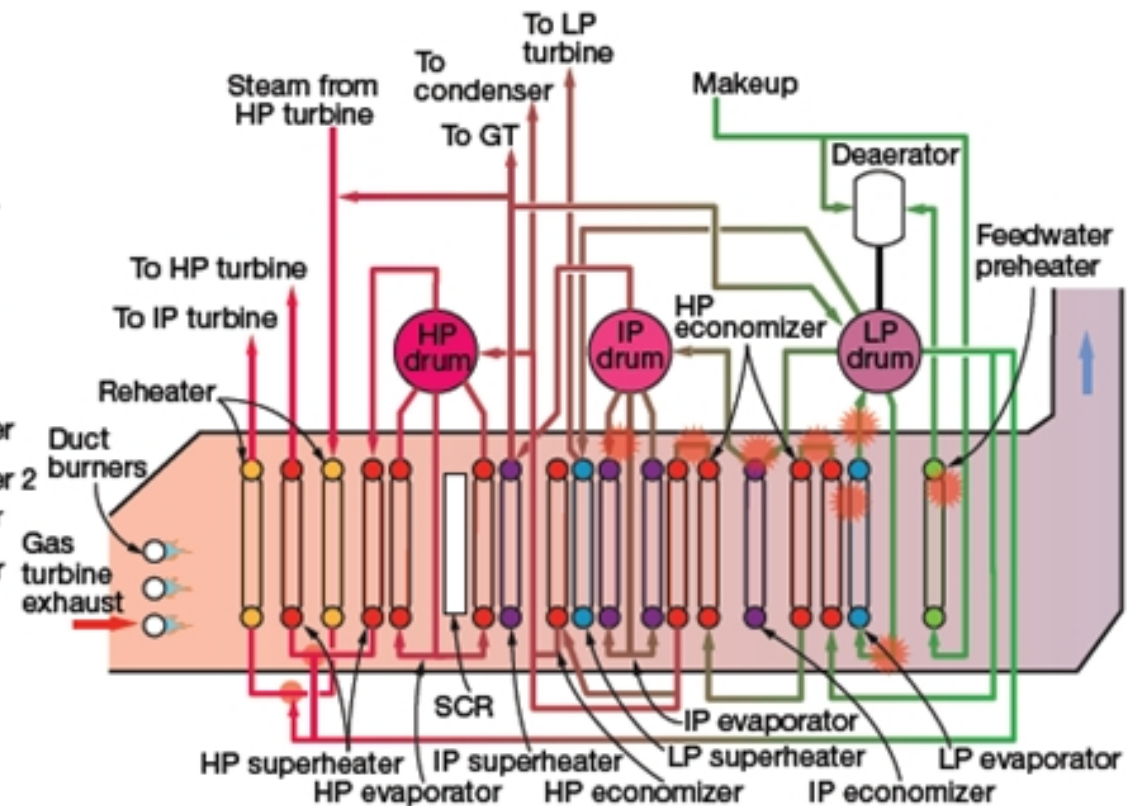
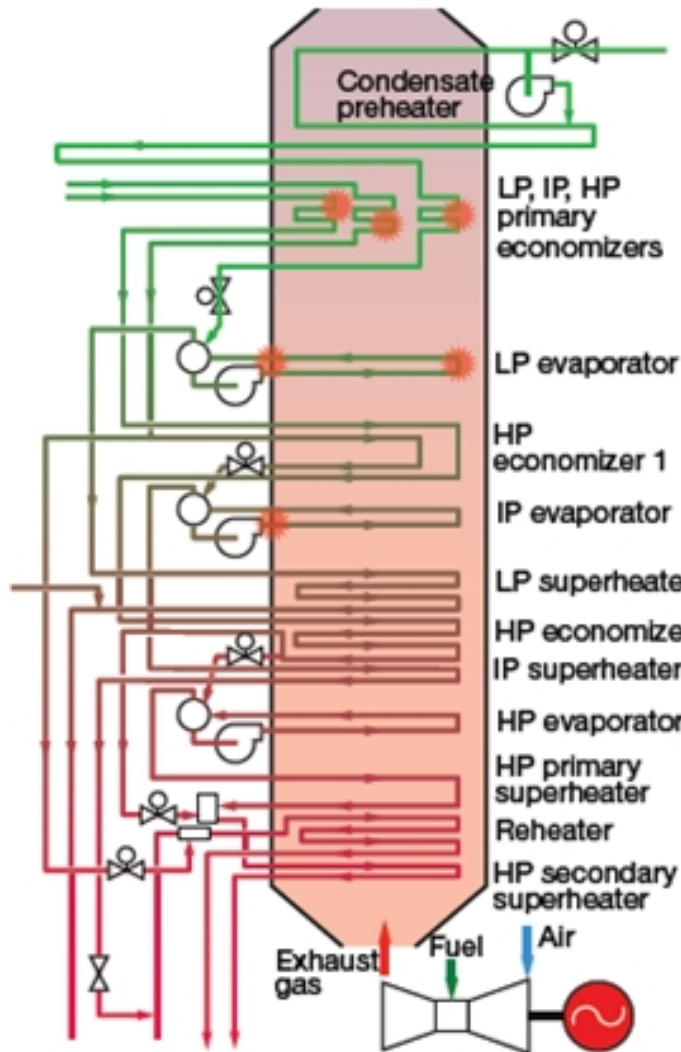


HRSG

Combined Cycle Utility HRSG



HRSG



1, 2. FAC locations typically identified with heat-recovery steam generators are LP heat-transfer surfaces and to a lesser degree the IP stages

HRSG



Installation of an HRSG

