

TYPICAL CONTROL SCHEMES IN POWER PLANT

ESSENTIAL BOILER CONTROLS

1. AIR ,WATER,FUEL FLOW CONTROL
2. FEED WATER CONTROL/DRUM LEVEL CONTROL
3. STEAM TEMPERATURE CONTROL
4. BOILER PROTECTION/INTERLOCKS (DIGITAL)

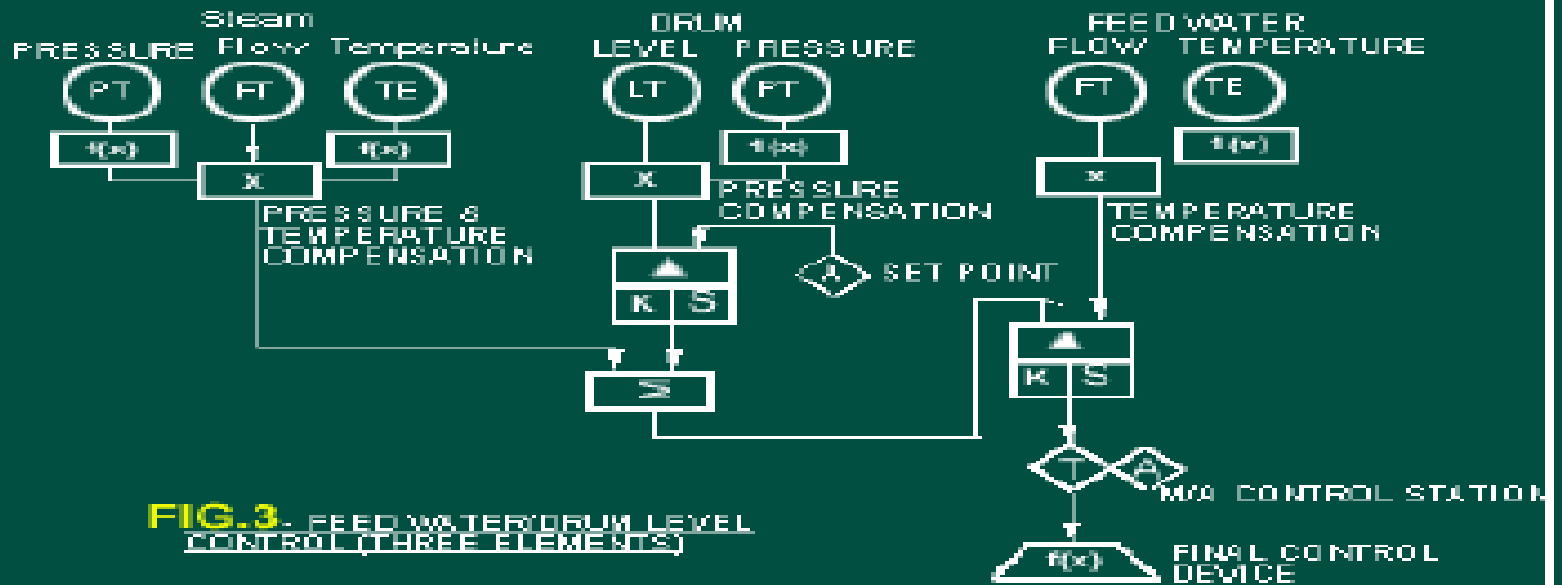


FIG.3. FEED WATER/DRUM LEVEL CONTROL (THREE ELEMENTS)

FURNACE - DRAFT TRANSMITTER

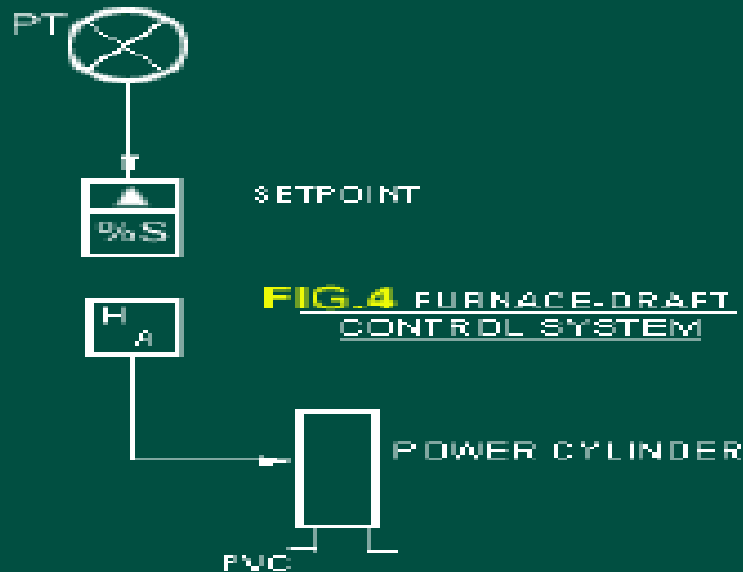


FIG.4 FURNACE-DRAFT CONTROL SYSTEM

SH. TEMPERATURE THERMOCOUPLE

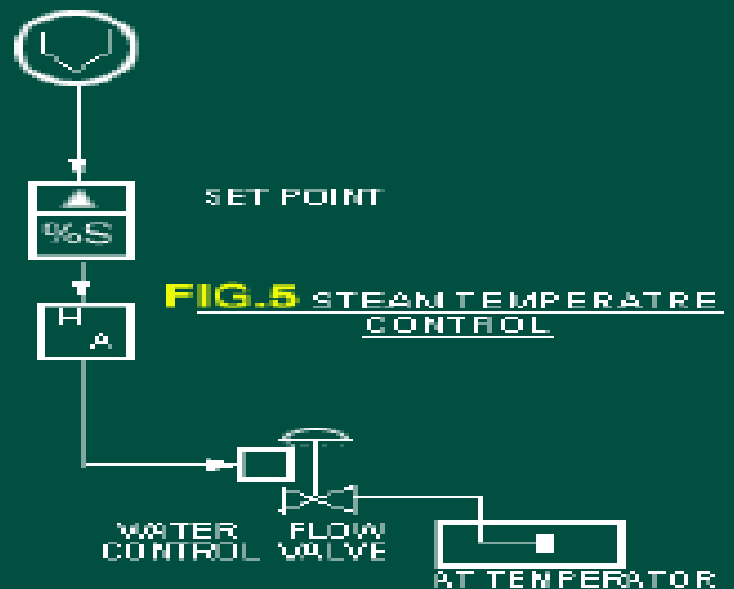
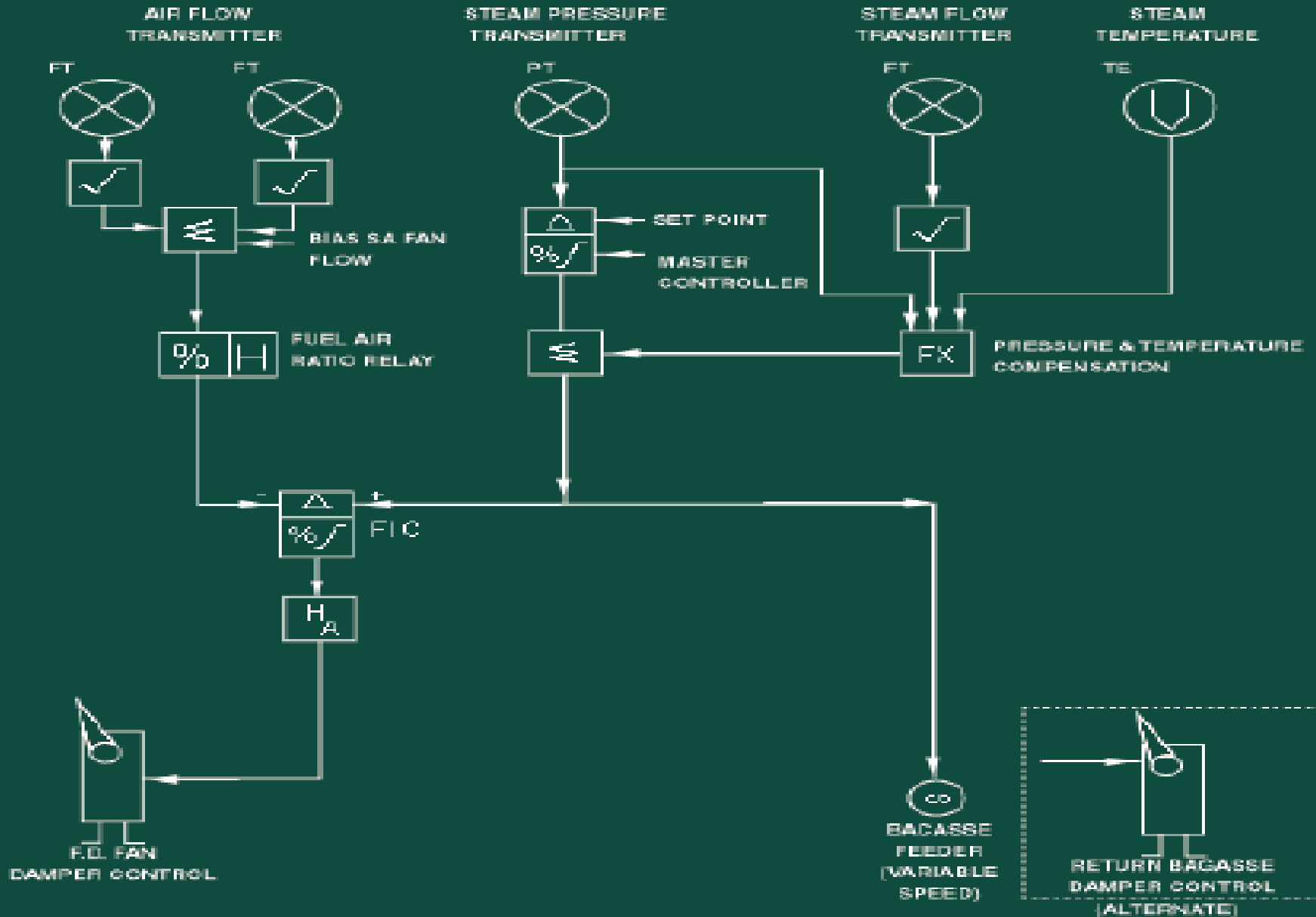


FIG.5 STEAM TEMPERATURE CONTROL

FIG.6

COMBUSTION CONTROL



BOILER TRIP

- a. FD fan trip / shut down
- b. ID fan trip / shut down
- c. Cogeneration turbine trip
- d. Drum level low / high trip

INTERLOCKS

- a. Start ID fan when FD fan and SA fan are off.
- b. Start FD fan only if ID fan is on.
- c. Start SA fan only if both FD and ID fans are on
- d. Start bagasse feeder only if SA fan is on
- e. ID fan is of all fans shall trip.
- f. Trip bagasse feeders when SA fan is tripped.