

1. Default settings

- A. V\_1 to v\_10 close
- B. Pump\_1, 2, 3 off

2. Tank cleaning Process

(water added to the system)

- A. Heat water
  - a. v\_1 open
  - b. v\_2 close
  - c. Pump\_1 start
  - d. v\_4 open
  - e. v\_3 open
- B. Keep until water temp reach 95. Keep 15 min
- C. Homogenizer clean
  - a. Pump\_3 start
  - b. V\_10 close
  - c. V\_9 open
  - d. Start homogenizer
- D. Keep process 15 min
- E. Draining water
  - a. V\_10 open
  - b. Close v\_9 after 5 min
  - c. Off homogenizer
  - d. Waite 10min drain
  - e. V\_9, v\_10 close
  - f. Pump\_3 off

3. Milk heating

(milk added to the system)

- A. Heat milk
  - a. System still on heating mode
- B. Keep until milk T upto 95. Keep 45 min
- C. Cooling to 65
  - a. V\_2 open
  - b. V\_1, v\_3 close
  - c. Pump\_1 off
  - d. V\_4 close
  - e. V\_5, v\_7, v\_6 open
  - f. Pump\_2 start
- D. At 65
  - a. V\_6 close
  - b. V\_8 open
  - c. Pump\_2 close
  - d. V\_5 close
- E. Milk homogenizer
  - a. Pump\_3 start
  - b. V\_9 open
- F. Keep until homogenise process 30 min
- G. Cooling to 45
  - a. Off homogenizer
  - b. V\_9 close
  - c. Pump\_3 off
  - d. V\_8 close
  - e. V\_6 open
  - f. Pump\_2 start
  - g. V\_5, v\_7 open
- H. Keep until milk at 45
- I. Stop cooling
  - a. V\_6 close
  - b. Pump\_2 off
  - c. V\_8 open
  - d. V\_5, v\_7 close