

Main_Program Properties

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Name	Main_Program	Number	1	Type	OB
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Language	LAD	Numbering	Manual	
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Information									
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Title	SP6-19	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: SP6-19

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Problem SP6-19 Revised Bolt Driving Control

Additional internal memory: _____

Tag Address	
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Run %M5.0 BOOL On while station running

Int_Reset %M5.1 BOOL Internal reset	
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Step_1 to Step_13 %M0.1 to M1.5 BOOL Step-in-progress bits

In_Tmr %DB1 IEC_TIMER Times engage cyl for bringing in pallet

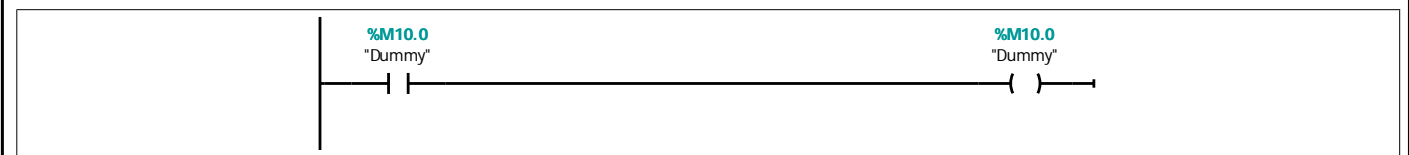
Raise_Tmr %DB3 IEC_TIMER Times raise of pallet

Push_Tmr %DB4 IEC_TIMER Times push of bolts
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Motor_Tmr %DB5 IEC_TIMER Retentive timer for air motor rotation

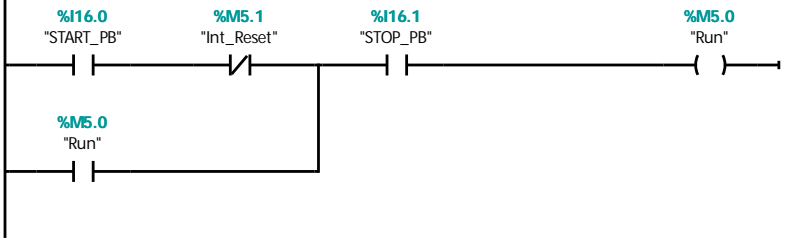
Lower_Tmr %DB9 IEC_TIMER Times lower of pallet

Out_Tmr %DB10 IEC_TIMER Times engage cyl for allowing out pallet

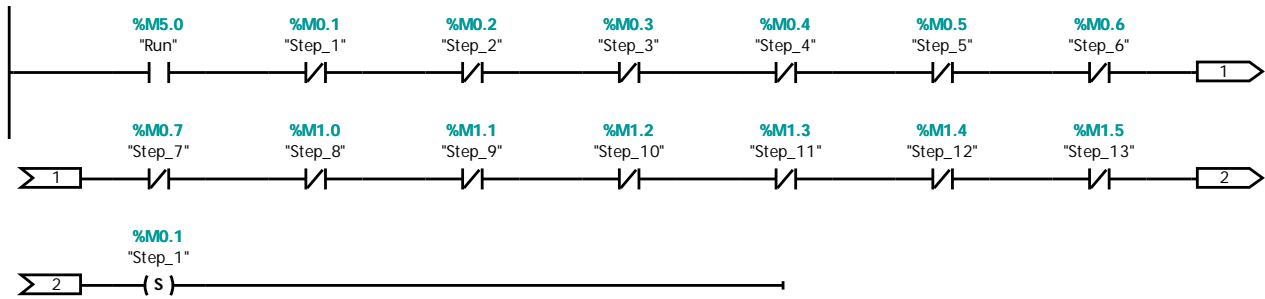


Network 2: Start/stop

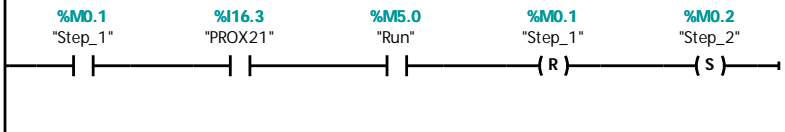
During reset prevent start



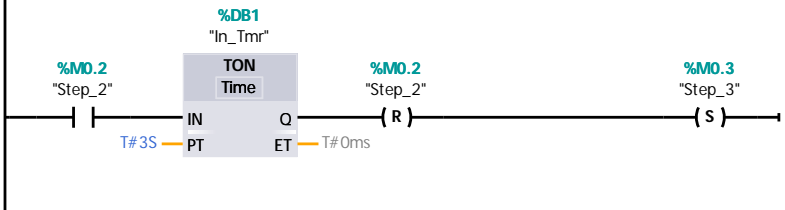
Network 3: Initial start



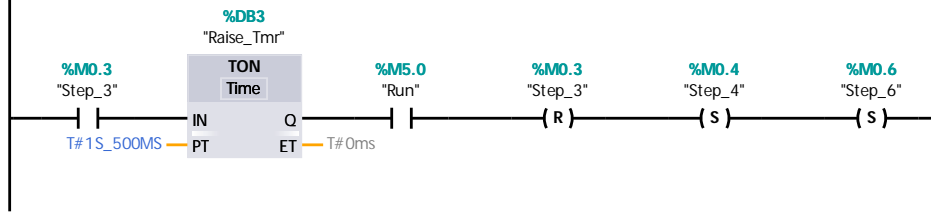
Network 4: Step 1 Wait for pallet



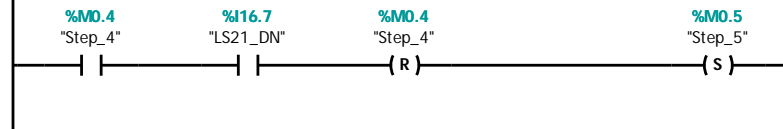
Network 5: Step 2 Allow one pallet in



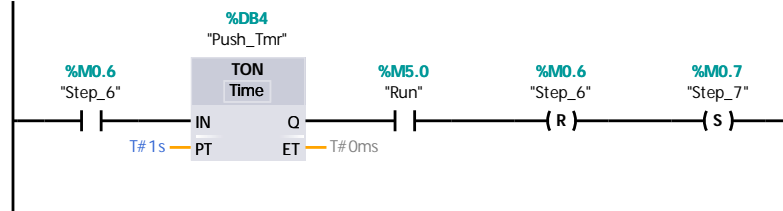
Network 6: Step 3 Raise pallet



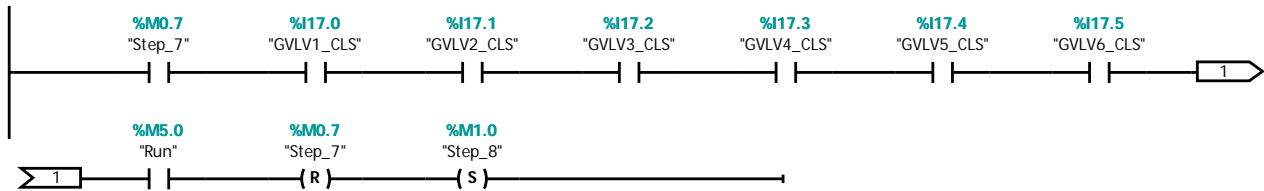
Network 7: Step 4 Lower mechanism



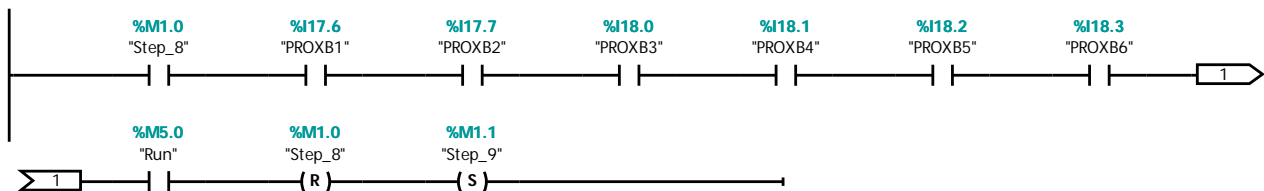
Network 8: Step 6 Push bolts



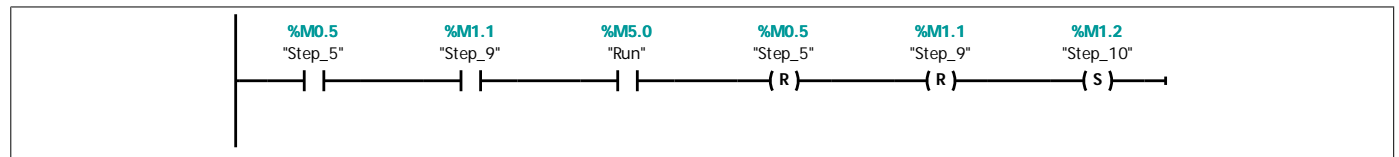
Network 9: Step 7 Close gate valves



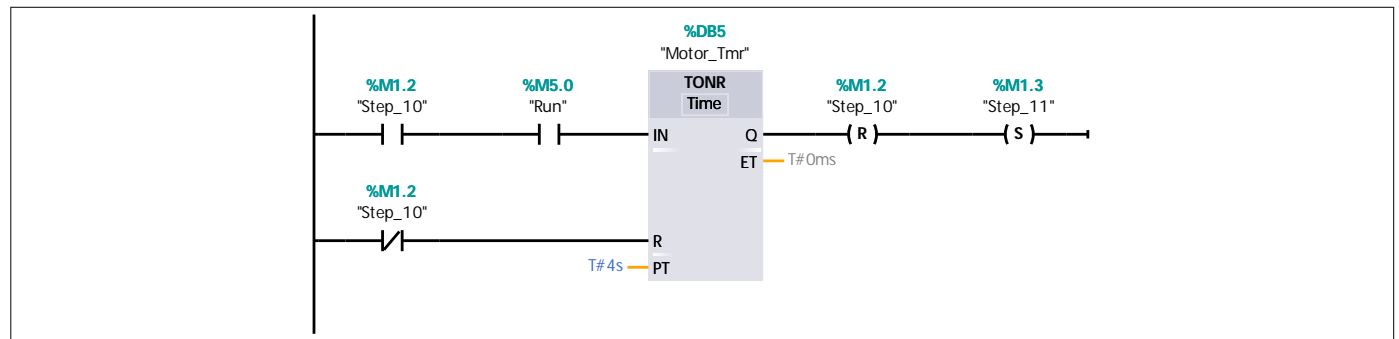
Network 10: Step 8 Convey bolts



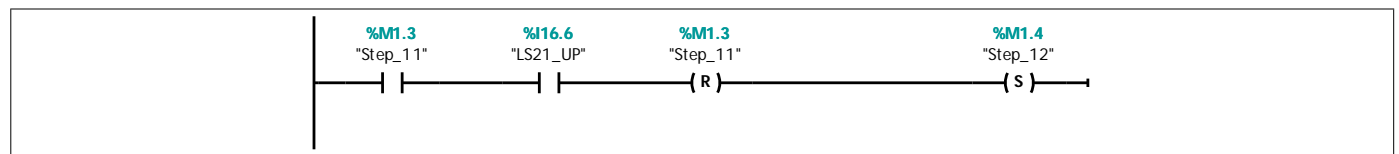
Network 11: Step 5 and Step 9 Wait for mechanism down and bolts in place.



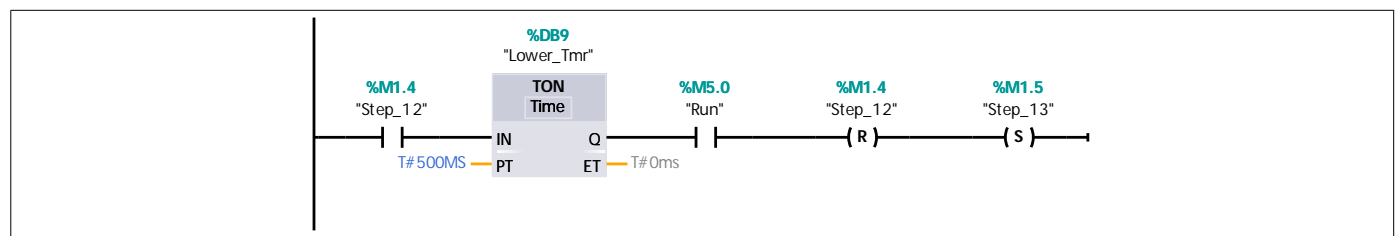
Network 12: Step 10 - timer tic for retentive



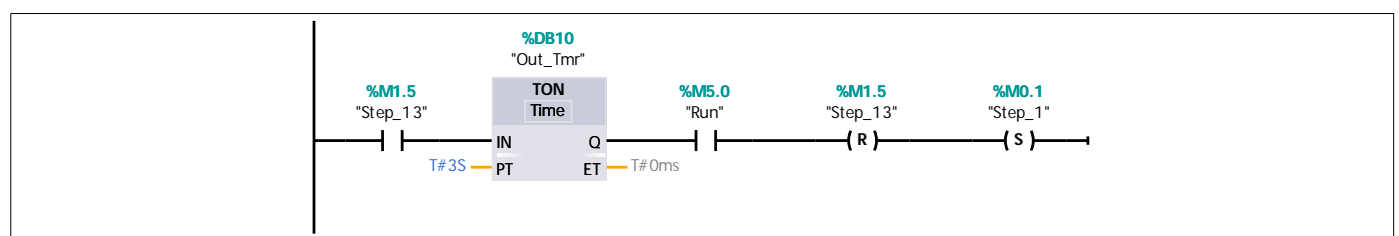
Network 13: Step 11 Raise mechanism



Network 14: Step 12 Drop pallet

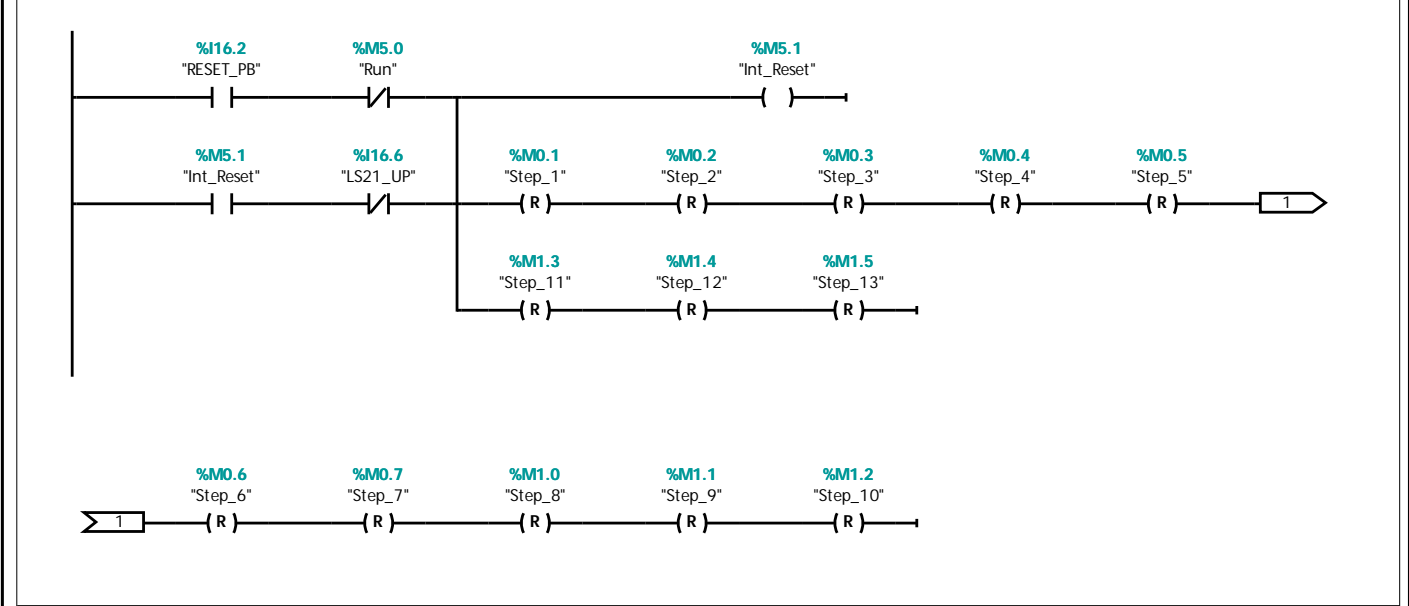


Network 15: Step 13 Move out pallet

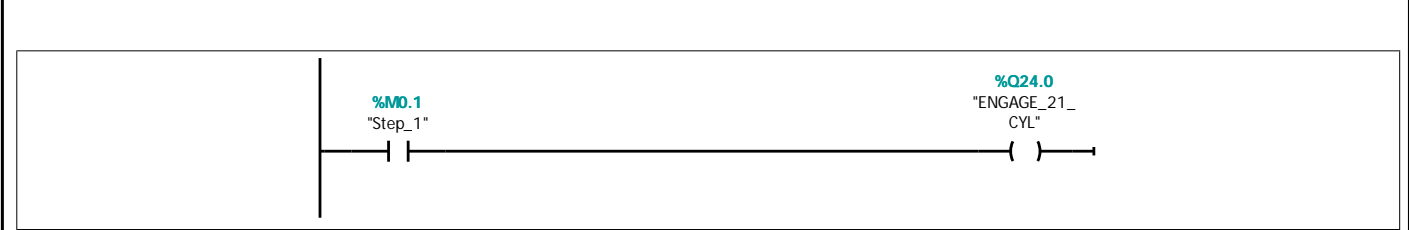


Network 16: Reset

Maintain reset until mechanism fully raised.



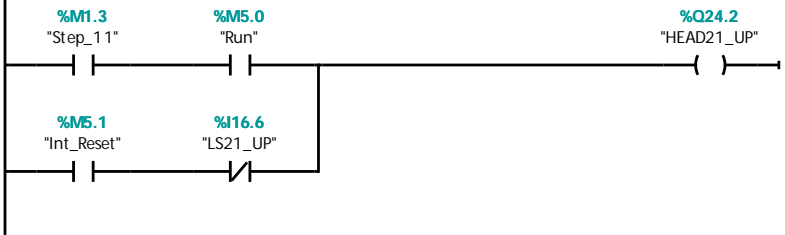
Network 17: Engage solenoids



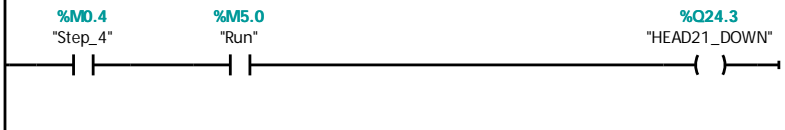
Network 18: Gate 2 control



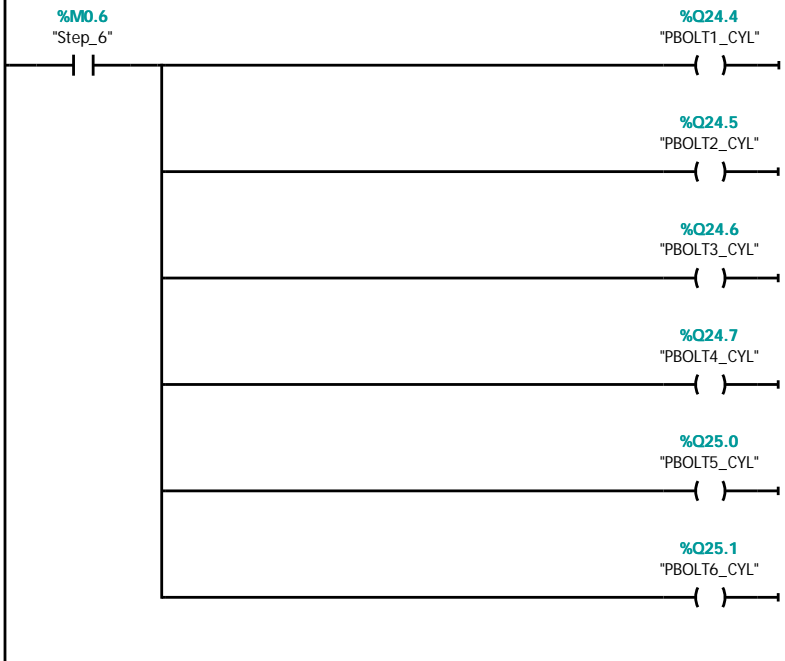
Network 19: Raise/lower mechanism



Network 20:



Network 21: Push bolt solenoids



Network 22: Gate valves

%M0.7
"Step_7"

%Q25.2
"GVLV1"

%M1.0
"Step_8"

%Q25.3
"GVLV2"

%Q25.4
"GVLV3"

%Q25.5
"GVLV4"

%Q25.6
"GVLV5"

%Q25.7
"GVLV6"

Network 23: Convey valves

%M1.0
"Step_8"

%Q28.0
"CVLV1"

%Q28.1
"CVLV2"

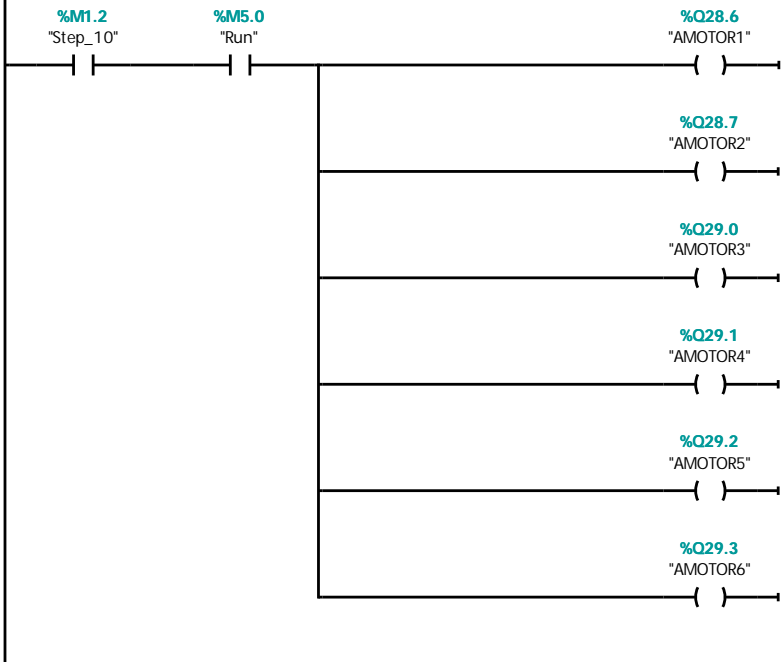
%Q28.2
"CVLV3"

%Q28.3
"CVLV4"

%Q28.4
"CVLV5"

%Q28.5
"CVLV6"

Network 24: Air motors



Network 25: Pallet up control

Must remain on when paused

