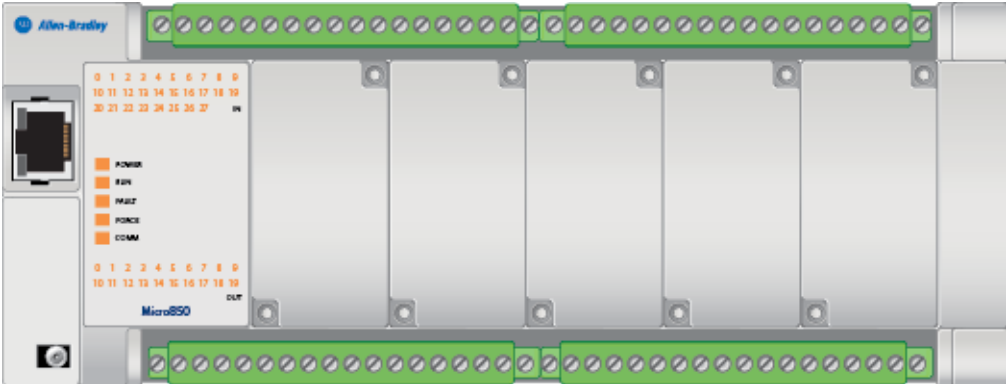


Micro850

Device Configuration

Controller

Overview

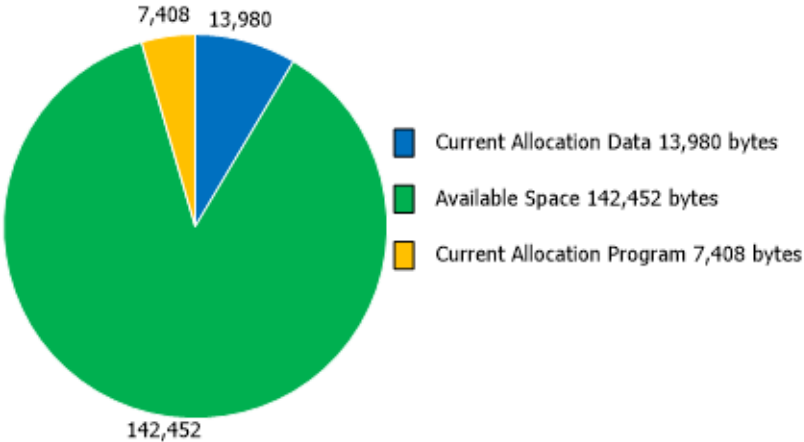


General

Name	Description	Vendor Name	Catalog ID	Controller Project Version	Download Source Code
Micro850		Allen-Bradley	2080-LC50-48QWB-SIM	12	Yes

Memory

Memory Statistics



Name	Allocated	Used	Free
Embedded Project	348,160 bytes	51,145 bytes	297,015 bytes
Temporary Variables	8,452 bytes	260 bytes	8,192 bytes

Startup/Faults

Mode Behavior	Fault Override
Retain previous power-down mode	Do not clear fault

Embedded I/O

Input Filter

Inputs	0-1	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-23	24-27
Input Filter	Default	Default	Default	Default	Default	Default	Default	Default	Default	Default

Input Latch and EII Edge

Input	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
-------	---	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----

# Document Generator

<b>Enable Latch</b>	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
<b>Latch Edge</b>	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling
<b>Edge</b>	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling

## Global Variables

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
_IO_EM_DO_00	DO_Butter_Dispenser	BOOL				Dispenses on high pulses	VarDirectlyRepresented	
_IO_EM_DO_01	DO_Sugar_Dispenser	BOOL				Dispenses while high	VarDirectlyRepresented	
_IO_EM_DO_02	DO_Mixer	BOOL				Dispenses drops while high	VarDirectlyRepresented	
_IO_EM_DO_03	DO_Egg_Dispenser	BOOL				Dispenses on high pulses	VarDirectlyRepresented	
_IO_EM_DO_04	DO_Vanilla_Dispenser	BOOL					VarDirectlyRepresented	
_IO_EM_DO_05	DO_Flour_Dispenser	BOOL					VarDirectlyRepresented	
_IO_EM_DO_06	DO_Salt_Dispenser	BOOL					VarDirectlyRepresented	
_IO_EM_DO_07	DO_Soda_Dispenser	BOOL					VarDirectlyRepresented	
_IO_EM_DO_08	DO_Ball_Roller	BOOL					VarDirectlyRepresented	
_IO_EM_DO_09	DO_Bowl_Cleaner	BOOL					VarDirectlyRepresented	
_IO_EM_DO_10	DO_Conveyor_Fwd	BOOL					VarDirectlyRepresented	
_IO_EM_DO_11	DO_Conveyor_Rev	BOOL					VarDirectlyRepresented	
_IO_EM_DO_12	DO_Oven	BOOL					VarDirectlyRepresented	
_IO_EM_DO_13	DO_Door	BOOL				Door opens when true, closes when false	VarDirectlyRepresented	
_IO_EM_DO_14	DO_Piston	BOOL				Pushes cookies out the door to user on high pulse	VarDirectlyRepresented	
_IO_EM_DO_15		BOOL					VarDirectlyRepresented	
_IO_EM_DO_16		BOOL					VarDirectlyRepresented	
_IO_EM_DO_17	DO_Ready	BOOL					VarDirectlyRepresented	
_IO_EM_DO_18	DO_Warning	BOOL					VarDirectlyRepresented	

# Document Generator

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
_IO_EM_DO_19	DO_Error	BOOL					VarDirectlyRepresented	
_IO_EM_DI_00	DI_Start_PB	BOOL					VarDirectlyRepresented	
_IO_EM_DI_01	DI_Stop_PB	BOOL					VarDirectlyRepresented	
_IO_EM_DI_02	DI_Restocked	BOOL				Pressed by user when restocked ingredients to clear errors	VarDirectlyRepresented	
_IO_EM_DI_03	DI_Butter_PE	BOOL				Photoelectric sensor at bottom of butter stack, true when stack is empty	VarDirectlyRepresented	
_IO_EM_DI_04		BOOL					VarDirectlyRepresented	
_IO_EM_DI_05		BOOL					VarDirectlyRepresented	
_IO_EM_DI_06		BOOL					VarDirectlyRepresented	
_IO_EM_DI_07		BOOL					VarDirectlyRepresented	
_IO_EM_DI_08		BOOL					VarDirectlyRepresented	
_IO_EM_DI_09		BOOL					VarDirectlyRepresented	
_IO_EM_DI_10		BOOL					VarDirectlyRepresented	
_IO_EM_DI_11		BOOL					VarDirectlyRepresented	
_IO_EM_DI_12		BOOL					VarDirectlyRepresented	
_IO_EM_DI_13		BOOL					VarDirectlyRepresented	
_IO_EM_DI_14		BOOL					VarDirectlyRepresented	
_IO_EM_DI_15		BOOL					VarDirectlyRepresented	
_IO_EM_DI_16		BOOL					VarDirectlyRepresented	
_IO_EM_DI_17		BOOL					VarDirectlyRepresented	
_IO_EM_DI_18		BOOL					VarDirectlyRepresented	
_IO_EM_DI_19		BOOL					VarDirectlyRepresented	
_IO_EM_DI_20		BOOL					VarDirectlyRepresented	
_IO_EM_DI_21		BOOL					VarDirectlyRepresented	
_IO_EM_DI_22		BOOL					VarDirectlyRepresented	
_IO_EM_DI_23		BOOL					VarDirectlyRepresented	
_IO_EM_DI_24		BOOL					VarDirectlyRepresented	
_IO_EM_DI_25		BOOL					VarDirectlyRepresented	
_IO_EM_DI_26		BOOL					VarDirectlyRepresented	

# Document Generator

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
_IO_EM_DI_27	DI_Reset_PB	BOOL					VarDirectlyRepresented	
Flour_Tank_Capacity		REAL		0.0			Var	
Flour_Tank_Full		BOOL					Var	
Flour_Tank_Minimum		REAL					Var	
Flour_Tank_Low		BOOL					Var	
Running		BOOL					Var	
Flour_Needed		REAL					Var	
Flour_Weight		REAL					Var	
Process_Index		INT		0			Var	
Next_Step		BOOL					Var	
Initialize		BOOL					Var	
DI_Bowl_Weight		REAL				Simulated weight [g] measurement	Var	
Recipe_Flour		REAL		180.0		Weight [g]	Var	
Recipe_Eggs		INT		2		Number of eggs	Var	
Tare_Weight		REAL				Weight [g]	Var	
Relative_Weight		REAL				(DI_Bowl_Weight) - (Tare_Weight) [g]	Var	
Tare		BOOL					Var	
Recipe_Sugar		REAL		100.0		Weight [g]	Var	
Butter_Weight		REAL					Var	
Sugar_Dispensed		BOOL					Var	
Butter_Dispensed		BOOL					Var	
Vanilla_Dispensed		BOOL					Var	
Recipe_Vanilla		INT		70		Number of drops	Var	
Dispense_Butter		BOOL					Var	
Dispense_Sugar		BOOL					Var	
DI_Vanilla_Drop		BOOL				Simulated output from vanilla dispenser - high pulse for every drop dispensed	Var	
Clean_Bowl		BOOL					Var	

# Document Generator

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
Cleaning_Complete		BOOL					Var	
C_Bowl_Weight		REAL					Var	
C_Butter_Weight		REAL					Var	
IDX_Butter		INT					Var	
IDX_Sugar		INT					Var	
IDX_Clean		INT					Var	
IDX_End		INT					Var	
IDX_Mix_1		INT					Var	
Mix_Complete		BOOL					Var	
__SYSVA_CYCLECNT		DINT				Cycle counter	VarGlobal	
__SYSVA_CYCLEDATE		TIME				Timestamp of the beginning of the cycle in milliseconds (ms)	VarGlobal	
__SYSVA_KVBPERR		BOOL				Kernel variable binding producing error (production error)	VarGlobal	
__SYSVA_KVBCERR		BOOL				Kernel variable binding consuming error (consumption error)	VarGlobal	
__SYSVA_RESNAME		STRING				Resource name (max length=255)	VarGlobal	
__SYSVA_SCANCNT		DINT				Input scan counter	VarGlobal	
__SYSVA_TCYCYCTIME		TIME				Programmed cycle time	VarGlobal	
__SYSVA_TCYCURRENT		TIME				Current cycle time	VarGlobal	
__SYSVA_TCYMAXIMUM		TIME				Maximum cycle time since last start	VarGlobal	
__SYSVA_TCYOVERFLOW		DINT				Number of cycle overflows	VarGlobal	
__SYSVA_RESMODE		SINT				Resource execution mode	VarGlobal	
__SYSVA_CCEXEC		BOOL				Execute one cycle when application is in cycle to cycle mode	VarGlobal	
__SYSVA_REMOTE		BOOL		FALSE		Remote status	VarGlobal	

# Document Generator

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
__SYSVA_SUSPEND_ID		UINT		0		Last Suspend ID	VarGlobal	
__SYSVA_TCYWDG		UDINT		2000		Software Watchdog	VarGlobal	
__SYSVA_MAJ_ERR_HALT		BOOL		FALSE		Major Error Halted status	VarGlobal	
__SYSVA_ABORT_CYCLE		BOOL		FALSE		Aborting Cycle	VarGlobal	
__SYSVA_FIRST_SCAN		BOOL		TRUE		First scan bit	VarGlobal	
__SYSVA_USER_DATA_LOST		BOOL		FALSE		User data lost	VarGlobal	
__SYSVA_POWERUP_BIT		BOOL		TRUE		Power-up bit	VarGlobal	
__SYSVA_PROJ_INCOMPLETE		UDINT		0		Project Incomplete	VarGlobal	
C_Butter_Max		INT					Var	
C_Eggs_Max		INT					Var	
Warn_Butter_Low		BOOL					Var	
Error_Butter_Empty		BOOL					Var	
Error		BOOL					Var	
Warn		BOOL					Var	
Warn_Sugar_Low		BOOL					Var	
Error_Sugar_Empty		BOOL					Var	
Ready		BOOL					Var	
C_Sugar_Max		REAL					Var	
C_Flour_Max		REAL					Var	
C_Sugar_Low		REAL					Var	
C_Sugar_Empty		REAL					Var	
DI_Sugar_Low_PE		BOOL					Var	
DI_Sugar_Empty_PE		BOOL					Var	
Dispense_Vanilla		BOOL					Var	
IDX_Eggs_Vanilla		INT					Var	
IDX_Mix_2		INT					Var	
IDX_Flour		INT					Var	
Warn_Eggs_Low		BOOL					Var	
Error_Eggs_Empty		BOOL					Var	
Dispense_Eggs		BOOL					Var	
Eggs_Dispensed		BOOL					Var	

# Document Generator

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
C_Egg_Weight		REAL					Var	
C_Egg_Dispende_Time		TIME					Var	
Egg_Dispende_Delay		TIME				Time [s] to wait for eggs to dispense	Var	
Mix		BOOL					Var	
Recipe_Mix_1		TIME		T#3s			Var	
Recipe_Mix_2		TIME		T#3s			Var	
Mix_Time		TIME					Var	
C_Clean_Bowl_Time		TIME					Var	
Dispense_Flour		BOOL					Var	
Flour_Dispensed		BOOL					Var	
DI_Flour_Low_PE		BOOL					Var	
DI_Flour_Empty_PE		BOOL					Var	
C_Flour_Low		REAL					Var	
C_Flour_Empty		REAL					Var	
Error_Flour_Empty		BOOL					Var	
Warn_Flour_Low		BOOL					Var	
Dispense_Salt		BOOL					Var	
Salt_Dispensed		BOOL					Var	
Dispense_Soda		BOOL					Var	
Soda_Dispensed		BOOL					Var	
IDX_Salt_Soda		INT					Var	
IDX_Mix_3		INT					Var	
Recipe_Mix_3		TIME		T#5s			Var	
Recipe_Cook_Time		TIME		T#10s			Var	
Recipe_Cool_Time		TIME		T#10s			Var	
IDX_Roll		INT					Var	
IDX_Bake		INT					Var	
IDX_Present		INT					Var	
Roll		BOOL					Var	
Rolling_Complete		BOOL					Var	



Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
Bake		BOOL					Var	
Baking_Complete		BOOL					Var	
DI_Conveyor_Oven_PE		BOOL					Var	
DI_Conveyor_Start_PE		BOOL					Var	
Present		BOOL					Var	
Presenting_Complete		BOOL					Var	
DI_Piston_Extended		BOOL					Var	

Programs

Constants

Programs

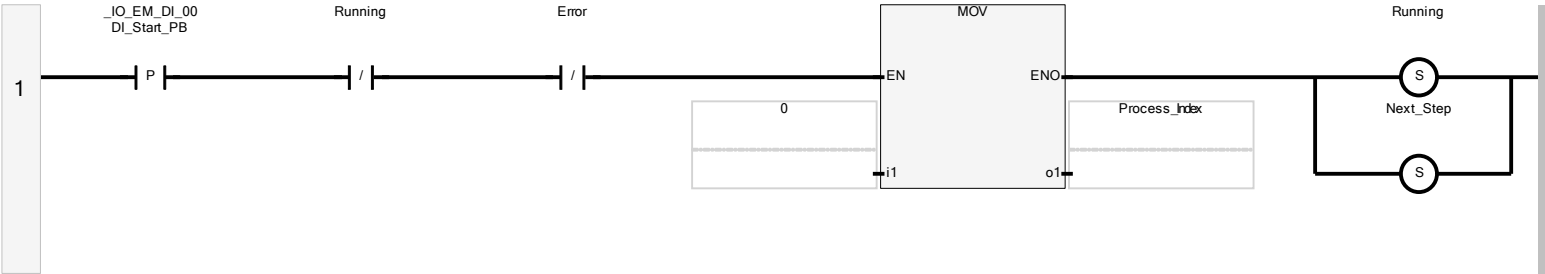
Equations

Programs

Process

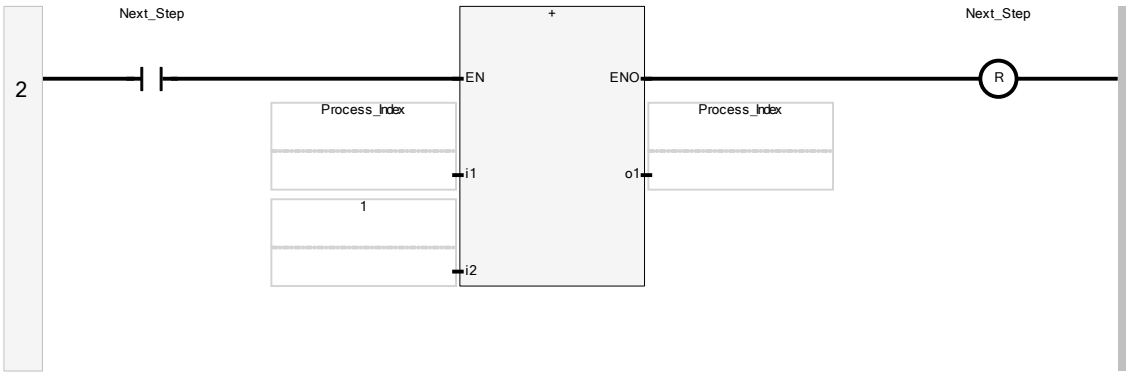
Rung1 Diagram

Start new process



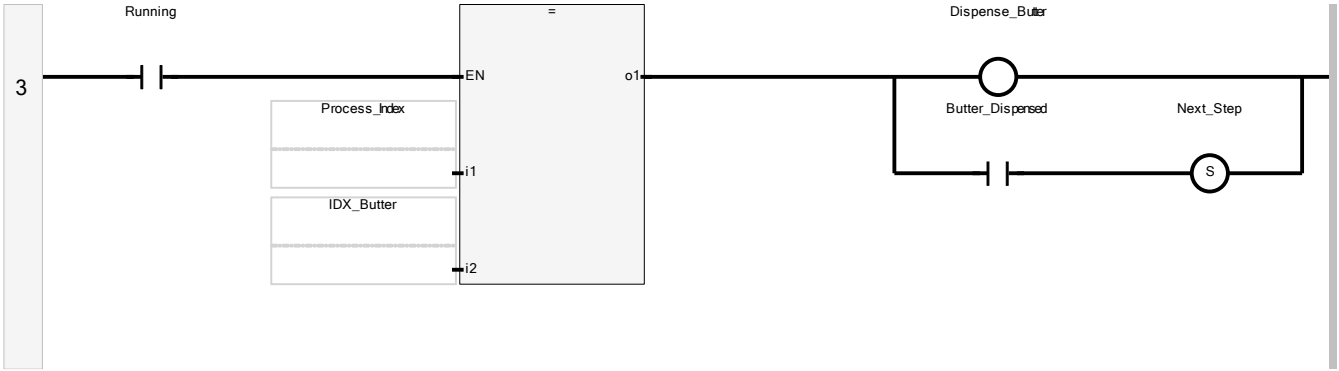
Rung2 Diagram

Increment process index



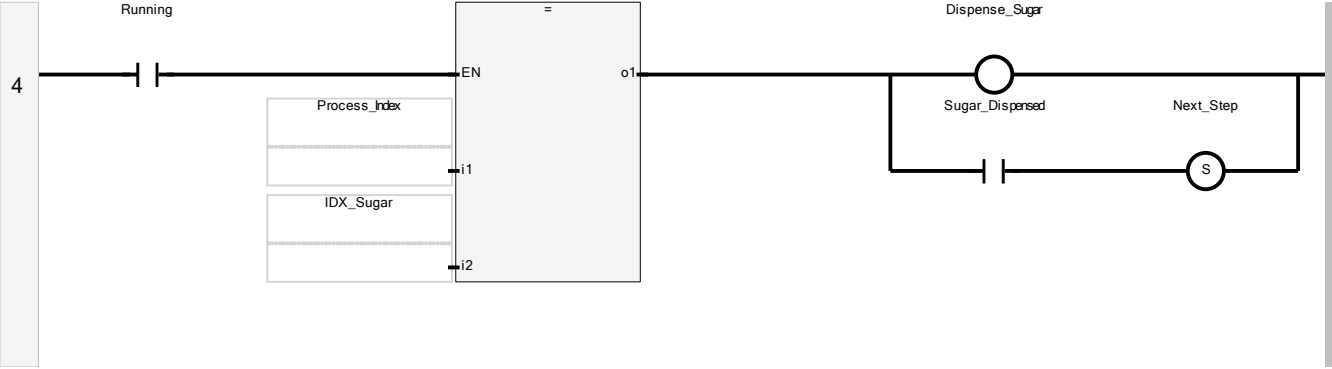
Rung3 Diagram

Dispense butter



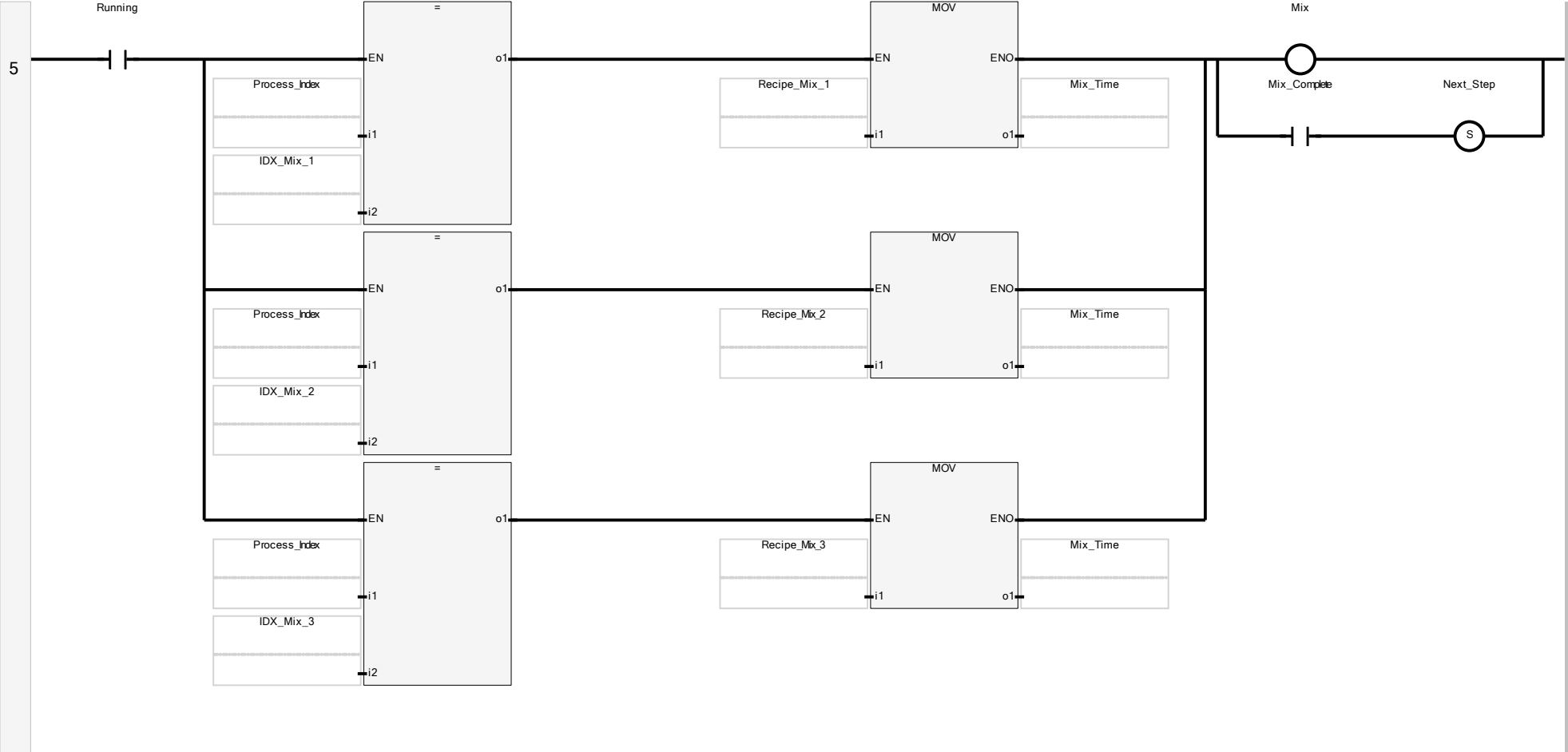
Rung4 Diagram

Dispense sugar

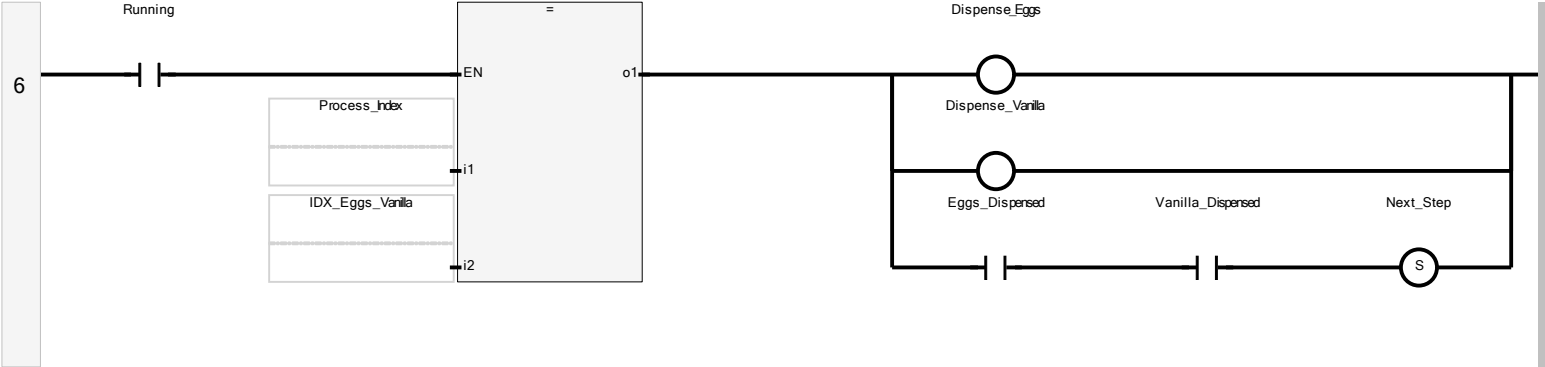


Rung5 Diagram

Mix\_1

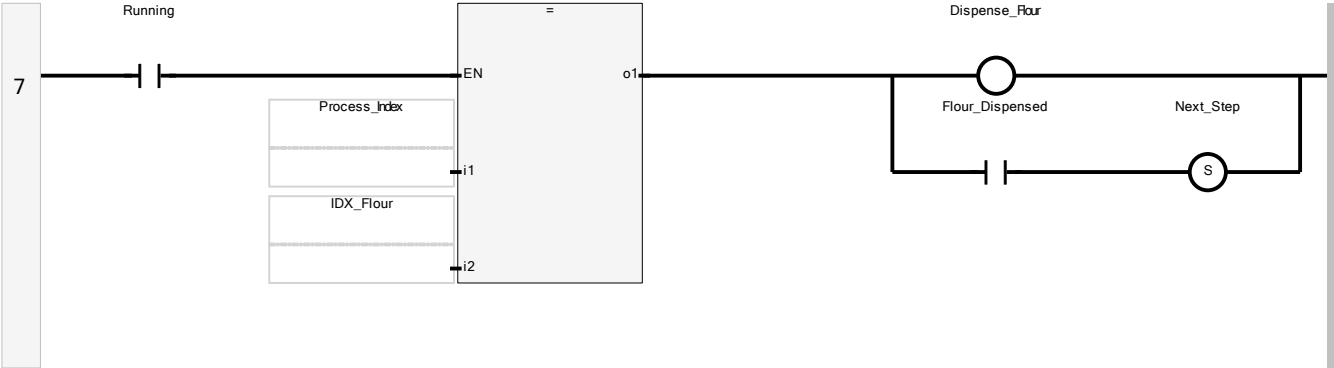


Rung6 Diagram  
Dispense eggs, vanilla



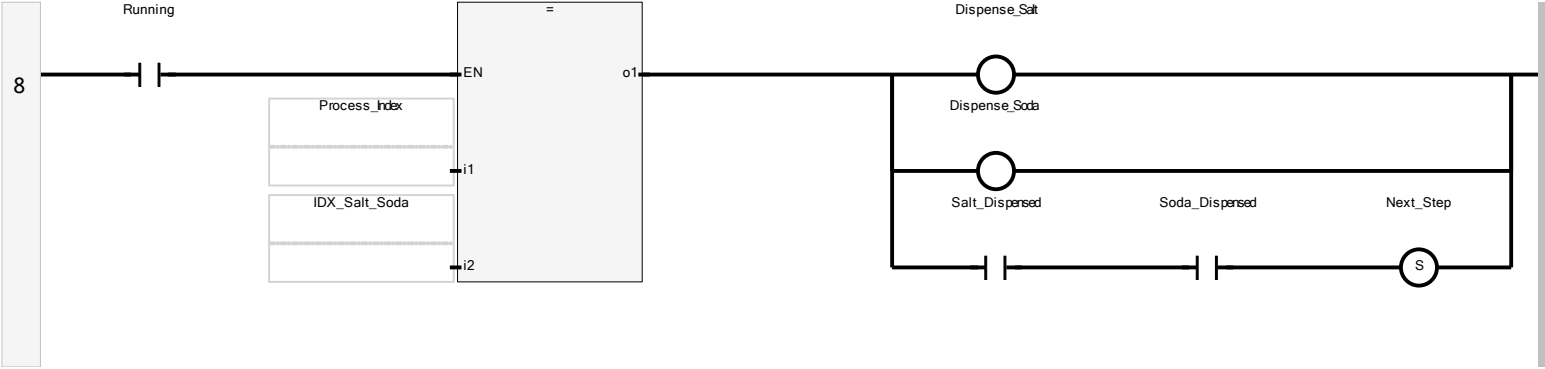
Rung7 Diagram

Dispense flour



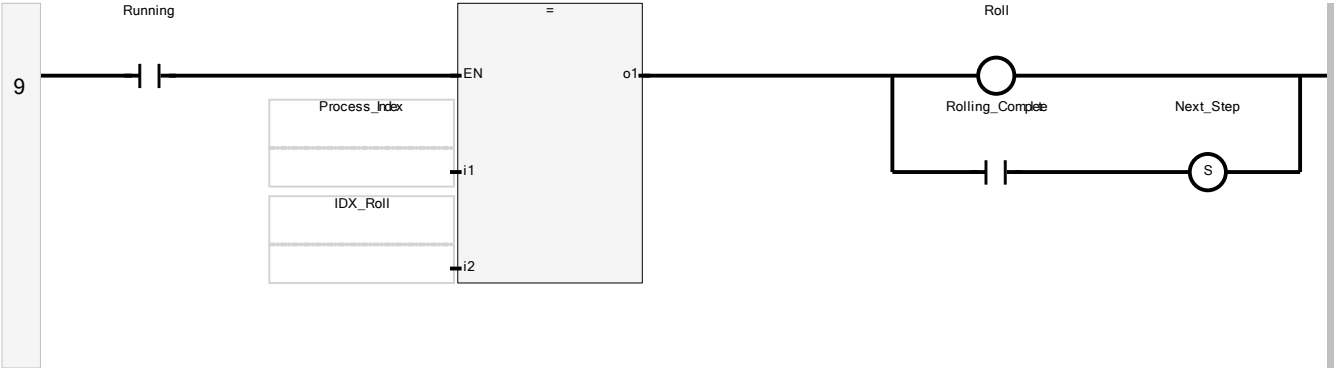
Rung8 Diagram

Dispense salt, baking soda



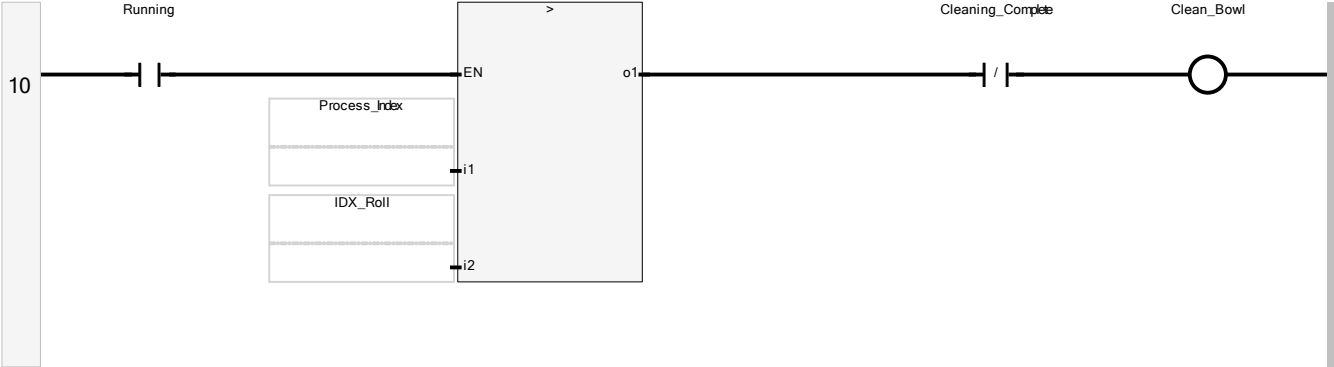
Rung9 Diagram

Roll into balls on tray



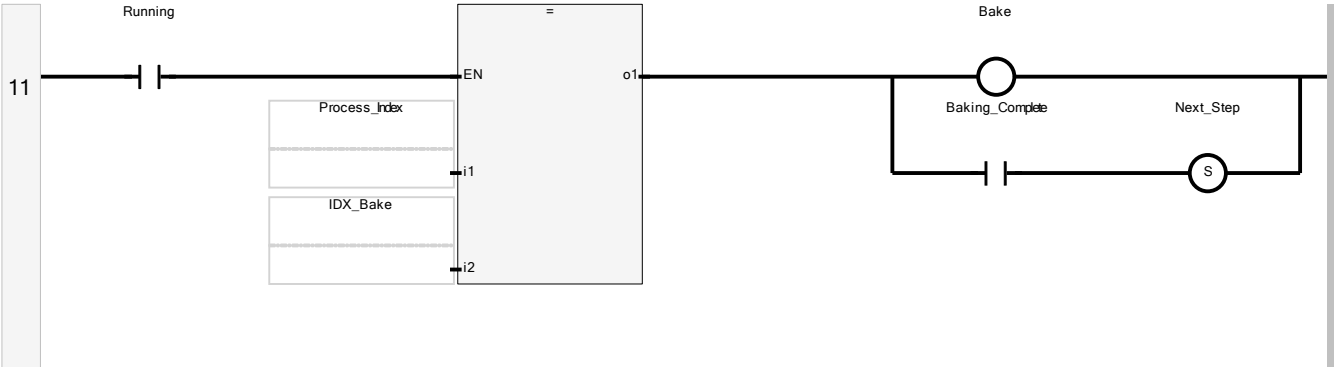
Rung10 Diagram

Clean



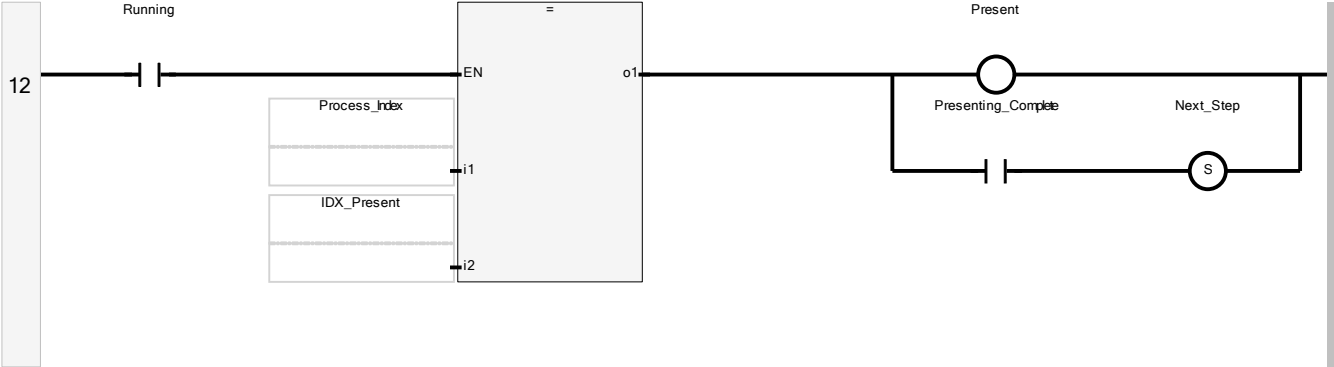
Rung11 Diagram

Bake



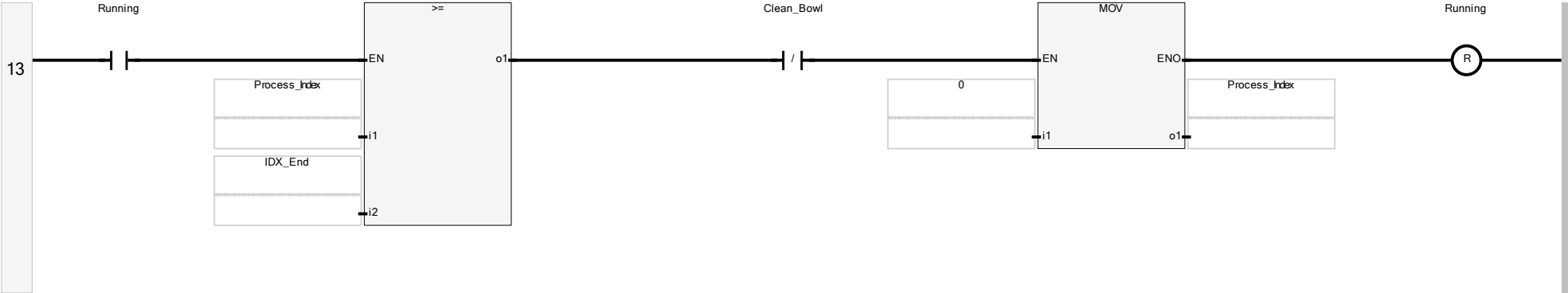
Rung12 Diagram

Present



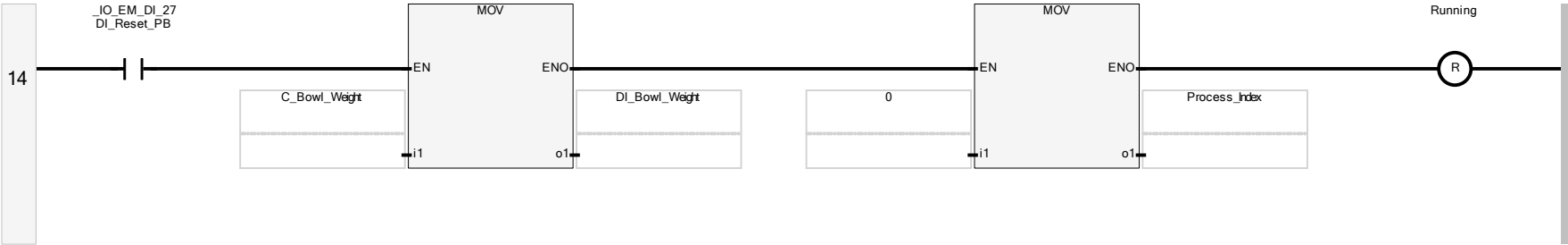
Rung13 Diagram

End process once cleaning is finished



Rung14 Diagram

Reset





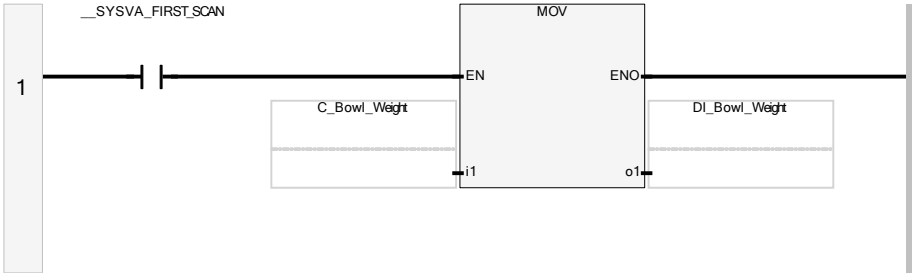
Mixing\_Bowl

Local Variables

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
TON_1		TON		...	...		Var	
TON_2		TON		...	...		Var	
TON_4		TON		...	...		Var	
TON_3		TON		...	...		Var	

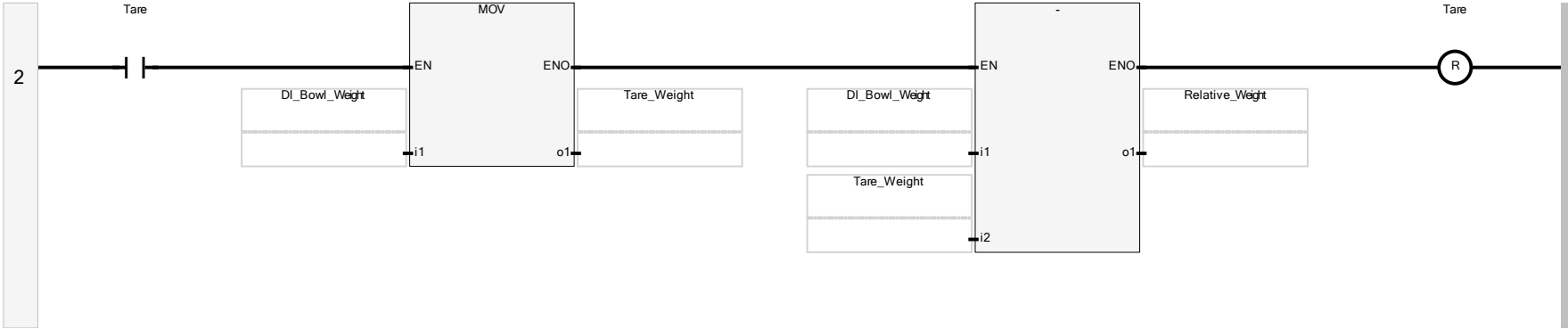
Rung1 Diagram

Initialize bowl weight



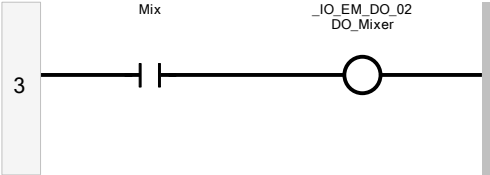
Rung2 Diagram

Tare - store bowl weight measurement



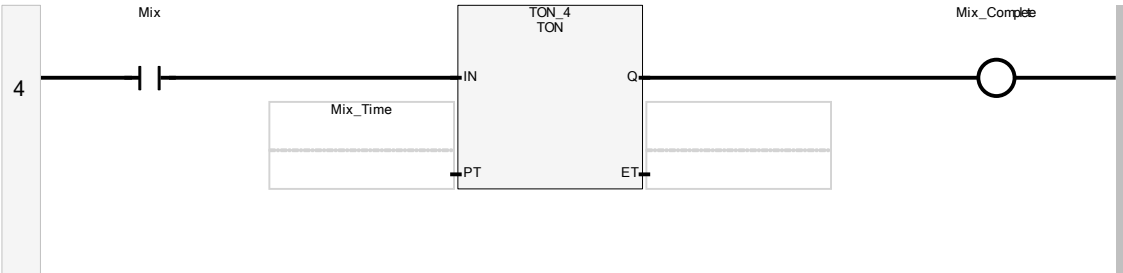
Rung3 Diagram

Mix output



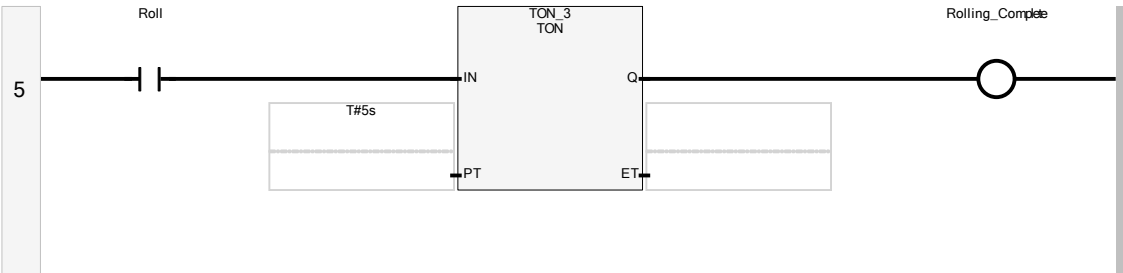
Rung4 Diagram

Mix timer



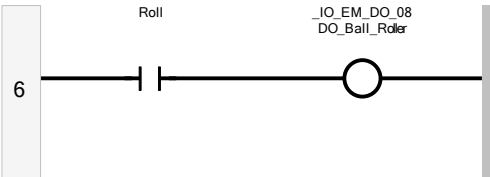
Rung5 Diagram

Roll dough balls



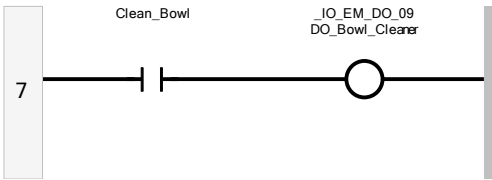
Rung6 Diagram

Send signal to ball roller



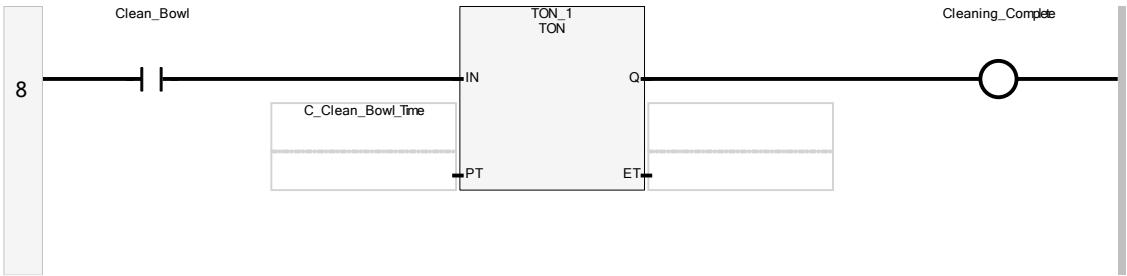
Rung7 Diagram

Clean bowl



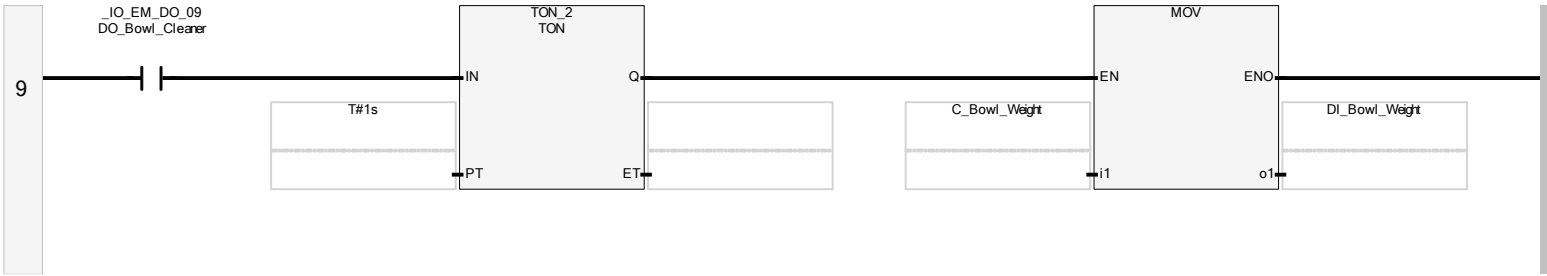
Rung8 Diagram

Clean bowl for 5s



Rung9 Diagram

Simulate emptying bowl - set weight to bowl weight after 1s



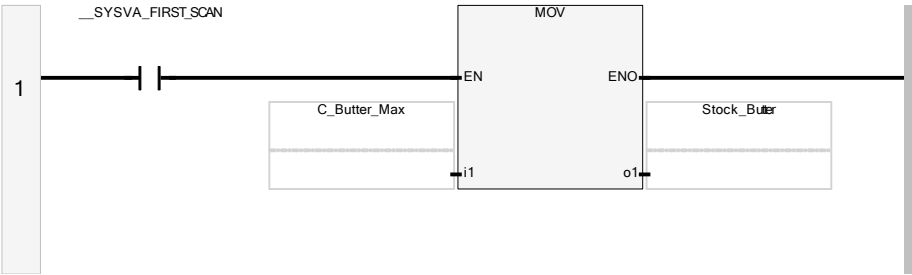
Butter\_Dispenser

Local Variables

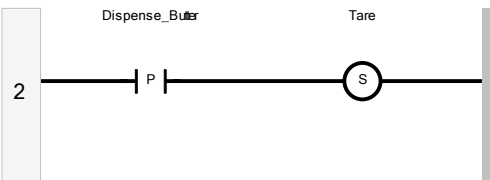
Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
Stock_Butter		INT					Var	
TON_7		TON		...	...		Var	
Dispensing_Butter		BOOL					Var	

Rung1 Diagram

Initialize to full stock

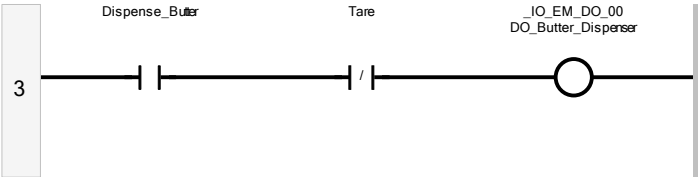


Rung2 Diagram



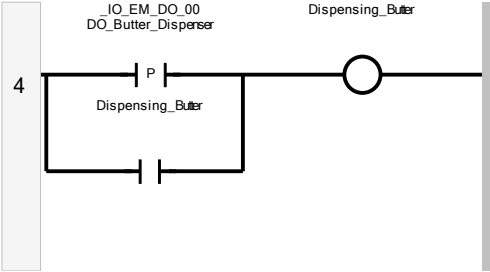
Rung3 Diagram

Wait for taring to dispense butter



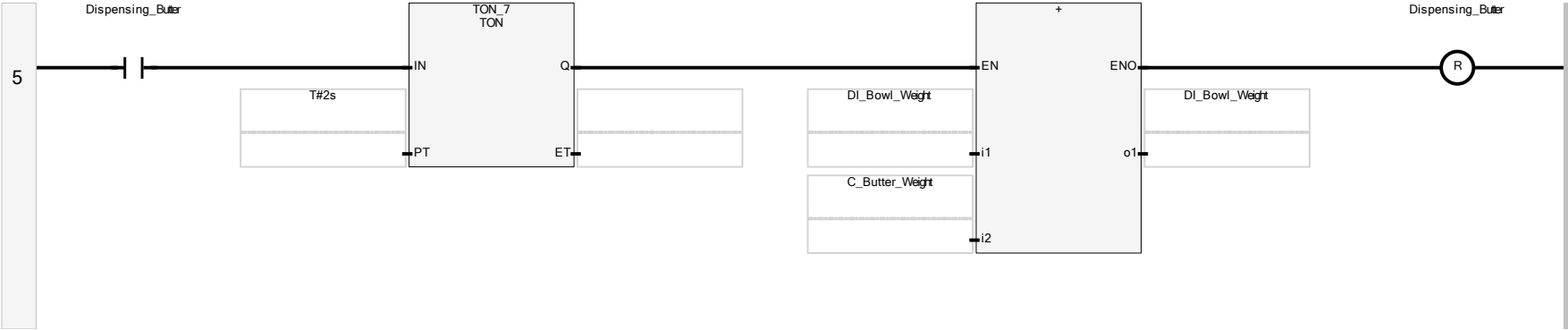
Rung4 Diagram

Begin dispensing butter when signal received



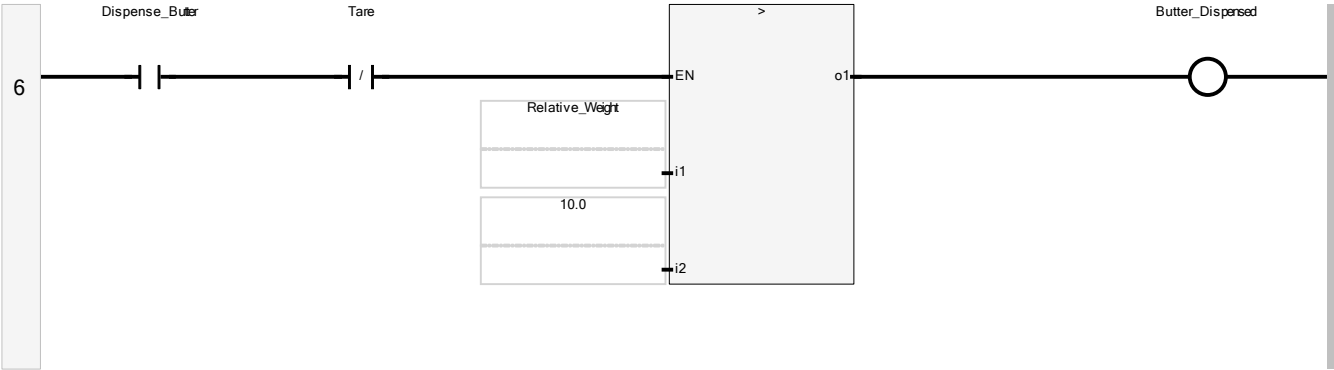
Rung5 Diagram

Simulate butter dispensing - increase bowl weight after 2 seconds



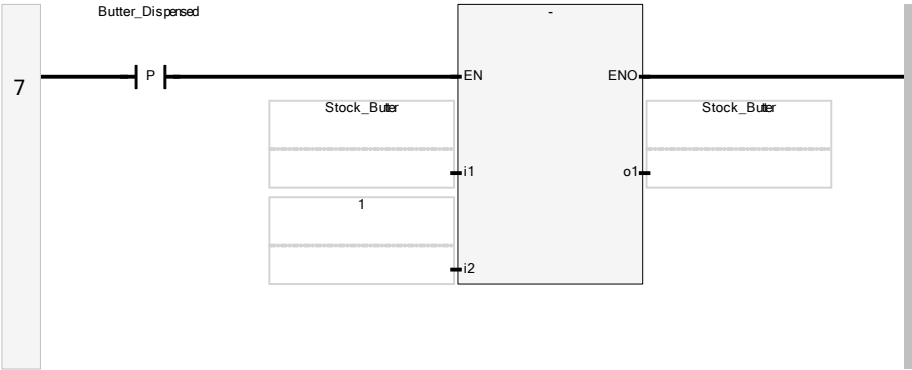
Rung6 Diagram

Detect butter dispensed by weight - at least 10g increase



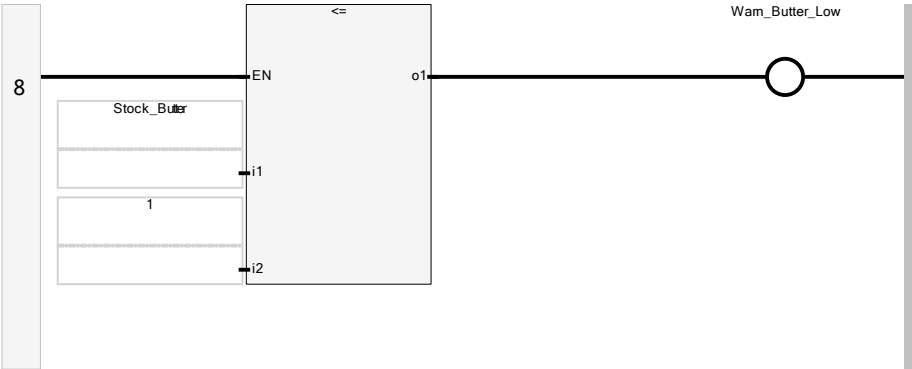
Rung7 Diagram

Decrease stock when dispensed



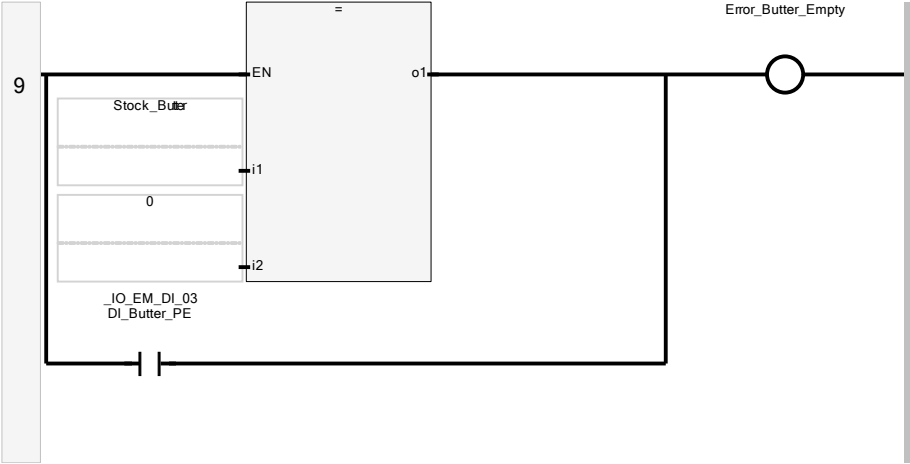
Rung8 Diagram

Low count warning



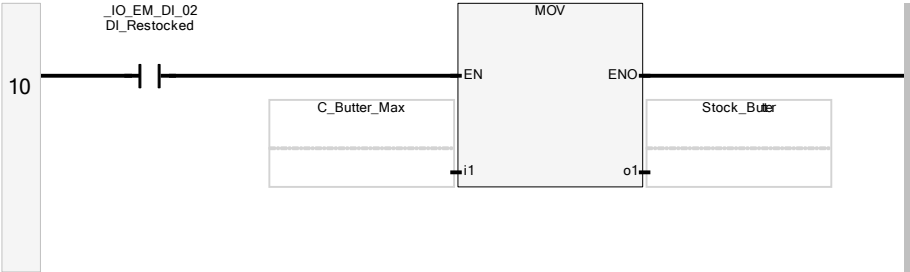
Rung9 Diagram

Out of stock error



Rung10 Diagram

Restock to max

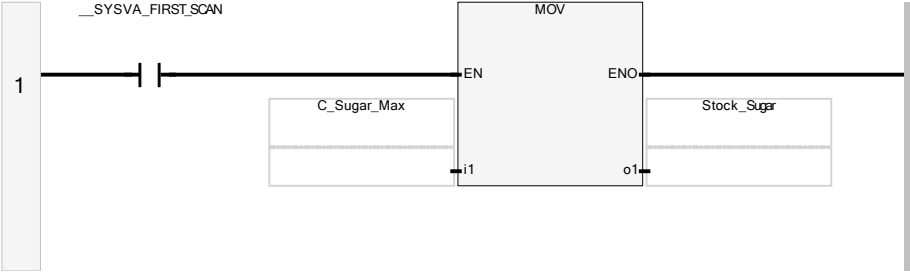


Sugar\_Dispenser

Local Variables

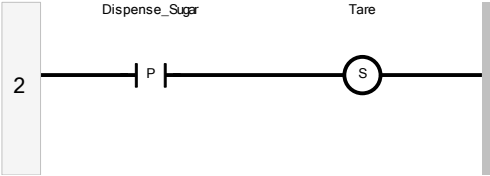
Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
TON_2		TON		...	...		Var	
TON_3		TON		...	...		Var	
Sugar_Pulse_State		BOOL					Var	
Stock_Sugar		REAL				Simulated amount of sugar in tank [g]	Var	

Rung1 Diagram



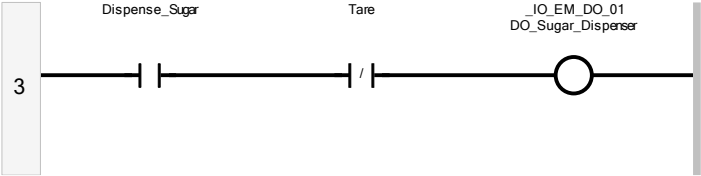
Rung2 Diagram

Initialize dispense sugar



Rung3 Diagram

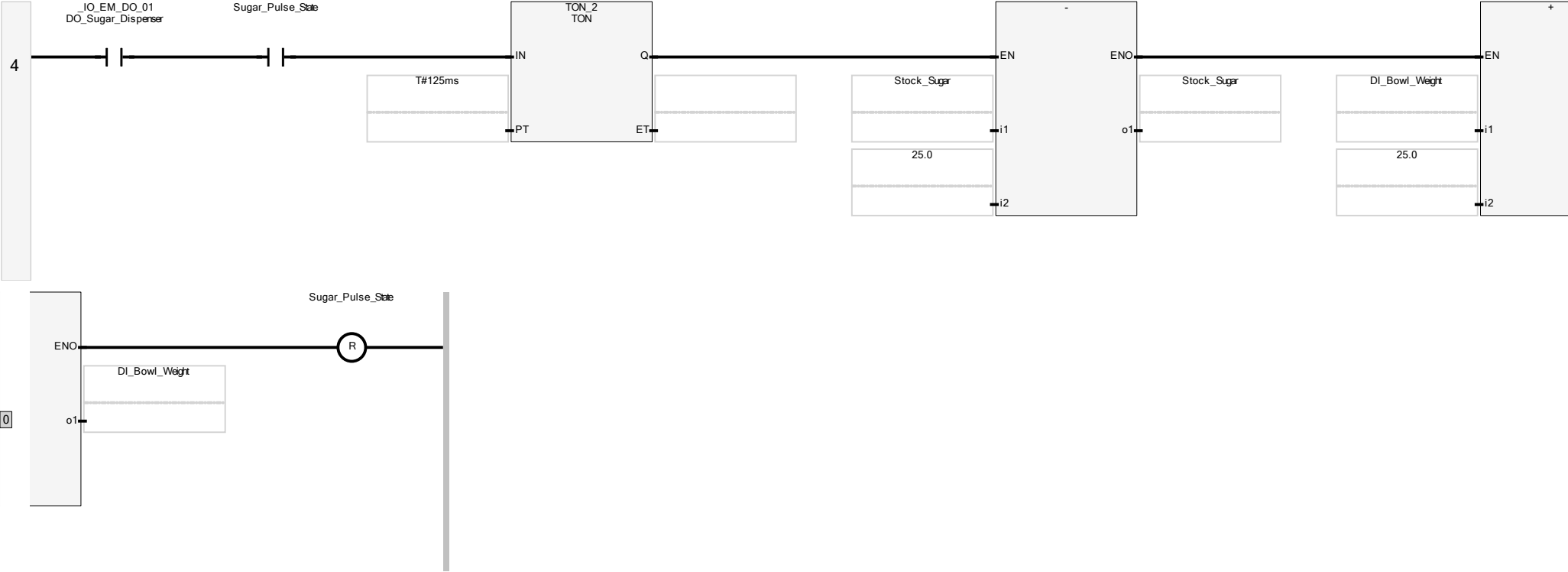
Wait for taring to dispense sugar



Rung4 Diagram

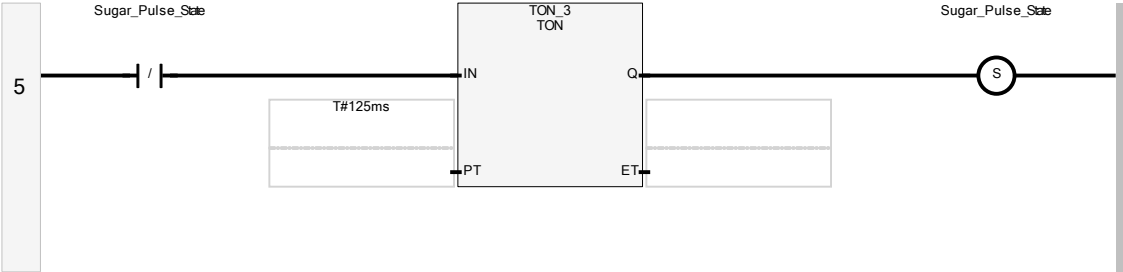
Simulate dispensing sugar at 100g/s = 25g/250ms, pulse high to low





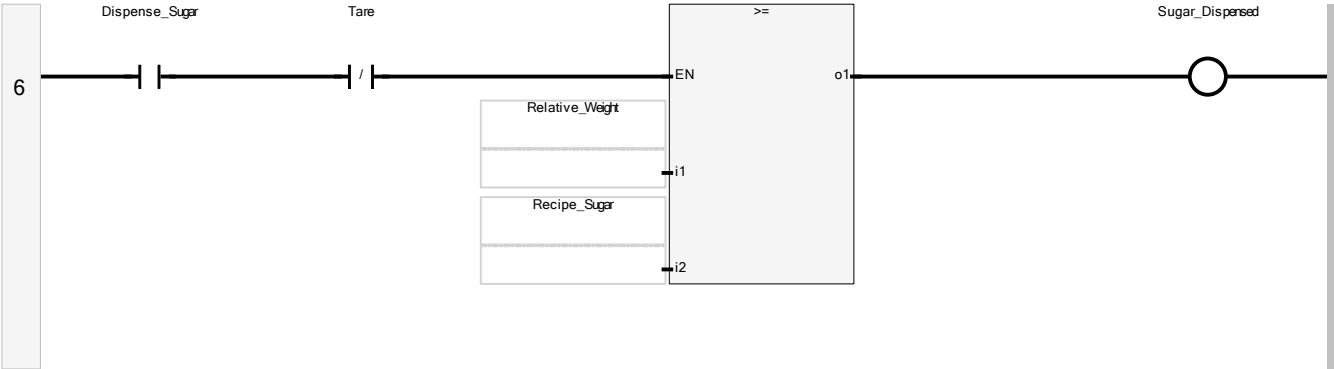
Rung5 Diagram

Sugar pulse low to high



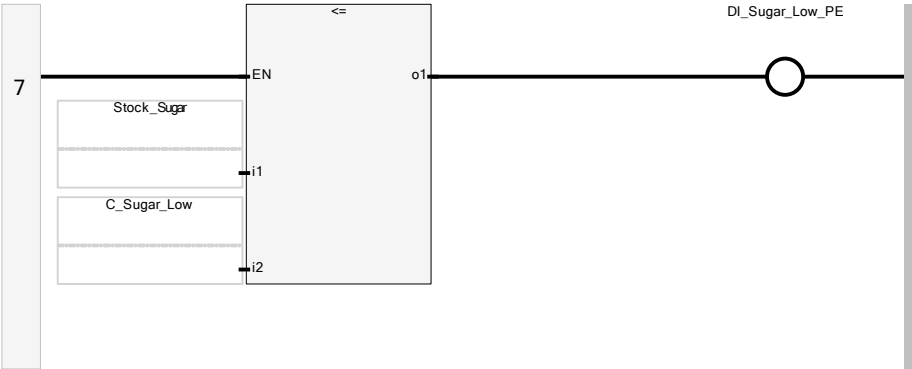
Rung6 Diagram

Detect sugar dispensed by weight



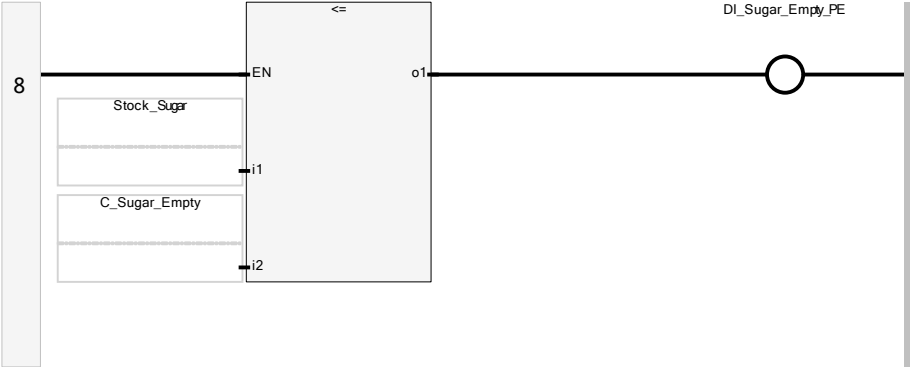
Rung7 Diagram

Simulate low level photoelectric sensor



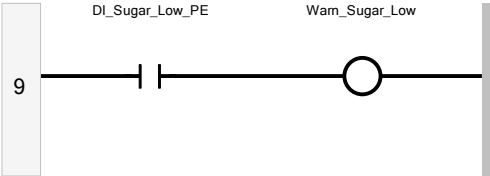
Rung8 Diagram

Simulate empty level photoelectric sensor



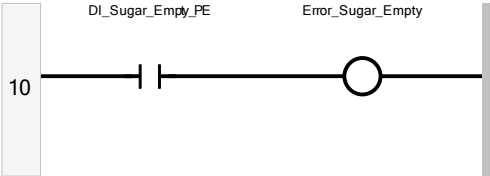
Rung9 Diagram

Low level warning



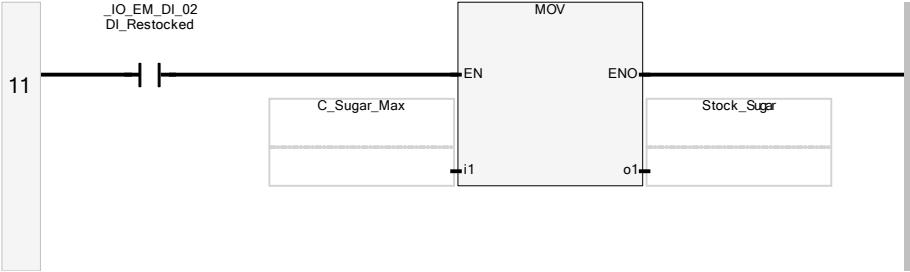
Rung10 Diagram

Empty error



Rung11 Diagram

Restock to max



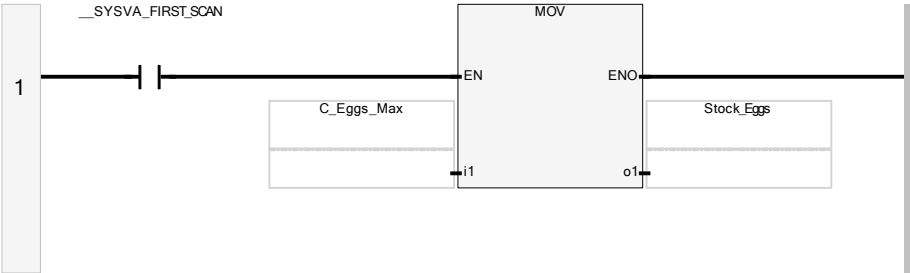
Egg\_Dispenser

Local Variables

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
Stock_Eggs		INT					Var	
TON_1		TON		...	...		Var	
Egg_Pulse_State		BOOL					Var	
TON_2		TON		...	...		Var	
Pulse_In_Count		INT				Counter for egg dispenser input signal	Var	
Dispensing_Egg		BOOL					Var	
TON_3		TON		...	...		Var	
Pulse_Out_Count		INT				Counter for generating the output pulse to egg dispenser	Var	
TON_4		TON		...	...		Var	

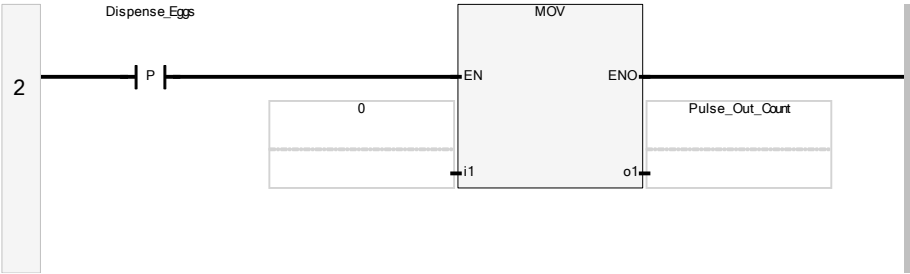
Rung1 Diagram

Initialize full egg carton



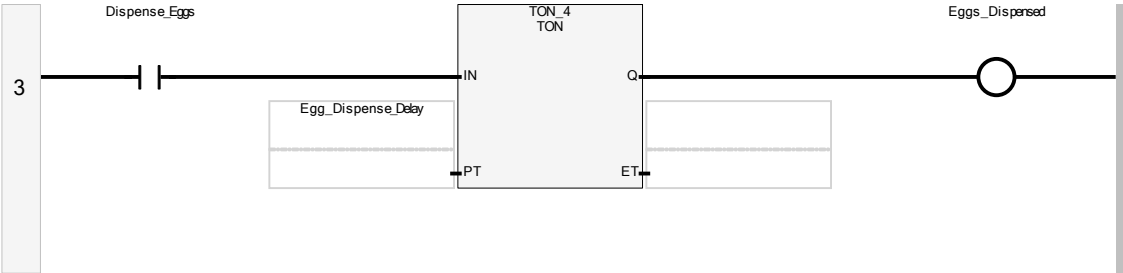
Rung2 Diagram

Initialize dispense eggs



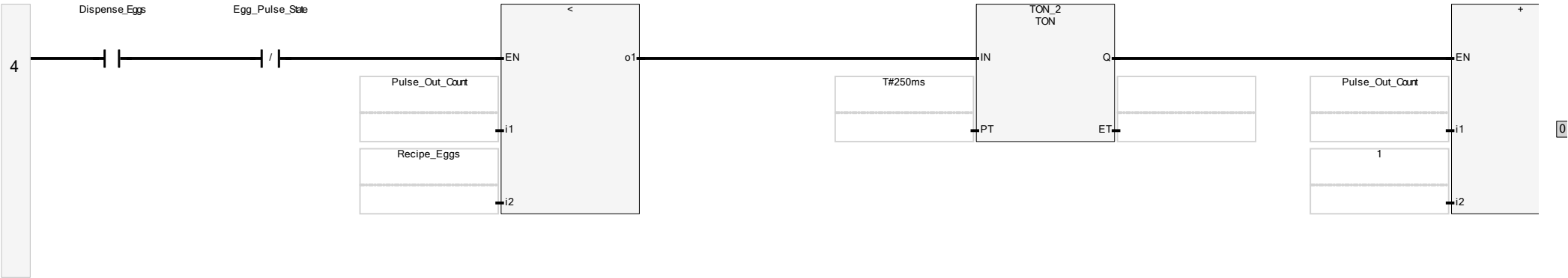
Rung3 Diagram

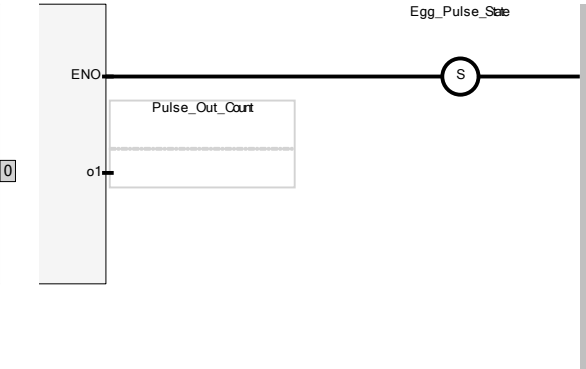
Delay timer waiting for eggs to dispense



Rung4 Diagram

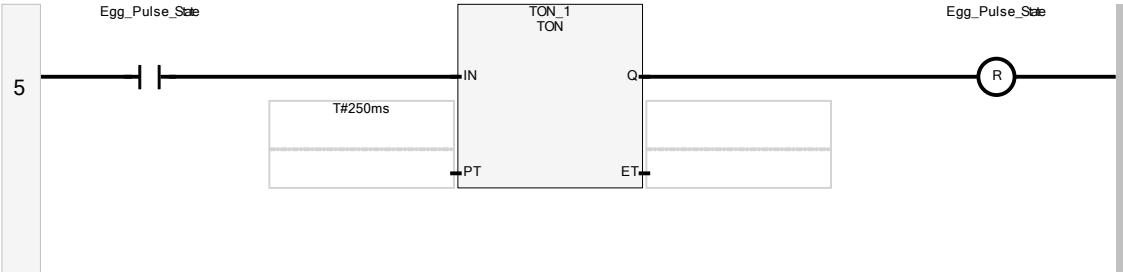
Generate a pulse with a high per number of eggs needed, low to high





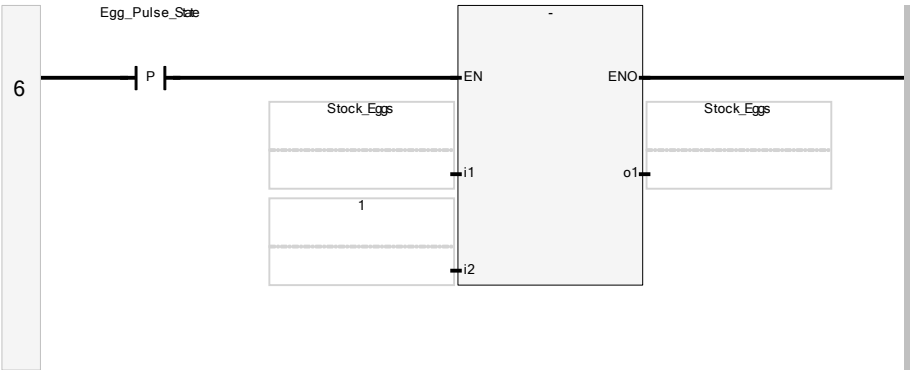
Rung5 Diagram

Pulse high to low



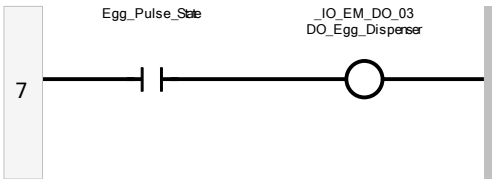
Rung6 Diagram

Reduce egg stock for every pulse sent



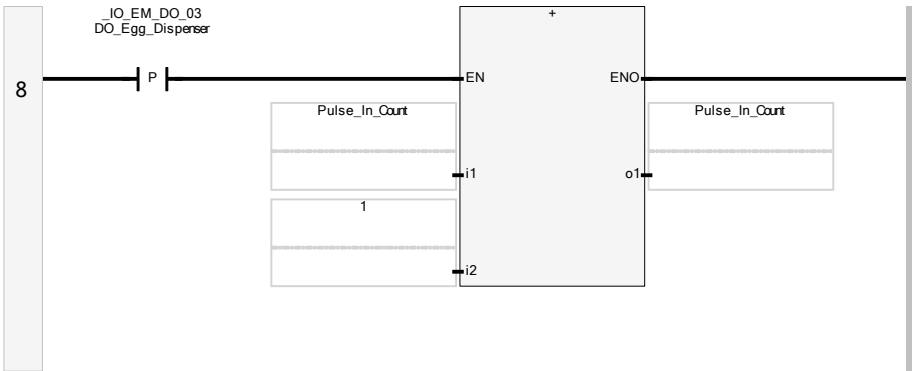
Rung7 Diagram

Send pulse to dispenser



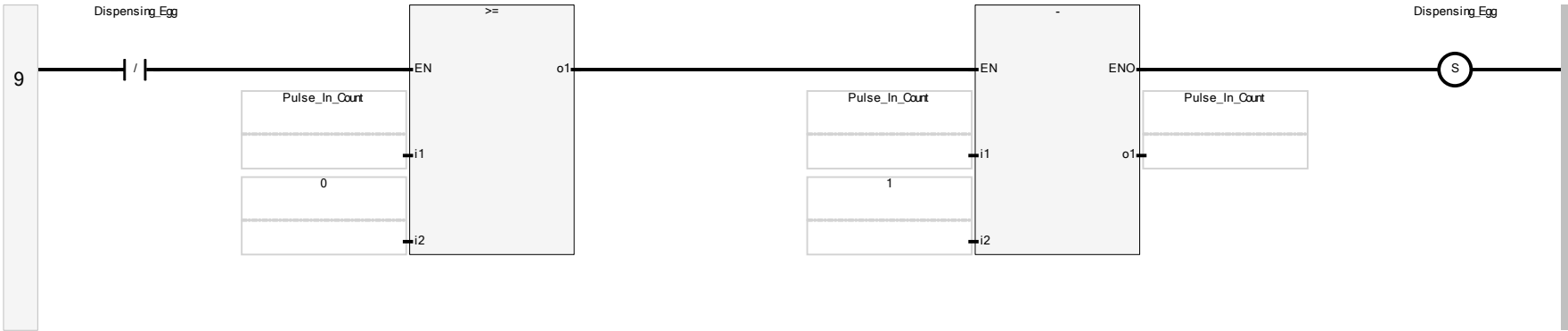
Rung8 Diagram

Count number of pulses received



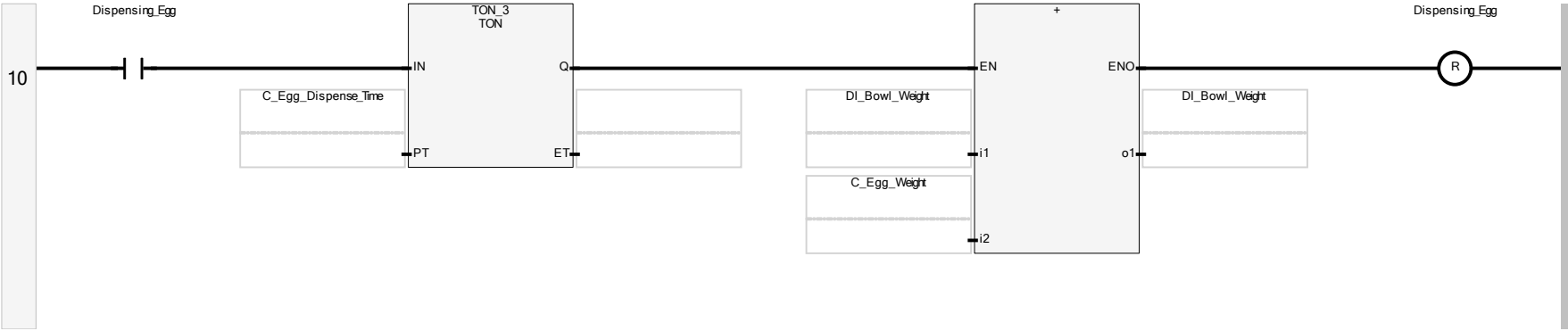
Rung9 Diagram

Dispense egg if pulse count >0



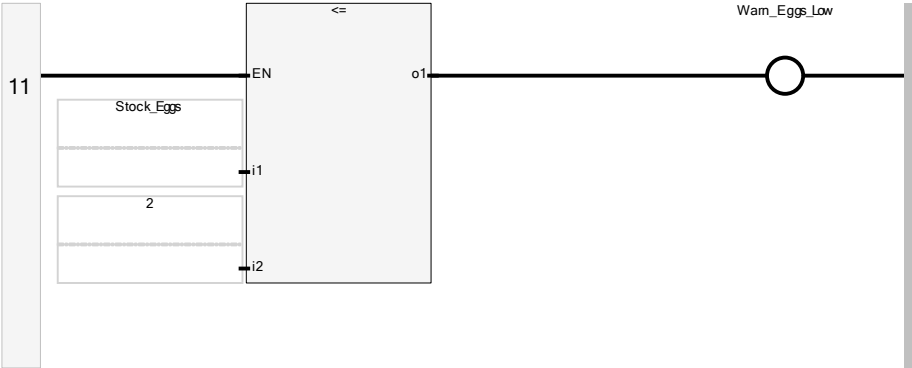
Rung10 Diagram

Simulate dispensing egg over 2s



Rung11 Diagram

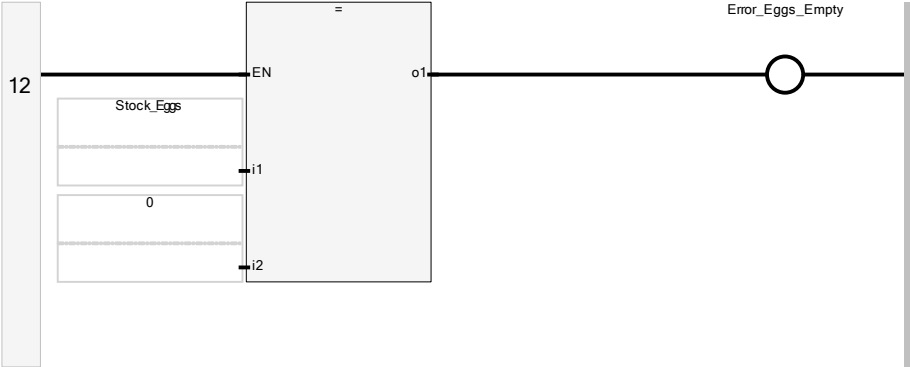
Low eggs warning



Rung12 Diagram

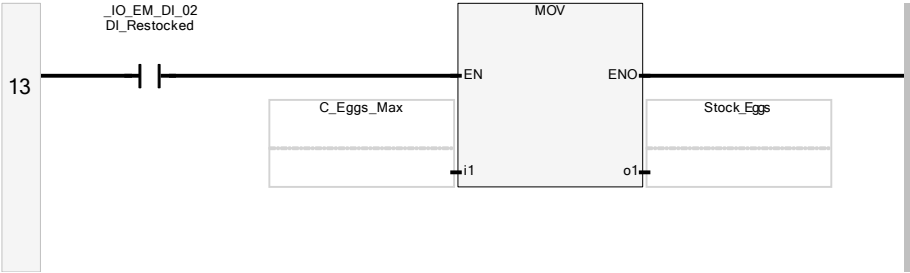
Empty eggs error





Rung13 Diagram

Restock eggs to full



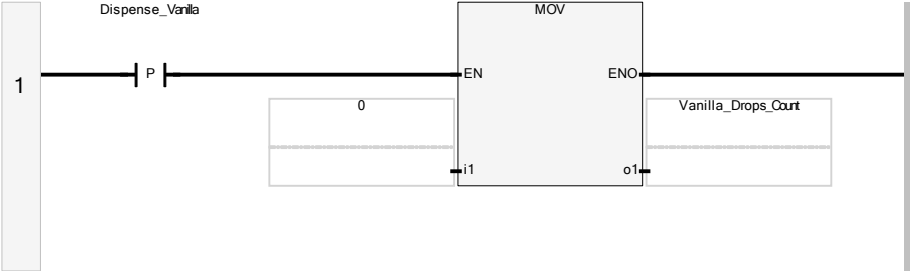
Vanilla\_Dispenser

Local Variables

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
TON_4		TON		...	...		Var	
Vanilla_Pulse_State		BOOL					Var	
TON_1		TON		...	...		Var	
Vanilla_Drops_Count		INT					Var	

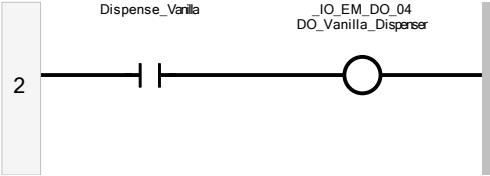
Rung1 Diagram

Initialize dispense - set drop count to 0



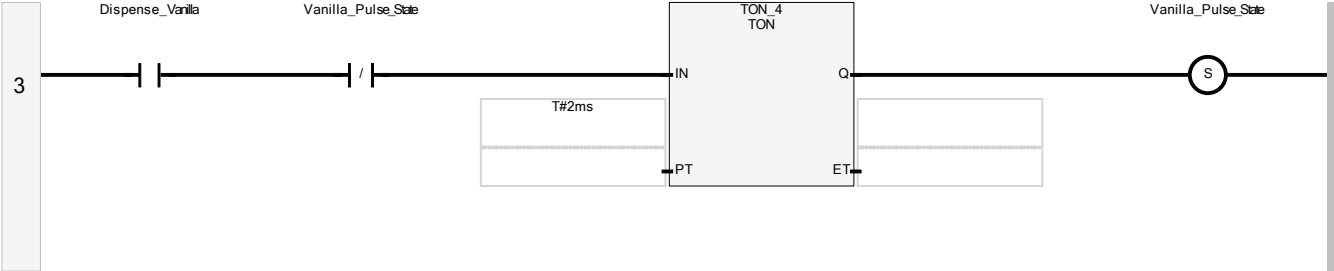
Rung2 Diagram

Send signal to dropper



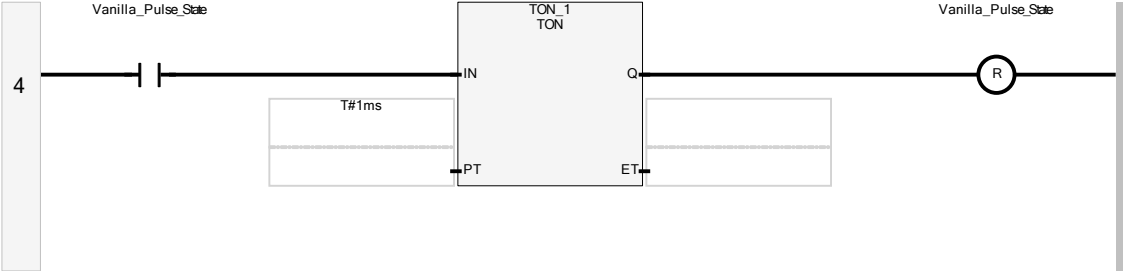
Rung3 Diagram

Generate pulse with 3ms period



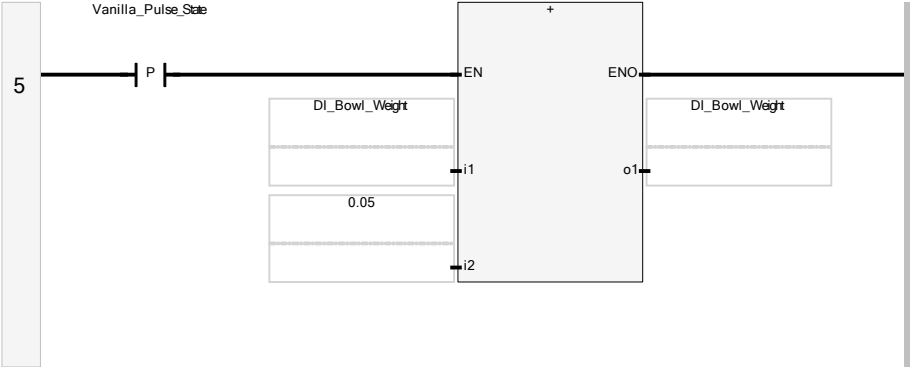
Rung4 Diagram

Pulse high to low



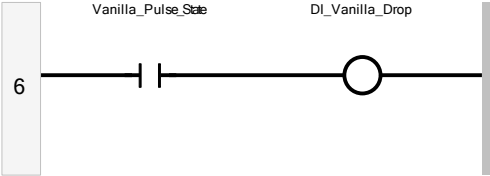
Rung5 Diagram

Simulate dispensing drop on pulse high - increase bowl weight by 0.05g



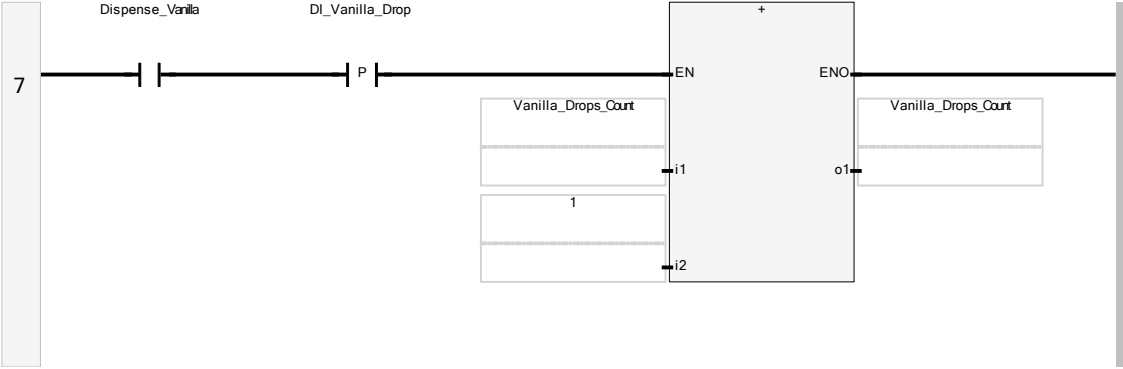
Rung6 Diagram

Simulate dropper output signal with a high pulse for every drop dispensed



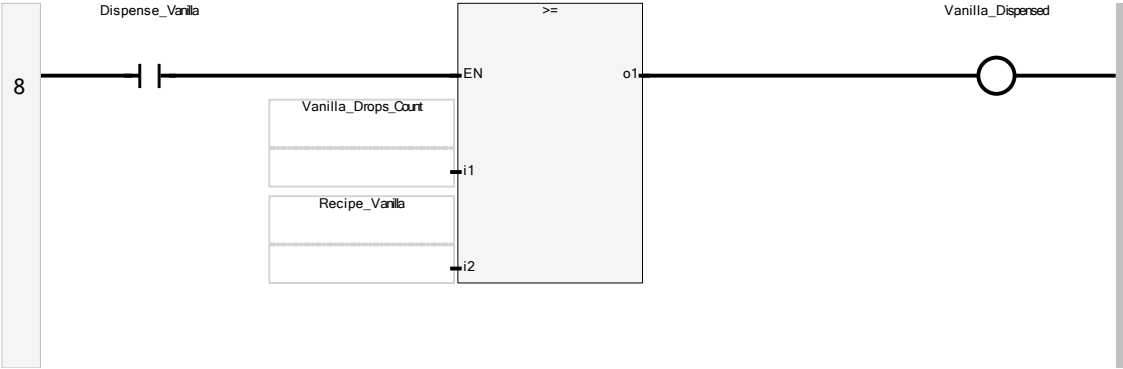
Rung7 Diagram

Count number of vanilla drops dispensed based on dropper output signal

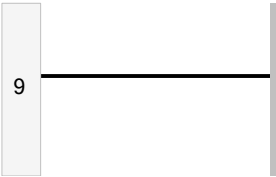


Rung8 Diagram

Stop dispensing vanilla when recipe drop count reached



Rung9 Diagram

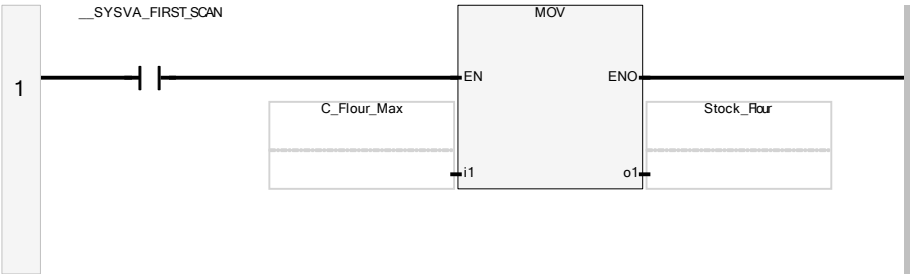


Flour\_Dispenser

Local Variables

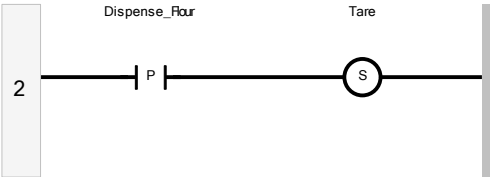
Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
Stock_Flour		REAL					Var	
TON_2		TON		...	...		Var	
Flour_Pulse_State		BOOL					Var	
TON_3		TON		...	...		Var	

Rung1 Diagram



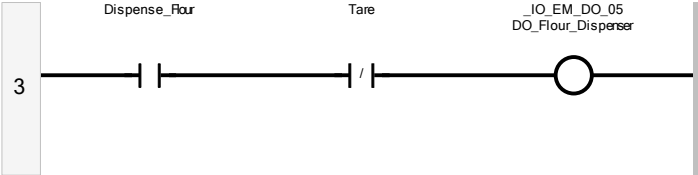
Rung2 Diagram

Initialize dispense sugar



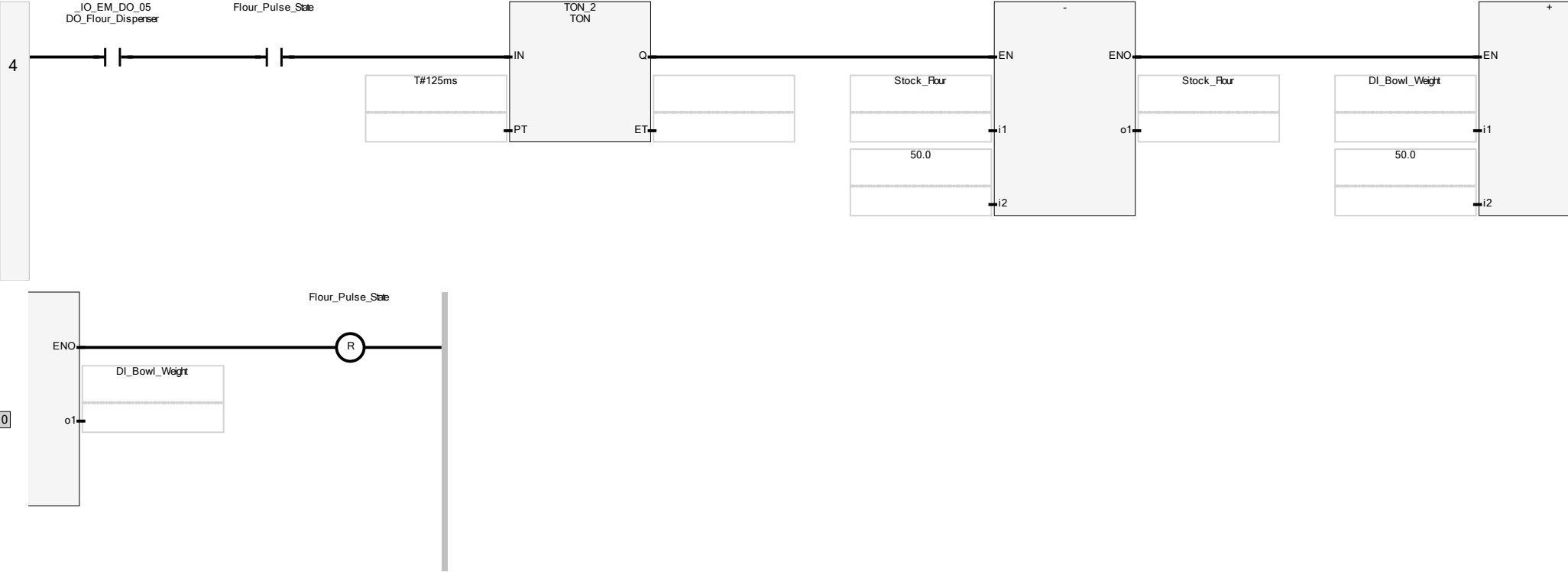
Rung3 Diagram

Wait for taring to dispense



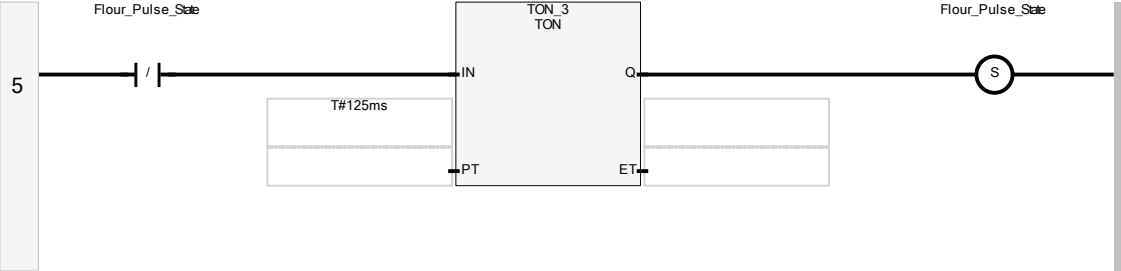
Rung4 Diagram

Simulate dispensing flour at 200g/s = 50g/250ms, pulse high to low



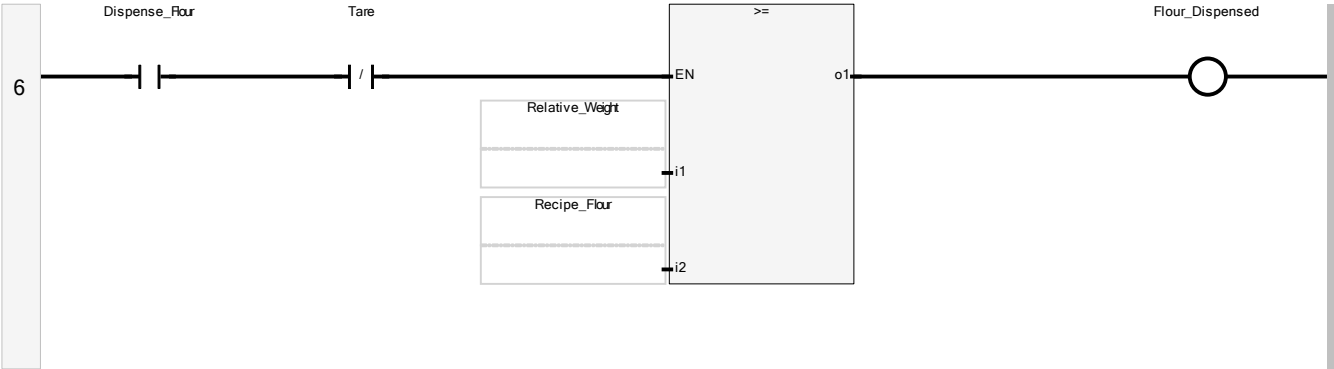
Rung5 Diagram

Flour pulse low to high



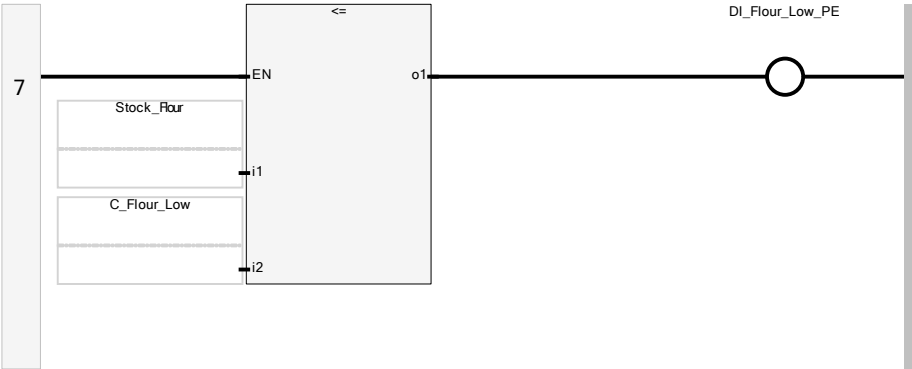
Rung6 Diagram

Detect flour dispensed by weight



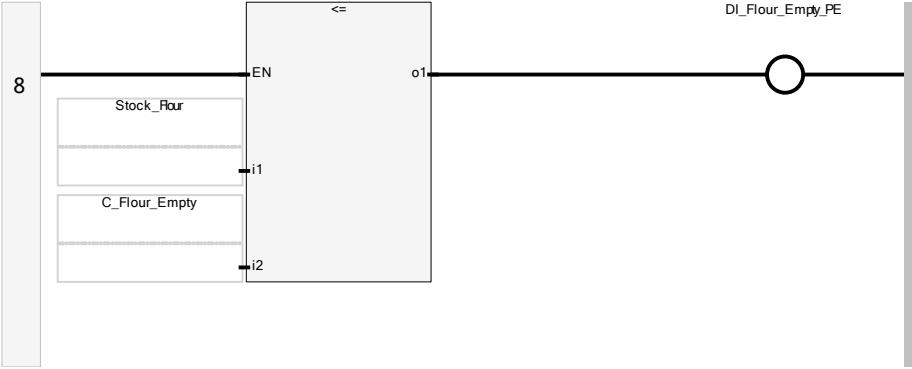
Rung7 Diagram

Simulate low level photoelectric sensor



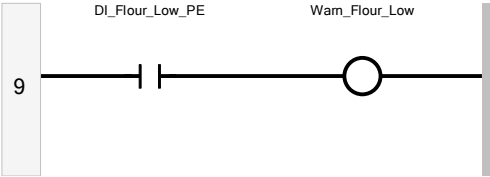
Rung8 Diagram

Simulate empty level photoelectric sensor



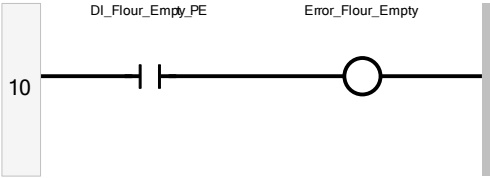
Rung9 Diagram

Low level warning



Rung10 Diagram

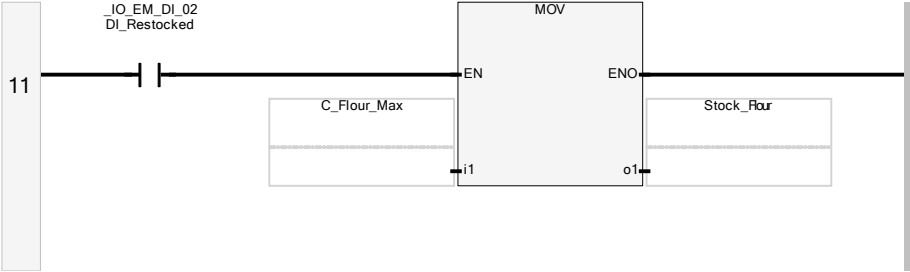
Empty error



Rung11 Diagram

Restock to max





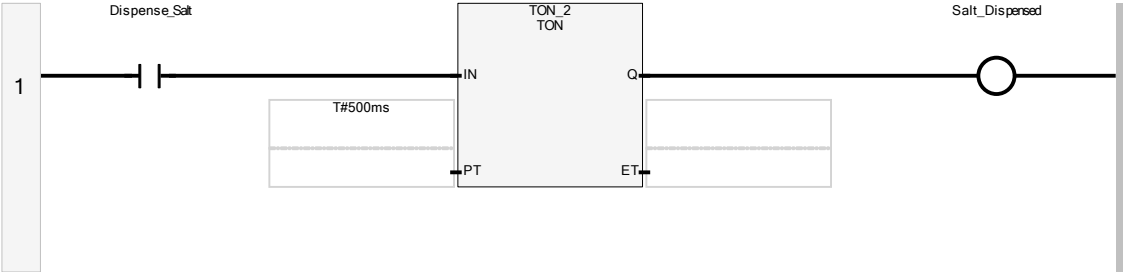
Salt\_Dispenser

Local Variables

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
TON_1		TON		...	...		Var	
TON_2		TON		...	...		Var	

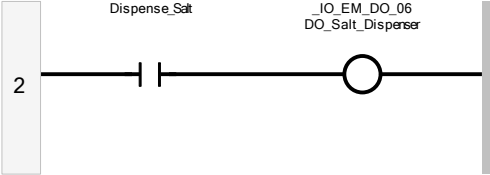
Rung1 Diagram

Salt timer



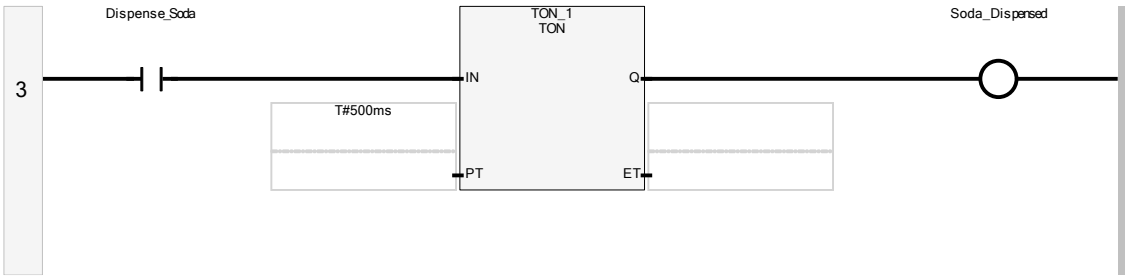
Rung2 Diagram

Salt output



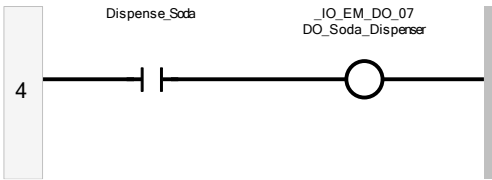
Rung3 Diagram

Soda timer



Rung4 Diagram

Soda output



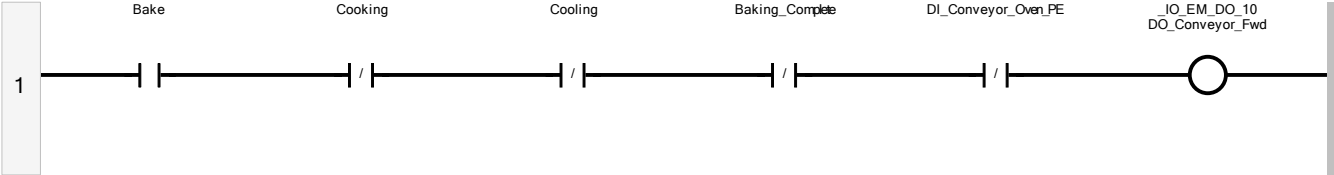
Oven

Local Variables

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
Cooking		BOOL					Var	
Cooling		BOOL					Var	
TON_4		TON		...	...		Var	
TON_5		TON		...	...		Var	
TON_2		TON		...	...		Var	
TON_1		TON		...	...		Var	

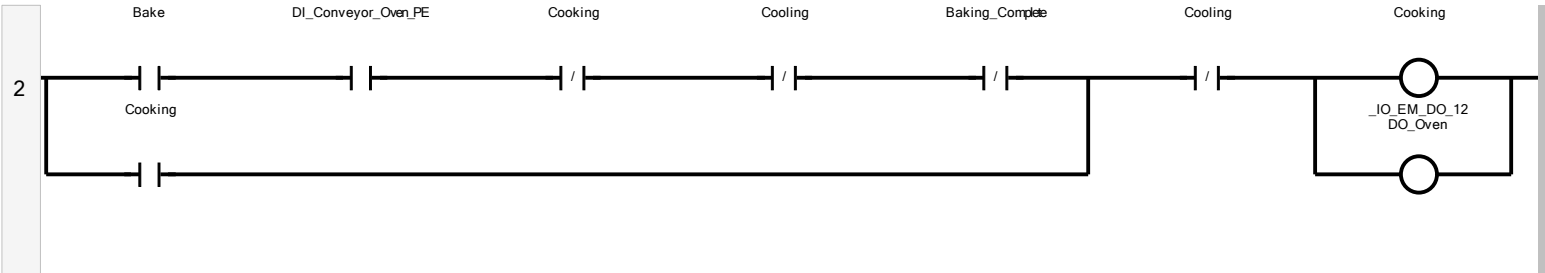
Rung1 Diagram

Move tray into oven on conveyor



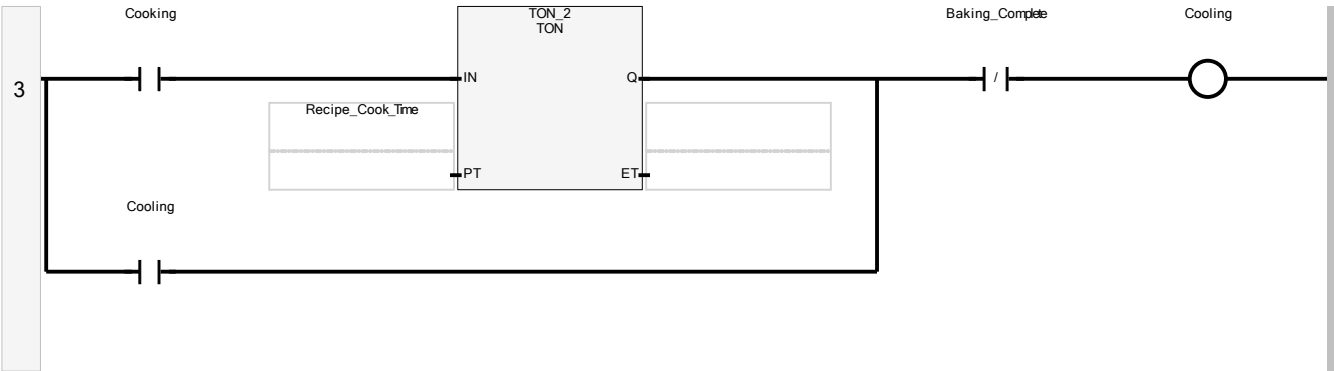
Rung2 Diagram

Cook



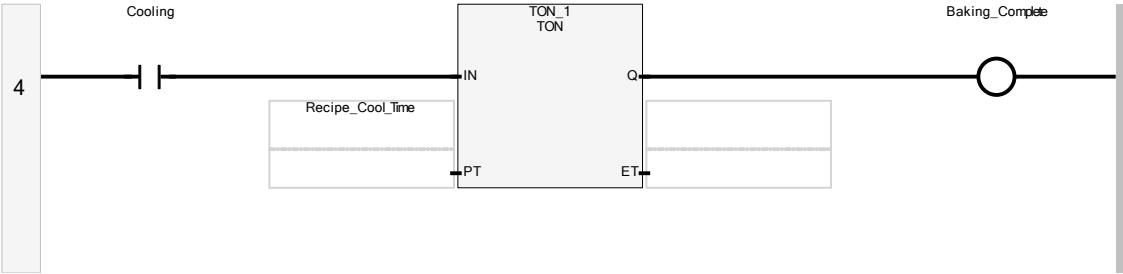
Rung3 Diagram

Cool

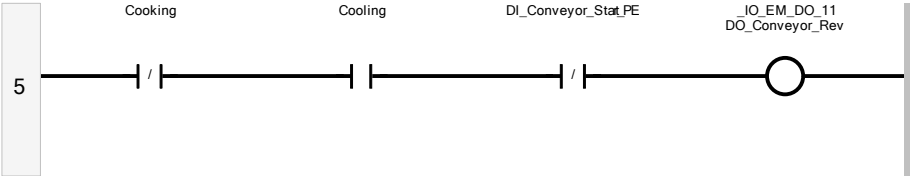


Rung4 Diagram

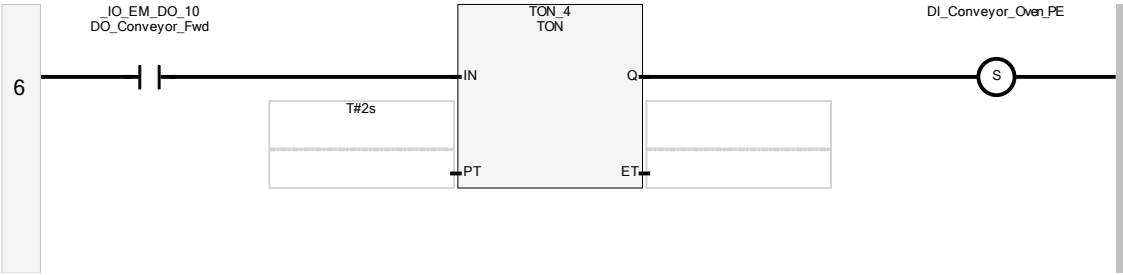
End of cooling



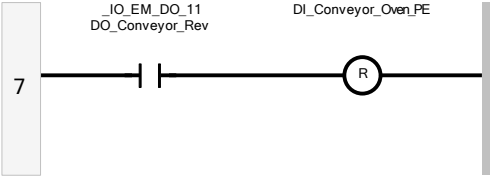
Rung5 Diagram  
Move tray out of oven on conveyor



Rung6 Diagram  
Simulate oven PE on

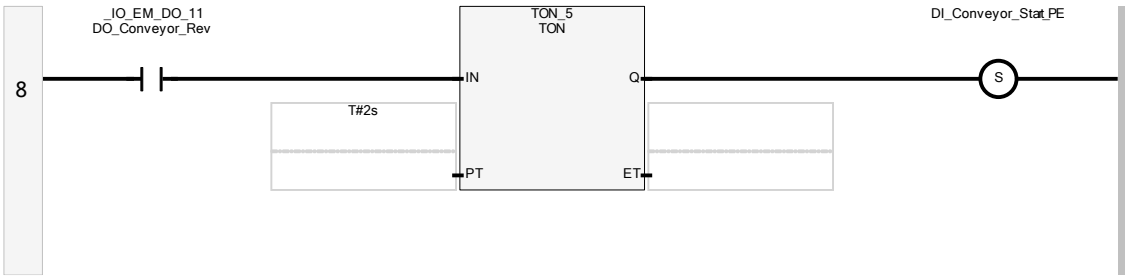


Rung7 Diagram  
Simulate oven PE off



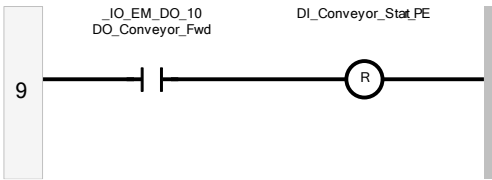
Rung8 Diagram

Simulate start PE on



Rung9 Diagram

Simulate start PE off



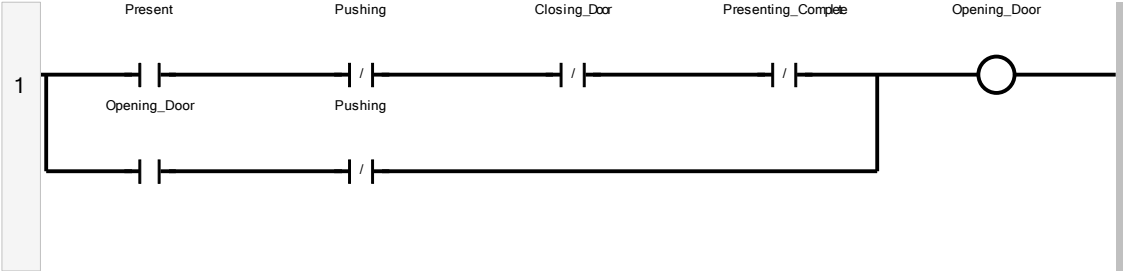
Presenting\_Window

Local Variables

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
TON_1		TON		...	...		Var	
DI_Door_Open		BOOL					Var	
TON_2		TON		...	...		Var	
TON_3		TON		...	...		Var	
Opening_Door		BOOL					Var	
Pushing		BOOL					Var	
Closing_Door		BOOL					Var	
TOF_1		TOF		...	...		Var	

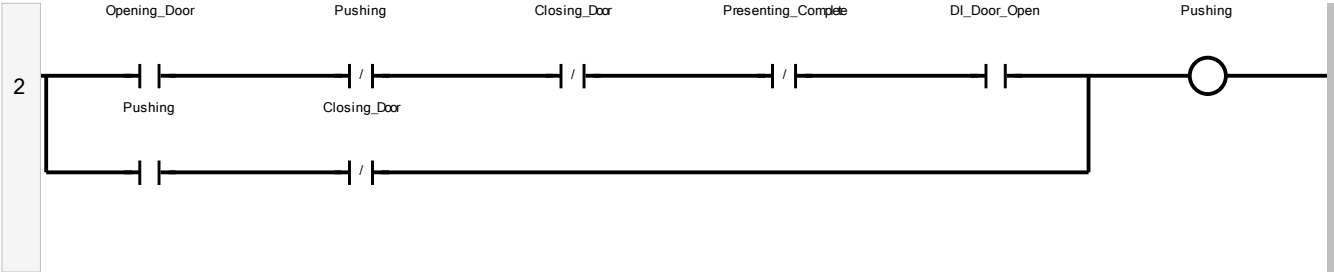
Rung1 Diagram

Open door



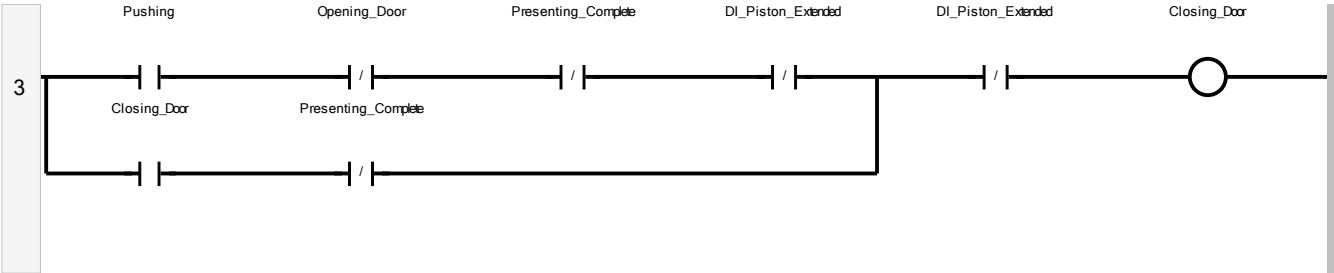
Rung2 Diagram

Push cookies out



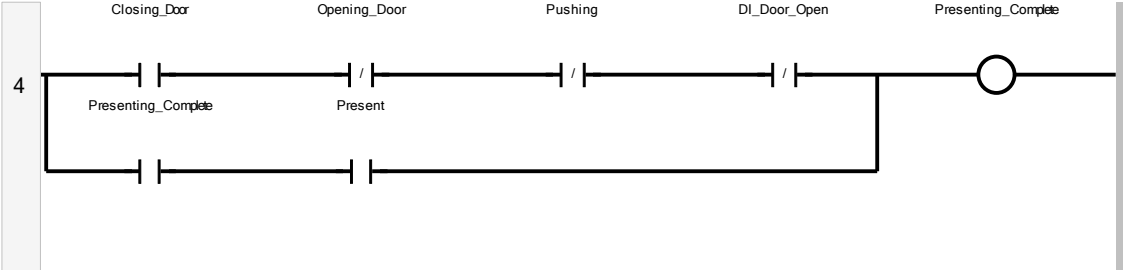
Rung3 Diagram

Close door



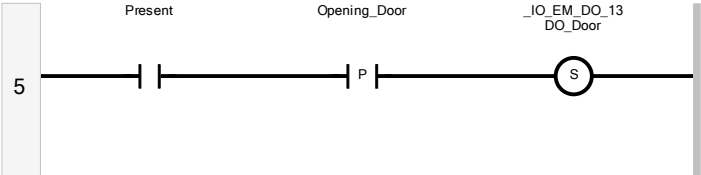
Rung4 Diagram

Complete presentation



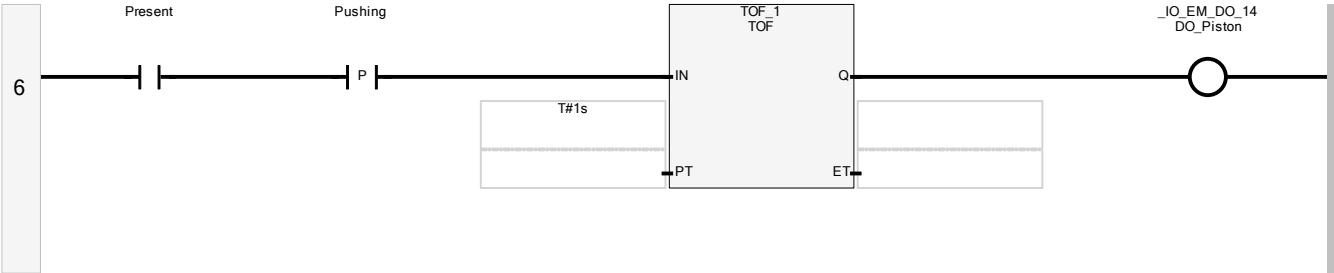
Rung5 Diagram

Open door output



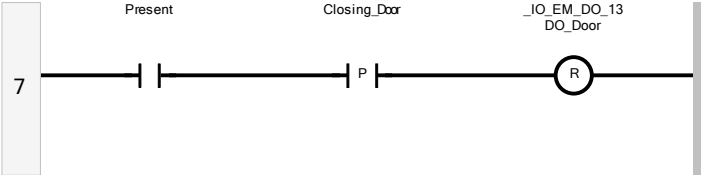
Rung6 Diagram

Piston output



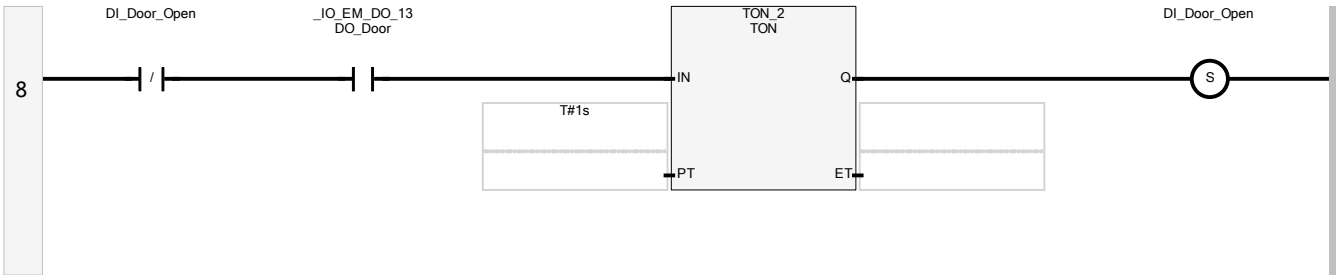
Rung7 Diagram

Close door output



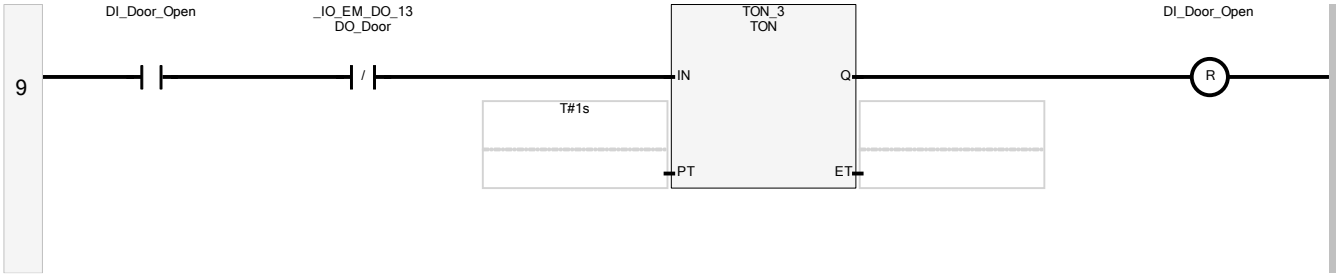
Rung8 Diagram

Simulate door opening



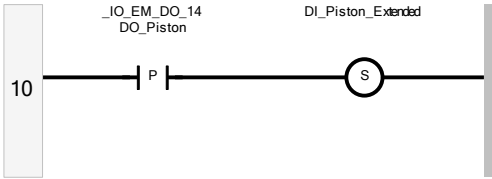
Rung9 Diagram

Simulate door closing



Rung10 Diagram

Simulate piston extending

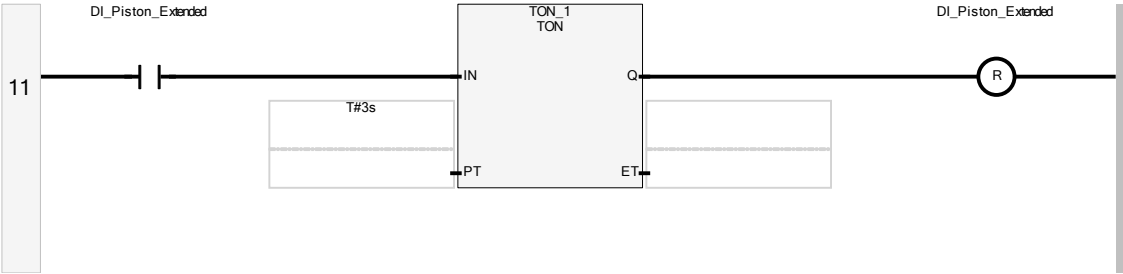


Rung11 Diagram

Simulate piston retracting







Indicators

Programs

