Totally Integrated	
Automation Portal	

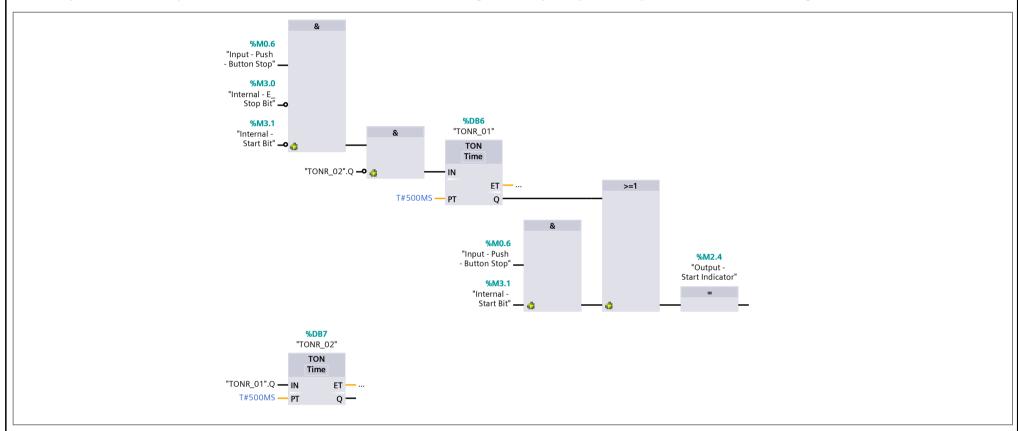
FrontPanel_Lights [OB126]

FrontPanel_Lig	hts Properties						
General							
Name	FrontPanel_Lights	Number	126	Туре	ОВ	Language	FBD
Numbering	Automatic						
Information							
Title	"Main Program Sweep (Cy- cle)"	Author		Comment	FrontPanel_Light_Routine Function Block Language	Family	
Version	0.1	User-defined ID					

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

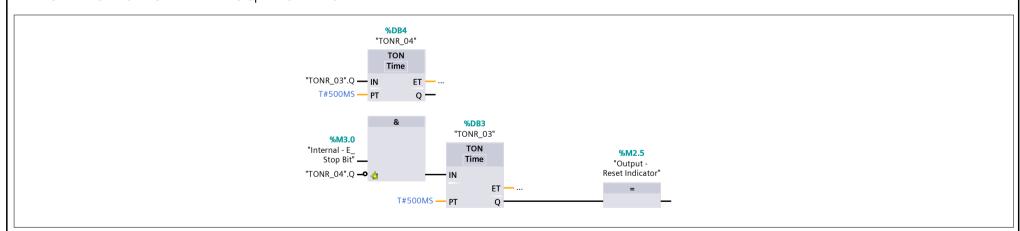
Network 1: Panel - Start Button Indicator

When Stop button is on, Stop Bit and Start Bit is not enabled. It will start blinking which require operator to press the start button. The light will turn solid.



Network 2: Panel - Reset Indicator

The reset button indicator will blink if stop bit is latched.



Automation	rated Portal							
nput_Map	pping [OB123]							
nput_Mapping General	Properties							
Name Numbering	Input_Mapping Automatic	Number	123		Туре	ОВ	Language	LAD
nformation Title	"Main Program Sweep (Cy-	Author			Comment	Input_Mapping_Routine	Family	
/ersion	cle)" 0.1	User-define	ed ID					
ame		Data ty	pe	Default value		Comment		
r Input Initial_Cal	<u> </u>	Bool				Initial call of this OB		
Remanen		Bool				=True, if remanent data	are available	
Temp Constant								
etwork 1: \	Workpiece Enter Conve	eyor #1						
	·							
			%I0.0 "Workpiece			%M0.0 "Input - Sensor		
			Enter Conveyor #1"			Conveyor #1 Start"		
			→ 			()		
		l						
etwork 2: V	Workpiece in Middle of	Conveyor	#1					
			W ID 4			%M0.1		
			%I0.1 "Wrokpiece in Middle of			"Input - Sensor Conveyor #1		
			Conveyor #1"			Stopper"		
letwork 3 · 1	No Workpiece at End of	f Conveyor	#1					
ietwork 3. i	NO WOIKPIECE AT LIIU O	Conveyor	π ι					
		1						
			%10.2			%M0.2 "Input -		
			"No Workpiece at End of Conveyor #1"			Sensor Conveyor #1 End"		
		-	— Η			· · · · · · · · · · · · · · · · · · ·		
letwork 4: [Distance Sensor							
						%M0.3		
						%M0.3 "Input - Sensor Conveyor #1		
			%I0.3 'Distance Sensor"			"Input - Sensor		
						"Input - Sensor Conveyor #1 Distance		
						"Input - Sensor Conveyor #1 Distance Sensor"		
etwork 5: V	Workpiece Enter Conve					"Input - Sensor Conveyor #1 Distance Sensor"		
etwork 5: V	Workpiece Enter Conve					"Input - Sensor Conveyor #1 Distance Sensor"		
etwork 5: V	Workpiece Enter Conve		'Distance Sensor"			"Input - Sensor Conveyor #1 Distance Sensor" ()		
etwork 5: \	Norkpiece Enter Conve	eyor #2	'Distance Sensor"			"Input - Sensor Conveyor #1 Distance Sensor" () *M0.4 "Input - Sensor		
etwork 5: \	Norkpiece Enter Conve	eyor #2	'Distance Sensor"			"Input - Sensor Conveyor #1 Distance Sensor" ()		
etwork 5: \	Workpiece Enter Conve	eyor #2	"Workpiece Enter Conveyor			"Input - Sensor Conveyor #1 Distance Sensor"		
		eyor #2	"Workpiece Enter Conveyor			"Input - Sensor Conveyor #1 Distance Sensor"		
	Workpiece Enter Conve	eyor #2	"Workpiece Enter Conveyor			"Input - Sensor Conveyor #1 Distance Sensor"		
		eyor #2	"Workpiece Enter Conveyor			"Input - Sensor Conveyor #1 Distance Sensor"		
		eyor #2	"Workpiece Enter Conveyor #2"			"Input - Sensor Conveyor #1 Distance Sensor" () *MO.4 "Input - Sensor Conveyor #2 Enter" ()		
		eyor #2	"Workpiece Enter Conveyor			"Input - Sensor Conveyor #1 Distance Sensor" *MO.4 "Input - Sensor Conveyor #2 Enter" ()		
		eyor #2	%IO.4 "Workpiece Enter Conveyor # 2"			"Input - Sensor Conveyor #1 Distance Sensor" *MO.4 "Input - Sensor Conveyor #2 Enter" ()		

Totally Integrated Automation Portal				
Network 7: Push-Butto	on Stop			•
		%IO.6 "Push-Button Stop"	%M0.6 "Input - Push - Button Stop"	
Network 8: Switch-Au	to/Manual			
		%l0.7 "Switch- Auto/ Manual"	%M0.7 "Input - Switch - Auto/ Manual"	
Network 9: Push-Butto	on Reset			
		%I1.0 "Push-Button Reset"	%M1.0 "Input - Push - Button - Reset"	
	<u>'</u>			

|--|

Main [OB1]

Main Propertie	s						
General							
Name	Main	Number	1	Туре	ОВ	Language	LAD
Numbering	Automatic				•		
Information							
Title	"Main Program Sweep (Cy- cle)"	Author		Comment	Separating Station Hangsihak Sin Dalton Miyabara	Family	
Version	0.1	User-defined ID					

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1: Conveyor #1 Belt Motor

Conveyor #1 Forward Direction. It will move if workpiece enter conveyor, after scanned, passed conveyor #1 or #2 end sensor

```
%M0.4
                                                                                                                                                "Input -
Sensor
                                                                                                                                                                              %M2.0
  %M3.1
                                                                                                                                                                         "Output -
Conveyor #1
Forward"
                                                                                                                                            Conveyor #2
Enter"
                         Conveyor #1
Start"
"Internal -
Start Bit"
                                                           %M0.1
                                                                                                                     %M0.2
                                                      "Input -
Sensor
Conveyor #1
Stopper"
                                                                                                                     "Input -
                                                                                     %M3.4
"Internal -
                         "Output -
Conveyor #1
Forward"
                                                                                                                    Sensor
                                                                                    End Bit #1"
                        "Timer_Retract".Q
                        "Timer_End 1".Q
```

Network 2: Conveyor #2 Internal End Bit

```
*M3.4

"Internal -
End Bit #1"

( )
```

Network 3: Conveyor #2 Timer

Allow conveyor #2 to run for an additional 2 seconds after Workpiece has passed the diffuse sensor

```
%M3.1 Sensor "Timer_End 1"

"Internal - Conveyor #1 End"

Start Bit" End"

Twee Time

Twee Time

Trace

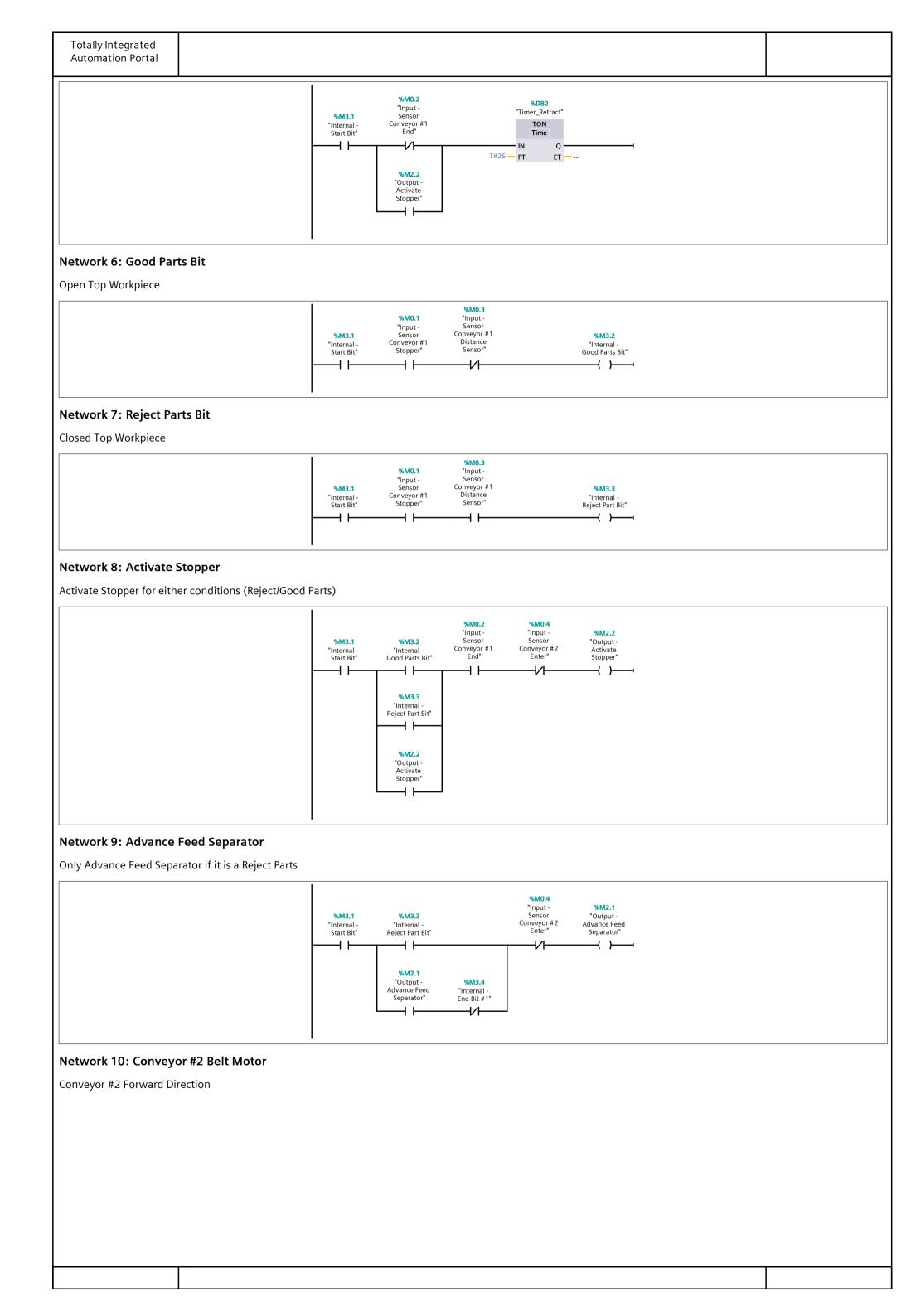
Tra
```

Network 4: Conveyor #1 Timer

Allow conveyor #1 to run for an additional 2 seconds after Workpiece has passed the diffuse sensor

Network 5: Retract Stopper Motor

Allow Motor to move after it has been scan/measure by diffuse and distance sensor



Totally Integrated **Automation Portal %M2.3**"Output Conveyor #2
Forward" **%M2.1**"Output Advance Feed
Separator" **%M3.1** "Internal -Start Bit" **%M2.3**"Output Conveyor #2
Forward" **%M2.2**"Output - Activate Stopper" "Timer_End".Q

Totally Integr Automation F	ated								
Output_Ma	pping [OB124]]							
Output_Mappin	g Properties								
General Name	Output_Mapping	N	lumber	124		Туре	ОВ	Language	LAD
Numbering Information	Automatic								
Title	"Main Program Swee cle)"		uthor			Comment	Output_Mapping_Routine	Family	
Version Name	0.1	U	Jser-defined ID Data type		Default value		Comment		
▼ Input					Default value				
Initial_Call			Bool Bool				Initial call of this OB =True, if remanent data a	ire available	
Temp Constant									
	onveyor #1 Forw	ard							
	,								
			%	M2.0					
			"O Conv Fo	utput - reyor #1 rward"			%Q0.0 "Conveyor #1 Forward"		
				I			()—		
Network 2. A	dvance Feed Sep	arator	ı						
NetWork 2. 7									
			"О	M2.1 utput - nce Feed			%Q0.1 "Advance Feed		
			Sep	arator"			Separator"		
Network 3: A	ctivate Stopper								
			"О	M2.2 utput -			%Q0.2		
			St	tivate opper" 			"Activate Stopper"		
Network 4:									
			"О	M2.3 utput - reyor #2			%Q0.3 "Conveyor #2		
			Fo	rward"			Forward"		
Network 5: P	anel Start Indicat	or							
				M2.4			%Q0.4		
				utput - Indicator"			"Panel Start Indicator"		
Network 6: P	anel Reset Indica	tor							
			0/	M2.5			%Q0.5		
			"O Reset	utput - Indicator"			"Panel Reset Indicator"		
				l					
			<u> </u>						

art_Mode Coll 25 If _ Boat Properties								
me start_Mode Number 125 Type 08 Language AD mbering Automatic Type Main Program Sveep (Cy Cy Cy Cy Cy Cy Cy Cy								
mbering Mutonatic ormation let (Main Program Sweep (Cycles) Author (cle) Author (cl		perties						
Input Book Start Mode Routine Family Start Mode Routine Fa			Number 12	25	Туре	ОВ	Language	LAD
ctwork 2: Stop button Pressed during operation Comment Commen	ormation		Author		Comment	Start Mode Poutine	Family	
Data type Default value Comment Input Initial_Call Bool Initial call of this OB Remanence Bool True, if remanent data are available Temp Constant Particle Start/Stop Circuit Particle Start Start/Stop Circuit Particle Start Star		cle)"			Comment	Start Wode Routine	railiny	
Initial_call Bool Initial_call of this OB Remanence Bool True, if remanent data are available Temp Constant twork 1: Start/Stop Circuit Types Oath Proper Start Br		0.1		Dofault value		Commont		
Remanence Bool			Data type	Delault value		Comment		
Temp Constant Stwork 1: Start/Stop Circuit Swork 3: Start Stop button Pressed during operation Stwork 2: Stop button Pressed during operation Swork 3: Reset latching bit y must be in Manual mode, Reset is pressed to reset the bit Swork 3: Reset latching bit y must be in Manual mode, Reset is pressed to reset the bit							ta are available	
Stwork 1: Start/Stop Circuit MAD 6 MAD 5 MAD 5 MAD 1 MAD 1	Temp					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
**MO.6 **MO.5 **MA3.0 **MA3.1 **Imput. Push **Shart Super								
twork 2: Stop button Pressed during operation **MA.3.0	twork 1: S	start/Stop Circuit						
twork 2: Stop button Pressed during operation MAG			1					
**MA3.1 **Internal - Start Bit* **MA3.0 **Input - Pech - Button Stop* **Stop Bit* **Stop Bit* **MA3.0 **Input - Pech - Button Stop* **Stop Bit* **MA3.0 **Input - Pech - Button Stop* **Stop Bit* **MA3.0 **Input - Pech - Button Stop* **MA3.0 **Input - Pech - Button Stop*			%M0.6	%M0.5 "Input -	%M3.0			
*MM.6 *Input - Push *Stop button Bressed to reset the bit *MM.6 *Input - Push *Inpu			- Button St	op" Start"	Stop Bit"			
etwork 2: Stop button Pressed during operation MAD 6				%M3.1				
etwork 2: Stop button Pressed during operation **M0.6 **Input - Push - Button Stop** **Stop Bit** **Stop Bit** **Stop Bit** **Input - Push - Button - Input - Push - Butt				"Internal - Start Bit"				
M0.6 "Input - Push - Button Stop *Stop Bit* (s) *Input - Push - Button Stop* *Stop Bit* *Stop Bit* *Stop Bit* *Input - Push - Button Stop* *M0.6 "Input - Push - Button Stop* *M1.0 *M0.6 "Input - Push - Button - "Input - Push - Button - "Internal - E. Stop Bit* *M1.0 *M1.0 *M1.0 *M1.0 *M1.0 *M1.0 *M1.0 *Input - Push - Button - "Input - Push - Button - "Internal - E. Stop Bit* *M3.0 *Input - Push - Stop Bit*								
M0.6 "Input - Push - Button Stop *Stop Bit* (s) *Input - Push - Button Stop* *Stop Bit* *Stop Bit* *Stop Bit* *Input - Push - Button Stop* *M0.6 "Input - Push - Button Stop* *M1.0 *M0.6 "Input - Push - Button - "Input - Push - Button - "Internal - E. Stop Bit* *M1.0 *M1.0 *M1.0 *M1.0 *M1.0 *M1.0 *M1.0 *Input - Push - Button - "Input - Push - Button - "Internal - E. Stop Bit* *M3.0 *Input - Push - Stop Bit*			l					
"Input - Push - Button Stop" **M0.6	twork 2: S	Stop button Pressed dur	ing operation					
twork 3: Reset latching bit must be in Manual mode, Reset is pressed to reset the bit Manual mode			<u> </u>					
etwork 3: Reset latching bit y must be in Manual mode, Reset is pressed to reset the bit *M0.6 "Input - "Input - Push "Input - Push - Button Stop" Manual" Reset" *M3.0 "Internal - E_ Stop Bit"			"Input - Pu	sh		"Internal - E		
y must be in Manual mode, Reset is pressed to reset the bit MM0.6				ор				
y must be in Manual mode, Reset is pressed to reset the bit								
%M0.7 %M1.0 %M0.6 "Input - "Input - Push "M3.0 "Input - Push Switch - Auto/ - Button - "Internal - E_ - Button Stop" Manual" Reset" Stop Bit"	twork 3: R	Reset latching bit						
%M0.6 "Input - Push %M3.0 "Input - Push Switch - Auto/ - Button - "Internal - E_ - Button Stop" Manual" Reset" Stop Bit"	/ must be in	Manual mode, Reset is pre	ssed to reset the bit					
"Input - Push Switch - Auto/ - Button - "Internal - E_ - Button Stop" Manual" Reset" Stop Bit"				%M0.7	%M1.0			
			"Input - Pu	"Input - "I sh Switch - Auto/	Input - Push - Button -	"Internal - E_		
				- 1				