

Main Program [OB1]

Main Program Properties

General

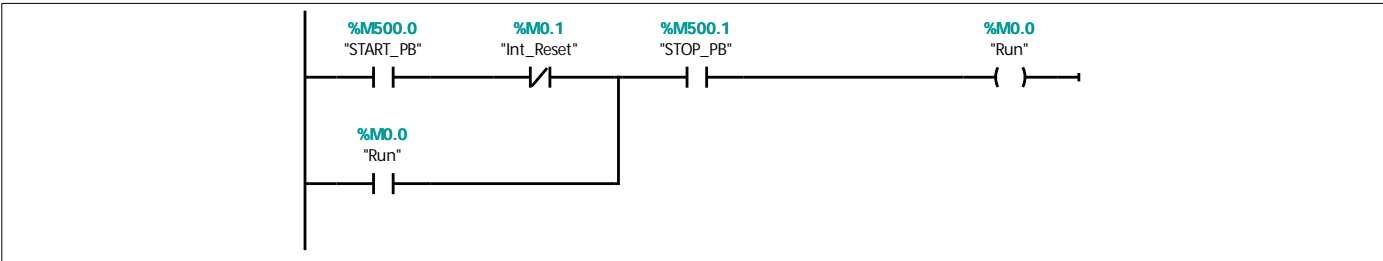
Name	Main Program	Number	1	Type	OB
Language	LAD	Numbering	Manual		

Information

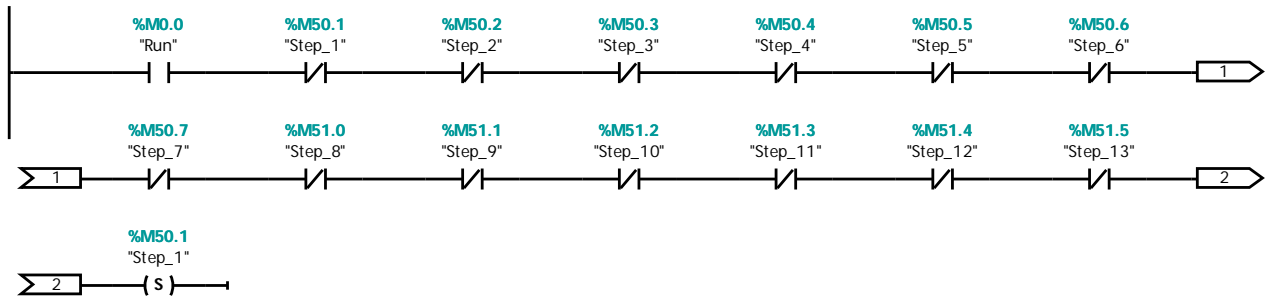
Title	"Main Program Sweep (Cycle)"	Author		Comment	Example 6.4 - Engine Inverter Copyright (c) 2011 Dogwood Valley Press, LLC
Family		Version	0.1	User-defined ID	

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	
Temp1	Bool	
Temp2	Bool	
Constant		

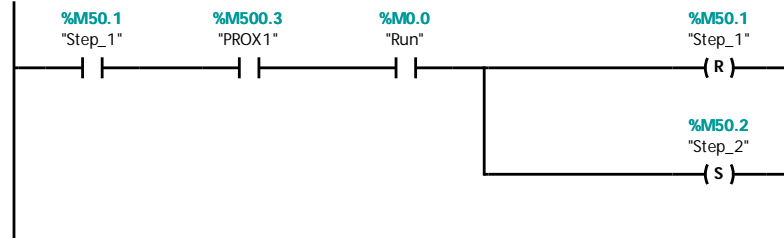
Network 1: Overall start/stop/pause



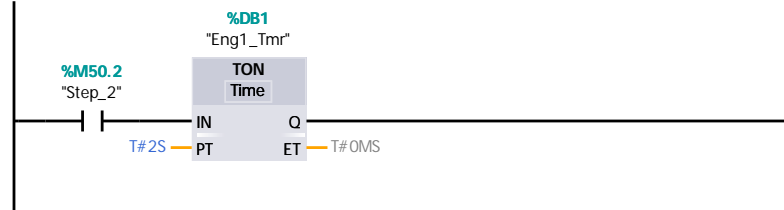
Network 2: Generate transition out of initial step



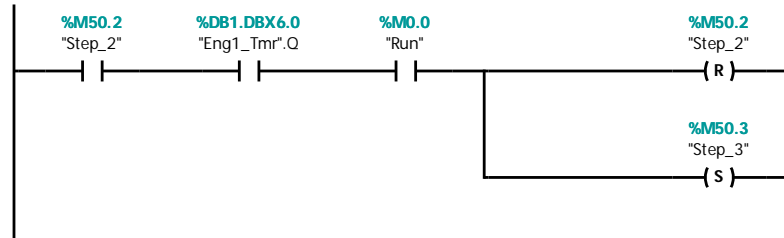
Network 3: Step 1 - Wait for pallet.



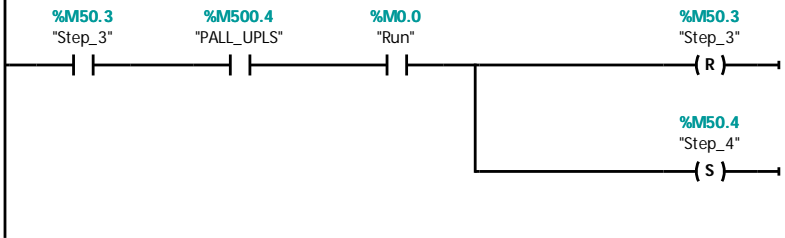
Network 4: Step 2 - Timer



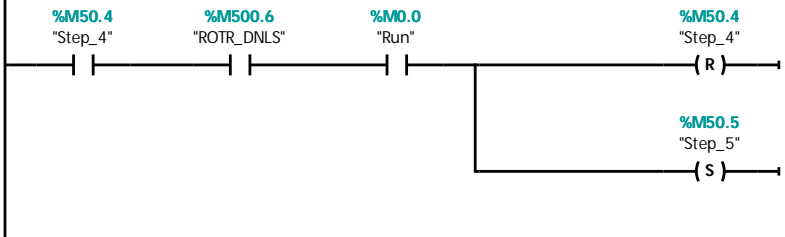
Network 5: Step 2 - Move to hook 2



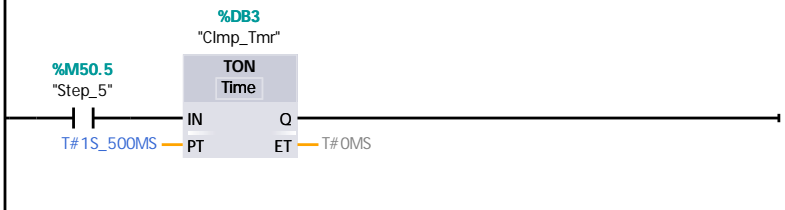
Network 6: Step 3 - Raise pallet



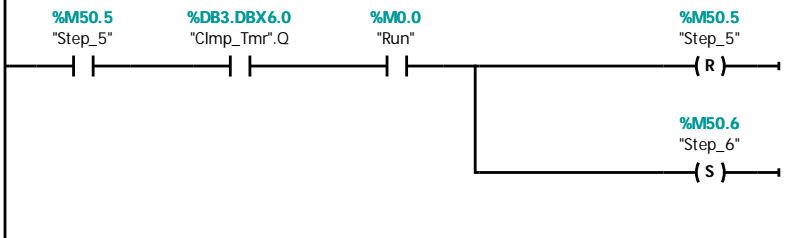
Network 7: Step 4 - Lower rotator



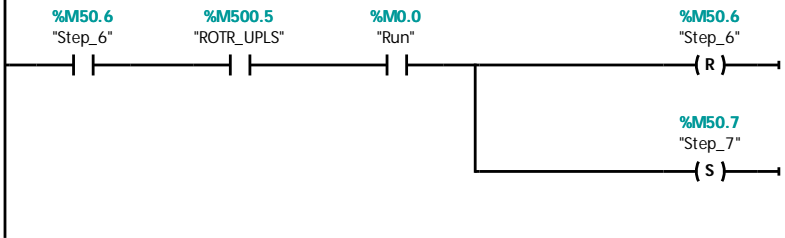
Network 8: Step 5 - Timer



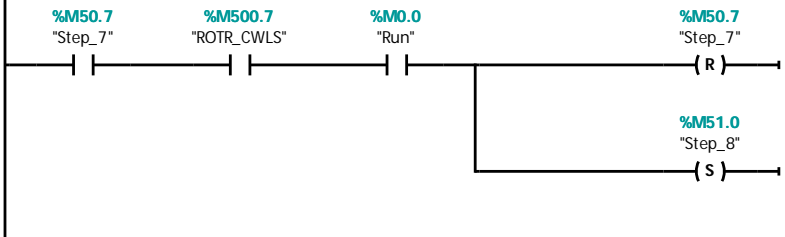
Network 9: Step 5 - Clamp engine



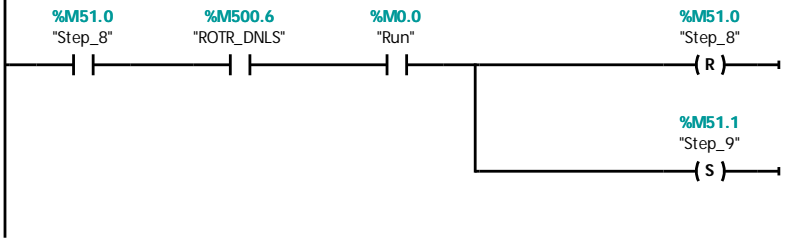
Network 10: Step 6 - Raise rotator



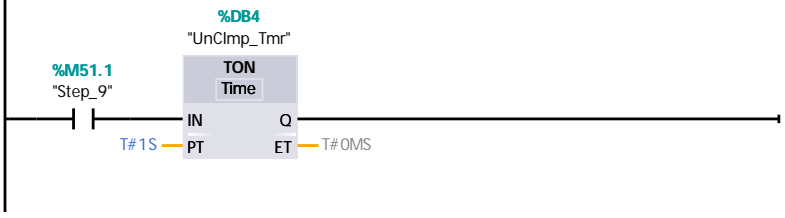
Network 11: Step 7 - Rotate clockwise



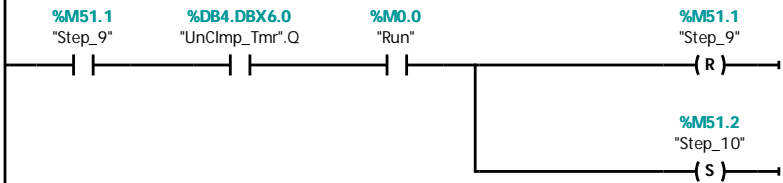
Network 12: Step 8 - Lower rotator



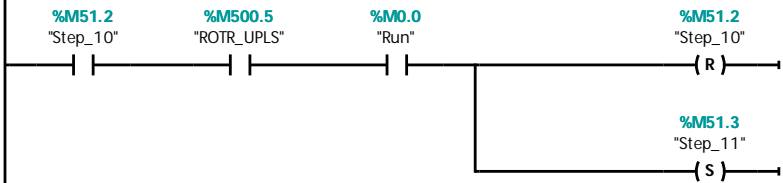
Network 13: Step 9 - Timer



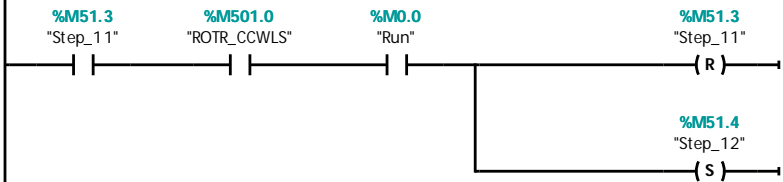
Network 14: Step 9 - Unclamp



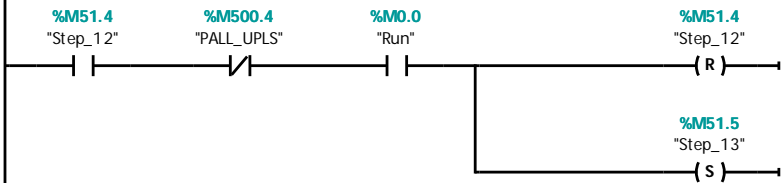
Network 15: Step 10 - Raise rotator



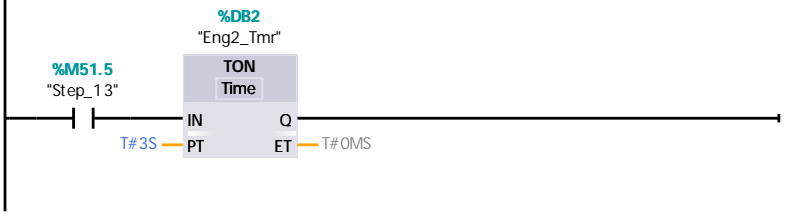
Network 16: Step 11 - Rotate CCW



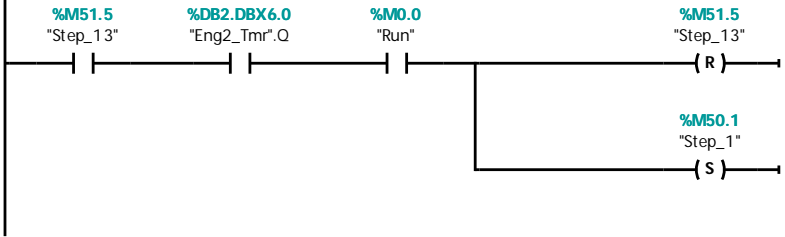
Network 17: Step 12 - Drop Engine



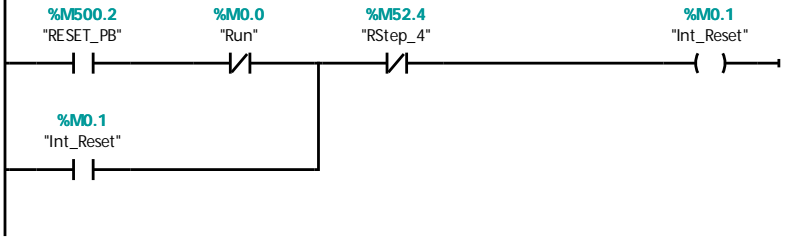
Network 18: Step 13 - Timer



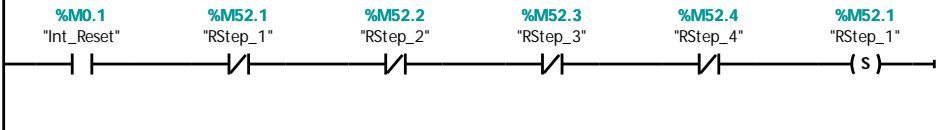
Network 19: Step 13 - Move out pallet



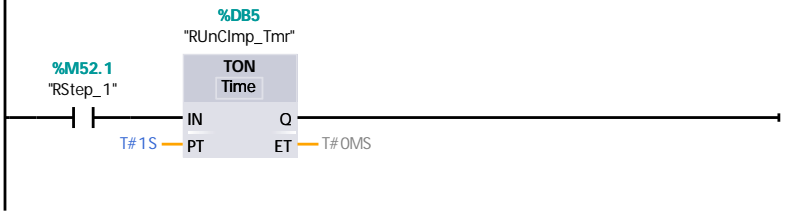
Network 20: Start/stop for reset operation



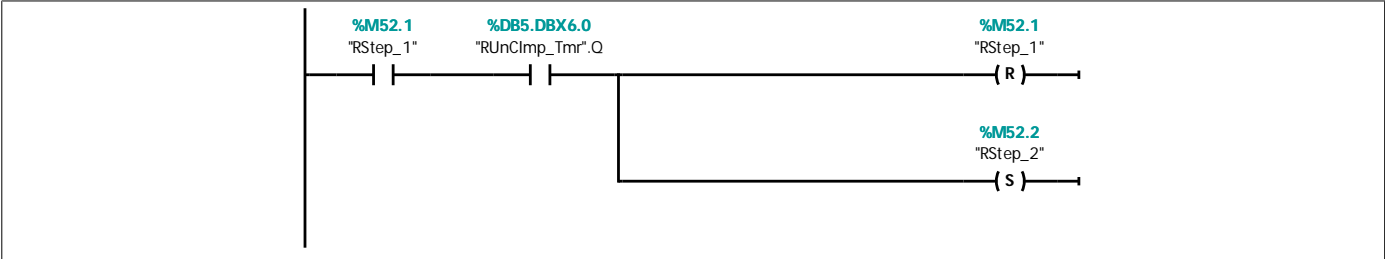
Network 21: First press of reset pb starts reset



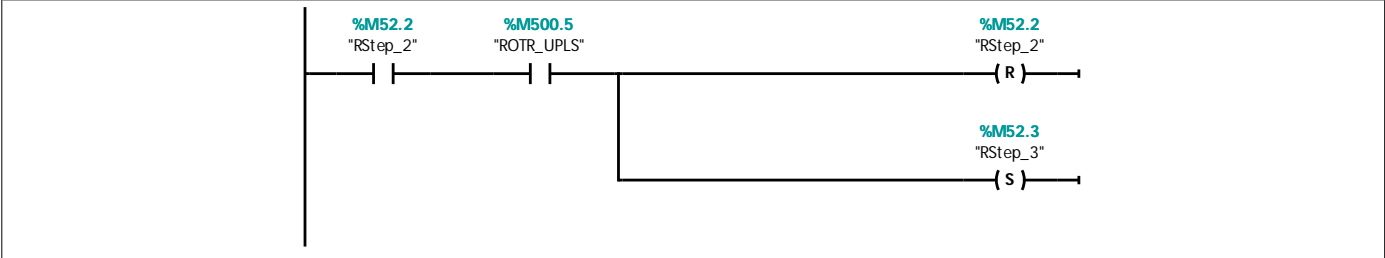
Network 22: Reset step 1 - Timer



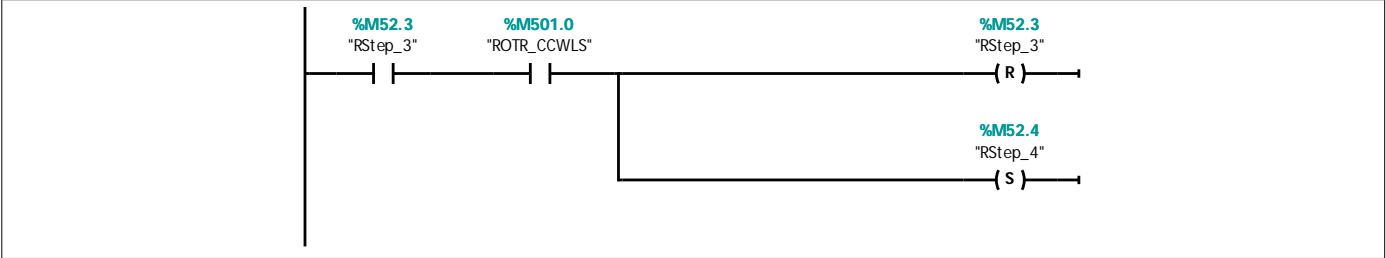
Network 23: Reset step 1 - Delay to unclamp



Network 24: Reset step 2 - Raise mechanism



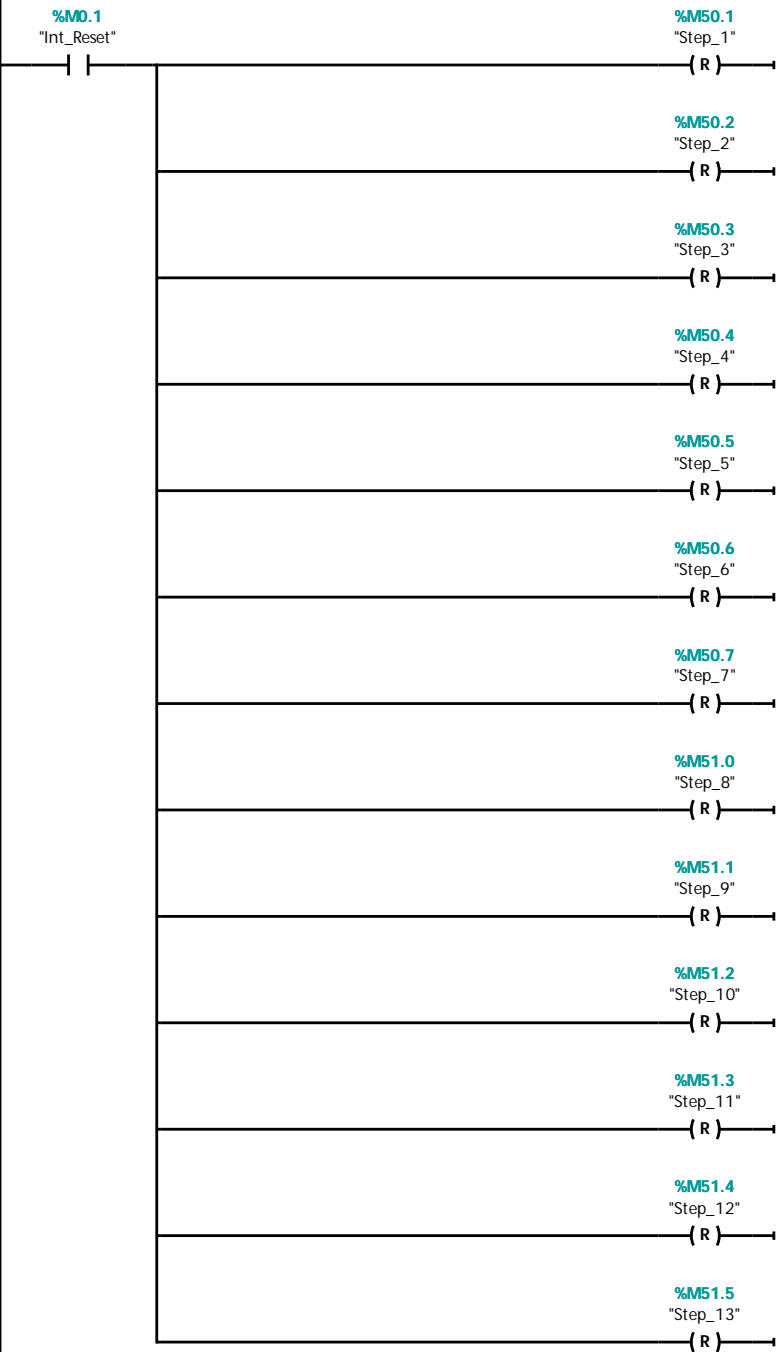
Network 25: Reset step 3 - Rotate CCW



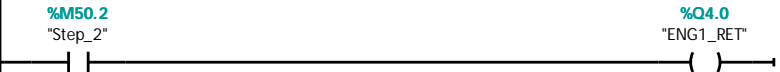
Network 26: Reset step 4 - Unlatch internal reset



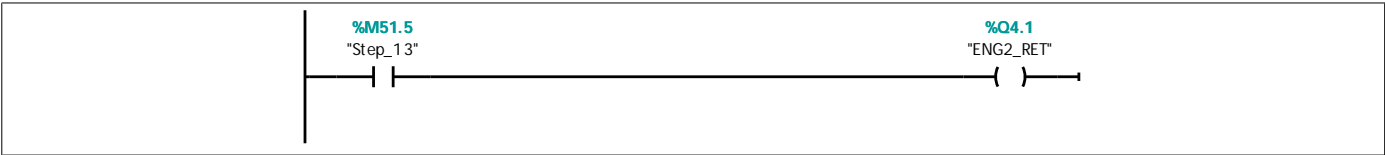
Network 27: Reset steps of main operation



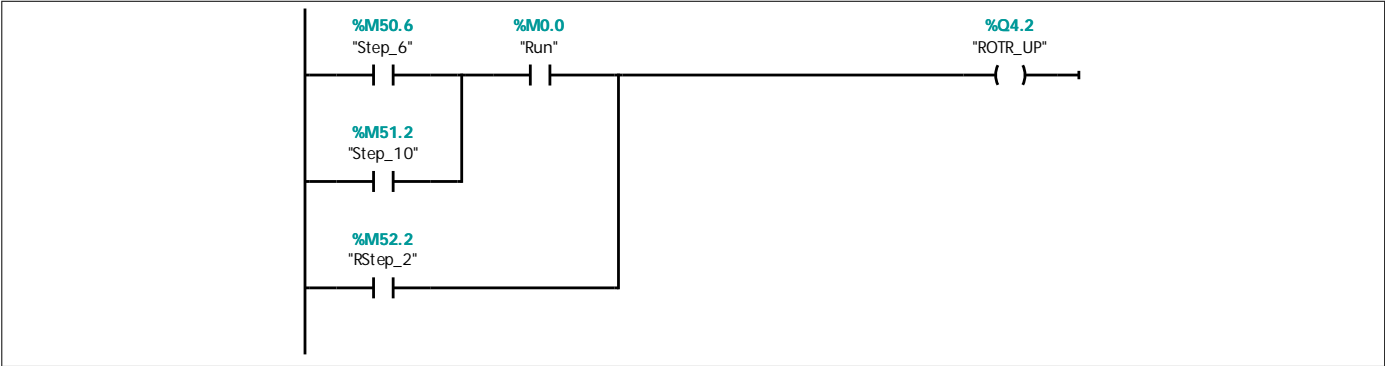
Network 28: Engaging hooks control



Network 29:



Network 30: Rotating mechanism up/down control



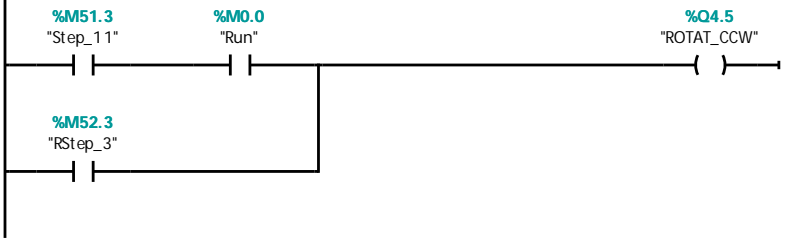
Network 31:



Network 32: Rotation control



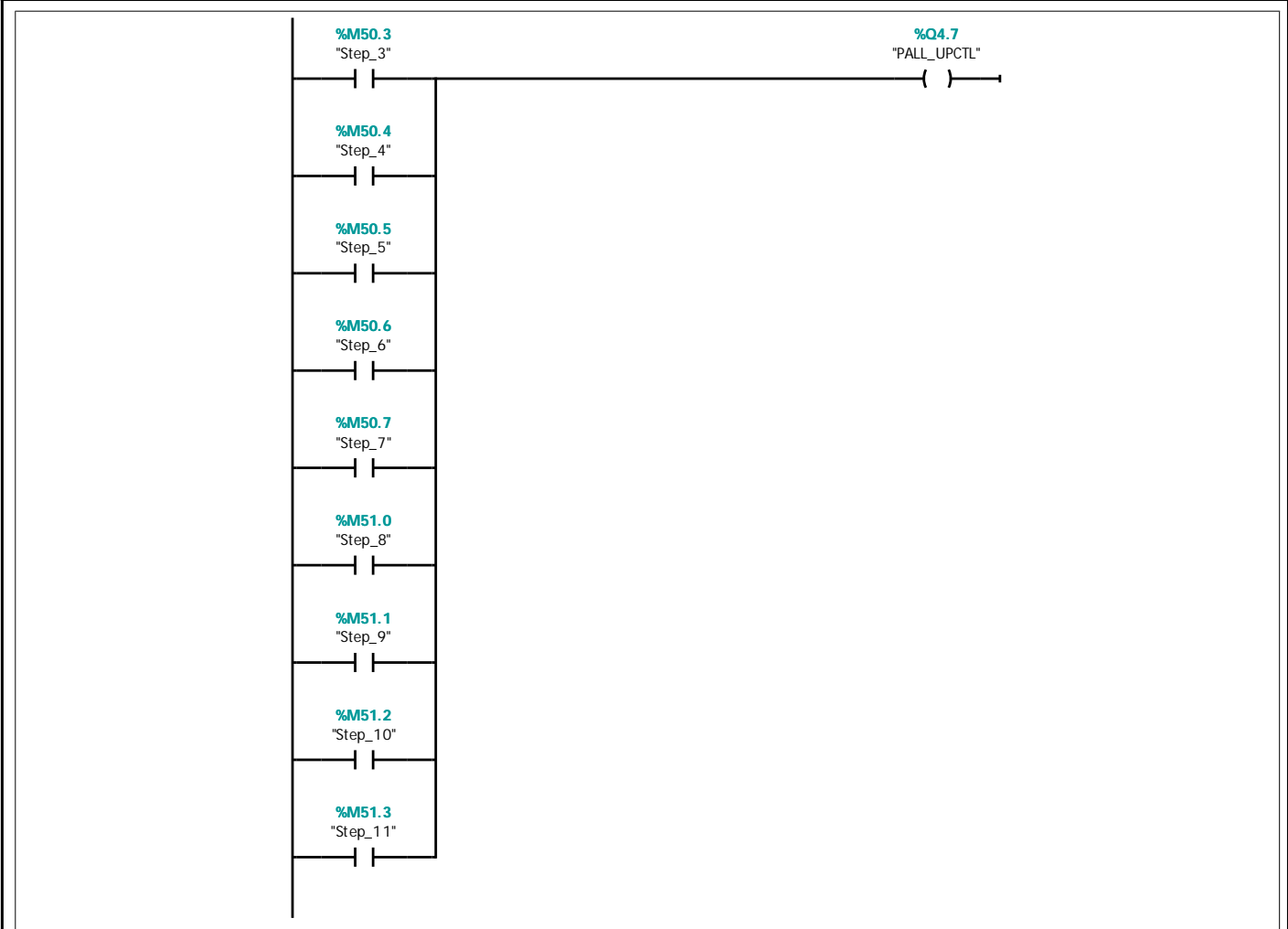
Network 33:



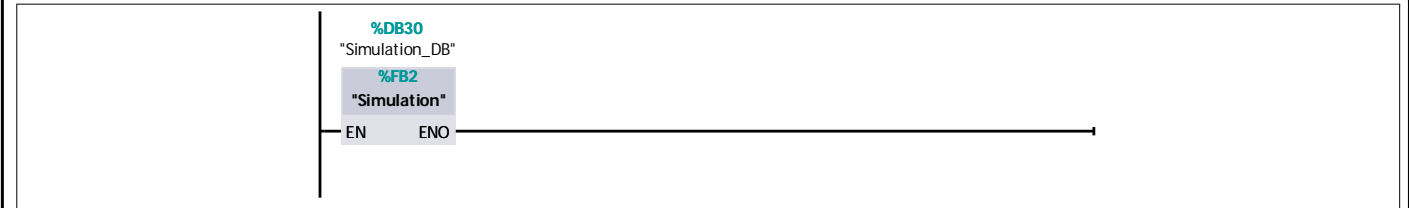
Network 34: Gripper control



Network 35: Pallet up control



Network 36:



Simulation [FB2]

Simulation Properties

General

Name	Simulation	Number	2	Type	FB
Language	LAD	Numbering	Manual		

Information

Title		Author		Comment	
Family		Version	0.1	User-defined ID	

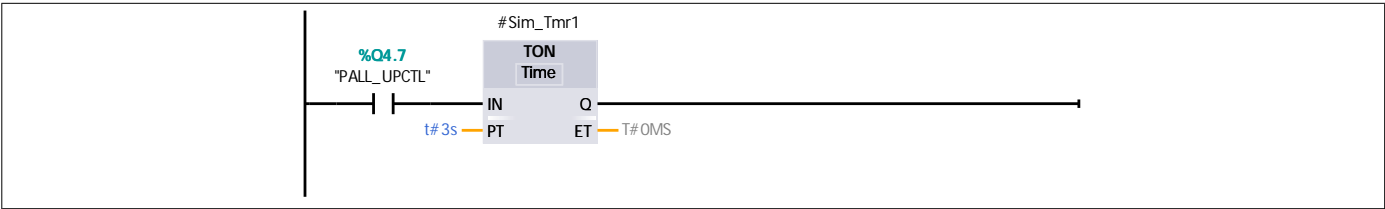
Name	Data type	Default value
Input		
Output		
InOut		
▼ Static		
Sim_Tmr1	TON	
SimTmr2	TON	
SimTmr3	TON	
SimTmr4	TON	
SimTmr5	TON	
SimTmr6	TON	
SimTmr7	TON	
SimTmr8	TON	
Temp		
Constant		

Network 1: Reset

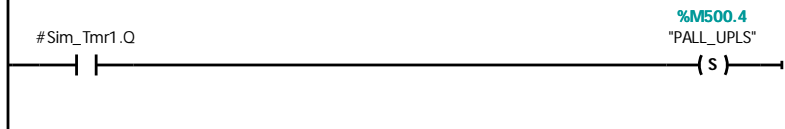
When reset, put engine at hook 1



Network 2: Pallet up LS

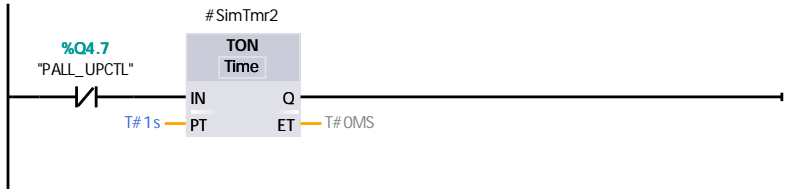


Network 3:

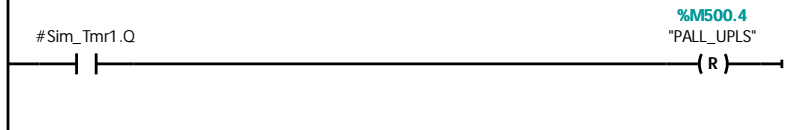


Network 4:

Delay reset when pallet dropped

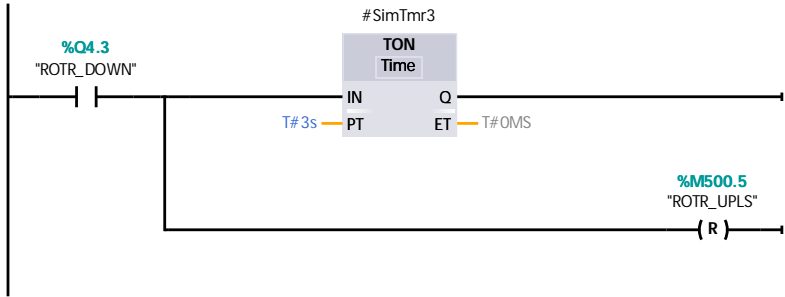


Network 5:

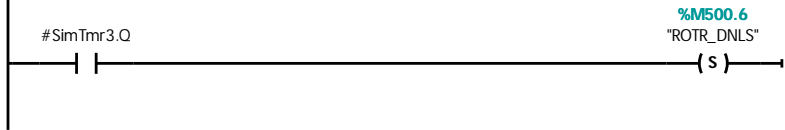


Network 6: Rotor down/up control.

When moved down, the up LS is immediately reset off. After 3 seconds, the down LS is set on

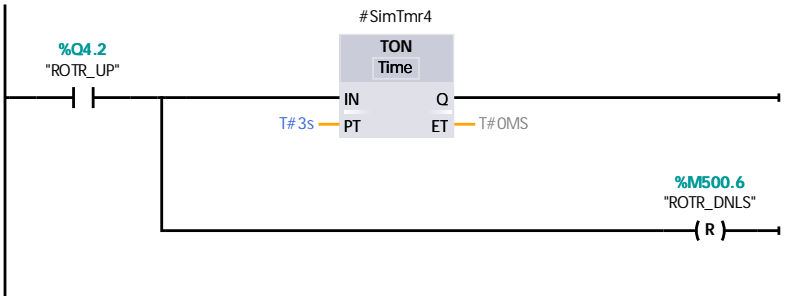


Network 7:

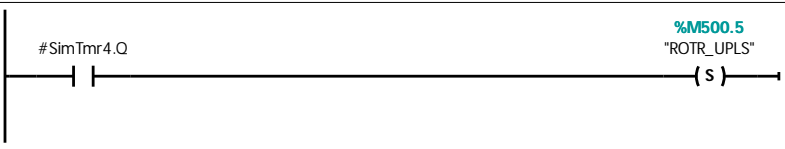


Network 8:

When moved up, the down LS is immediately reset off. After 3 seconds, the up LS is set on

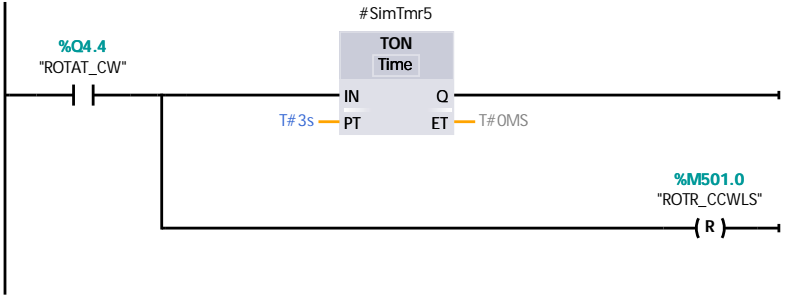


Network 9:

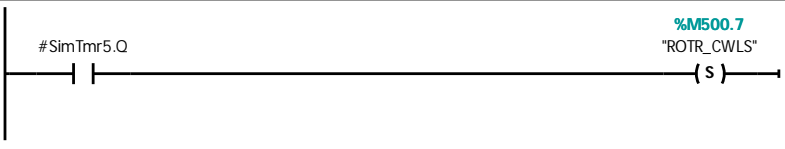


Network 10: Rotor rotating control.

When rotated CW, the CCW LS is immiediately reset off. After 3 seconds, CW LS is set on

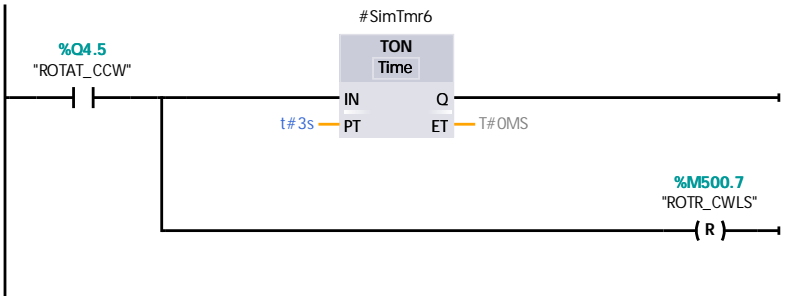


Network 11:



Network 12:

When rotated CCW, the CW LS is immiediately reset off. After 3 seconds, CCW LS is set on

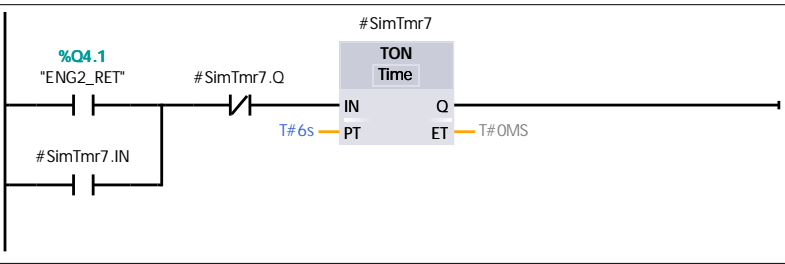


Network 13:

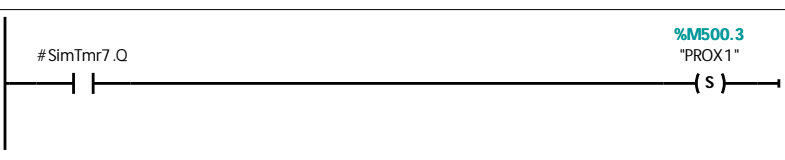


Network 14: Pallet Prox

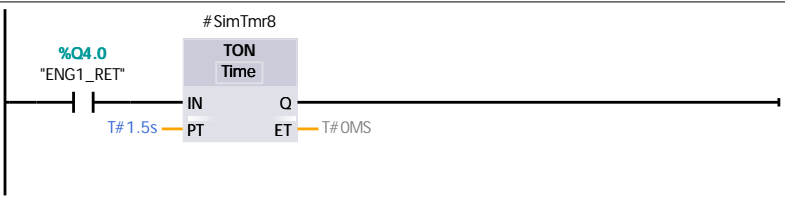
Set it 6 seconds after one has left the station. Reset it 1.5 seconds after a new one let in.



Network 15:



Network 16:



Network 17:

#SimTmr8.Q

%M500.3
"PROX1"

(R)