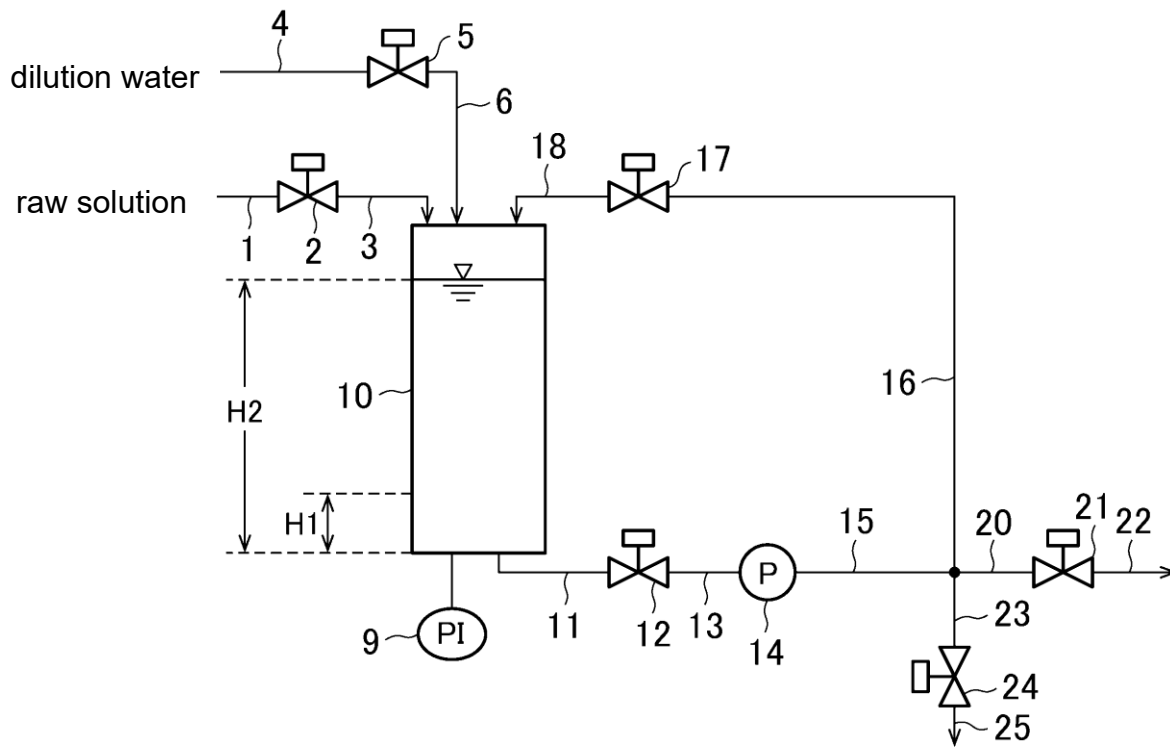


The diagram illustrates a closed-loop control system for a stirred tank reactor. The system components and their interconnections are as follows:

- Inputs:**
 - dilution water (4):** Enters the system and passes through a valve (5) to become line 6, which enters the reactor (10) at the top.
 - raw solution (1):** Enters the system and passes through a valve (2) to become line 3, which enters the reactor (10) at the top.
- Reactor (10):** A stirred tank reactor with a stirrer (9) and a PI controller (9). The reactor has two liquid levels indicated: H_1 (bottom) and H_2 (top).
- Output and Feedback:**
 - The reactor output (11) is pumped (14) through a valve (12) to become line 13, which enters a storage tank (15).
 - The storage tank (15) has a bottom outlet (24) leading to a drain (25).
 - The storage tank output (16) is fed back to the reactor inlet (18) through a valve (17).
- Control and Monitoring:**
 - The PI controller (9) is connected to the reactor (10) and the storage tank (15).
 - The storage tank (15) is also connected to a pump (14) and a valve (12).
 - The storage tank (15) has a bottom outlet (24) leading to a drain (25).

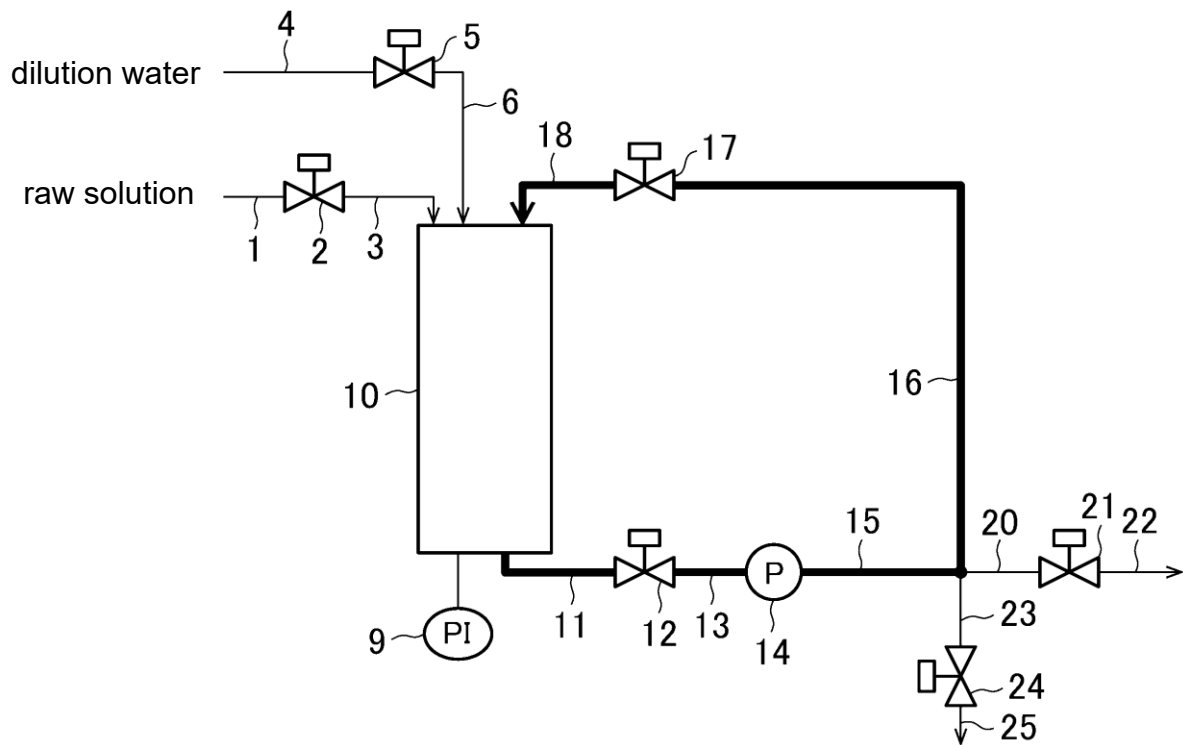
[Fig. 3]

Fig. 3



[Fig. 4]

Fig. 4



[Fig. 5]

Fig. 5

