

FC3 - <offline>

"Table Station"

Nombre: **Familia:**
Autor: **Versión:** 0.1
Versión del bloque: 2
Hora y fecha Código: 22/08/2022 15:22:18
Interface: 18/08/2022 10:00:20
Longitud (bloque / código / datos): 00446 00302 00000

Nombre	Tipo de datos	Dirección	Comentario
IN		0.0	
OUT		0.0	
IN_OUT		0.0	
TEMP		0.0	
RETURN		0.0	
RET_VAL		0.0	

Bloque: FC3 TURN TABLE MANAGEMENT

Segm.: 1

```
////////////////////////////////////////////////////////////////  
//***** TURN TABLE FINITE STATE MACHINE (FSM) *****/  
////////////////////////////////////////////////////////////////
```

// If Systeme is Active => Enter into the State machine

```
U    "systemActive"          M10.0  
SPBN _020
```

```
L    "turnTableState"        MW24
```

```
SPL  _021
```

```
SPA  CERO  
SPA  ONE  
SPA  TWO  
SPA  THREE  
SPA  FOUR  
SPA  FIVE  
SPA  SIX
```

```
_021: SPA  OUT
```

//***** RESET ALL THE TABLE OUTPUTS *****/

```
CERO: R    "Var System Outputs".load      DB2.DBX0.2  
R    "Var System Outputs".unLoad          DB2.DBX0.3  
R    "Var System Outputs".turnTable       DB2.DBX0.4
```

// If Turn Table => New State

```
U    "Var System Inputs".turnTableEntry   DB1.DBX0.7  
FP    "OnsLoadAct"                        M255.3
```

```
O
```

```
U    "Var System Inputs".turnTableEntry   DB1.DBX0.7
```

```
U    "Var System Inputs".loadPosition     DB1.DBX1.1
```

```
FP    "OnsReLoadBox"                      M254.7
```

```
SPBN _022
```

```
L    1
```

```
T    "turnTableState"                    MW24
```

```
_022: NOP  0
```

```
SPA  END
```

//***** SET LOAD BOX INTO TURN TABLE *****/

```
ONE: S    "Var System Outputs".load      DB2.DBX0.2
```

// If box at front sensor => New State

```
U    "Var System Inputs".atFront          DB1.DBX1.2
```

```
SPBN _023
```

```
L    2
```

```
T    "turnTableState"                    MW24
```

```
_023: NOP  0
```

```
SPA  END
```

```
//***** RESET LOAD, SET TURN TABLE AND BOX PATH SELECTION *****//
TWO:  R    "Var System Outputs".load          DB2.DBX0.2
      S    "Var System Outputs".turnTable      DB2.DBX0.4

// If large box detected and at unload position => New State
      U    "largeBox"                          M20.2
      SPBN _024
      L    3
      T    "turnTableState"                    MW24
_024: NOP    0

// If Not large box detected and at unload position => New State
      UN   "largeBox"                          M20.2
      SPBN _025
      L    5
      T    "turnTableState"                    MW24
_025: NOP    0
      SPA  END

//***** LARGE BOX PATH (LEFT CONVEYOR)*****//
THRE: U    "Var System Inputs".unloadPosition DB1.DBX1.0
      SPBN _026
      L    4
      T    "turnTableState"                    MW24
_026: NOP    0
      SPA  END

//***** SMALL BOX LEAVING PATH (RIGHT CONVEYOR)*****//
FOUR: S    "Var System Outputs".load          DB2.DBX0.2

// If negative edge sensor left entry => State 0
      U    "Var System Inputs".leftEntry       DB1.DBX1.4
      FN    "OnsLeftLeaving"                  M255.0
      SPBN _027
      L    0
      T    "turnTableState"                    MW24
_027: NOP    0
      SPA  END

//***** SMALL BOX LEAVING PATH (RIGHT CONVEYOR)*****//
FIVE: U    "Var System Inputs".unloadPosition DB1.DBX1.0
      SPBN _028
      L    6
      T    "turnTableState"                    MW24
_028: NOP    0
      SPA  END

//***** SMALL BOX LEAVING PATH (RIGHT CONVEYOR)*****//
SIX:  S    "Var System Outputs".unload         DB2.DBX0.3

// If negative edge sensor right entry => State 0
      U    "Var System Inputs".rightEntry      DB1.DBX1.3
      FN    "OnsRightLeaving"                  M254.6
      SPBN _029
      L    0
      T    "turnTableState"                    MW24
_029: NOP    0
      SPA  END

//***** VALUE OUT OF RANGE *****//
OUT:  L    0
      T    "turnTableState"                    MW24
      SPA  END

//***** IF JUMP TO END LOOP OUT *****//
END:  BEA

_020: NOP    0
```