

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	
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

Run M5.0 BOOL On while station running

Int_Reset M5.1 BOOL Internal reset

Step_1 to Step_13 M0.1 to M1.5 BOOL Step-in-progress bits

In_Tmr DB1 TON_SFB Times engage cyl for bringing in pallet

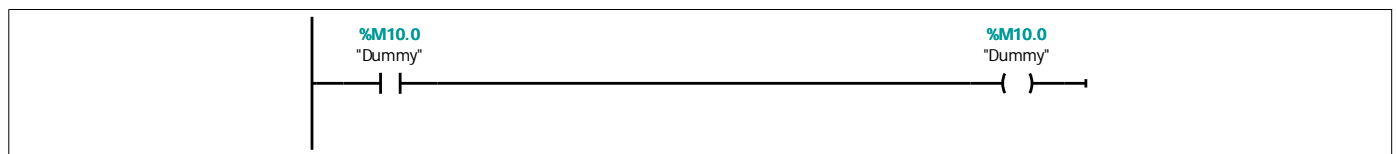
Raise_Tmr DB3 TON_SFB Times raise of pallet

Push_Tmr DB4 TON_SFB Times push of bolts

Motor_Tmr DB5 TON_SFB Times air motor rotation

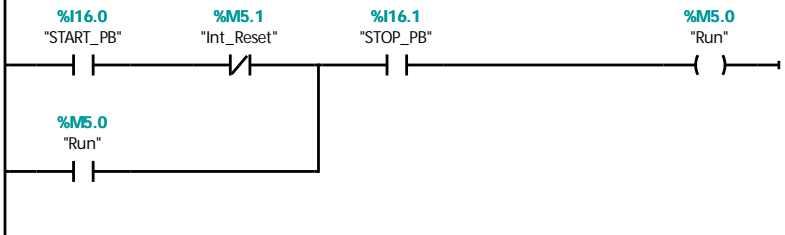
Lower_Tmr DB9 TON_SFB Times lower of pallet

Out_Tmr DB10 TON_SFB Times engage cyl for allowing out pallet

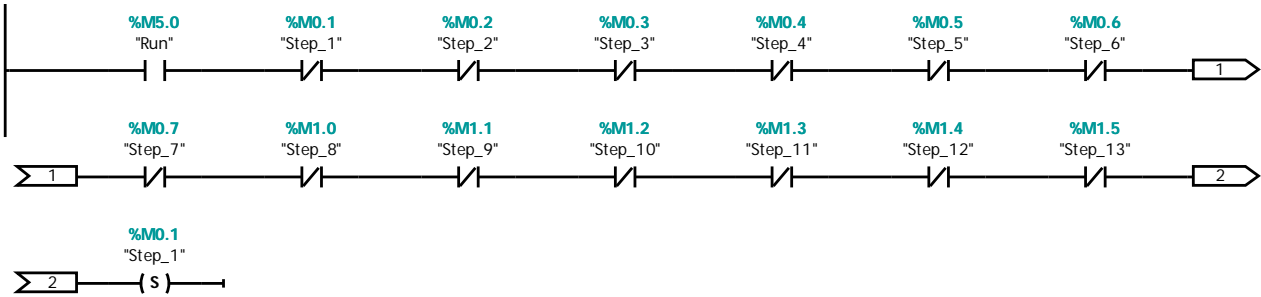


Network 2: Start/stop

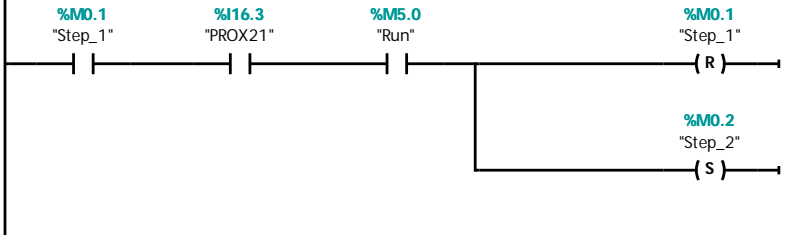
During reset prevent start



Network 3: Initial start



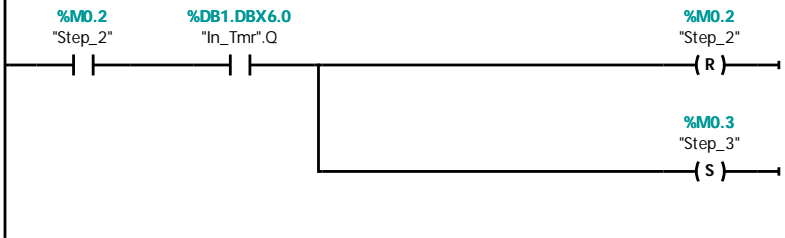
Network 4: Step 1 Wait for pallet



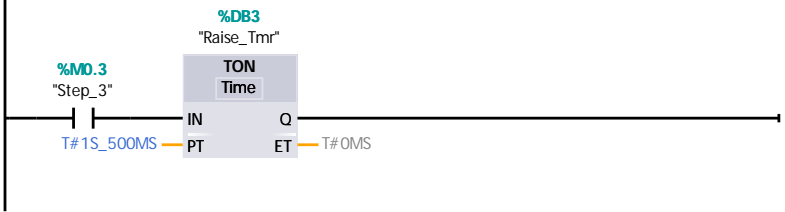
Network 5: Pallet In timer



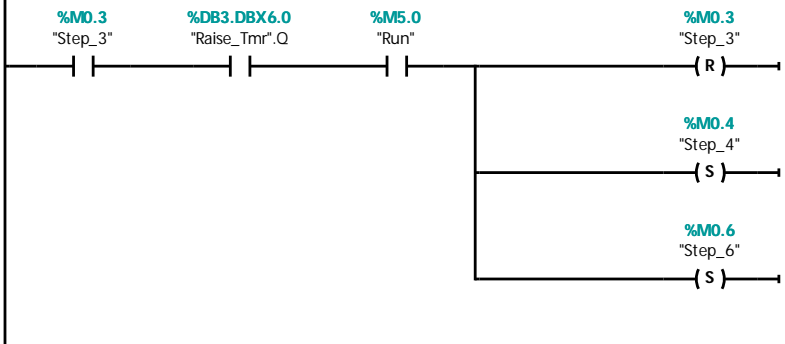
Network 6: Step 2 Allow one pallet in



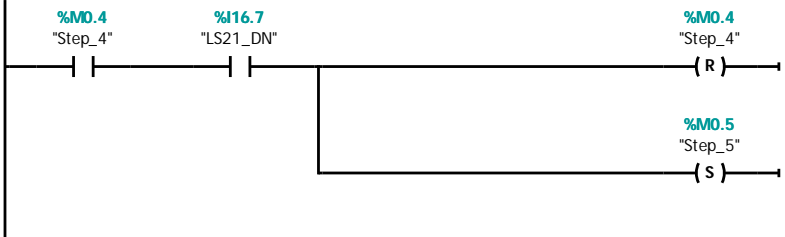
Network 7: Raise pallet timer



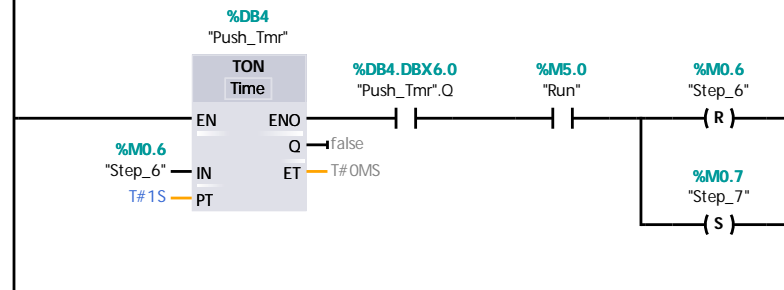
Network 8: Step 3 Raise pallet



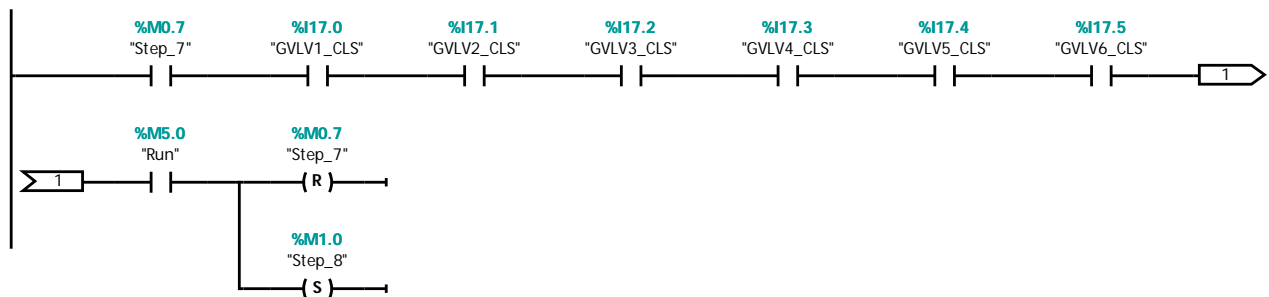
Network 9: Step 4 Lower mechanism



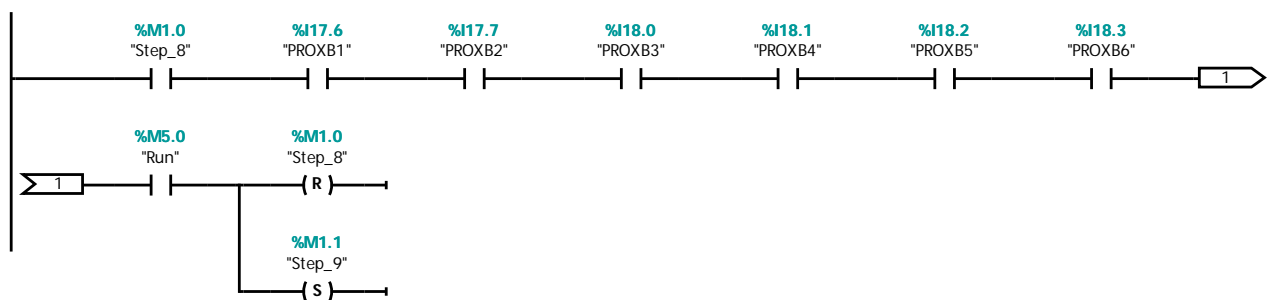
Network 10: Step 6 Push bolts



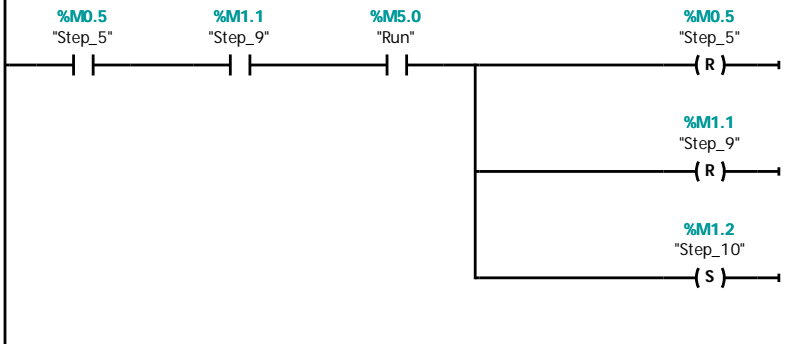
Network 11: Step 7 Close gate valves



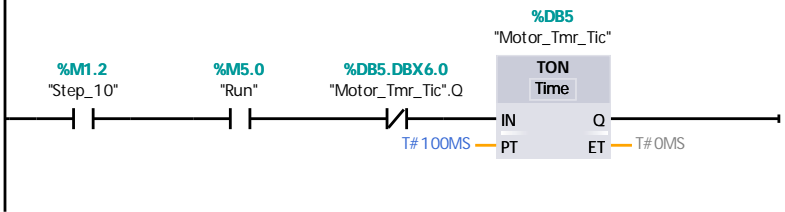
Network 12: Step 8 Convey bolts



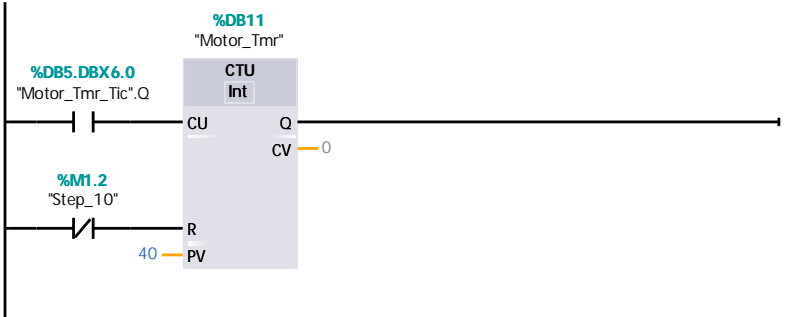
Network 13: Step 5 and Step 9 Wait for mechanism down and bolts in place.



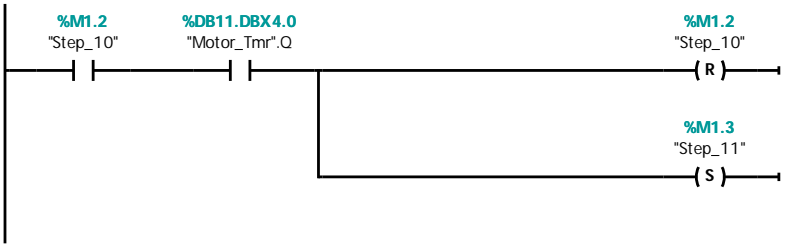
Network 14: Step 10 - timer tic for retentive



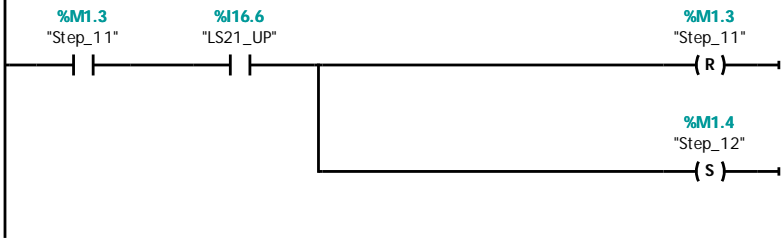
Network 15: Step 10 - Counter for retentive function



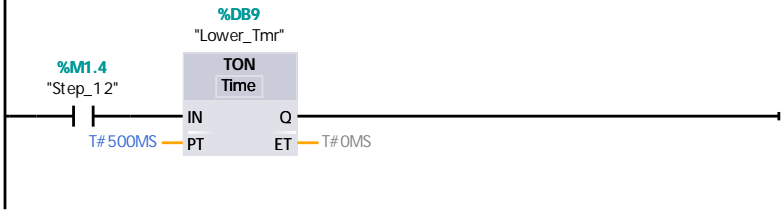
Network 16: Step 10 Run air motors



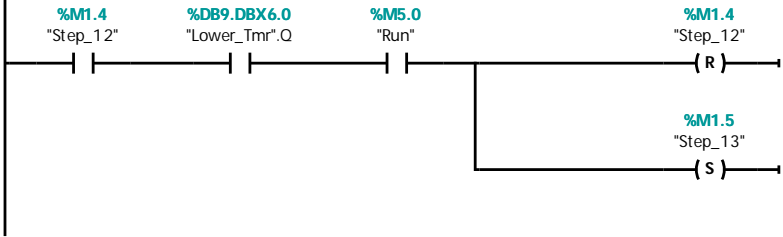
Network 17: Step 11 Raise mechanism



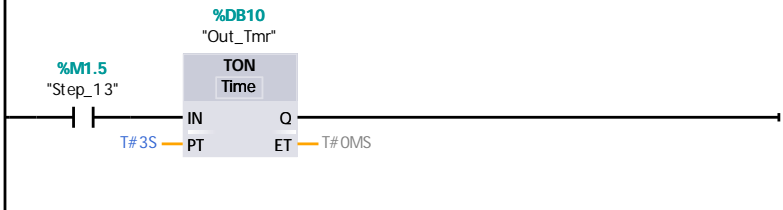
Network 18: Drop Pallet timer



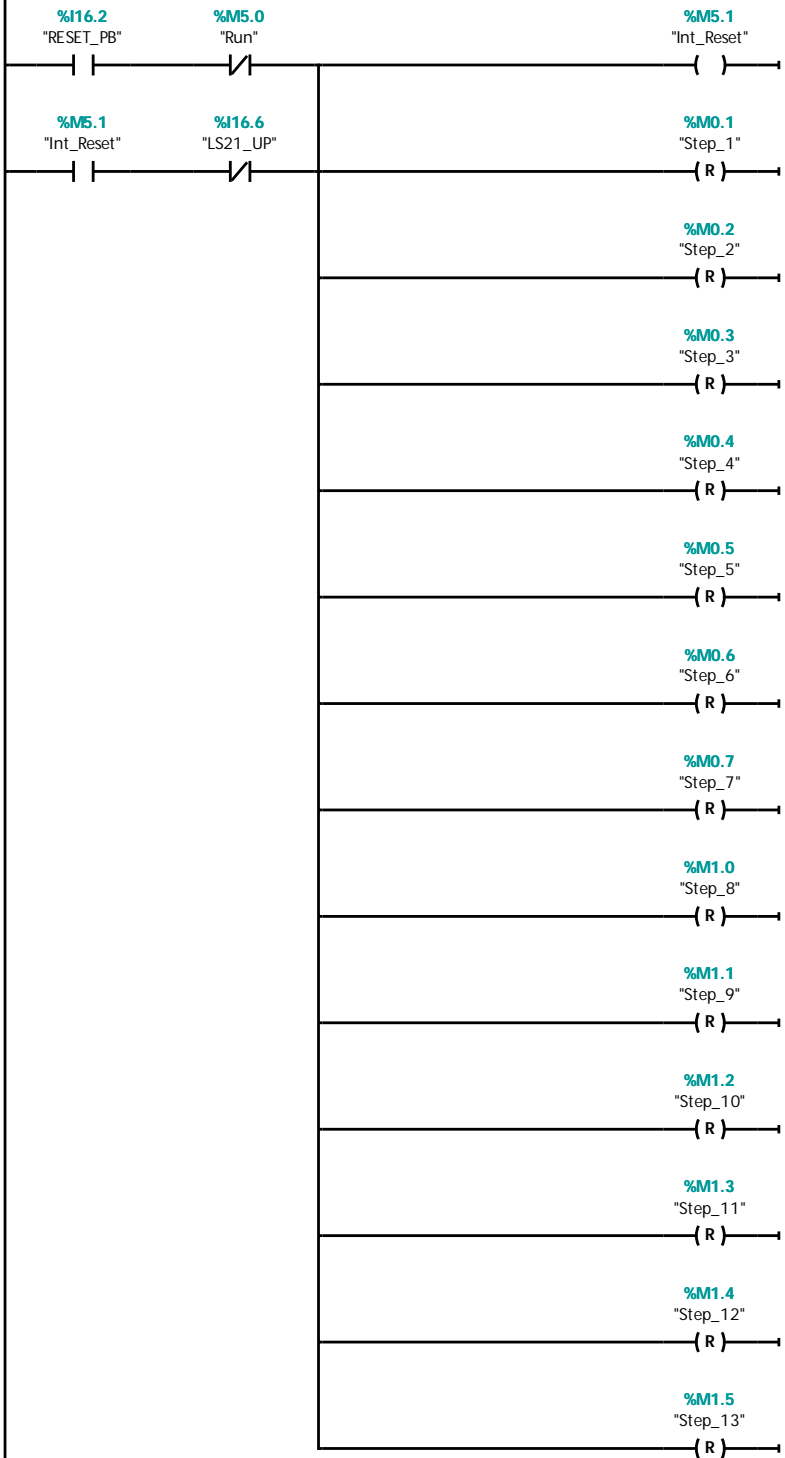
Network 19: Step 12 Drop pallet



Network 20: Move out timer



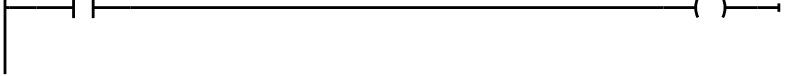
Network 21: Step 13 Move out pallet



Network 23: Engage solenoids

%M0.1
"Step_1"

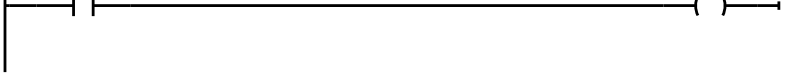
%Q24.0
"ENGAGE_21_
CYL"



Network 24: Gate 2 control

%M1.5
"Step_13"

%Q24.1
"ENGAGE_22_
CYL"



Network 25: Raise/lower mechanism

Move up on reset

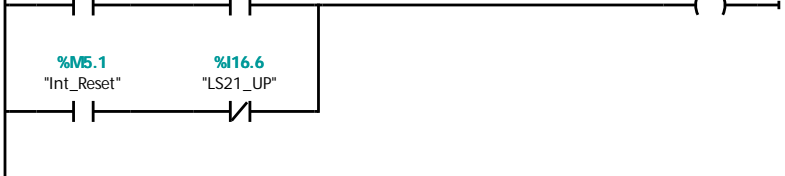
%M1.3
"Step_11"

%M5.0
"Run"

%Q24.2
"HEAD21_UP"

%M5.1
"Int_Reset"

%I16.6
"LS21_UP"

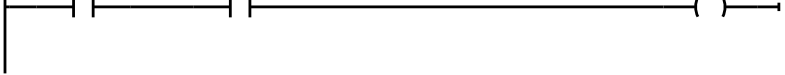


Network 26:

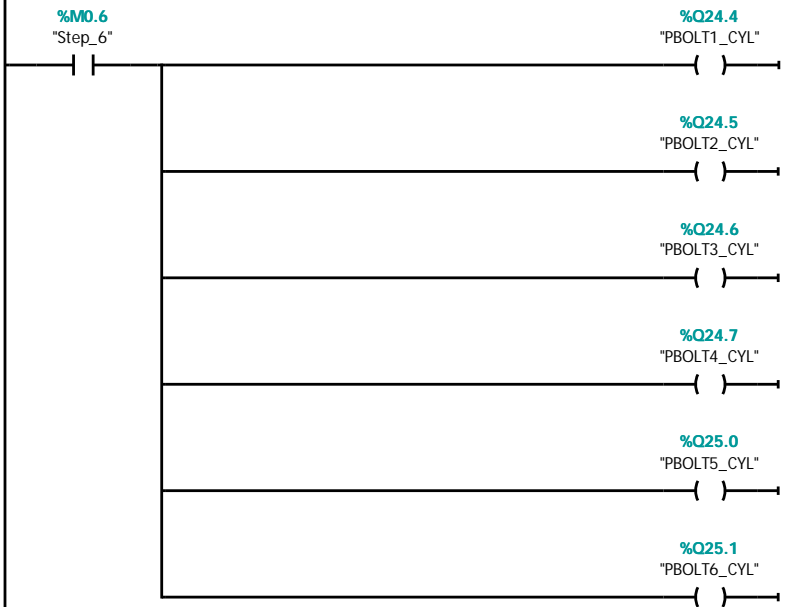
%M0.4
"Step_4"

%M5.0
"Run"

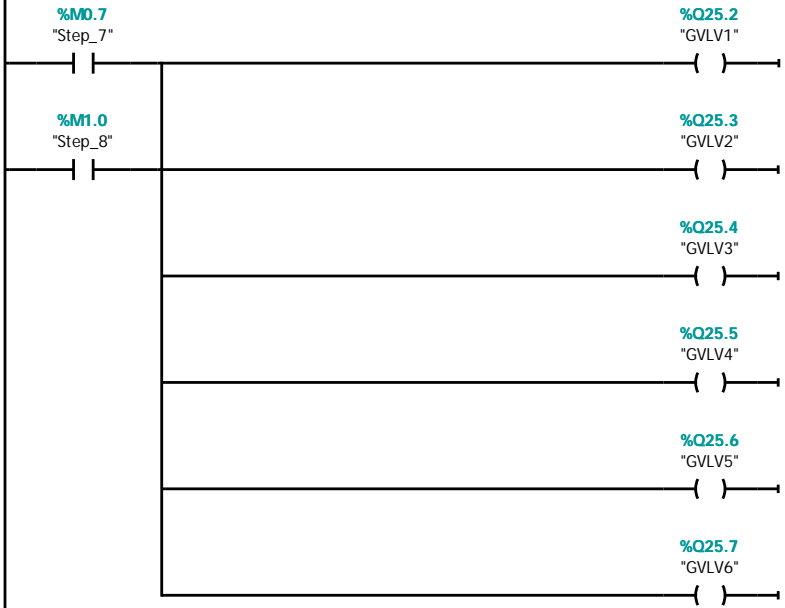
%Q24.3
"HEAD21_DOWN"



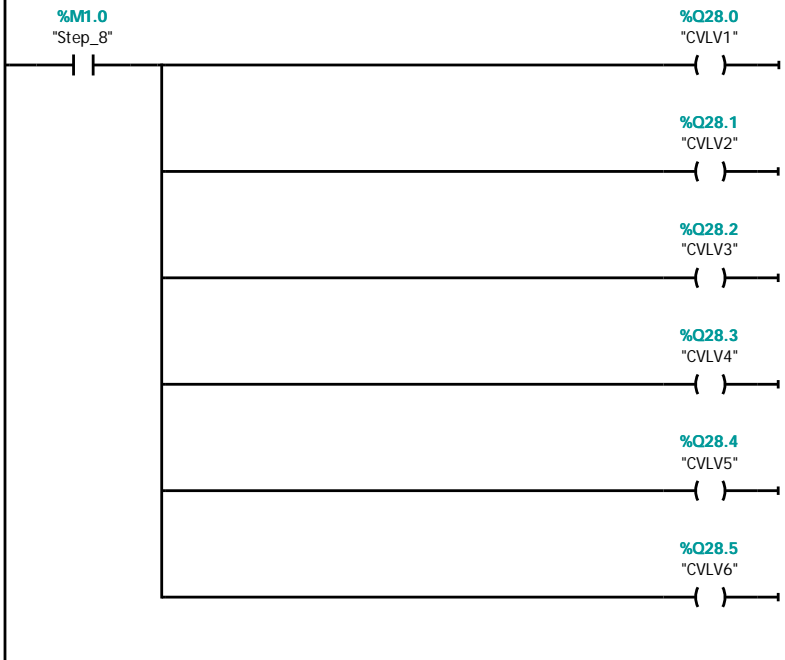
Network 27: Push bolt solenoids



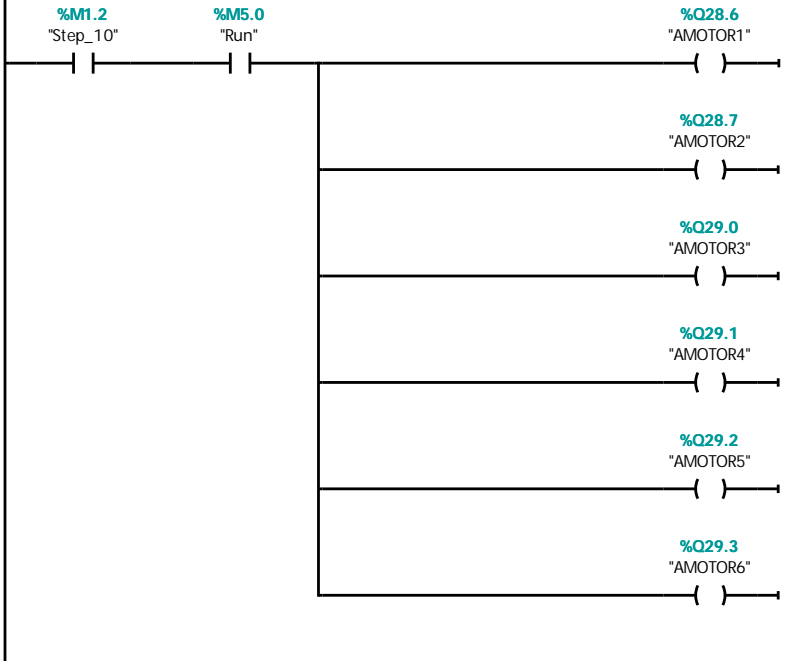
Network 28: Gate valves



Network 29: Convey valves



Network 30: Air motors



Network 31: Pallet up control

Must remain on when paused

%M0.3
"Step_3"

%M0.4
"Step_4"

%M0.5
"Step_5"

%M1.2
"Step_10"

%M1.3
"Step_11"

%Q29.4
"PALL21_UP"

