

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: SP6-18

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Problem SP6-18 Revised Drilling Station Control

Additional internal memory:

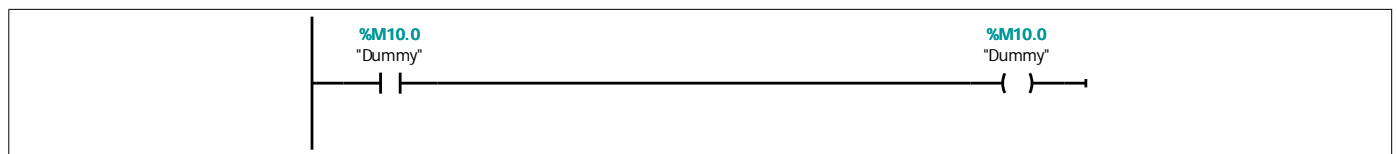
Tag Address

Run M5.0 BOOL On while station running

Int_Reset M5.1 BOOL Internal reset

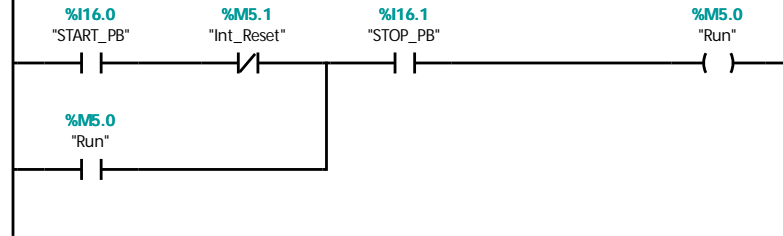
Step_1 to Step_16 M0.1 to M2.0 BOOL Step-in-progress bits

Unclmp_Tmr DB1 TON_SFB Time unclamping of part

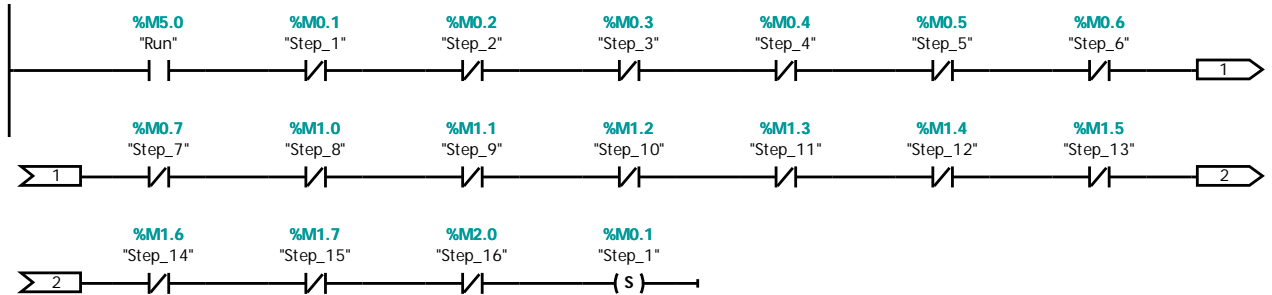


Network 2: Start/stop

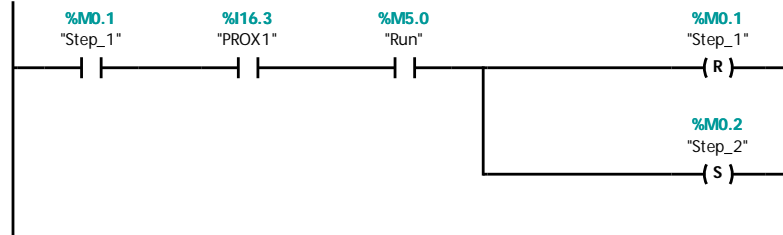
During reset prevent start



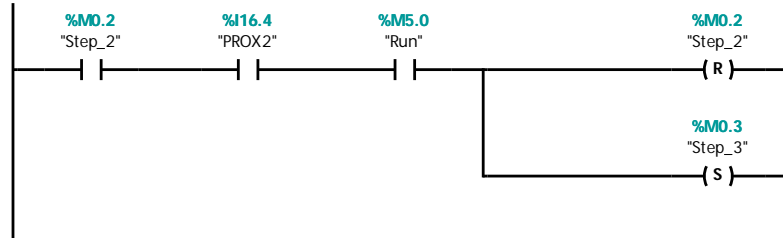
Network 3: Initial start



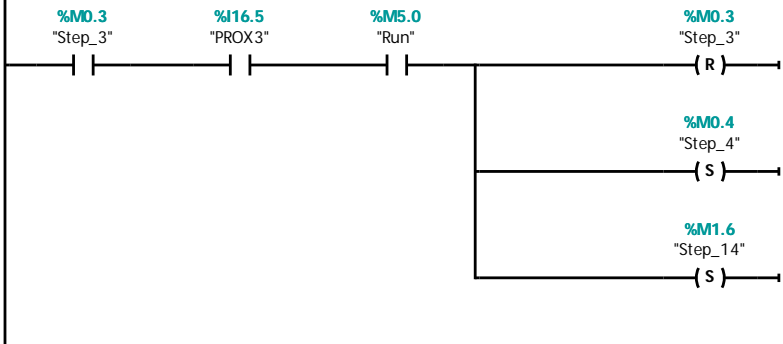
Network 4: Step 1 Wait for first part



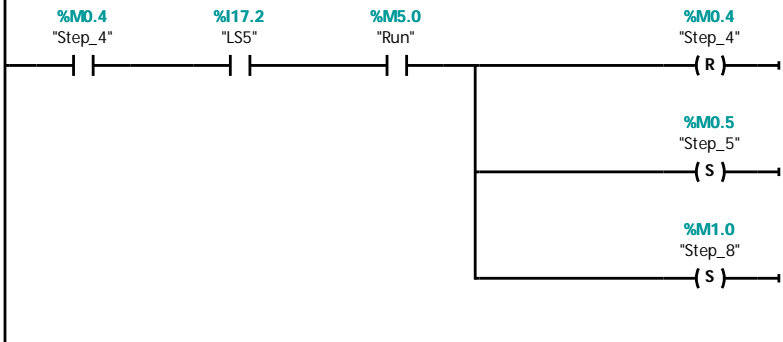
Network 5: Step 2 Move part to position 2



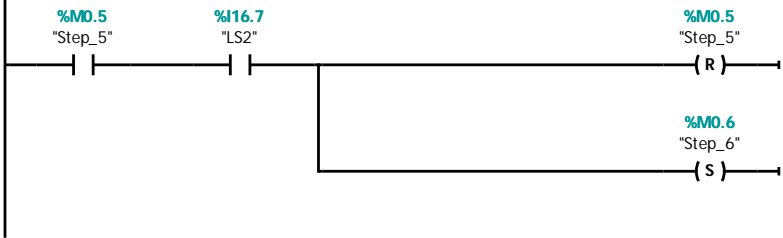
Network 6: Step 3 Move part to position 3



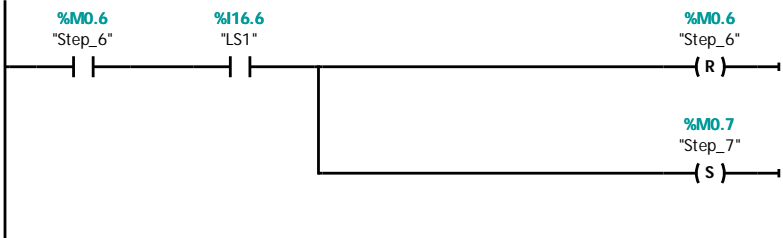
Network 7: Step 4 Clamp part



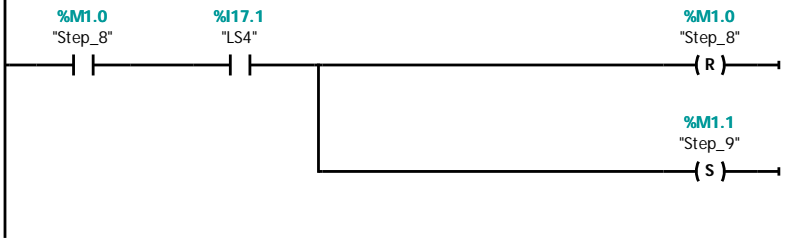
Network 8: Step 5 Extend drill 1



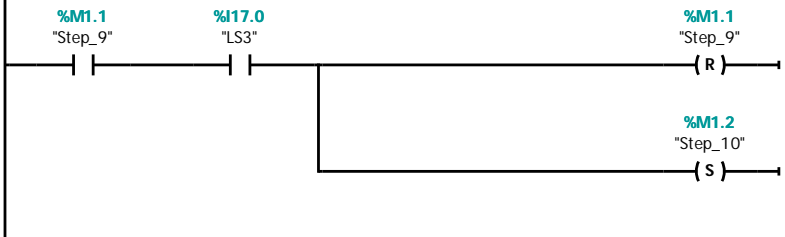
Network 9: Step 6 Retract drill 1



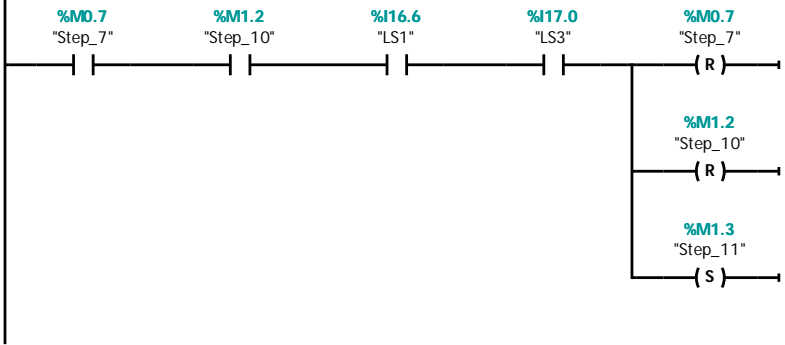
Network 10: Step 8 Extend drill 2



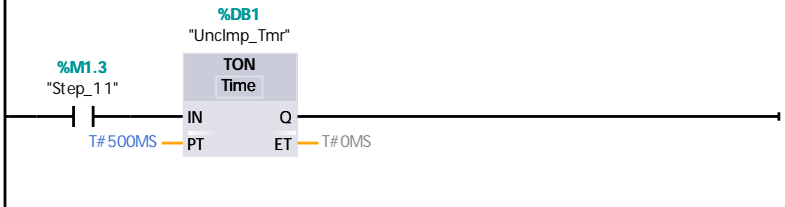
Network 11: Step 9 Retract drill 2



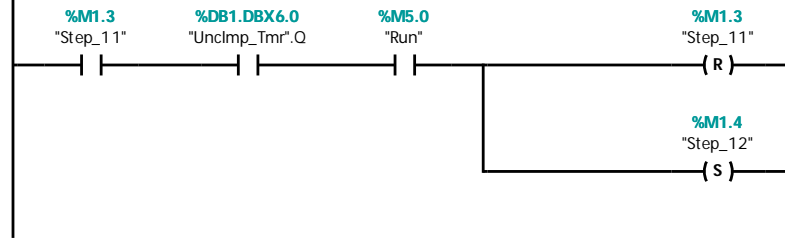
Network 12: Steps 7 and 10 Wait for both holes to be drilled



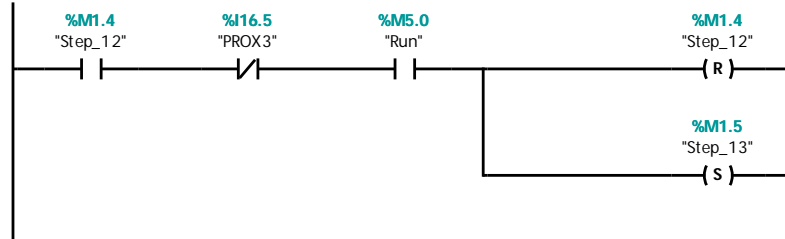
Network 13: Unclamp timer



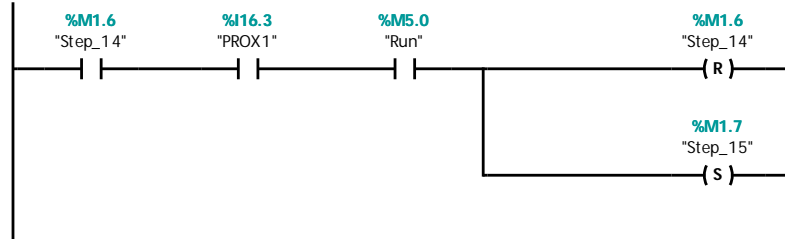
Network 14: Step 11 Unclamp part



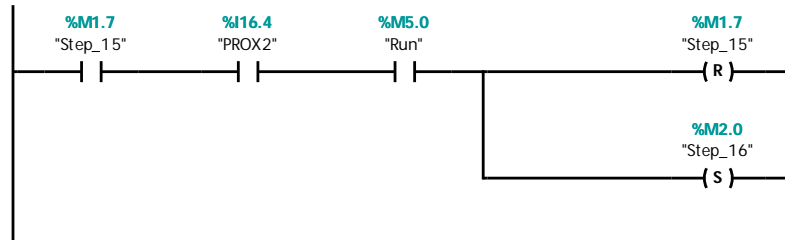
Network 15: Step 12 Move out part



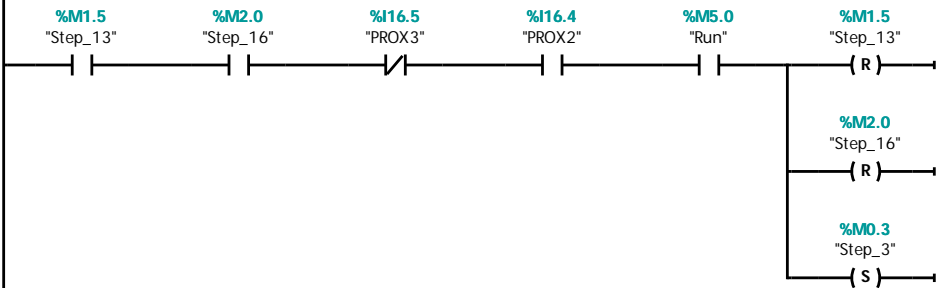
Network 16: Step 14 - Wait for part in position 1



Network 17: Step 15 - Move part to position 2



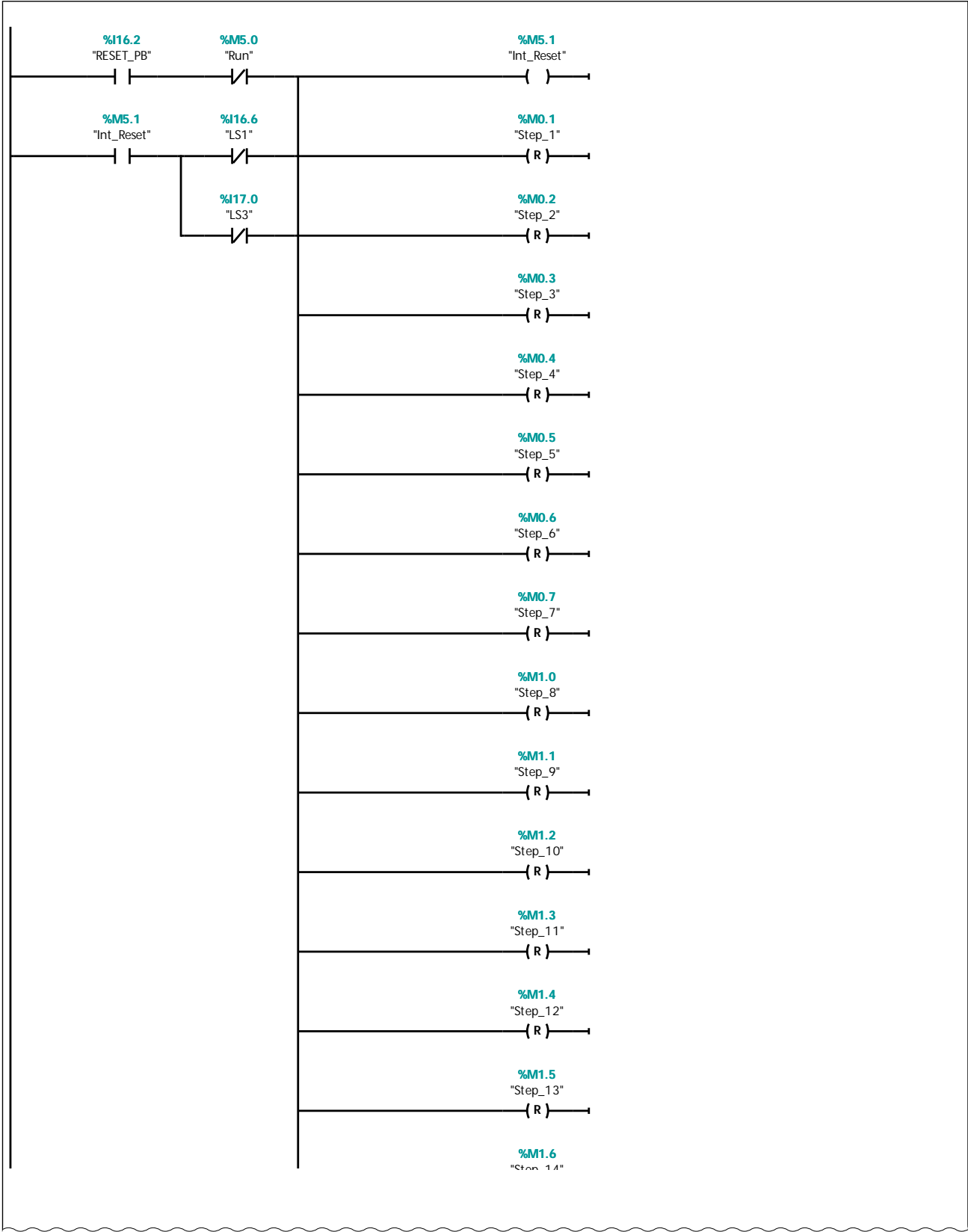
Network 18: Steps 13 and 16 - Wait for one part unclamped and another in pos



Network 19: Reset

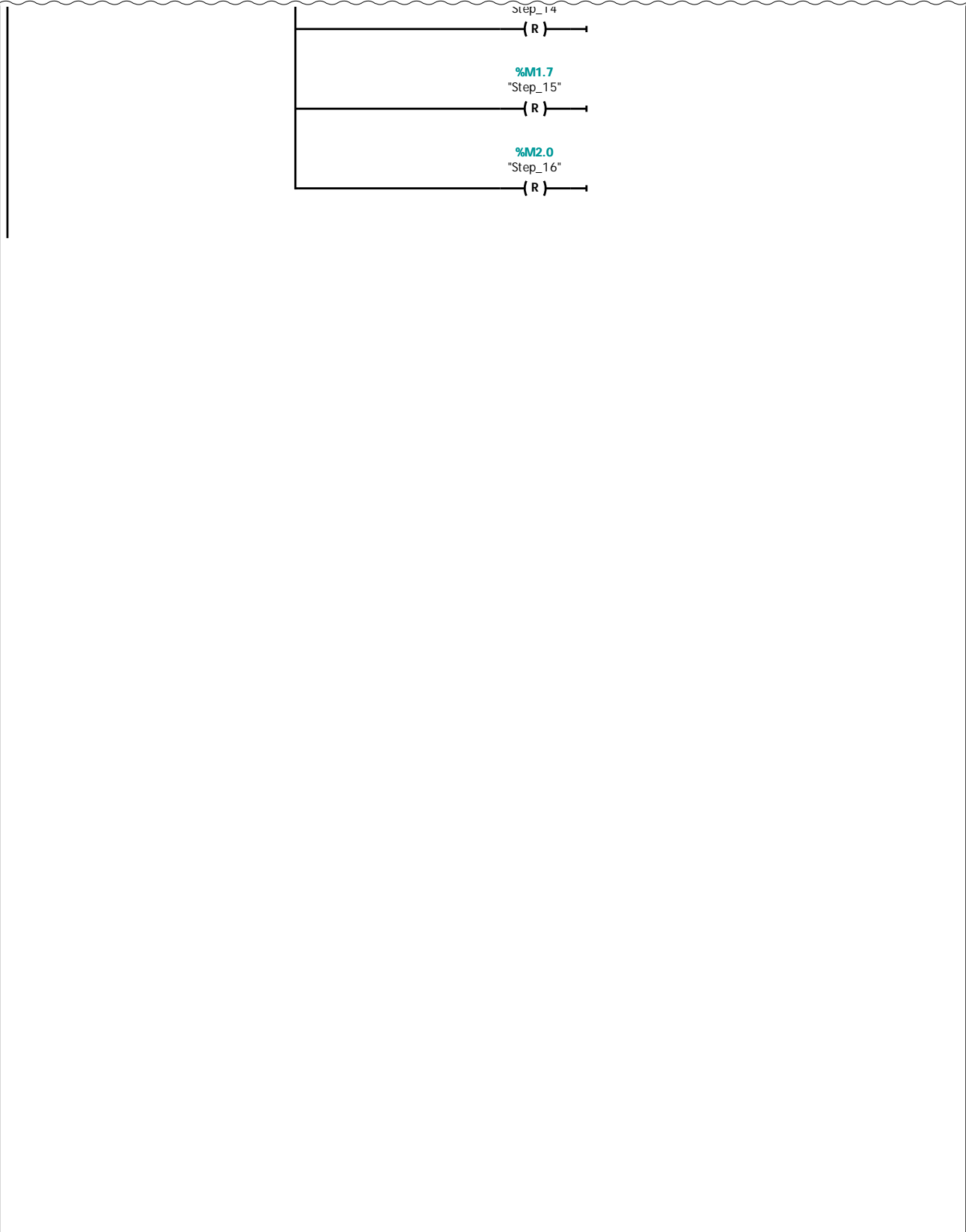
Maintain reset until both drill retracted.

Network 19: Reset (1.1 / 2.1)

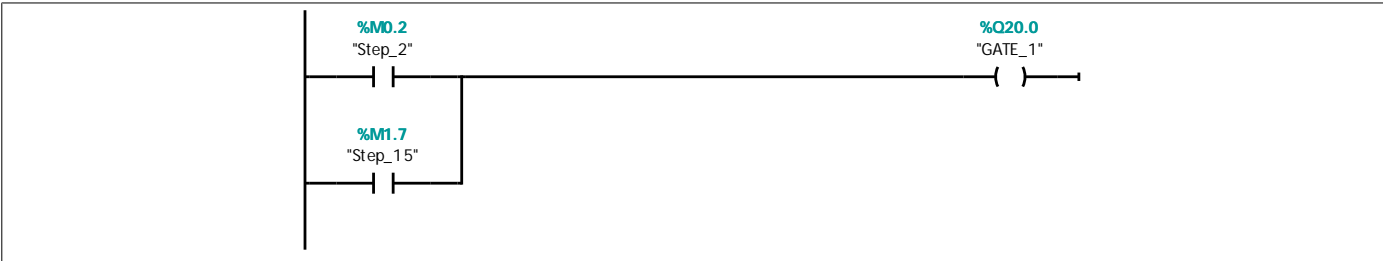


Network 19: Reset (2.1 / 2.1)

1.1 (Page1 - 7)

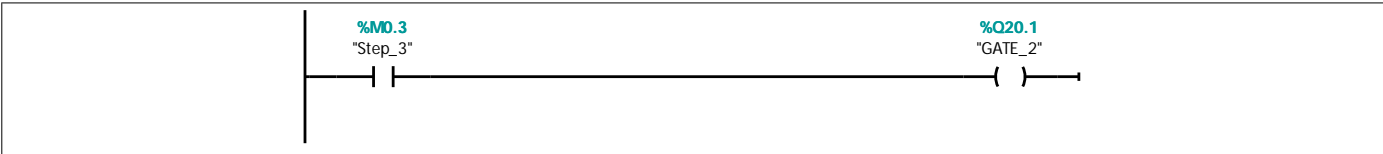


Network 20: Gate controls



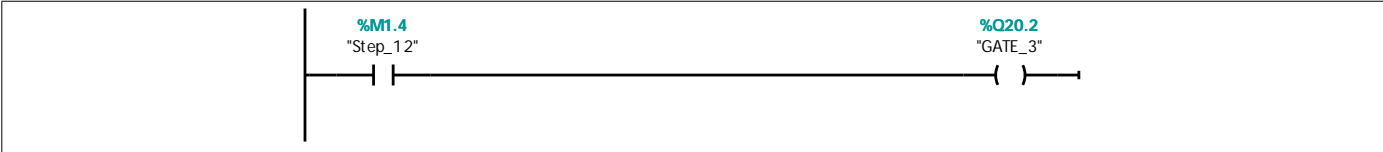
Network 21: Gate 2 control

Retract on reset

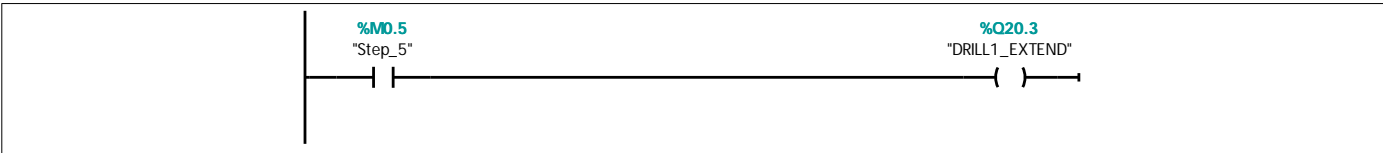


Network 22: Knife controls

Retract on reset

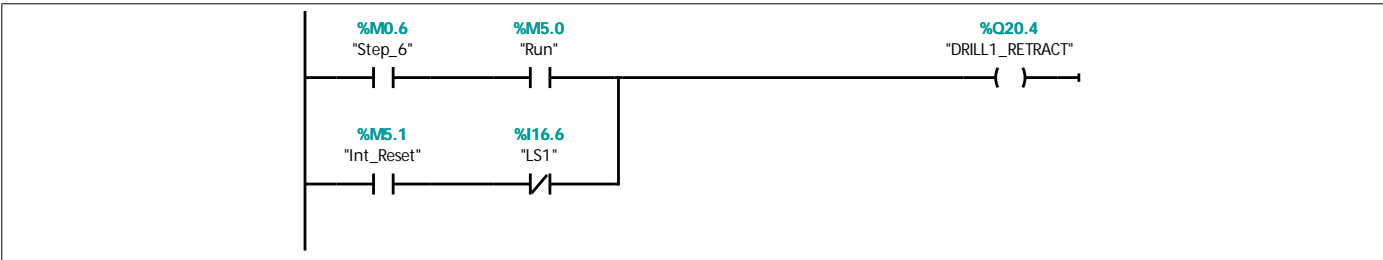


Network 23: Drill 1 controls



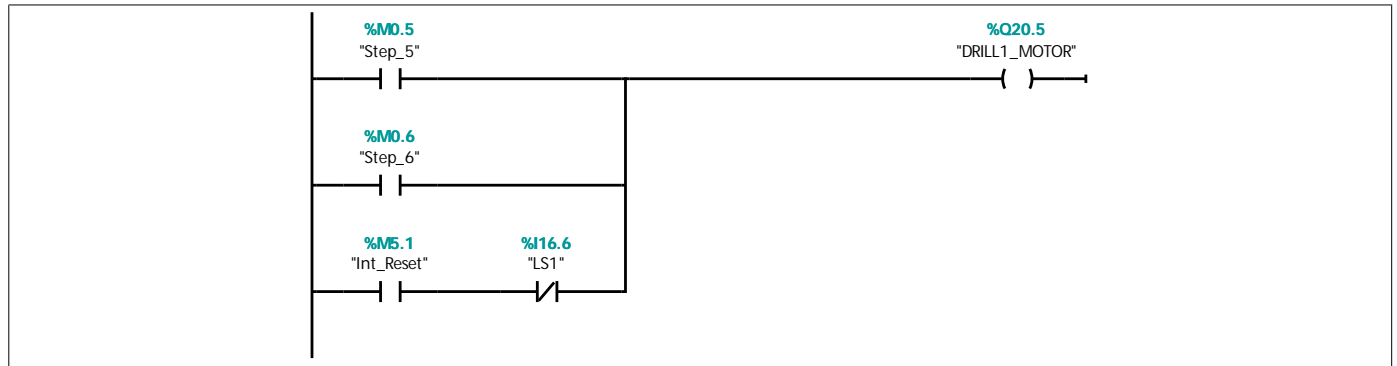
Network 24: Drill 1 retraction control

Must also retract on reset

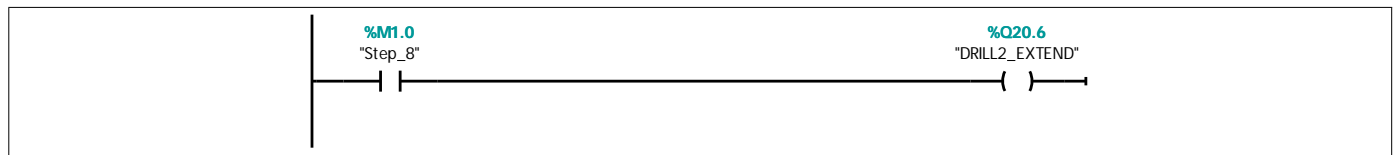


Network 25: Drill 1 motor control

Must continue to run drill motor while retracting due to reset

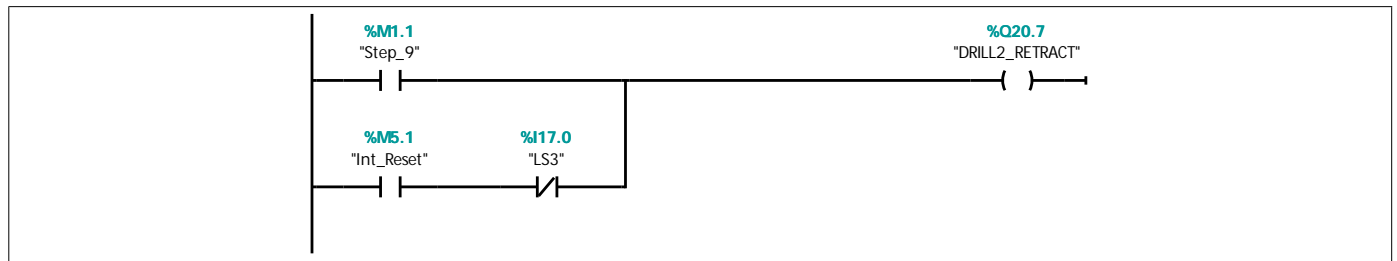


Network 26: Drill 2 controls



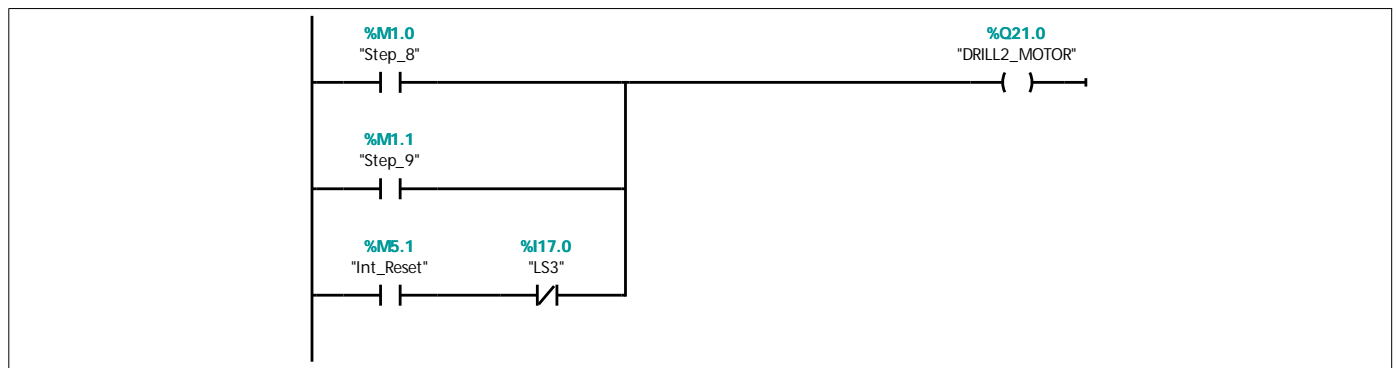
Network 27: Drill 2 retraction control

Must also retract on reset



Network 28: Drill 2 motor control

Must continue to run drill motor while retracting due to reset



Network 29: Clamp control

Must remain on when paused and when resetting, before both drills retracted.

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