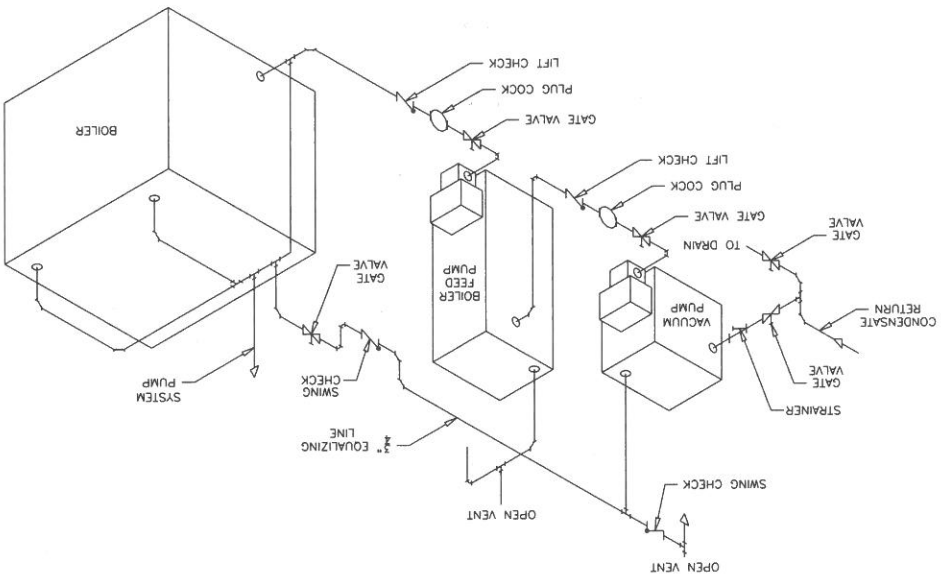


C. Boiler Feed and Vacuum Pumps

Control & Pipe (same as Boiler Feed & Condensate Pump)

**Additional Piping:** Equalizing line between boiler steam header and vacuum pump. Equalizing line will prevent a possible vacuum develop- ing in steam supply that could be greater than vacuum in the return.



SIZING OF VACUUM PUMP

Vacuum condensate pumps are normally sized at 2 or 3 times the sys- tem condensing rate. This is the same procedure for sizing standard condensing rate. The vacuum pump must also remove air from the return system. The system size, the inches of vacuum desired, and tightness of the system piping must be considered. The following chart will help. 1.210

Air Removal Requirement

System	Vac / In. Hg.	CFM / 1,000 EDR
• up to 10,000 EDR (tight)	0 - 10	.5
• over 10,000 EDR (tight)	0 - 10	.3
• all systems, some air in-leakage	0 - 10	1.0

Highest Temperature °F of Condensate Permissible with Vacuum Pumps

Vacuum Inches of Mercury in Pump Receiver	Highest Permissible Temperature of Condensate °F
15	179
12	187
10	192
8	196
6	201
4	205
2	209
1	210