

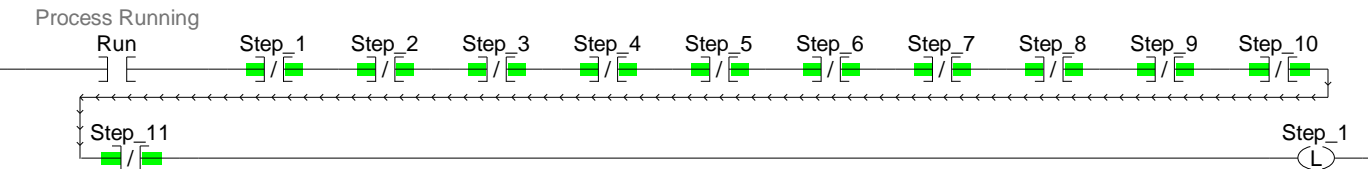
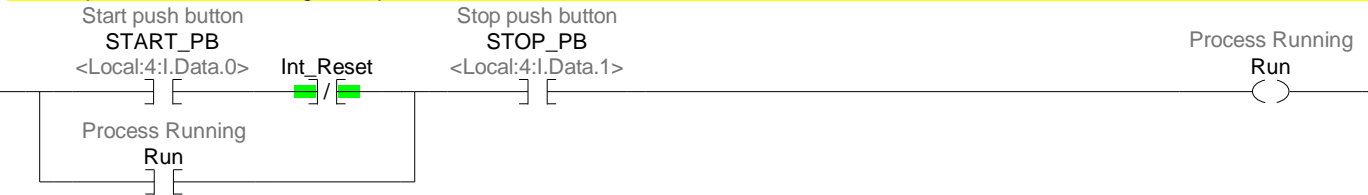
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Bolt Driving Station Control

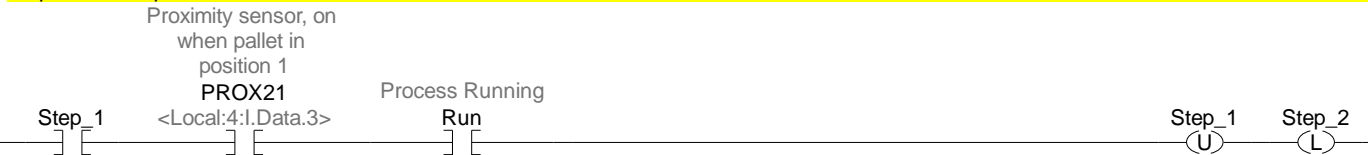
Additional internal memory:

Tag	Data Type	
Run	BOOL	On while station running
Int_Reset	BOOL	Internal reset
Step_1 to Step_11	BOOL	Step-in-progress bits
In_Tmr	TIMER	Times engage cyl for bringing in pallet
Raise_Tmr	TIMER	Times raise of pallet
Push_Tmr	TIMER	Times push of bolts
Motor_Tmr	TIMER	Times air motor rotation
Lower_Tmr	TIMER	Times lower of pallet
Out_Tmr	TIMER	Times engage cyl for allowing out pallet

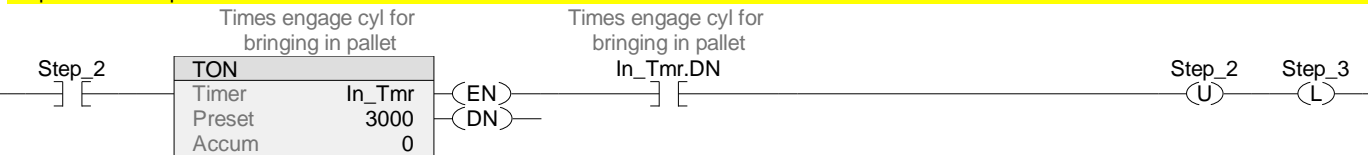
Start/stop and initial start. During reset, prevent start



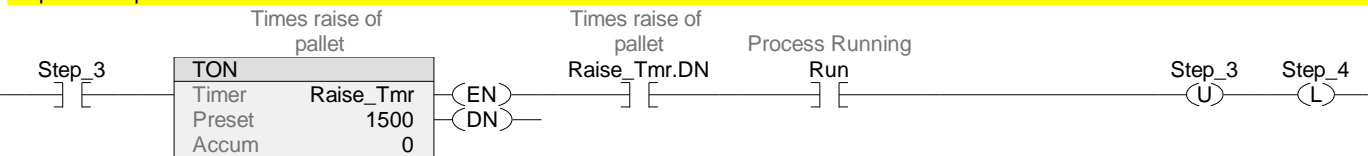
Step 1 Wait for pallet.



Step 2 Allow one pallet in.



Step 3 Raise pallet.



Step 4 Lower mehanism.

Limit switch on when
bolt driving
mechanism is down
LS21_DN
<Local:4:I.Data.7>



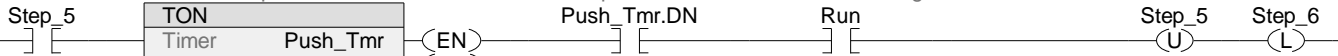
Step 5 Push bolts.

Times push of bolts

TON	Push_Tmr
Timer	1000
Preset	0
Accum	0

Times push of bolts
Push_Tmr.DN

Process Running
Run

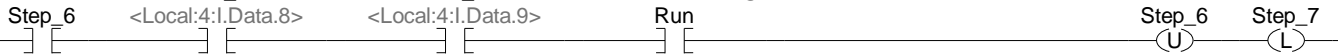


Step 6 Close gate valves.

Limit switch on when
gate valve #1 is
closed
GVLV1_CLS
<Local:4:I.Data.8>

Limit switch on when
gate valve #2 is
closed
GVLV2_CLS
<Local:4:I.Data.9>

Process Running
Run

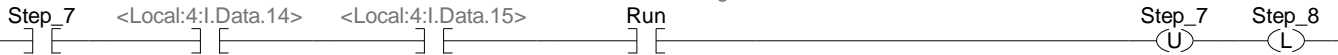


Step 7 Convey bolts.

Proximity switch on
when bolt #1 in
position to be
driven
PROXB1
<Local:4:I.Data.14>

Proximity switch on
when bolt #2 in
position to be
driven
PROXB2
<Local:4:I.Data.15>

Process Running
Run



Step 8 Run air motor.

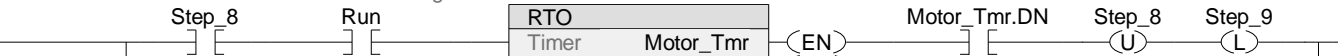
Process Running
Run

Times air motor
rotation

RTO	Motor_Tmr
Timer	4000
Preset	0
Accum	0

Times air motor
rotation

Motor_Tmr.DN

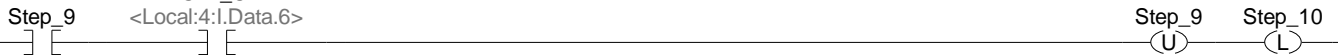


Step 8

Times air motor
rotation
Motor_Tmr
(RES)

Step 9 Raise mechanism.

Limit switch on when
bolt driving
mechanism is up
LS21_UP
<Local:4:I.Data.6>



Step 10 Drop pallet.

Times lower of
pallet

TON	Lower_Tmr
Timer	500
Preset	0
Accum	0

Times lower of
pallet
Lower_Tmr.DN

Process Running
Run



