Escena12_ST

```
   1|       10|       20|       30|       40|       50|       60|       70|       80|       90|       100|       110|

 1  R_TRIG_0 (CLK := start);
 2  if em_stop and stop and not reseteo and R_TRIG_0.Q then
 3          start_light:=1;
 4          stop_light:=0;
 5          reset_light:=0;
 6          %M50:=0;
 7  end_if;
 8  if not stop and not auto then
 9          entry_conveyor:=0;
10          exit_conveyor:=0;
11          start_light:=0;
12          stop_light:=1;
13  end_if;
14  (*Modo manual-----------------------*)
15  if start_light and manual and em_stop then
16  R_TRIG_1 (CLK := start);
17          if R_TRIG_1.Q then
18                  entry_conveyor:=1;
19                  aux_cont:=0;
20          end_if;
21  R_TRIG_2 (CLK := at_entry);
22          if R_TRIG_2.Q then
23                  entry_conveyor:=0;
24          end_if;
25  F_TRIG_0 (CLK := movingx);
26          if (at_entry and not entry_conveyor and not movx) or ( grab and item_detected and movx and F_TRIG_0.Q
26>>) then
27                  movz:=1;
28          end_if;
29          if movingz and item_detected and not movx then
30                  grab:=1;
31          end_if;
32          if grab and item_detected and not movx then
33                  movz:=0;
34          end_if;
35          if grab and item_detected and not movingz and not movz then
36                  movx:=1;
37          end_if;
38  F_TRIG_1 (CLK := movingz);
39          if movz and F_TRIG_1.Q and movx and at_exit then
40                  grab:=0;
41                  if not grab then
42                          movz:=0;
43                  end_if;
44          end_if;
45          if movx and not grab and not item_detected and not movz then
46                  movx:=0;
47                  exit_conveyor:=1;
48          end_if;
49          TON_2 (IN := exit_conveyor,
50         PT := t#5.5s);
51          if TON_2.Q then
52                  exit_conveyor:=0;
53                  start_light:=0;
54                  aux_cont:=1;
55          end_if;
56  end_if;
57  (*Reseteo---------------------------------*)
58  R_TRIG_3 (CLK := reseteo);
59  if r_trig_3.q then
60          %M51:=0;
61  end_if;
62  if (R_TRIG_3.Q and not start_light) or not em_stop then
63          reset_light:=1;
64          aux_cont:=1;
65          entry_conveyor:=0;
66          exit_conveyor:=0;
67          movx:=0;
68          movz:=0;
69          grab:=0;
70          start_light:=0;
71  end_if;
72
73  if %M51 and %s6 then
74          reset_light:=1;
75  end_if;
76  if %M51 and not %s6 then
77          reset_light:=0;
78  end_if;
79
80  F_TRIG_2 (CLK := stop);
81  if F_TRIG_2.Q then
82          stop_light:=1;
83          %M50:=1;
84  end_if;
85  F_TRIG_3 (CLK := em_stop);
86  if F_TRIG_3.Q then
87          %M51:=1;
88  end_if;
89  (*Modo automático-----------------------*)
90  if start_light and auto and em_stop then
91  R_TRIG_4 (CLK := start);
92          if R_TRIG_4.Q then
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    1|       10|       20|       30|       40|       50|       60|       70|       80|       90|      100|      110|

 93                  entry_conveyor:=1;
 94                  aux_cont:=0;
 95          end_if;
 96
 97  R_TRIG_5 (CLK := at_entry);
 98          if R_TRIG_5.Q then
 99                  entry_conveyor:=0;
100          end_if;
101
102  F_TRIG_4 (CLK := movingx);
103          if (at_entry and not entry_conveyor and not movx) or ( grab and item_detected and movx and F_TRIG_4.Q
103>>) then
104                  movz:=1;
105          end_if;
106          if movingz and item_detected and not movx then
107                  grab:=1;
108          end_if;
109          if grab and item_detected and not movx then
110                  movz:=0;
111          end_if;
112          if grab and item_detected and not movingz and not movz then
113                  movx:=1;
114          end_if;
115
116  F_TRIG_5 (CLK := movingz);
117          if movz and F_TRIG_5.Q and movx and at_exit then
118                  grab:=0;
119                  if not grab then
120                          movz:=0;
121                  end_if;
122          end_if;
123          if movx and not grab and not item_detected and not movz then
124                  movx:=0;
125                  exit_conveyor:=1;
126          end_if;
127
128          TON_3 (IN := exit_conveyor,
129         PT := t#5.5s);
130          if TON_3.Q then
131                  exit_conveyor:=0;
132                  entry_conveyor:=1;
133                  if cont=2 and %M50 then
134                          entry_conveyor:=0;
135                          start_light:=0;
136                          aux_cont:=1;
137                  end_if;
138          end_if;
139
140  end_if;
141  F_TRIG_6 (CLK := at_entry);
142  CTU_0 (CU := F_TRIG_6.Q,
143         R := aux_cont,
144         CV => cont);
145  if cont=3 then
146          aux_cont:=1;
147  end_if;
148  if cont=0 then
149          aux_cont:=0;
150  end_if;
```