

**OB1 - <offline>**  
"  
**Name:** **Family:**  
**Author:** **Version:** 0.1  
**Block version:** 2  
**Time stamp Code:** 12/27/2015 06:38:36 AM  
**Interface:** 02/15/1996 04:51:12 PM  
**Lengths (block/logic/data):** 00684 00536 00026

| Name           | Data Type     | Address | Comment   |
|----------------|---------------|---------|---|
| TEMP           |               | 0.0     |   |
| OB1_EV_CLASS   | Byte          | 0.0     | Bits 0-3 = 1 (Coming event), Bits 4-7 = 1 (Event class 1) |
| OB1_SCAN_1     | Byte          | 1.0     | 1 (Cold restart scan 1 of OB 1), 3 (Scan 2-n of OB 1)     |
| OB1_PRIORITY   | Byte          | 2.0     | Priority of OB Execution                                  |
| OB1_OB_NUMBR   | Byte          | 3.0     | 1 (Organization block 1, OB1)                             |
| OB1_RESERVED_1 | Byte          | 4.0     | Reserved for system                                       |
| OB1_RESERVED_2 | Byte          | 5.0     | Reserved for system                                       |
| OB1_PREV_CYCLE | Int           | 6.0     | Cycle time of previous OB1 scan (milliseconds)            |
| OB1_MIN_CYCLE  | Int           | 8.0     | Minimum cycle time of OB1 (milliseconds)                  |
| OB1_MAX_CYCLE  | Int           | 10.0    | Maximum cycle time of OB1 (milliseconds)                  |
| OB1_DATE_TIME  | Date_And_Time | 12.0    | Date and time OB1 started                                 |

**Block: OB1**    **"Main Program Sweep (Cycle)"**

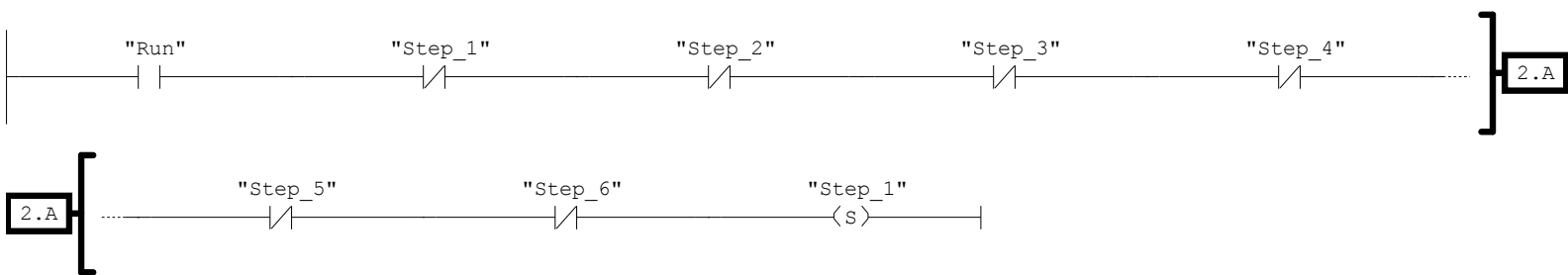
Copyright (c) 2011, 2015 Dogwood Valley Press, LLC  
-----  
Problem SP6-2 Batch Process Control  
  
Additional internal memory:  
Symbol                      Address  
Run                            M5.0                      BOOL    On while station running  
Int\_Override                M5.1                      BOOL    Reset and empty tank  
Step\_1 to Step\_7            M0.1 to M0.7            BOOL    Step-in-progress bits  
WaitA\_Tmr                    DB3                        SFB4    Times wait after filling A  
WaitB\_Tmr                    DB4                        SFB4    Times wait after filling B  
Stir\_Tmr                      DB5                        SFB4    Times stirring  
Empty\_Tmr                    DB6                        SFB4    Used to determine when empty  
Override\_Tmr                DB1                        SFB4    Times emptying when override

Network: 1            Start/stop

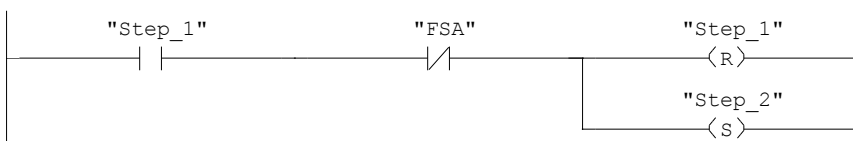
During override prevent start



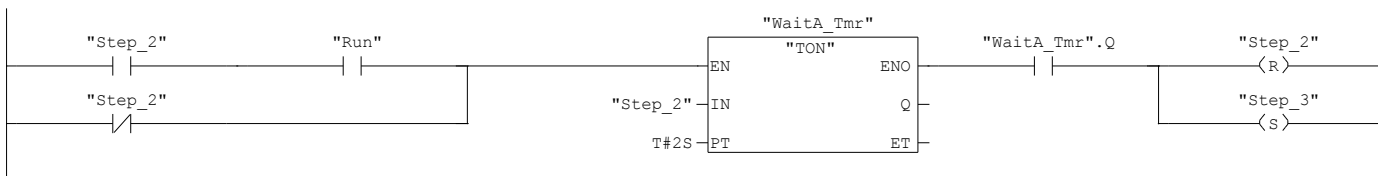
|            |               |
|------------|---------------|
| Network: 2 | Initial start |
|------------|---------------|



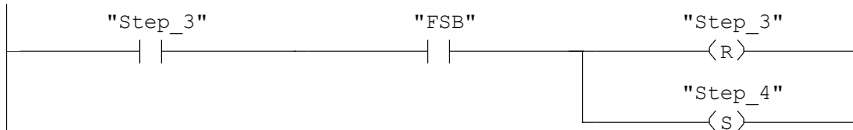
|            |               |
|------------|---------------|
| Network: 3 | Step 1 Fill A |
|------------|---------------|



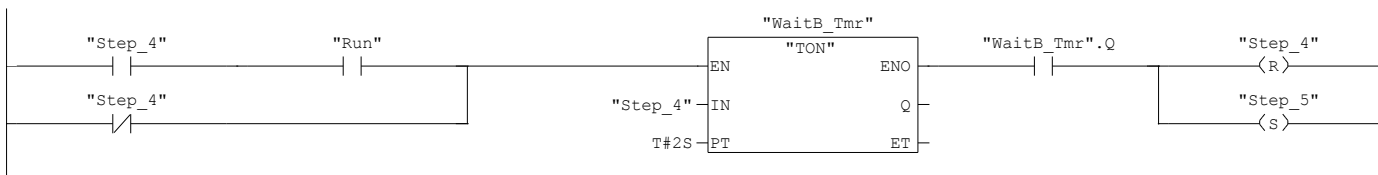
|            |                           |
|------------|---------------------------|
| Network: 4 | Step 2 Wait 2 sec after A |
|------------|---------------------------|



|            |               |
|------------|---------------|
| Network: 5 | Step 3 Fill B |
|------------|---------------|

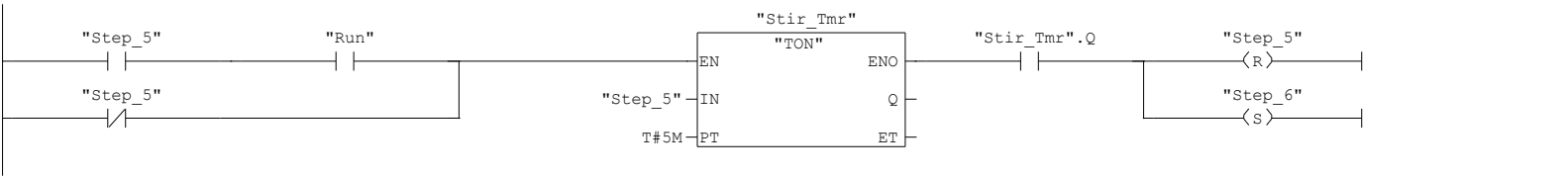


|            |                           |
|------------|---------------------------|
| Network: 6 | Step 4 Wait 2 sec after B |
|------------|---------------------------|



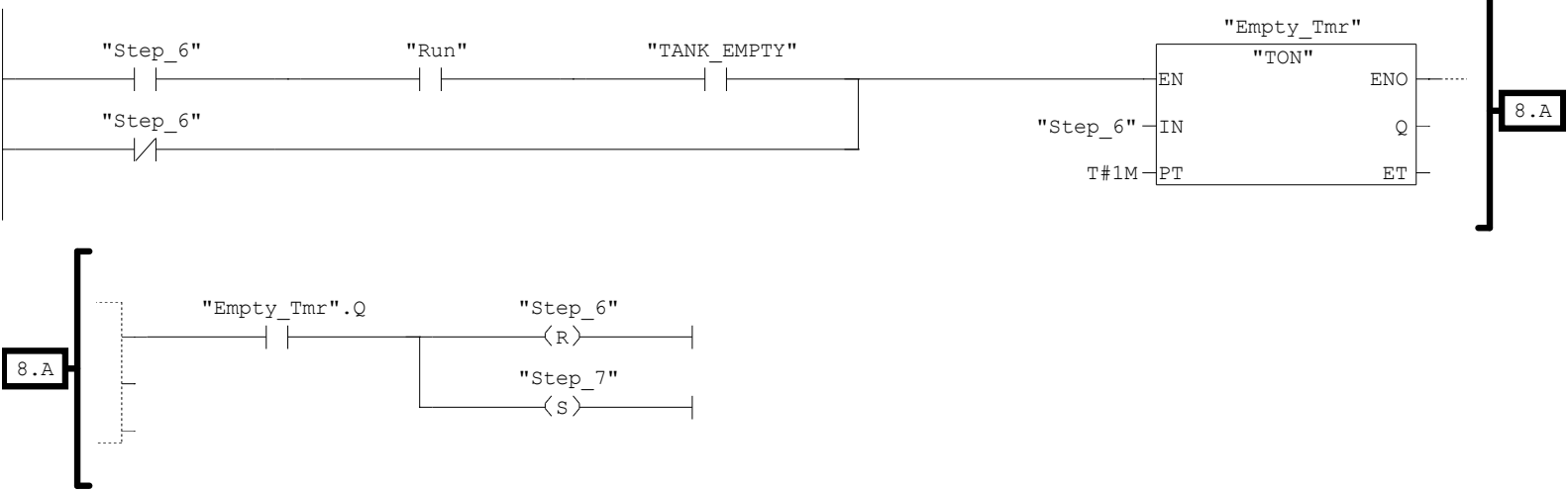
Network: 7

Step 5 Stir 10 minutes



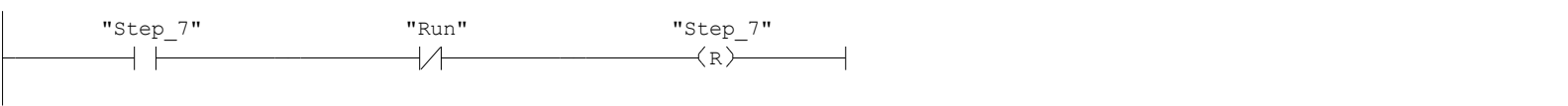
Network: 8

Step 6 Drain Tank



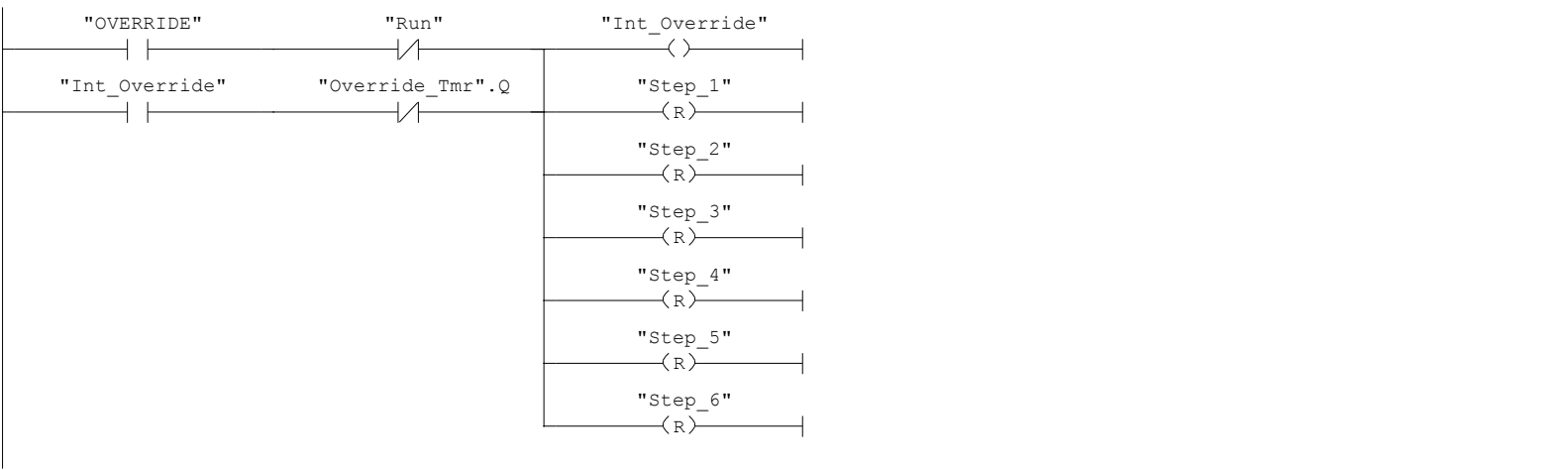
Network: 9

Step 7 Unlatch Run



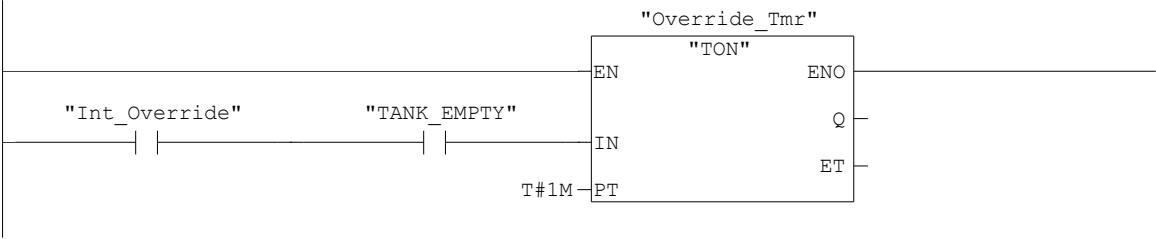
Network: 10

Override



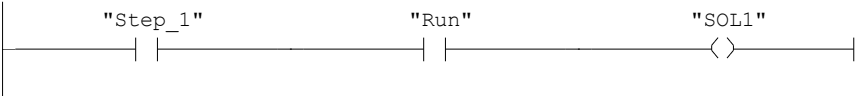
Network: 11

Override Timer



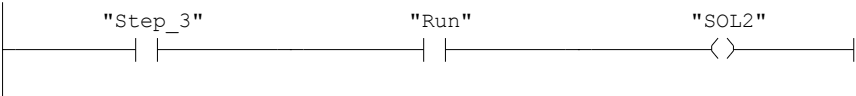
Network: 12

Ingredient A fill solenoid, on to allow ingredient A into tank



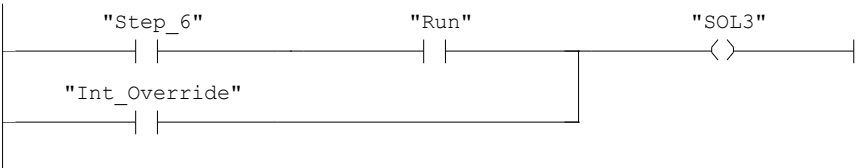
Network: 13

Ingredient B fill solenoid, on to allow ingredient B into tank



Network: 14

Tank outlet solenoid, on to empty tank



Network: 15

Stirrer motor control on to run stirrer

