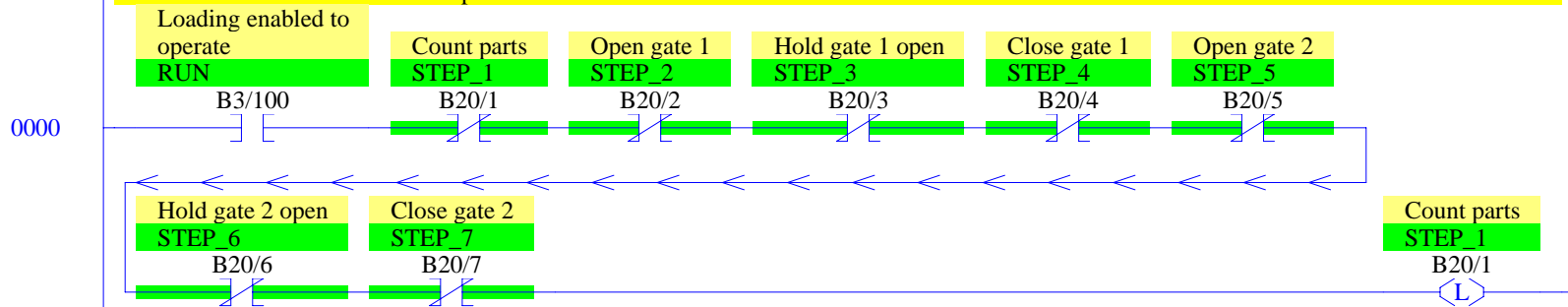


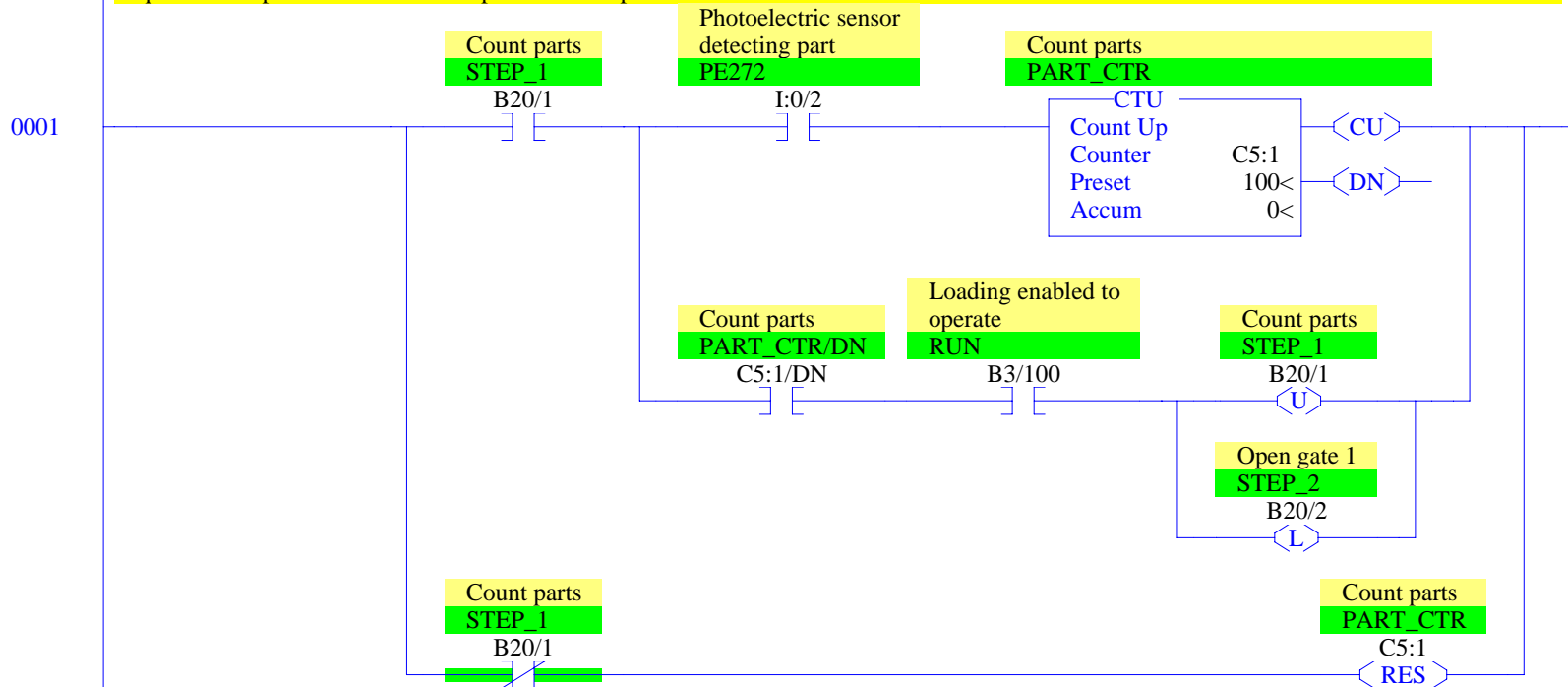
Example 6.3 Tub Loader Control

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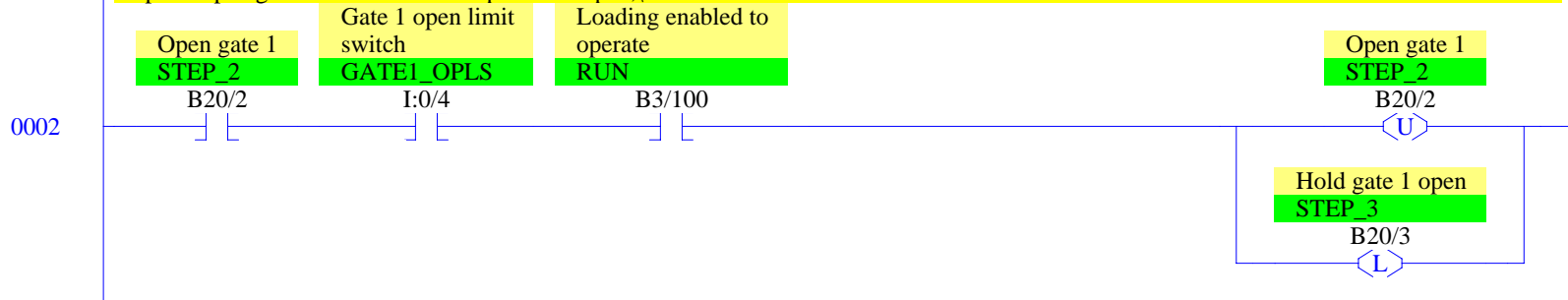
Generate transition out of initial step



Step 1 - Count parts. Transition to step 2 when 100 parts counted.



Step 2 - Open gate 1. Transition to step 3 when open, \.



0003

Step 3 - Hold gate 1 open for 3 secs after tub passes. Transition to step 4 when done.

Hold gate 1 open
STEP_3

B20/3

Proximity sensor
detecting tub
TUB_PROX

I:0/3

Loading enabled to
operate
RUN

B3/100

Gate 1 hold
open timer
G1_HOLD_TMR

RTO	
Retentive Timer On	
Timer	T4:1
Time Base	0.01
Preset	300<
Accum	0<

Gate 1 hold
open timer
G1_HOLD_TMR/DN

T4:1/DN

Hold gate 1 open
STEP_3

B20/3

Close gate 1
STEP_4

B20/4

Gate 1 hold
open timer
G1_HOLD_TMR

T4:1

< RES >

0004

Step 4 - Close gate 1. Transition to step 5 when closed.

Close gate 1
STEP_4

B20/4

Gate 1 closed limit
switch
GATE1_CLLS

I:0/5

Loading enabled to
operate
RUN

B3/100

Close gate 1
STEP_4

B20/4

Open gate 2
STEP_5

B20/5

0005

Step 5 - Open gate 2. Transition to step 6 when open, \.

Open gate 2
STEP_5

B20/5

Gate 2 open limit
switch
GATE2_OPLS

I:0/6

Loading enabled to
operate
RUN

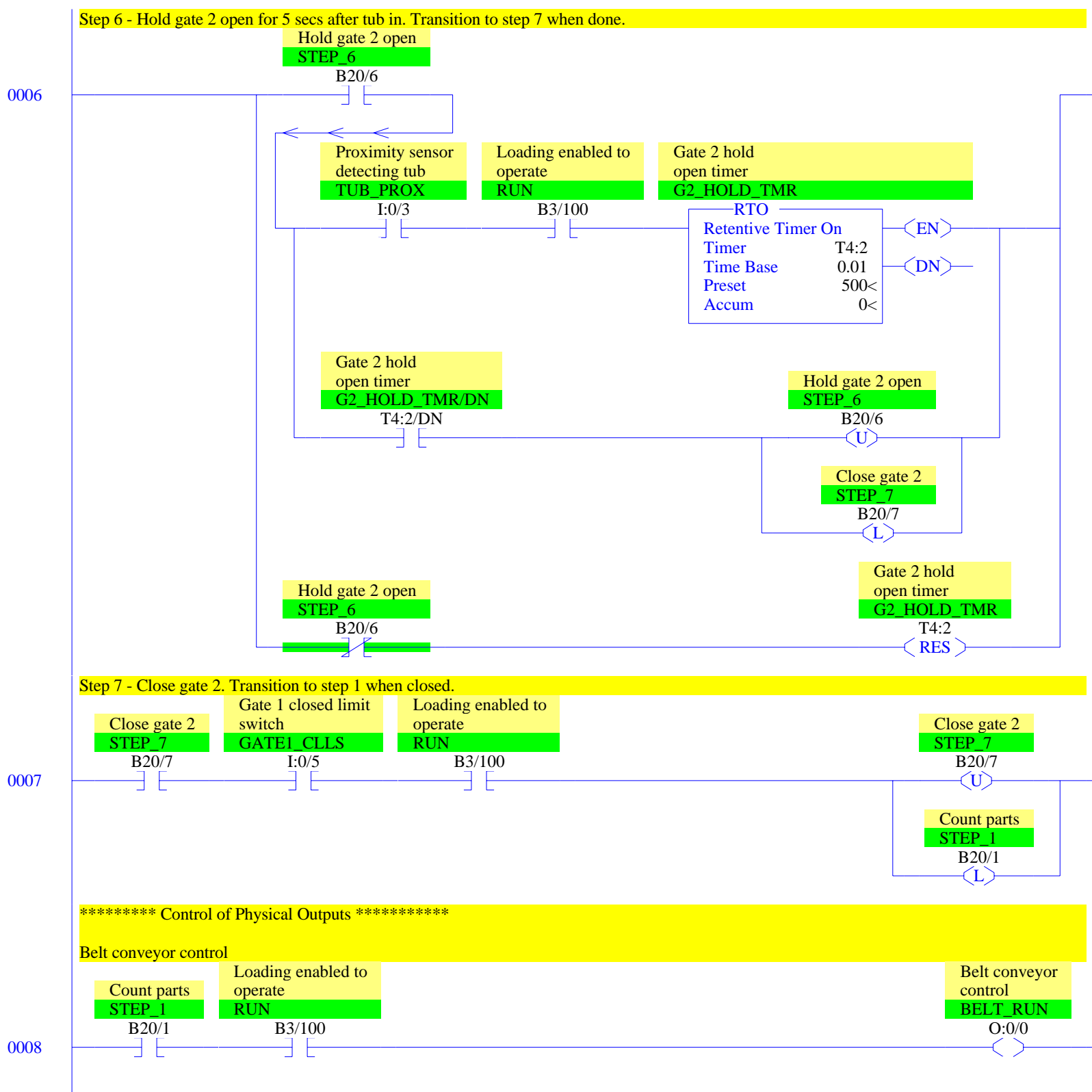
B3/100

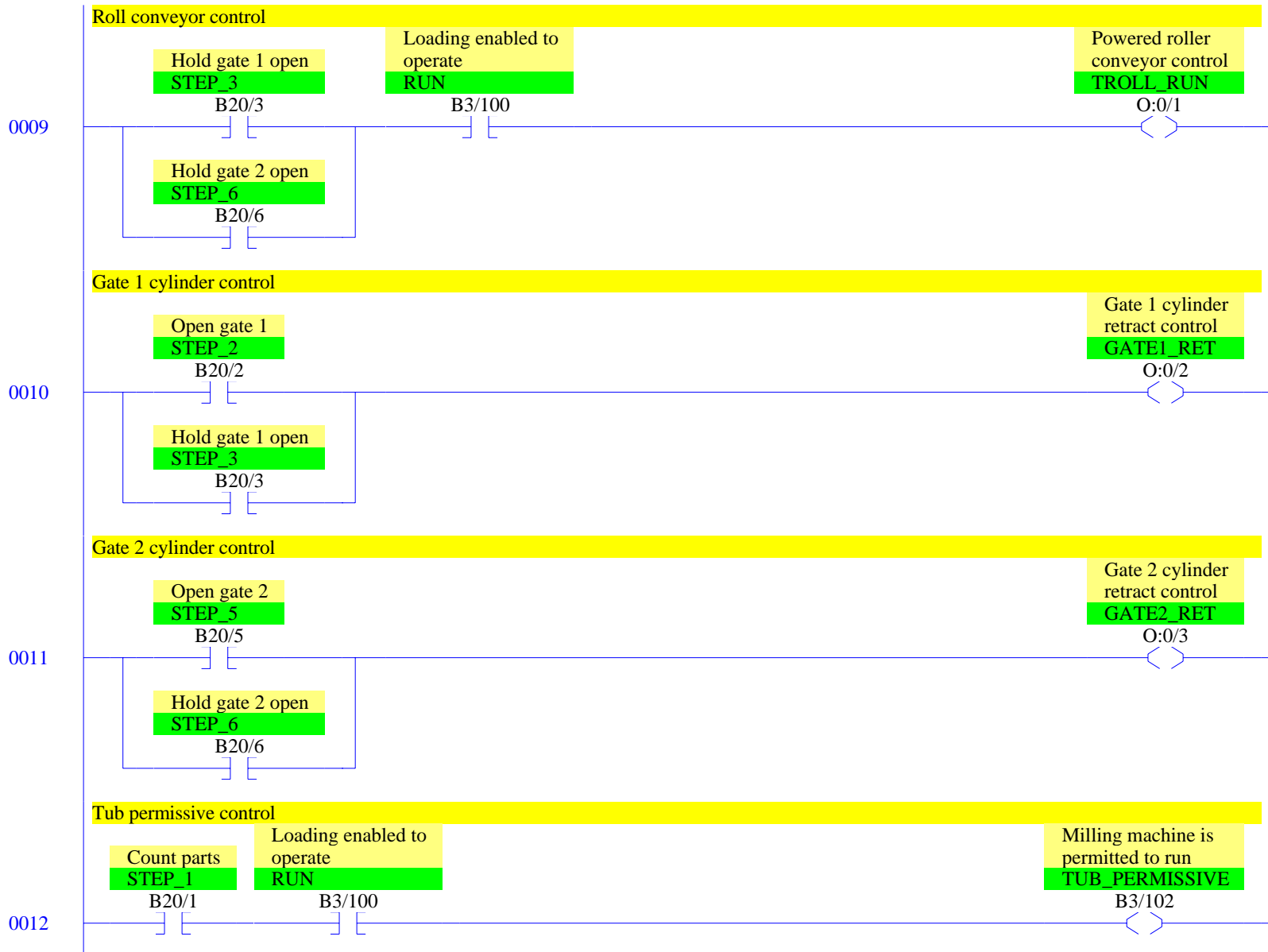
Open gate 2
STEP_5

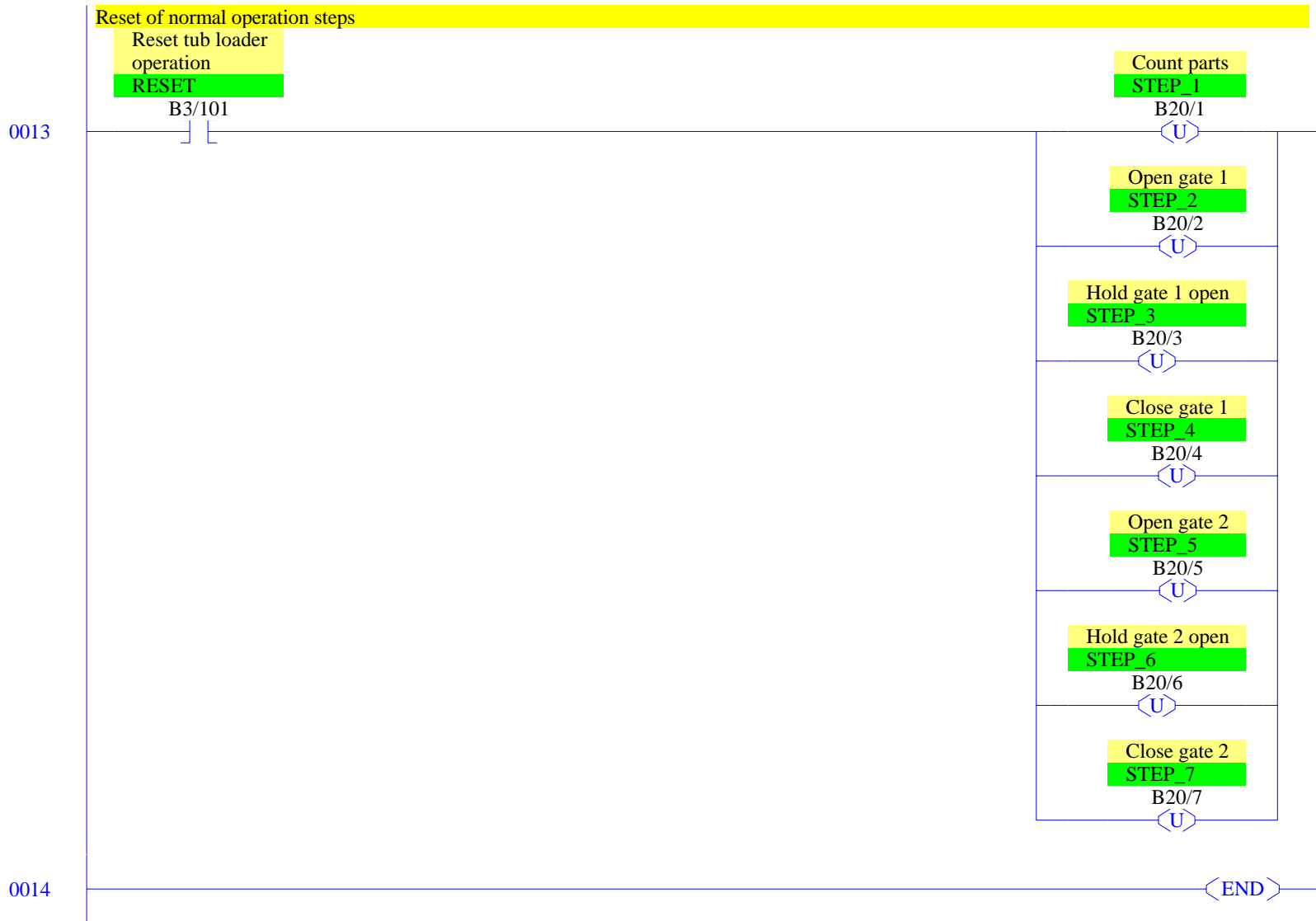
B20/5

Hold gate 2 open
STEP_6

B20/6







RSLogix 500 Cross Reference Report - Sorted by Address

O:0/0	- {BELT_RUN} Belt conveyor control OTE - File #2 - 8
O:0/1	- {TROLL_RUN} Powered roller conveyor control OTE - File #2 - 9
O:0/2	- {GATE1_RET} Gate 1 cylinder retract control OTE - File #2 - 10
O:0/3	- {GATE2_RET} Gate 2 cylinder retract control OTE - File #2 - 11
I:0/2	- {PE272} Photoelectric sensor detecting part XIC - File #2 - 1
I:0/3	- {TUB_PROX} Proximity sensor detecting tub XIO - File #2 - 3 XIC - File #2 - 6
I:0/4	- {GATE1_OPLS} Gate 1 open limit switch XIC - File #2 - 2
I:0/5	- {GATE1_CLLS} Gate 1 closed limit switch XIC - File #2 - 4, 7
I:0/6	- {GATE2_OPLS} Gate 2 open limit switch XIC - File #2 - 5
B3/100	- {RUN} Loading enabled to operate XIC - File #2 - 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 12
B3/101	- {RESET} Reset tub loader operation XIC - File #2 - 13
B3/102	- {TUB_PERMISSIVE} Milling machine is permitted to run OTE - File #2 - 12
T4:1	- {G1_HOLD_TMR} Gate 1 hold open timer RTO - File #2 - 3 RES - File #2 - 3
T4:1/DN	- XIC - File #2 - 3
T4:2	- {G2_HOLD_TMR} Gate 2 hold open timer RTO - File #2 - 6 RES - File #2 - 6
T4:2/DN	- XIC - File #2 - 6
C5:1	- {PART_CTR} Count parts CTU - File #2 - 1 RES - File #2 - 1
C5:1/DN	- XIC - File #2 - 1
B20/1	- {STEP_1} Count parts OTL - File #2 - 0, 7 OTU - File #2 - 1, 13 XIC - File #2 - 1, 8, 12 XIO - File #2 - 0, 1
B20/2	- {STEP_2} Open gate 1 OTL - File #2 - 1 OTU - File #2 - 2, 13 XIC - File #2 - 2, 10 XIO - File #2 - 0
B20/3	- {STEP_3} Hold gate 1 open OTL - File #2 - 2 OTU - File #2 - 3, 13 XIC - File #2 - 3, 9, 10 XIO - File #2 - 0, 3
B20/4	- {STEP_4} Close gate 1 OTL - File #2 - 3 OTU - File #2 - 4, 13 XIC - File #2 - 4 XIO - File #2 - 0
B20/5	- {STEP_5} Open gate 2 OTL - File #2 - 4 OTU - File #2 - 5, 13 XIC - File #2 - 5, 11 XIO - File #2 - 0
B20/6	- {STEP_6} Hold gate 2 open OTL - File #2 - 5 OTU - File #2 - 6, 13 XIC - File #2 - 6, 9, 11

RSLogix 500 Cross Reference Report - Sorted by Address

B20/7	XIO - File #2 - 0, 6
	- {STEP_7} Close gate 2
	OTL - File #2 - 6
	OTU - File #2 - 7, 13
	XIC - File #2 - 7
	XIO - File #2 - 0