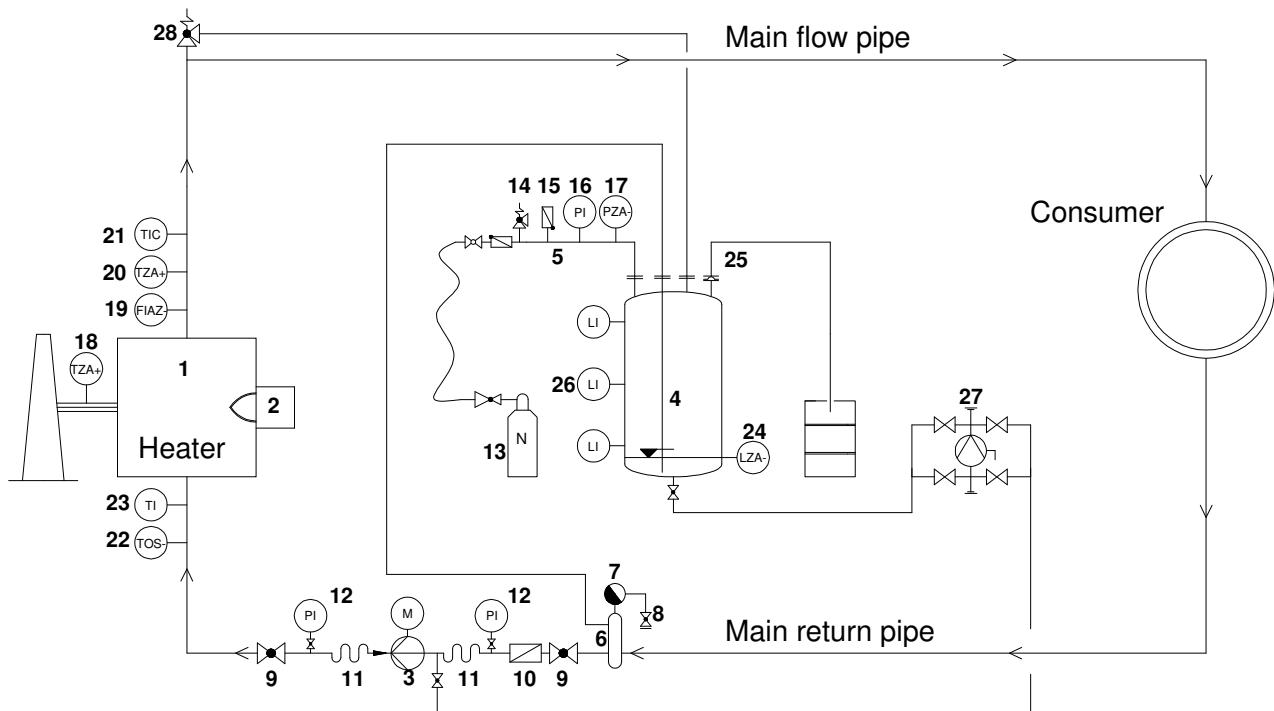


R/I - Drawing Thermal oil heating plant

Regiomat guarantees a controllable flow through the heater. The thermal oil has the possibility to expand over a non-turn-off pipeline between the heater and the expansion vessel. The nitrogen in the expansion vessel guarantees the necessary pressure balance and protects the thermal oil from the oxygen in the air. This is the reason why the thermal oil doesn't oxidize even when we have high temperatures. So you have a system which works for more than 15 years without any problems.

The necessary safety installations are:

- A flow controller to make sure that enough thermal oil flows.
- A level switch to make sure that there is enough thermal oil in the system and that no gas can get into the system. Because it is not allowed to run the pump in a dry condition.
- A thermostat in the main pipeline to make sure that the temperature of the thermal oil can not get higher as a defined maximum temperature.
- A thermostat for the flue gas to make sure that the temperature of the flue gas is not higher than a defined maximum temperature.
- A pressostat to make sure that there is enough nitrogen pressure.



Legende:

1	Heater	11	Vibration absorber	21	Temperature controller
2	Burner	12	Manometer	22	Thermostat
3	Circulation pump	13	Nitrogen	23	Temperature gauge
4	Expansion vessel	14	Safety valve	24	Level switch
5	Nitrogen system	15	Vacuum breaker	25	Rupture disk
6	Gas collection bottle	16	Manometer	26	Level control
7	Autom. centralized air separator	17	Pressostat	27	Filling pump
8	Cock with cap	18	Thermostat flue gas	28	Safety valve
9	Shut-off valves	19	Flow control		
10	Strainer	20	Thermostat main pipe		