

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: SP6-16

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Problem SP6-16 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_11 M0.1 to M1.3 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

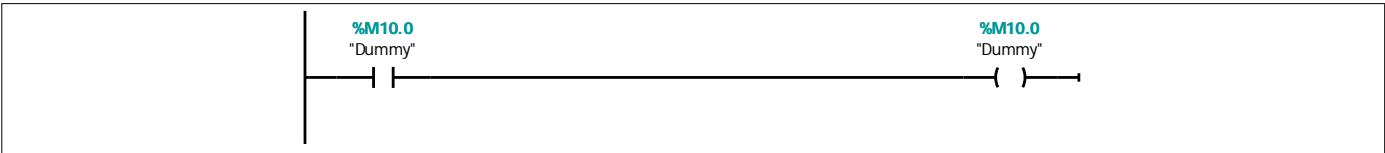
Push_Tmr DB4 TON_SFB Times push of bolts

Motor_Tmr_Tic DB5 TON_SFB Tic for retentive timer for air motor rotation

Motor_Tmr_Ctr DB11 CTU_SFB Counter for retentive timer for air motor rotation

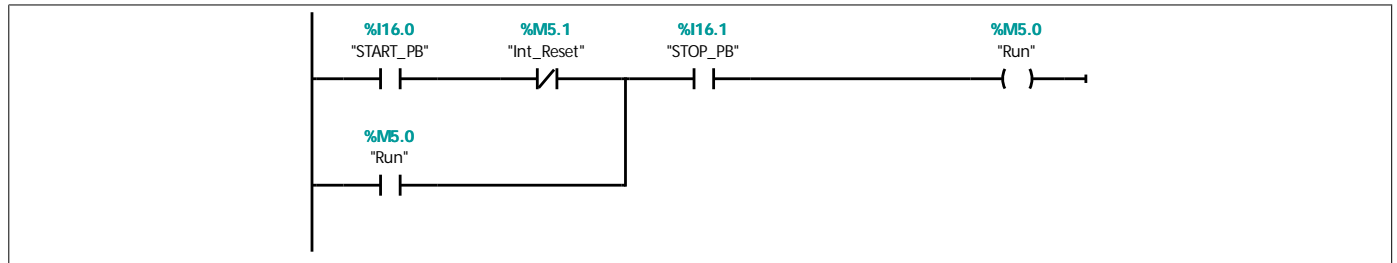
Lower_Tmr DB9 TON_SFB Times lower of pallet

Out_Tmr DB10 TON_SFB Times engage cyl for allowing out pallet

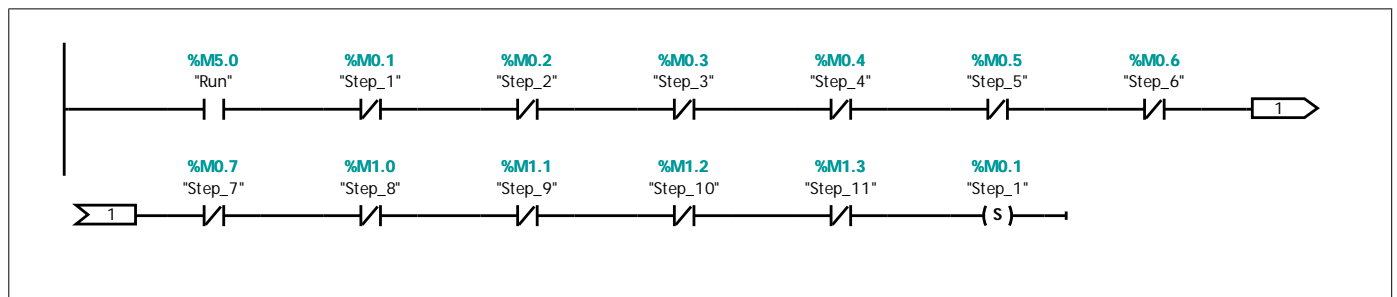


Network 2: Start/stop

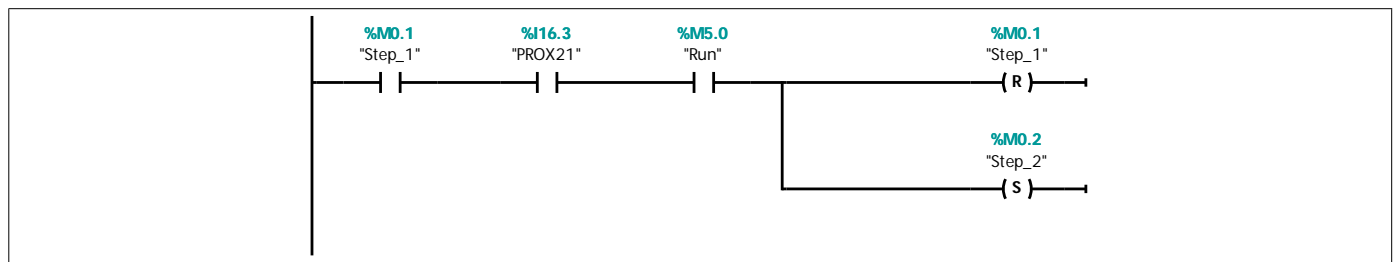
During reset prevent start



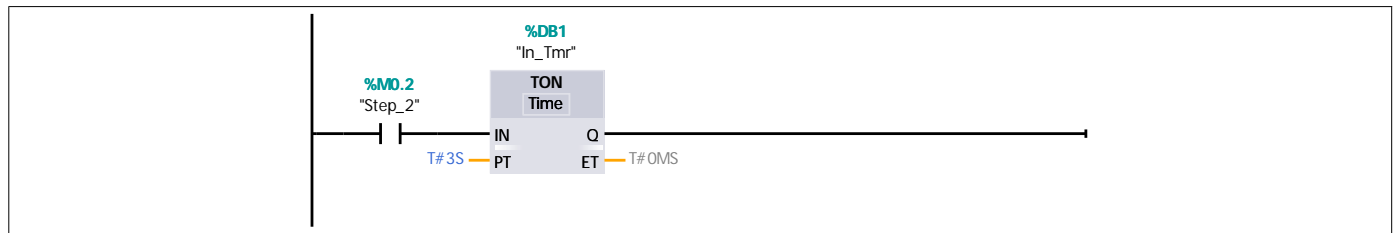
Network 3: Initial start



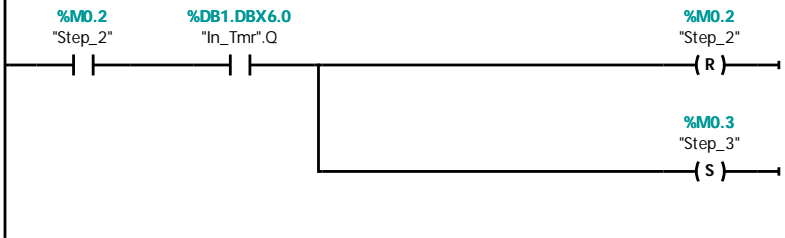
Network 4: Step 1 Wait for pallet



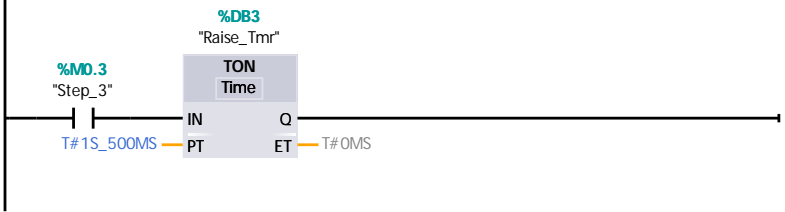
Network 5: Pallet in timer



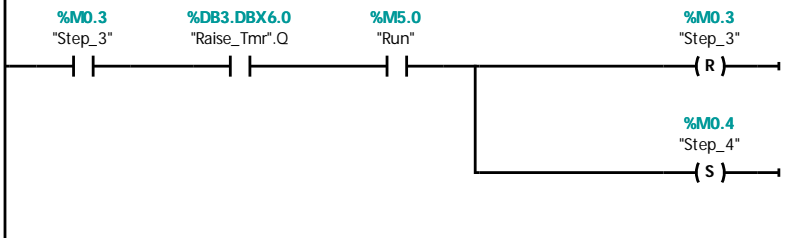
Network 6: Step 2 Allow one pallet in



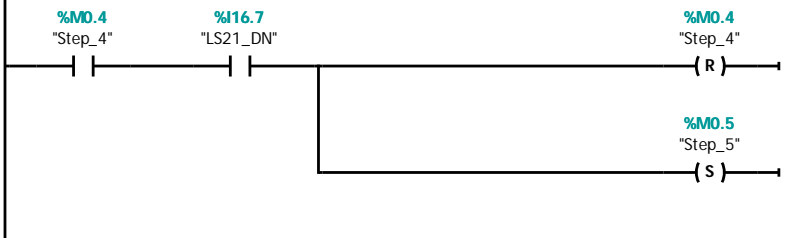
Network 7:



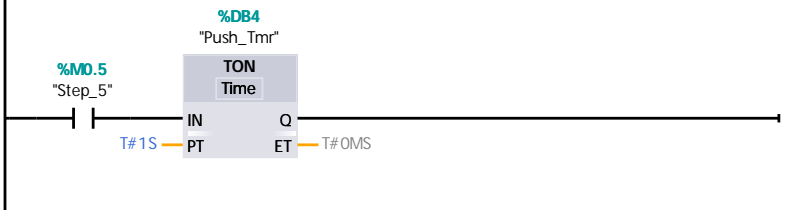
Network 8: Step 3 Raise pallet



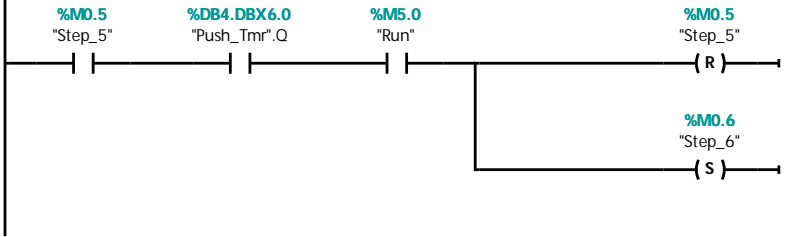
Network 9: Step 4 Lower mechanism



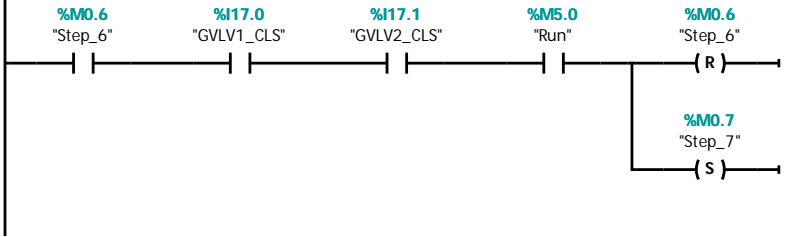
Network 10: Push bolts timer



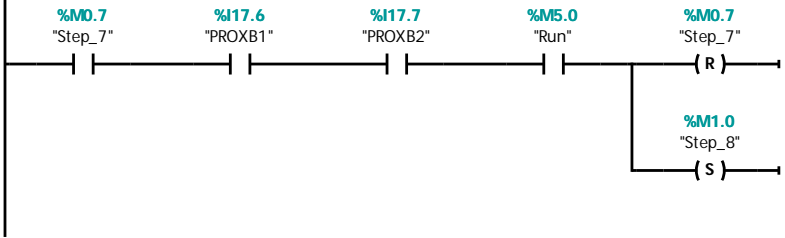
Network 11: Step 5 Push bolts



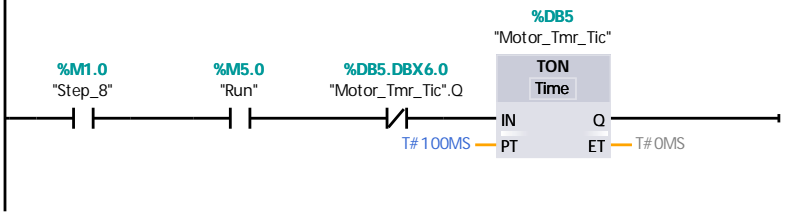
Network 12: Step 6 Close gate valves



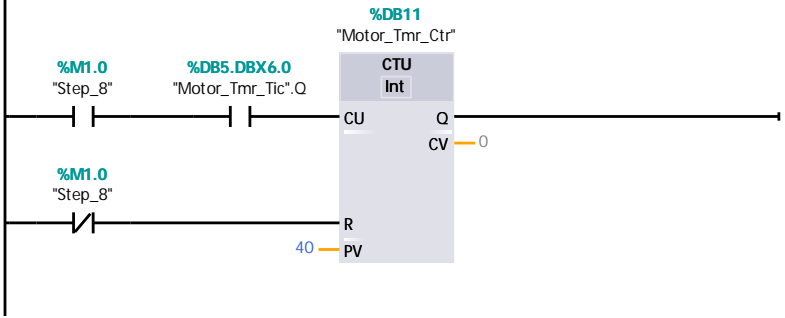
Network 13: Step 7 Convey bolts



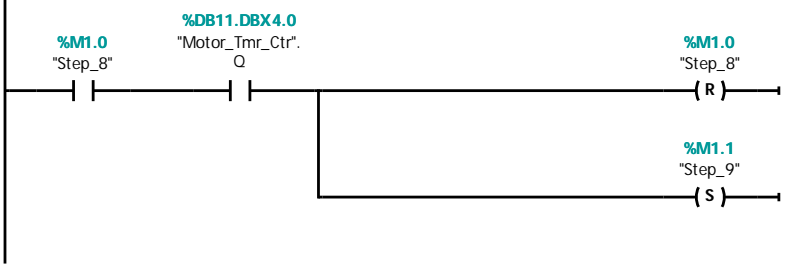
Network 14: Motor timer - tic for retentive function



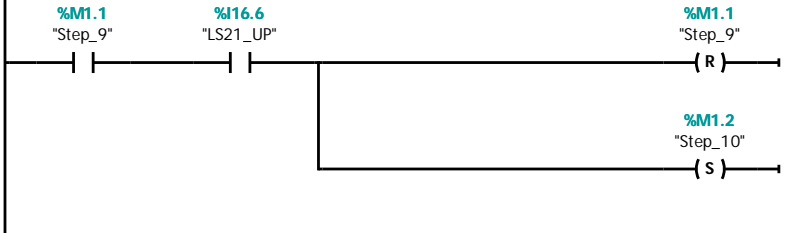
Network 15: Motor timer - counter for retentive function



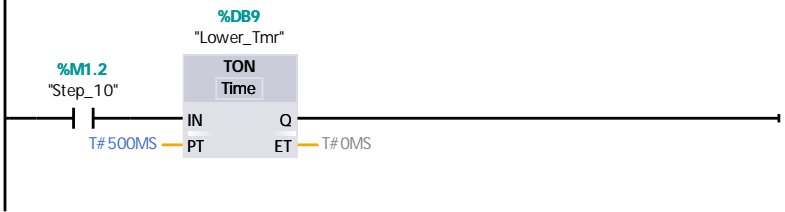
Network 16: Step 8 Run air motor



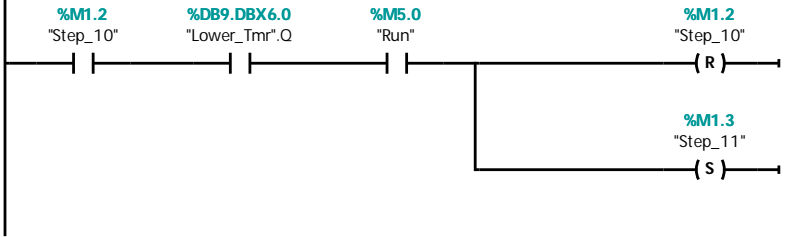
Network 17: Step 9 Raise mechanism



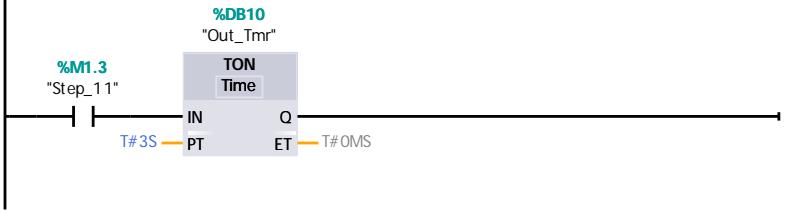
Network 18: Drop Pallet timer



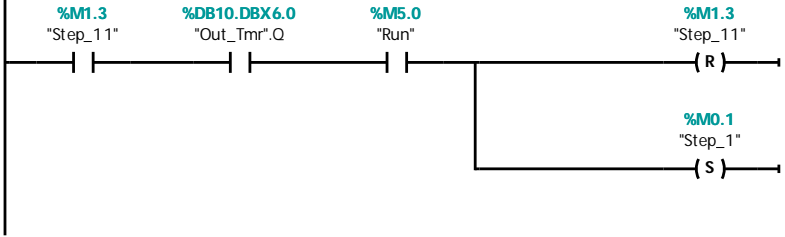
Network 19: Step 10 Drop pallet



Network 20:

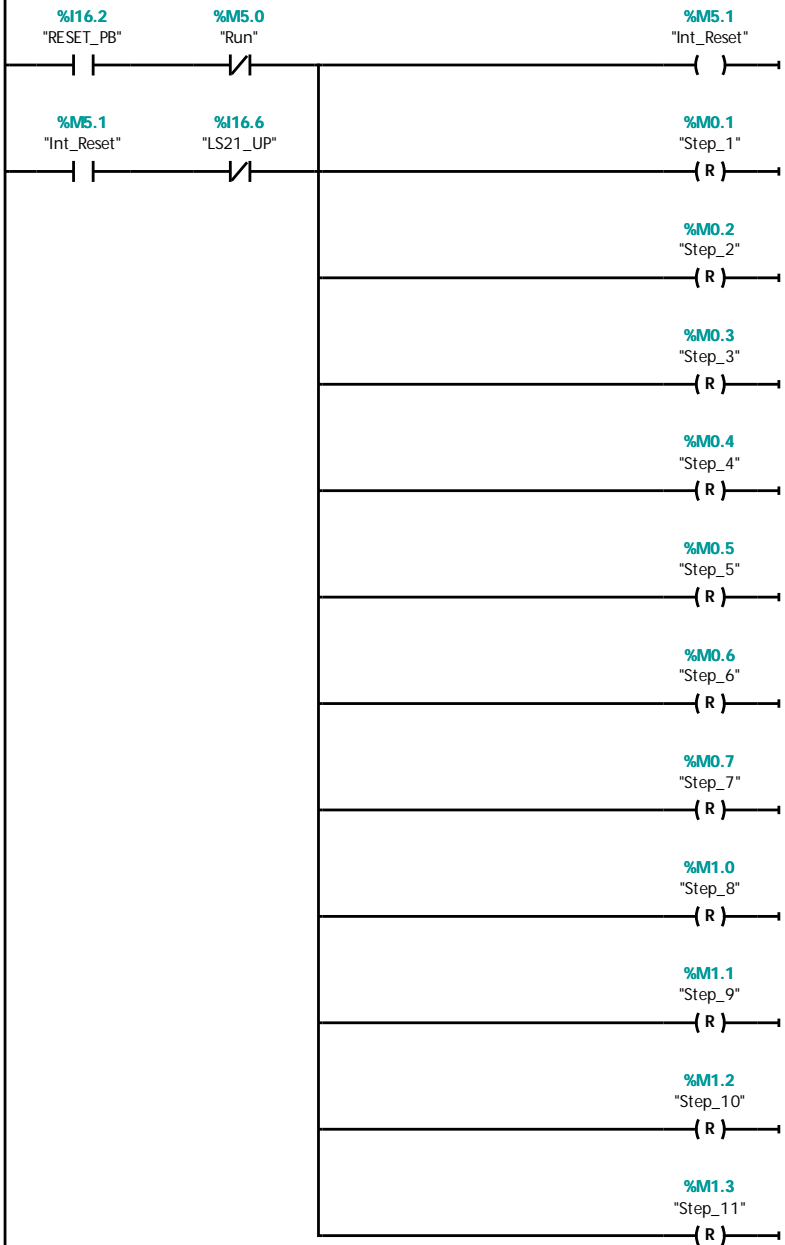


Network 21: Step 11 Move out pallet

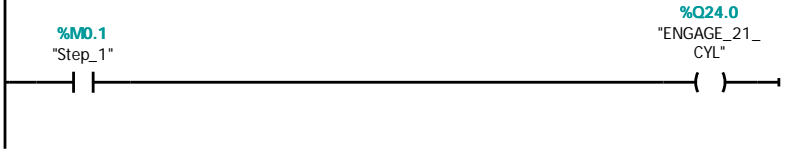


Network 22: Reset

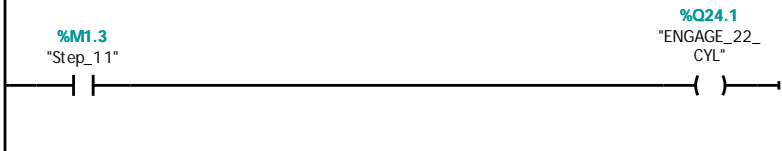
Maintain reset until mechanism fully raised.



Network 23: Engage solenoids

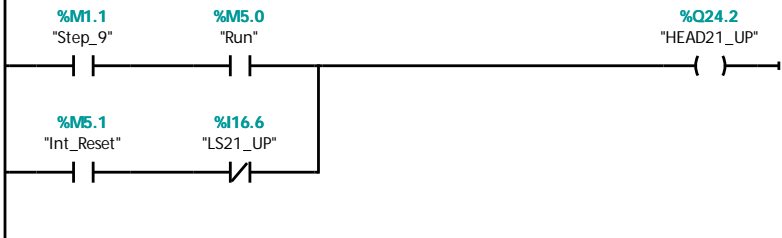


Network 24:

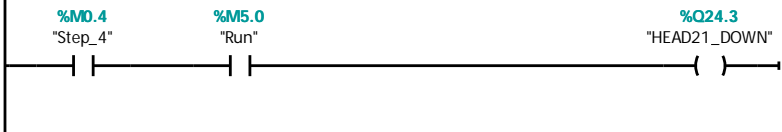


Network 25: Raise/lower mechanism

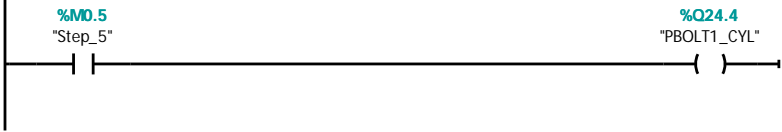
Move up on reset



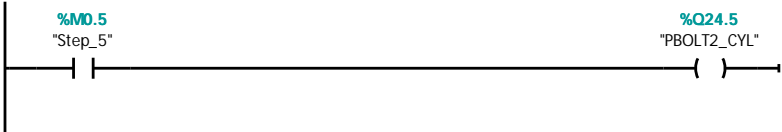
Network 26:



Network 27: Push bolt solenoids



Network 28:



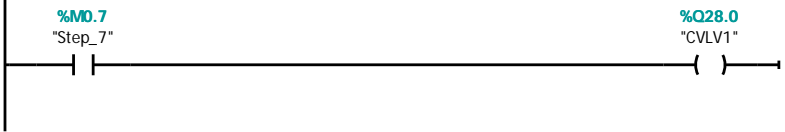
Network 29: Gate valves



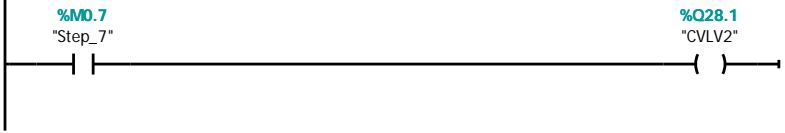
Network 30: Open convey valve #2 to convey bolt #2 to driver



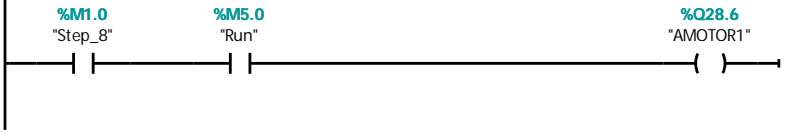
Network 31: Convey valves



Network 32: Clamp control



Network 33: Air motors



Network 34: Open valve to air motor #2 to drive bolt #2

%M1.0
"Step_8"

%M5.0
"Run"

%Q28.7
"AMOTOR2"



Network 35: Pallet up control

Must remain on when paused

%M0.3
"Step_3"

%Q29.4
"PALL21_UP"

