

# Main\_Program [OB1]

## Main\_Program Properties

### General

Name	Main_Program	Number	1	Type	OB
Language	LAD	Numbering	Manual		

### Information

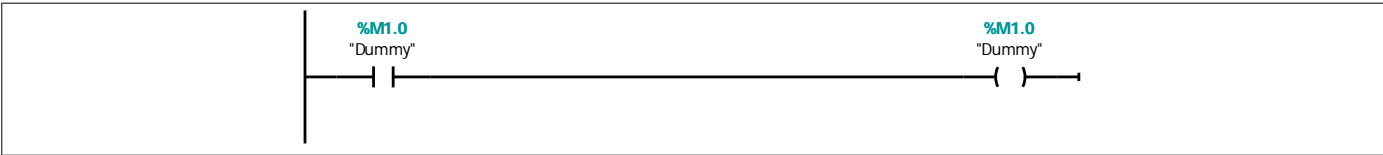
Title	SP9-9	Author		Comment	
Family		Version	0.1	User-defined ID	

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		

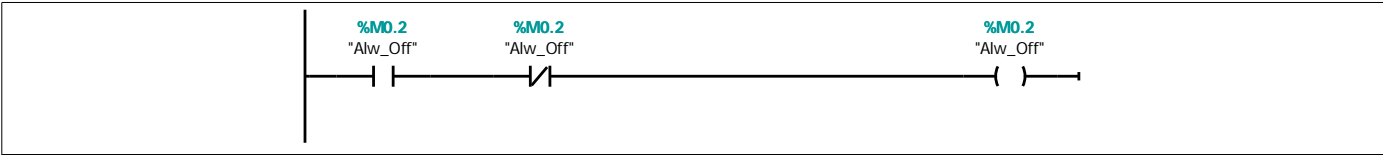
## Network 1: SP9-9

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SP9-9 Pressure Check Station with shift register-based sequence.



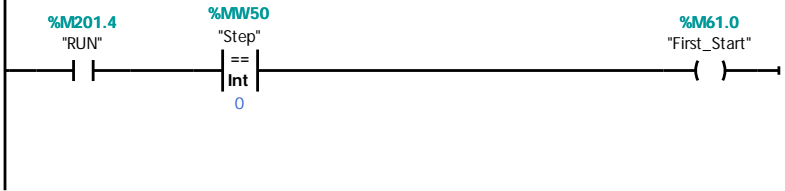
## Network 2: Always Off Logic



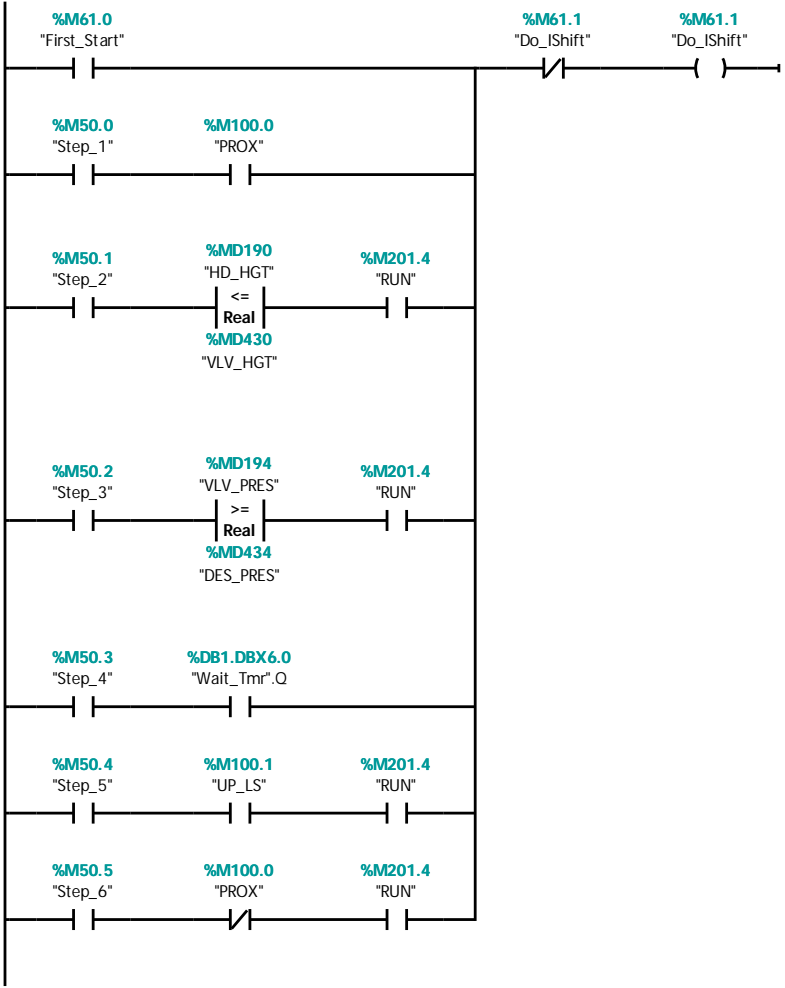
## Network 3: Always On Logic



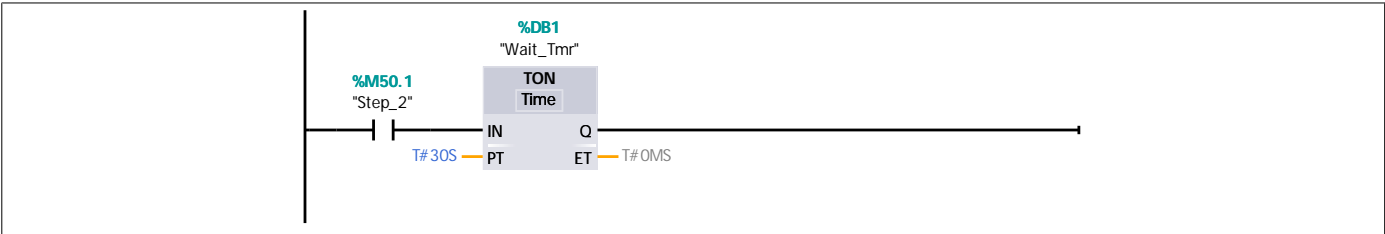
**Network 4: First Start - run and no step-in-progress bit set**



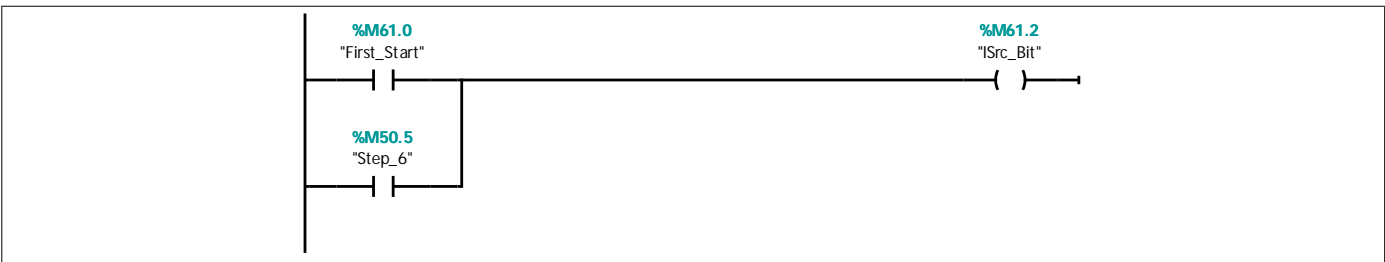
**Network 5: All transition conditions. Any one causes shift.**



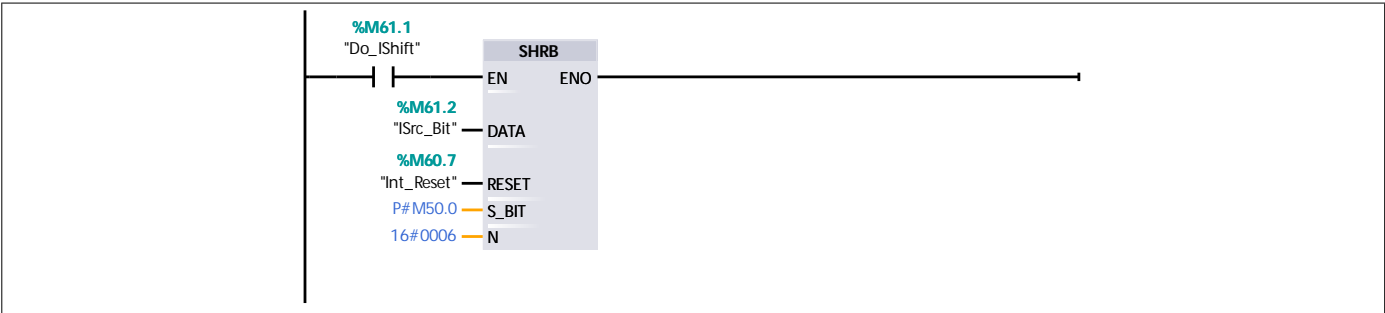
**Network 6: Timers for transitions**



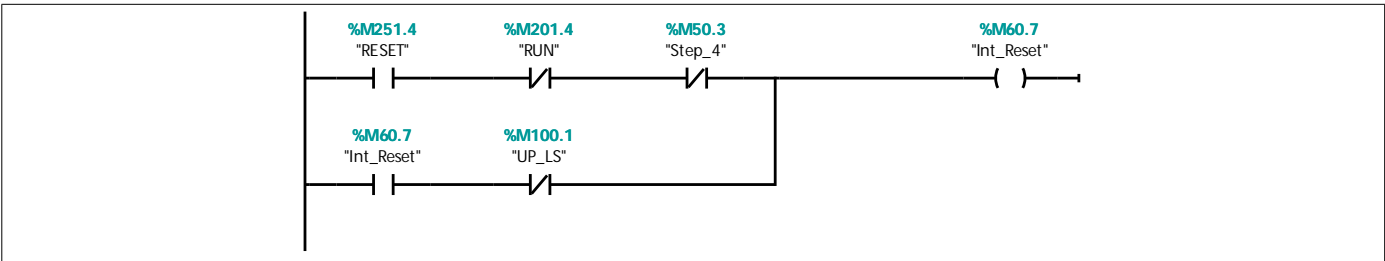
**Network 7: Bit shifted into register. First start and last step are only "1" shifted in**



**Network 8:**



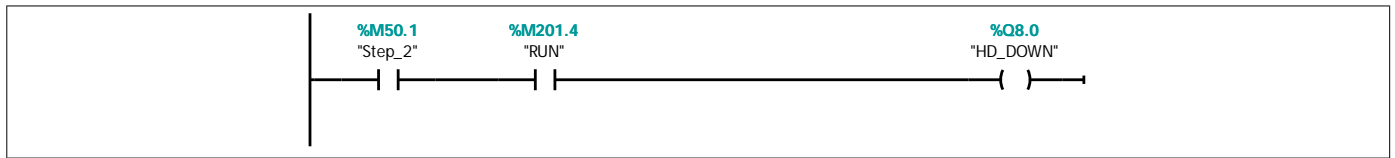
**Network 9: Reset. Do not allow in step 4**



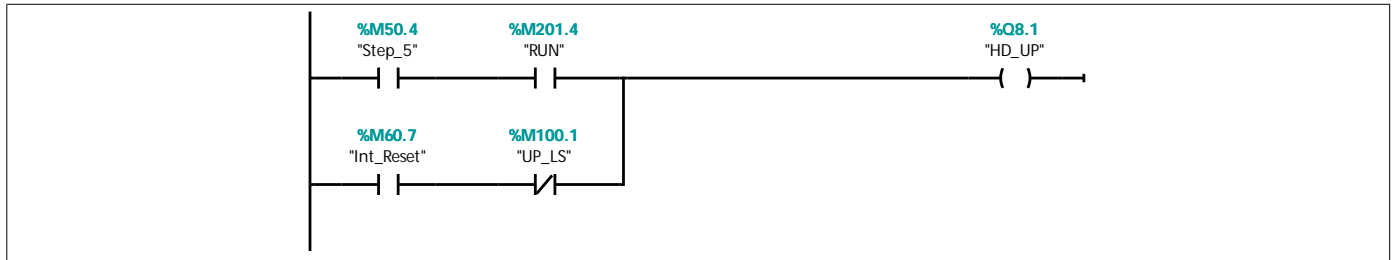
**Network 10: Head down control**

Physical Outputs

Head raise/lower. Off when paused. Raise when reset.



### Network 11: Head up control



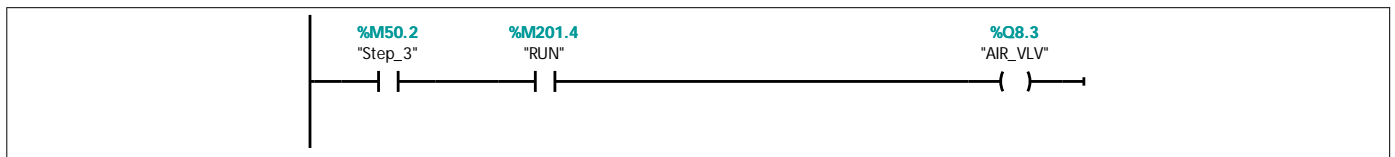
### Network 12: On to move carrier (and valve) up and off the conveyor

Lift solenoid. Must remain on when paused.



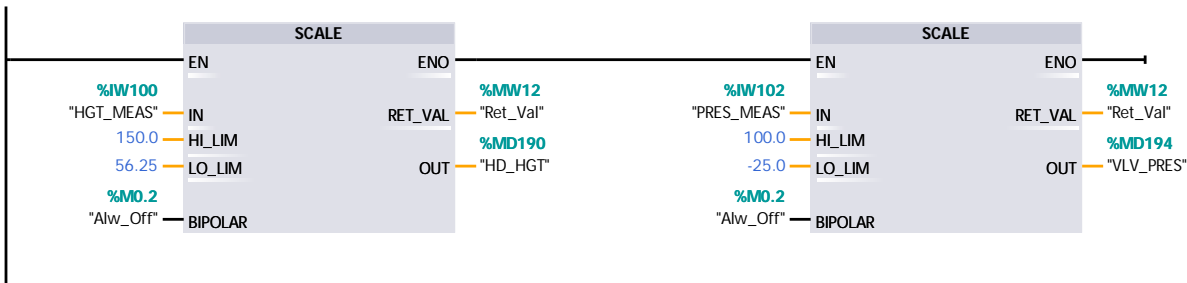
### Network 13: Opens air valve pressurize tested valve

Air valve



### Network 14: Convert height measurement to mm and pressure measurement to psi.

Uses SCALE block. Note that the lo\_lim input is 25% lower than zero weight to account for this block assuming the minimum value of the analog in is zero rather than the 5530 (which corresponds to 4 mA).



**Network 15: Set if valve is to be rejected because it will not hold pressure**

Check valve pressure during step 4. If falling, set reject bit.

