

# Main\_Program [OB1]

## Main\_Program Properties

### General

Name	Main_Program	Number	1	Type	OB
Language	LAD	Numbering	Manual		

### Information

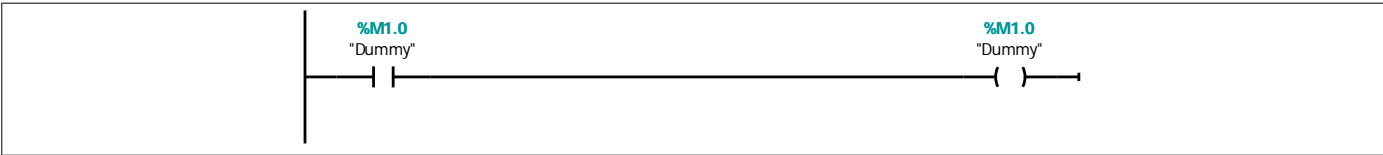
Title	SP9-7	Author		Comment	
Family		Version	0.1	User-defined ID	

Name	Data type	Default value
▼ Temp		
OB1_EV_CLASS	Byte	
OB1_SCAN_1	Byte	
OB1_PRIORITY	Byte	
OB1_OB_NUMBR	Byte	
OB1_RESERVED_1	Byte	
OB1_RESERVED_2	Byte	
OB1_PREV_CYCLE	Int	
OB1_MIN_CYCLE	Int	
OB1_MAX_CYCLE	Int	
OB1_DATE_TIME	Date_And_Time	
Constant		

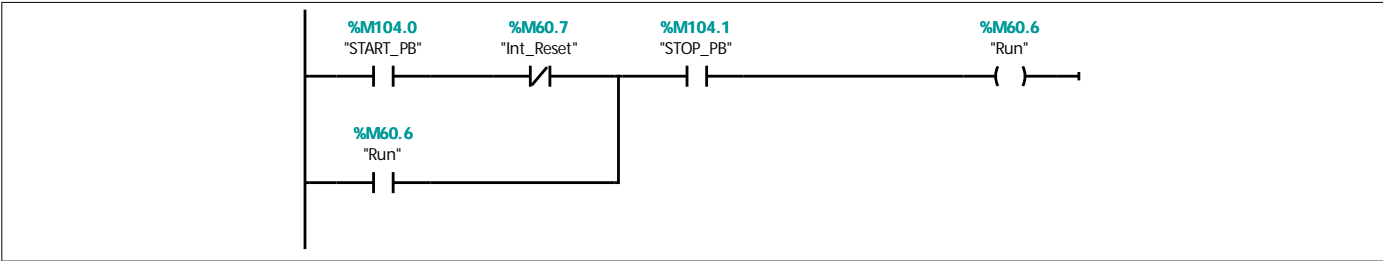
## Network 1:

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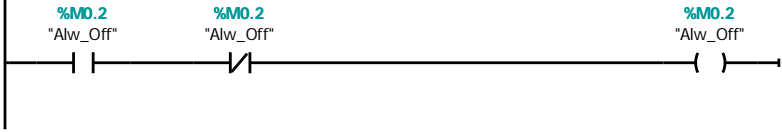
SP9-7 Part Oiler with shift register-based sequence.



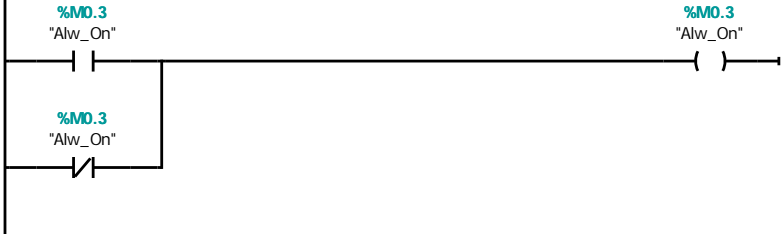
## Network 2: Start/stop/pause. Start prevented if reset in progress.



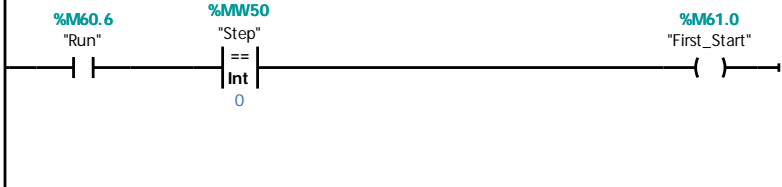
## Network 3: Always Off Logic



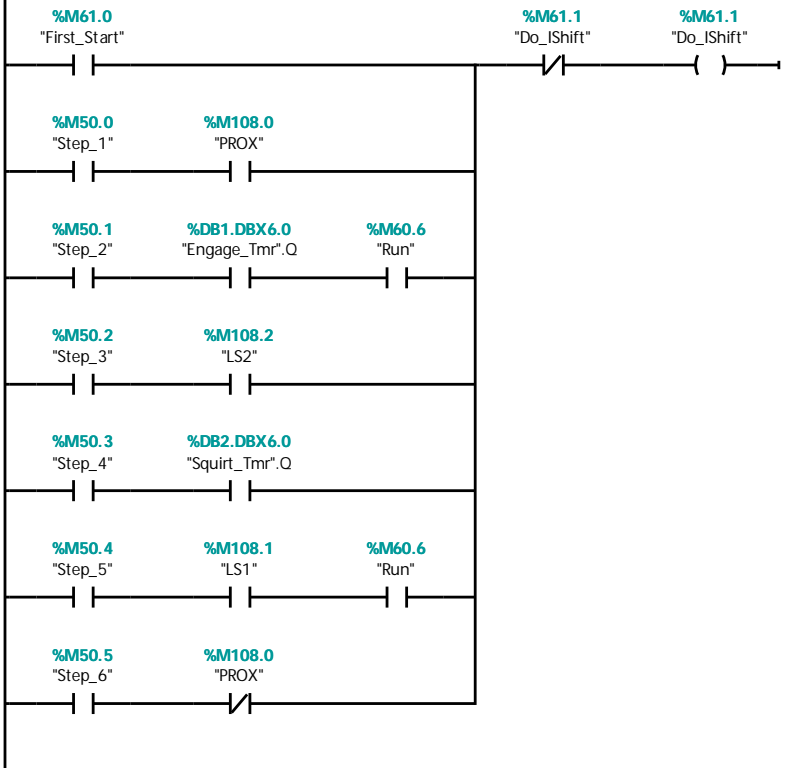
Network 4: Always On Logic



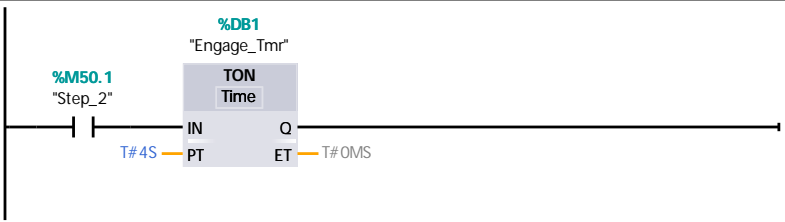
Network 5: First Start - run and no step-in-progress bit set



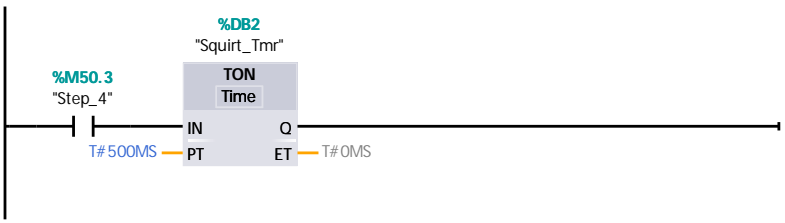
Network 6: All transition conditions. Any one causes shift.



Network 7: Timers for transitions



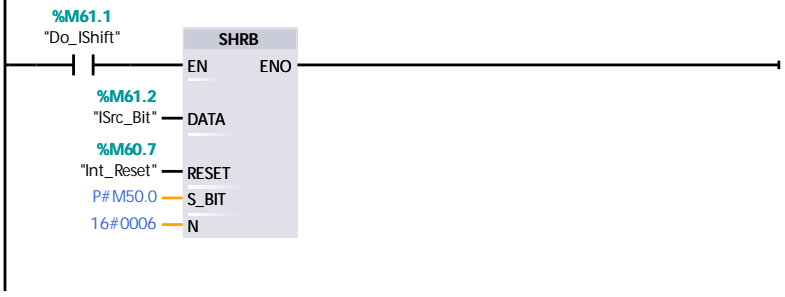
Network 8:



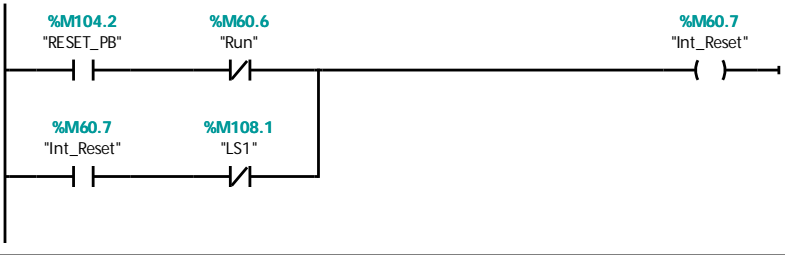
Network 9: Bit shifted into register. First start and last step are only "1" shifted in



Network 10:

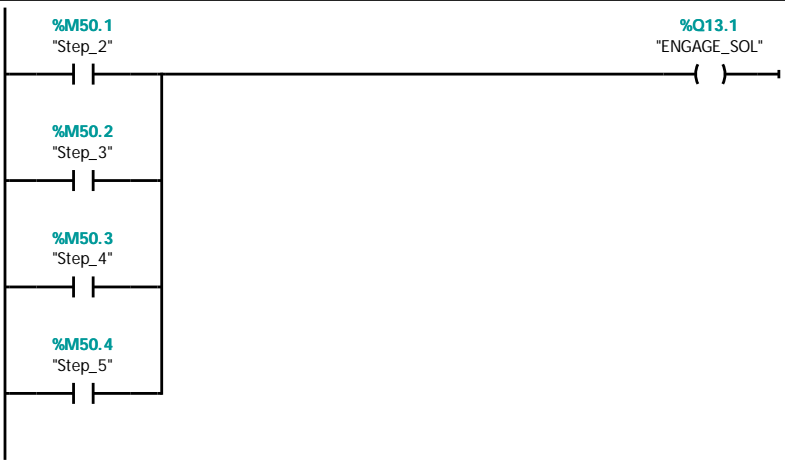


Network 11: Start/stop for reset operation. Reset pb starts, reset step 4 stops it.

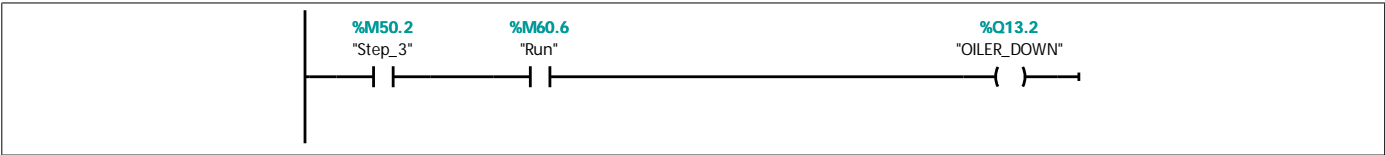


Network 12: On to move up hook to engage platform in station

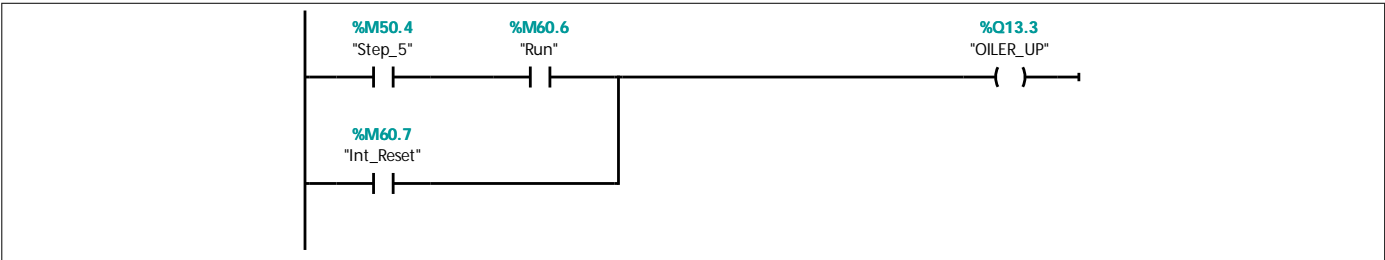
Physical Outputs



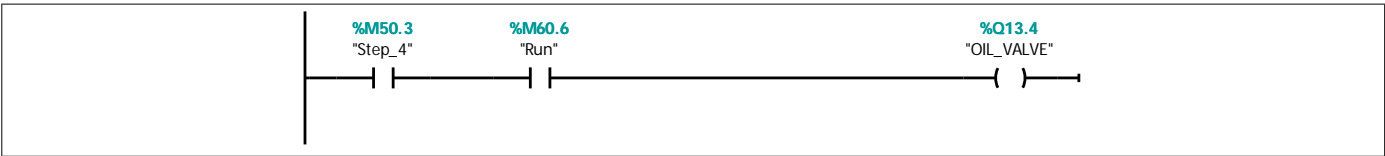
**Network 13: On to lower oiler tip**



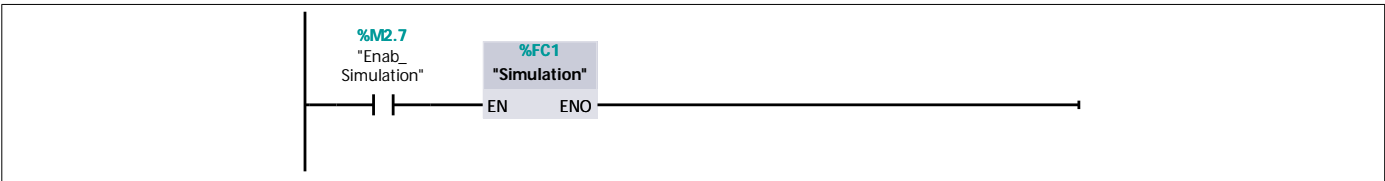
**Network 14: On to raise oiler tip**



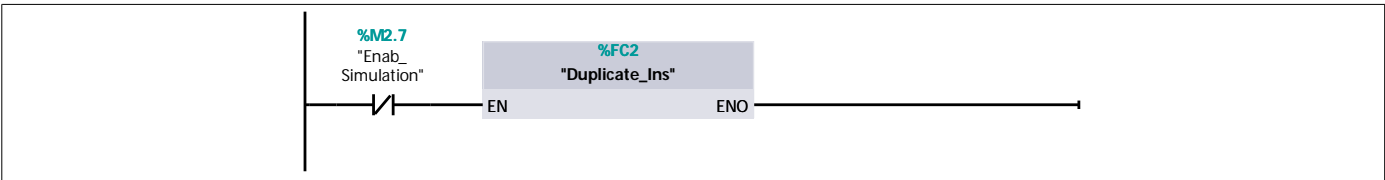
**Network 15: On to open valve and squirt oil**



**Network 16: Simulation**



**Network 17: Copy real inputs to input image if not simulating**



## Duplicate\_Ins [FC2]

### Duplicate\_Ins Properties

#### General

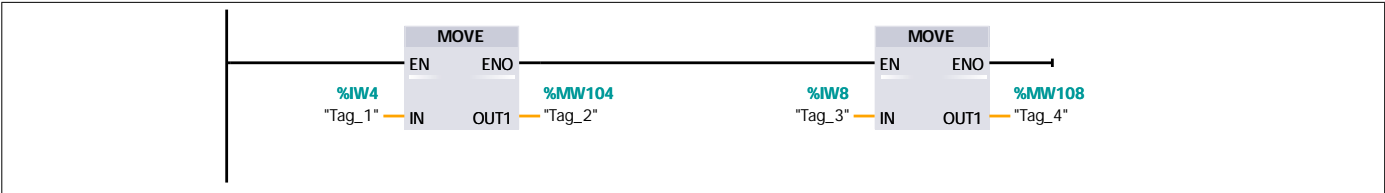
Name	Duplicate_Ins	Number	2	Type	FC
Language	LAD	Numbering	Manual		

#### Information

Title		Author		Comment	
Family		Version	0.1	User-defined ID	

Name	Data type	Default value
Input		
Output		
InOut		
Temp		
Constant		
▼ Return		
Duplicate_Ins	Void	

### Network 1:



## Simulation [FC1]

## Simulation Properties

## General

Name	Simulation	Number	1	Type	FC
Language	LAD	Numbering	Manual		

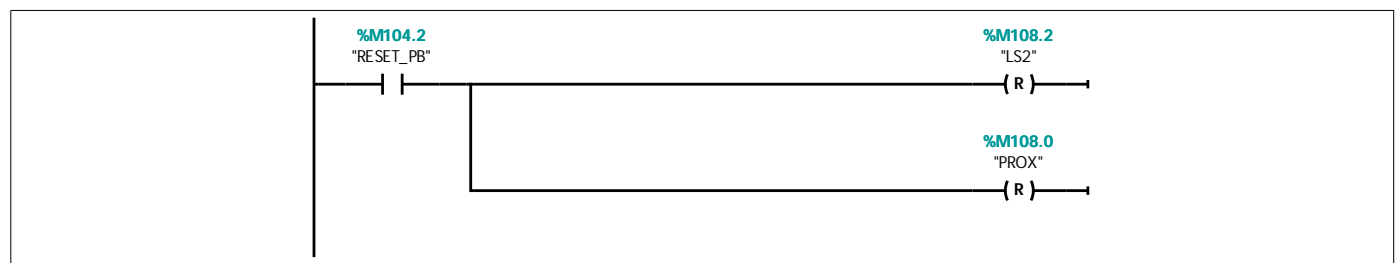
## Information

Title		Author		Comment	Copyright (c) 2011, 2015 Dogwood Valley Press, LLC ----- SIMULATION LOGIC
Family		Version	0.1	User-defined ID	

Name	Data type	Default value
Input		
Output		
InOut		
Temp		
Constant		
▼ Return		
Simulation	Void	

## Network 1: Limit switch, on (closed) when oiler tip is in lowered position

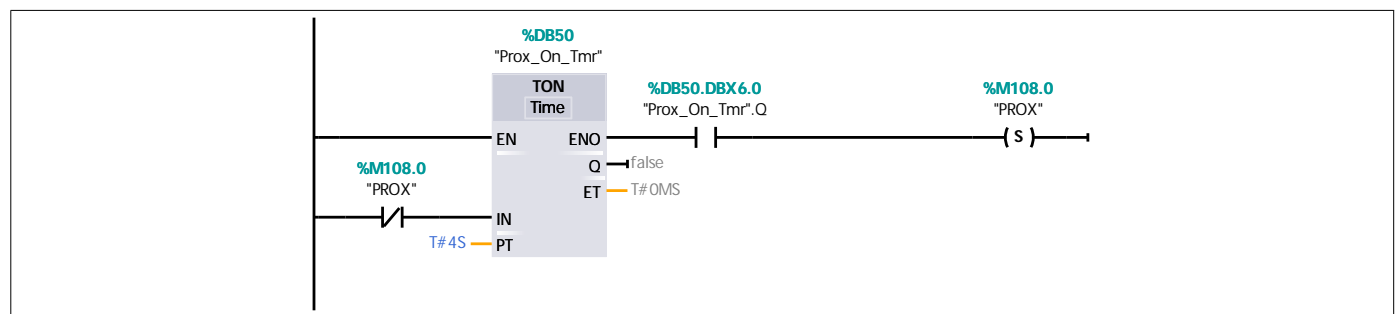
On reset, reset PROX and LS2



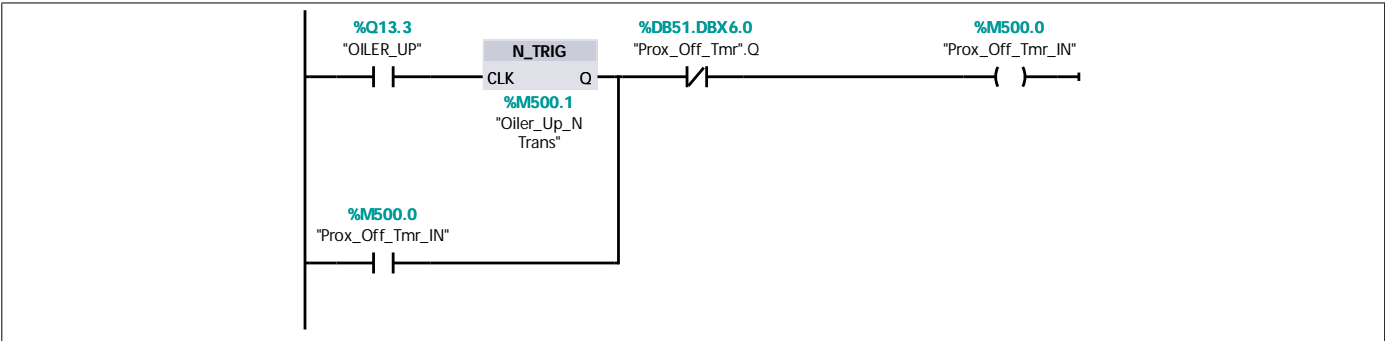
## Network 2: Proximity sensor, on when platform is in station

PROX simulation: Set when PROX off and for 4 secs.

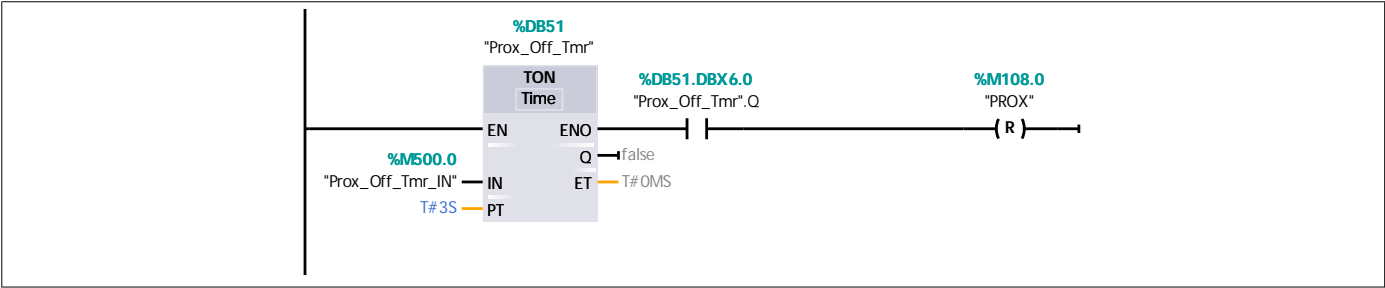
Reset 3 secs after OILER\_UP transitions off



**Network 3:**



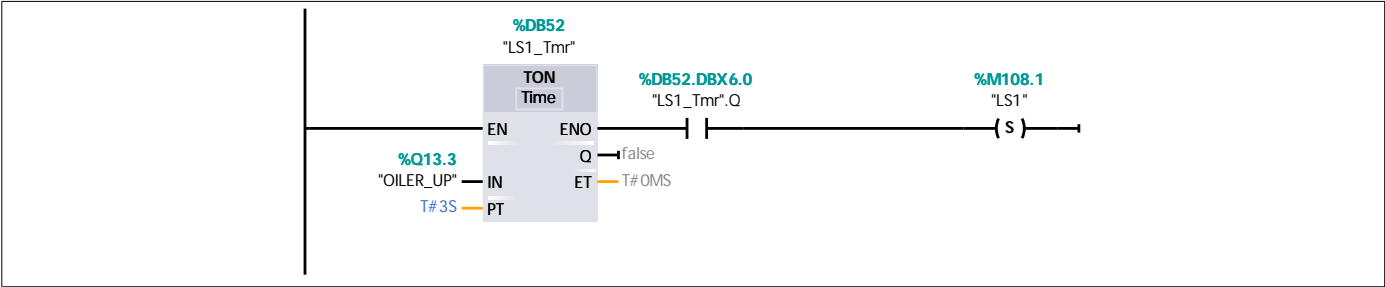
**Network 4: Proximity sensor, on when platform is in station**



**Network 5: Limit switch, on (closed) when oiler tip is in raised position**

LS1 and LS2 simulation: Set LS1 when OILER\_UP on for 3 sec. Reset when OILER\_DOWN

Set LS2 when OILER\_DOWN on for 3 sec. Reset when OILER\_UP

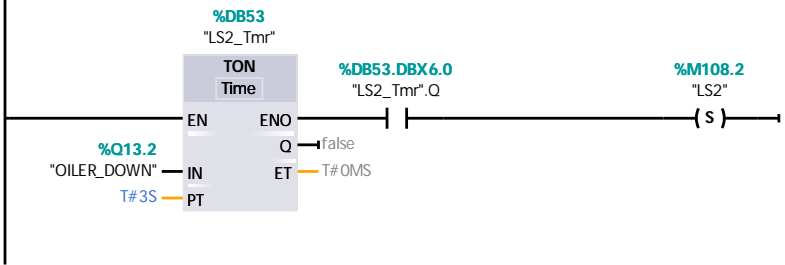


**Network 6: Limit switch, on (closed) when oiler tip is in raised position**



**Network 7: Proximity sensor, on when 40-foot rail piece in feeder area**





Network 8: Limit switch, on (closed) when oiler tip is in lowered position

