

Main_Program [OB1]

Main_Program Properties

General

Name	Main_Program	Number	1	Type	OB
Language	LAD	Numbering	Manual		

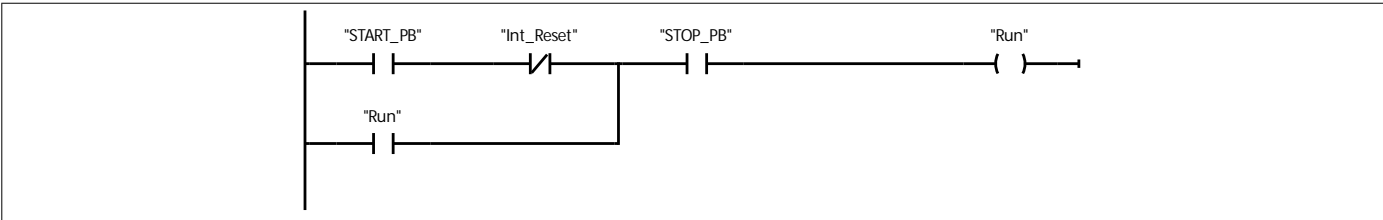
Information

Title	"Main Program Sweep (Cycle)"	Author		Comment	Example 9.2 Engine Inverter with counter-based sequencer Copyright (c) 2023 Dogwood Valley Press, LLC
Family		Version	0.1	User-defined ID	

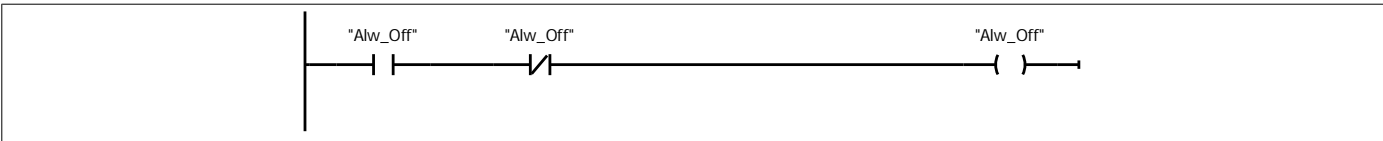
Name	Data type	Default value
▼ Temp		
OB1_EV_CLASS	Byte	
OB1_SCAN_1	Byte	
OB1_PRIORITY	Byte	
OB1_OB_NUMBR	Byte	
OB1_RESERVED_1	Byte	
OB1_RESERVED_2	Byte	
OB1_PREV_CYCLE	Int	
OB1_MIN_CYCLE	Int	
OB1_MAX_CYCLE	Int	
OB1_DATE_TIME	Date_And_Time	
Constant		

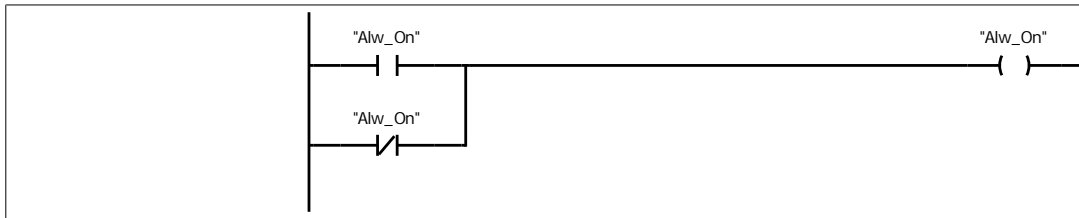
Network 1: Start/stop/pause.

Start prevented if reset in progress.

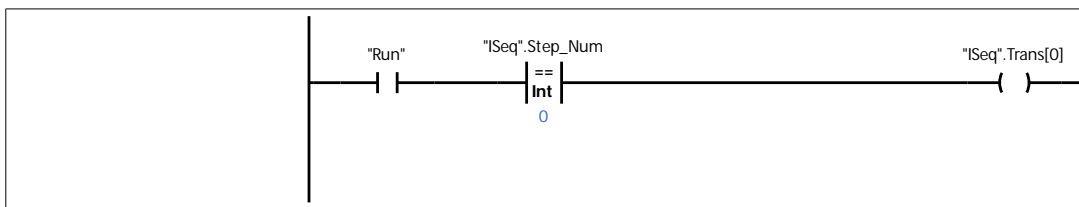
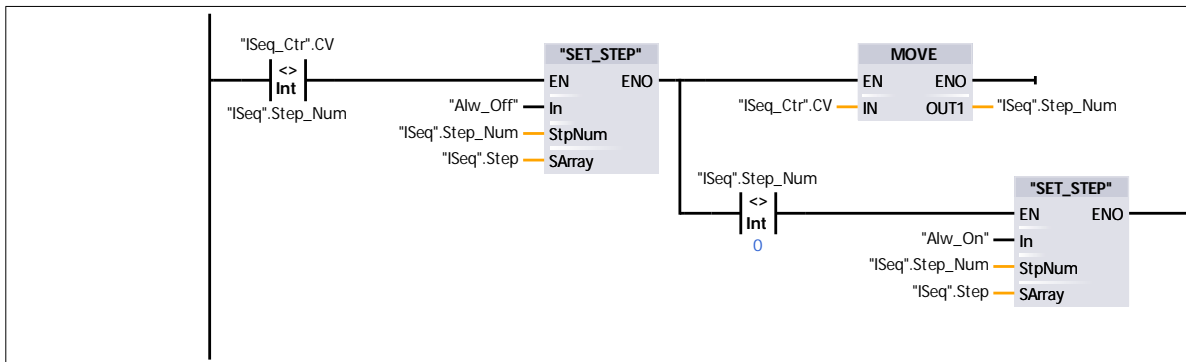
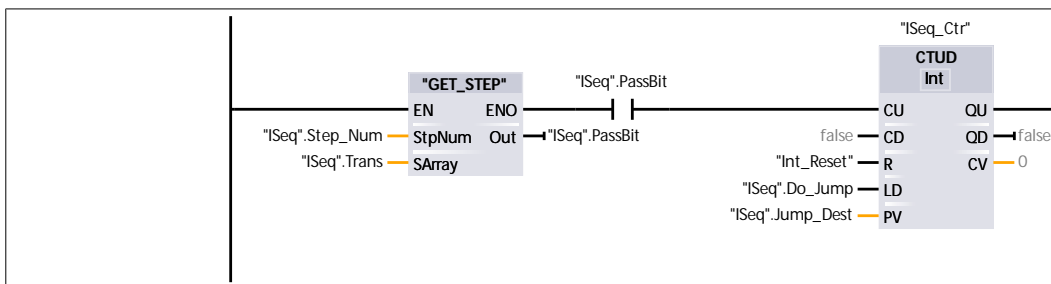


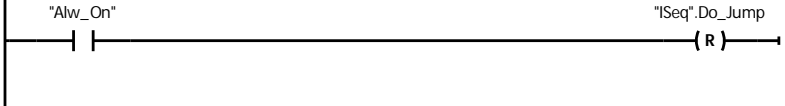
Network 2: Always Off Logic



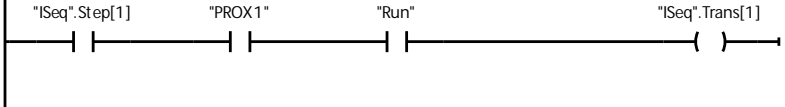
Network 3: Always On Logic**Network 4: First Start - transition out of initial step to step 1**

Transition out of initial step to step 1.

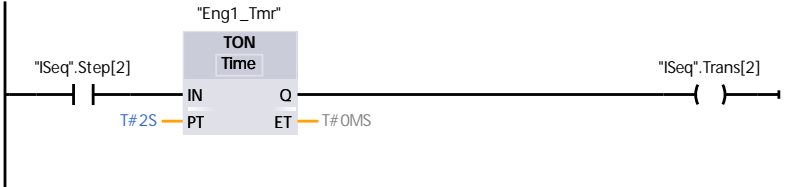
**Network 5: Change step-in-progress bit when tep changes****Network 6: Increment to next step when step-done bit set. Also handle jumps****Network 7:**



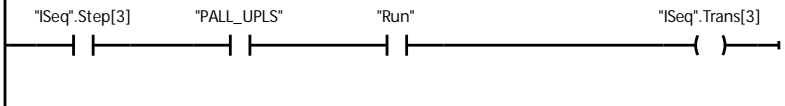
Network 8: Step 1 - Wait for pallet.



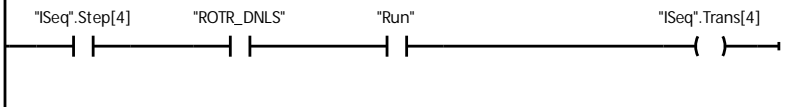
Network 9: Step 2 - Move to hook 2



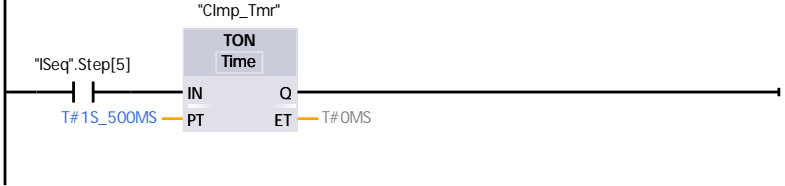
Network 10: Step 3 - Raise pallet



Network 11: Step 4 - Lower rotator

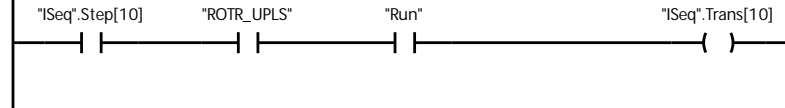


Network 12: Step 5 - Timer

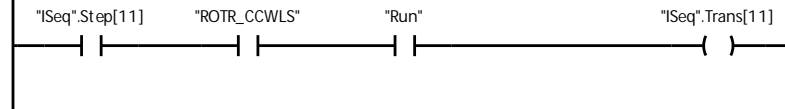


Network 13: Step 5 - Clamp

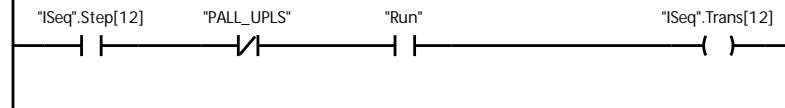
Totally Integrated Automation Portal		
Network 14: Step 6 - Raise rotator		
Network 15: Step 7 - Rotate CW		
Network 16: Step 8 - Lower rotator		
Network 17: Step 9 - Unclamp timer.		
Network 18: Step 9 - Unclamp engine.		
Network 19: Step 10 - Raise rotator.		



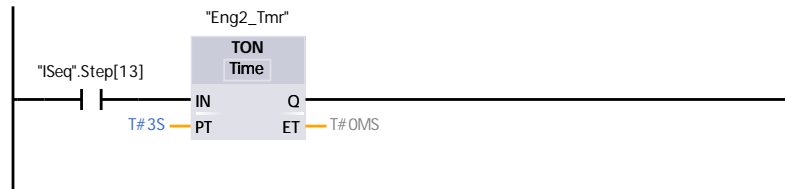
Network 20: Step 11 - Rotate CW



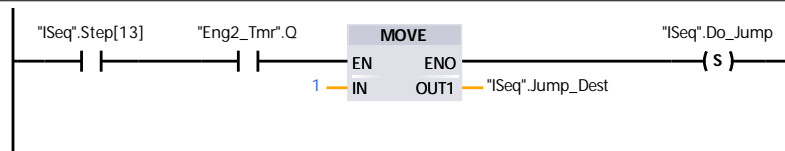
Network 21: Step 12 - Drop engine.



Network 22: Step 13 - Timer

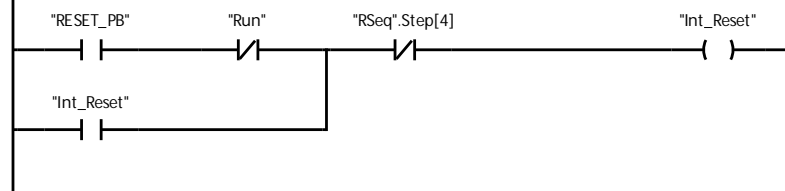


Network 23: Step 13 - Move out pallet, then jump to step 1

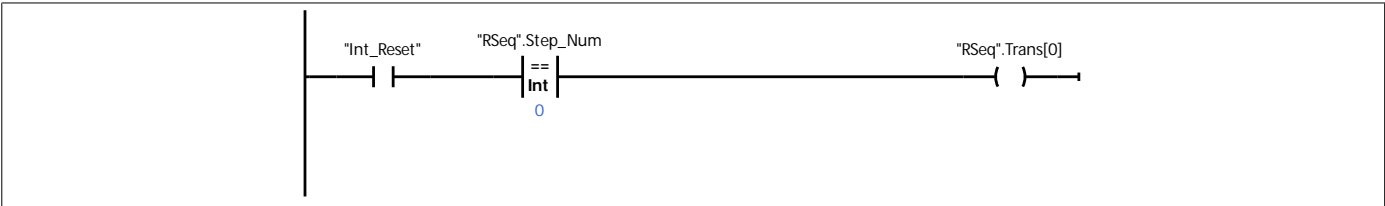


Network 24: Start/stop for reset operation.

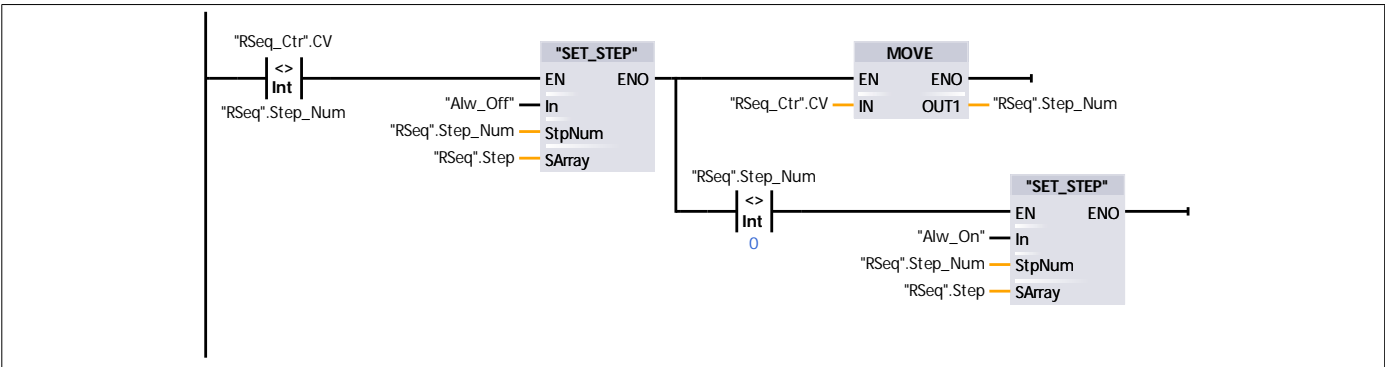
Reset pb starts, reset step 4 stops it.



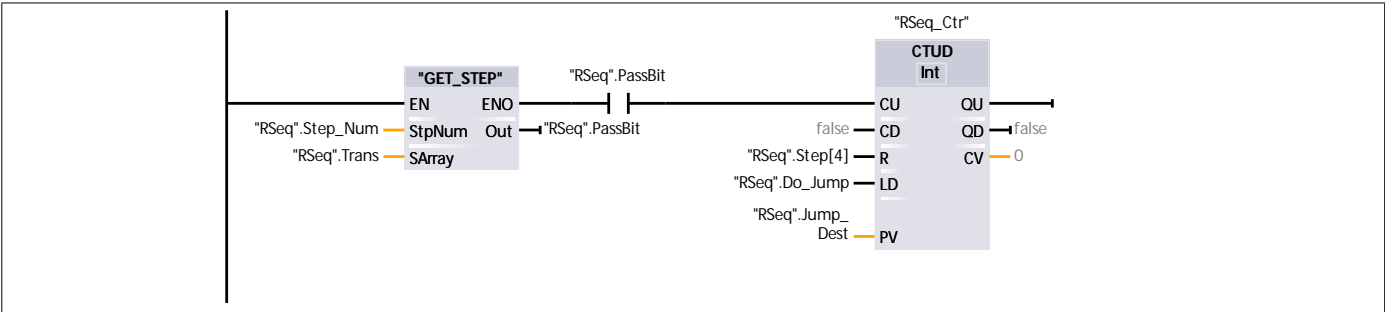
Network 25: First press of reset pb starts reset



Network 26: Change reset step-in-progress bit when step changes.

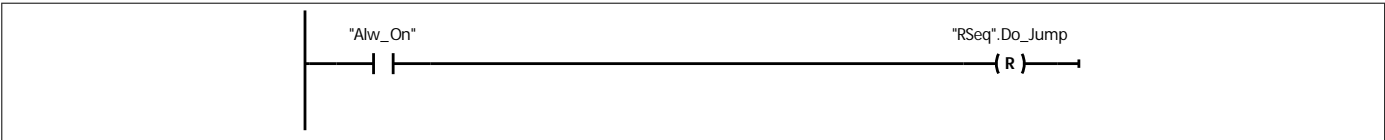


Network 27: Reset increment to next step when step-done bit set.

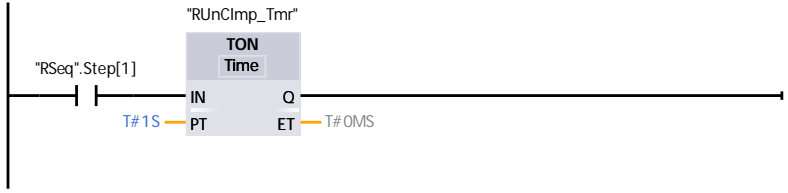


Network 28:

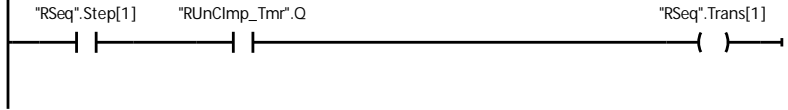
Always reset jump bit



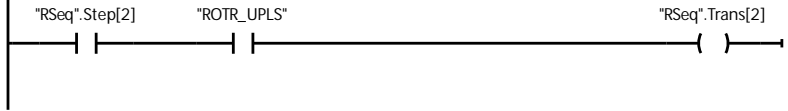
Network 29: Reset step 1 - Unclamp timer



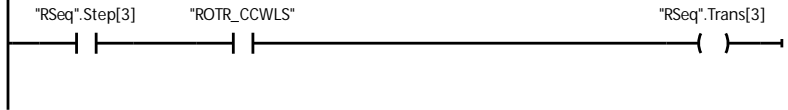
Network 30: Reset step 1 - Unclamp.



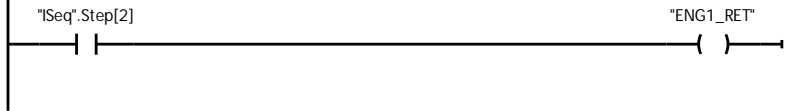
Network 31: Reset step 2 - Raise mechanism.



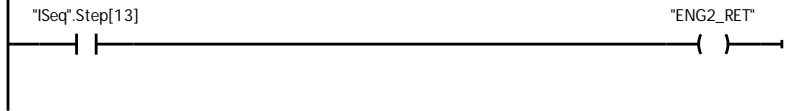
Network 32: Reset step 3 - Rotate CCW.



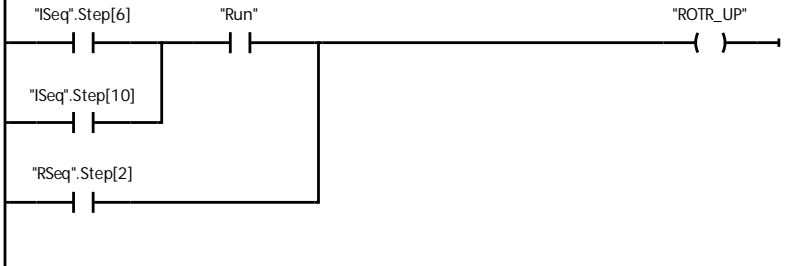
Network 33: Engaging hooks control



Network 34:



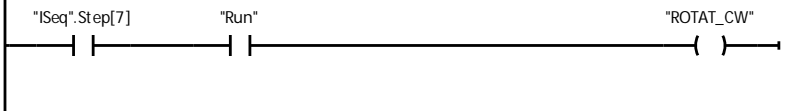
Network 35: Rotating mechanism up/down control.



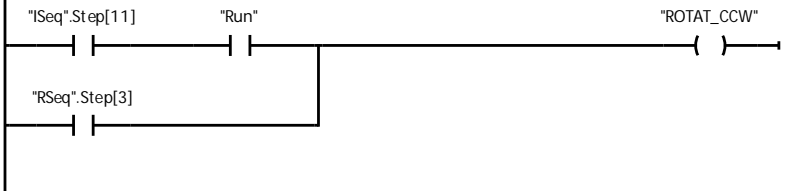
Network 36:



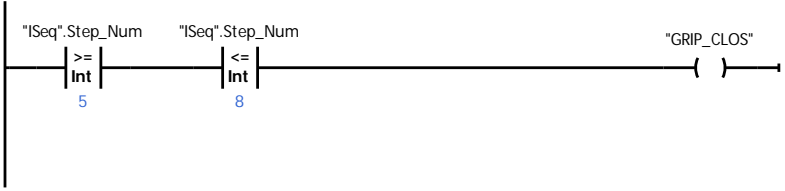
Network 37: Rotation Control



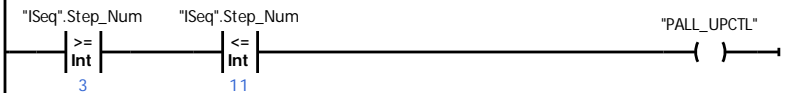
Network 38:



Network 39: Gripper Control



Network 40: Pallet Up Control



Network 41: Call simulation

