

## Width Check Station Control

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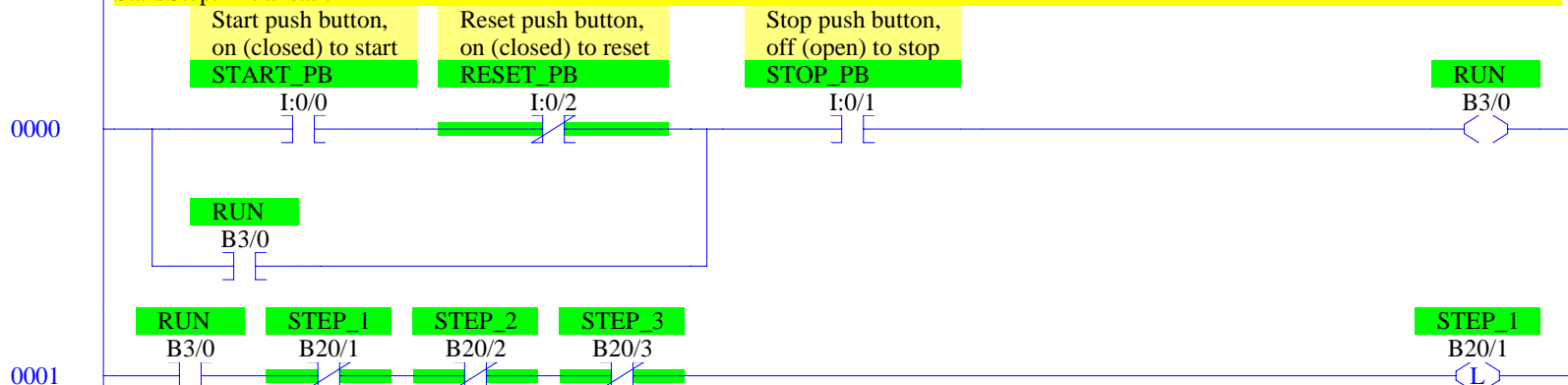
Additional internal memory:

Symbol	Address	
RUN	B3/0	On while station running
STEP_1 to STEP_3	B20/1 to B20/3	Step-in-progress bits
CLAMP_TMR	T4:1	Delay for measurement to stabilize
RELEASE_TMR	T4:2	Delay for allow part to move out
PART_CTR	C5:1	Counts parts

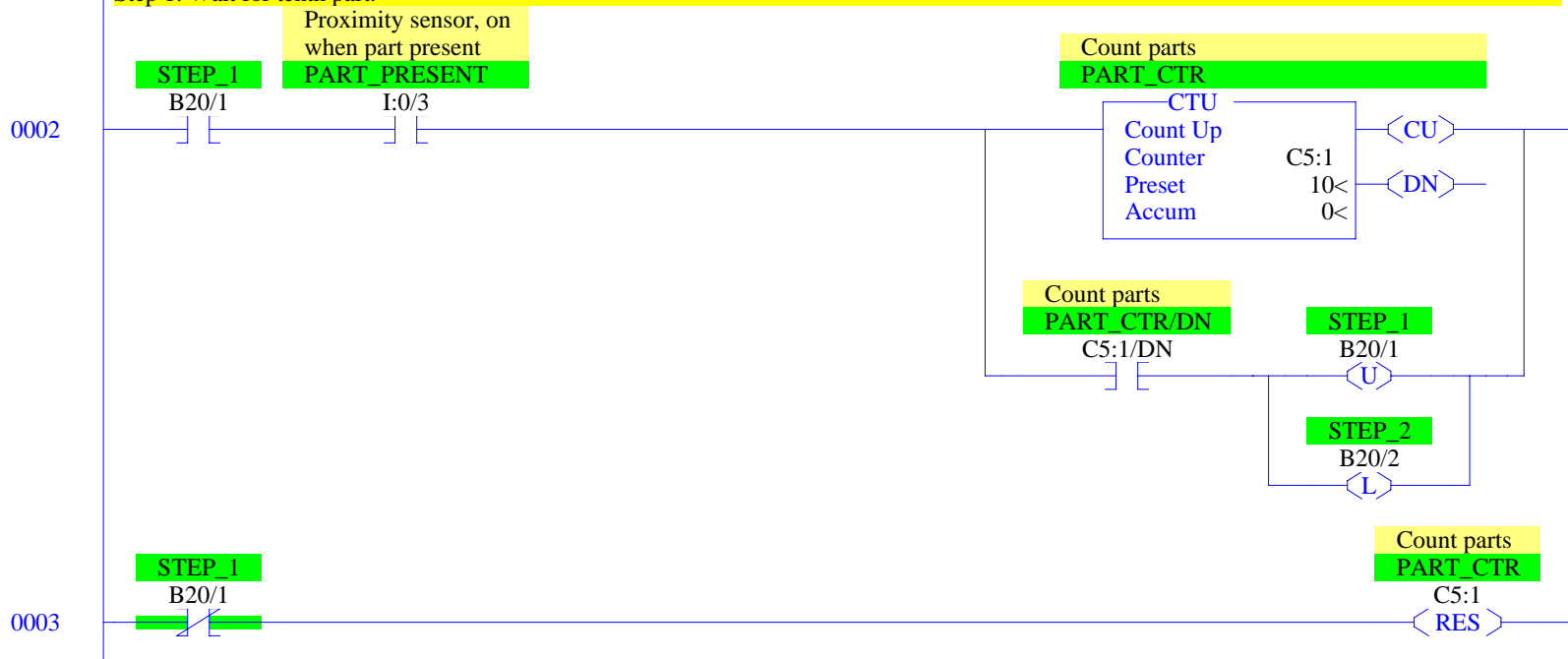
Conversion formula

$$\text{WIDTH\_VAL} = ((\text{WIDTH\_MEAS} - 6241) / 24965) * (70)$$

Start/Stop. Initial start



Step 1. Wait for tenth part.



Step 2. Wait 2 sec for width to stabilize. Convert width on transition.

0004

STEP\_2

B20/2

Wait for width to  
stabilize, 2 sec

CLAMP\_TMR

TON  
Timer On Delay  
Timer T4:1  
Time Base 0.01  
Preset 200<  
Accum 0<

EN

DN

Wait for width to  
stabilize, 2 sec

CLAMP\_TMR/DN

T4:1/DN

RUN

B3/0

STEP\_2

B20/2

STEP\_3

B20/3

Wait for width to  
stabilize, 2 sec

CLAMP\_TMR/DN

T4:1/DN

0005

SUB  
Subtract

Source A I:1.0  
0<

Source B 6241.0  
6241.0<

Dest F8:0  
0.0<

DIV  
Divide

Source A F8:0  
0.0<

Source B 24965.0  
24965.0<

Dest F8:0  
0.0<

Width of current (or  
last) part, in mm (a  
REAL)

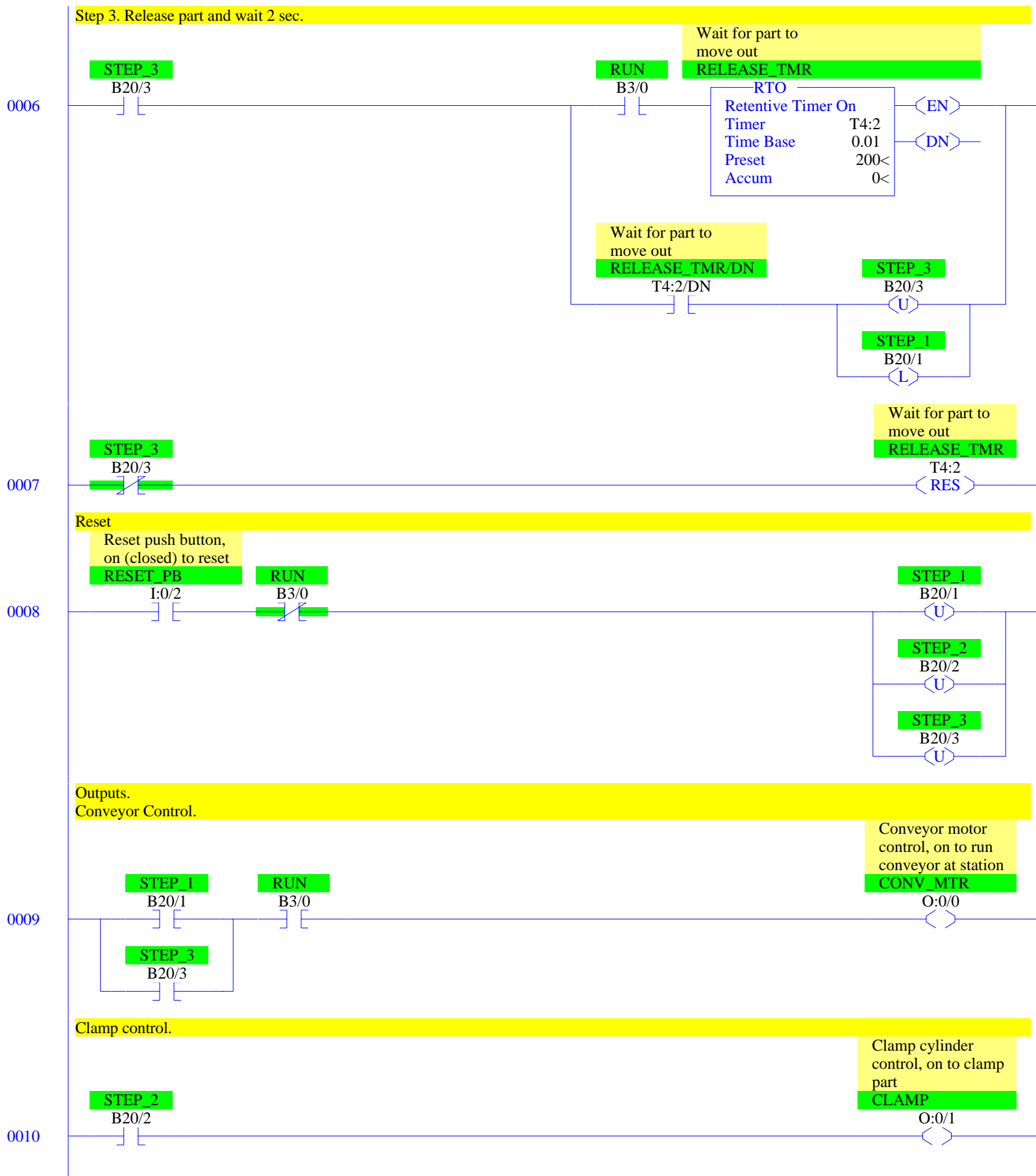
WIDTH\_VAL

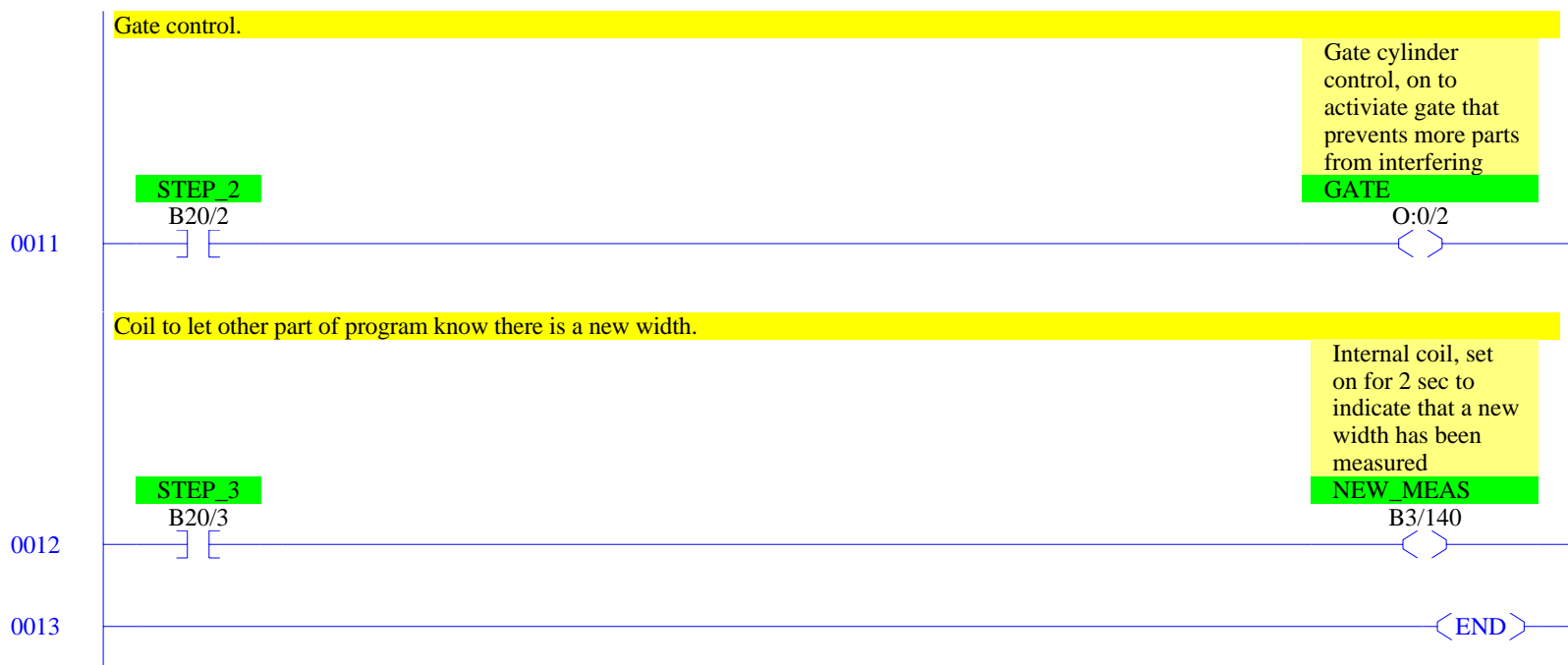
MUL  
Multiply

Source A F8:0  
0.0<

Source B 70.0  
70.0<

Dest F12:0  
0.0<





## RSLogix 500 Cross Reference Report - Sorted by Address

O:0/0	- {CONV_MTR} Conveyor motor control, on to run conveyor at station OTE - File #2 - 9
O:0/1	- {CLAMP} Clamp cylinder control, on to clamp part OTE - File #2 - 10
O:0/2	- {GATE} Gate cylinder control, on to activate gate that prevents more parts from entering OTE - File #2 - 11
I:0/0	- {START_PB} Start push button, on (closed) to start XIC - File #2 - 0
I:0/1	- {STOP_PB} Stop push button, off (open) to stop XIC - File #2 - 0
I:0/2	- {RESET_PB} Reset push button, on (closed) to reset XIC - File #2 - 8 XIO - File #2 - 0
I:0/3	- {PART_PRESENT} Proximity sensor, on when part present XIC - File #2 - 2
I:1.0	- SUB - File #2 - 5
B3/0	- {RUN} OTE - File #2 - 0 XIC - File #2 - 0, 1, 4, 6, 9 XIO - File #2 - 8
B3/140	- {NEW_MEAS} Internal coil, set on for 2 sec to indicate that a new width has been measured OTE - File #2 - 12
T4:1	- {CLAMP_TMR} Wait for width to stabilize, 2 sec TON - File #2 - 4
T4:1/DN	- XIC - File #2 - 4, 5
T4:2	- {RELEASE_TMR} Wait for part to move out RTO - File #2 - 6 RES - File #2 - 7
T4:2/DN	- XIC - File #2 - 6
C5:1	- {PART_CTR} Count parts CTU - File #2 - 2 RES - File #2 - 3
C5:1/DN	- XIC - File #2 - 2
F8:0	- SUB - File #2 - 5 MUL - File #2 - 5 DIV - File #2 - 5
F12:0	- {WIDTH_VAL} Width of current (or last) part, in mm (a REAL) MUL - File #2 - 5
B20/1	- {STEP_1} OTL - File #2 - 1, 6 OTU - File #2 - 2, 8 XIC - File #2 - 2, 9 XIO - File #2 - 1, 3
B20/2	- {STEP_2} OTL - File #2 - 2 OTU - File #2 - 4, 8 XIC - File #2 - 4, 10, 11 XIO - File #2 - 1
B20/3	- {STEP_3} OTL - File #2 - 4 OTU - File #2 - 6, 8 XIC - File #2 - 6, 9, 12 XIO - File #2 - 1, 7