

Escena9_ST

```
1|      10|      20|      30|      40|      50|      60|      70|      80|      90|     100|     110|
1  R_TRIG_0 (CLK := start);
2
3  if em_stop and stop and not reseteo and R_TRIG_0.Q THEN
4      start_light:=1;
5      stop_light:=0;
6      reset_light:=0;
7      %M50:=0;
8  end_if;
9
10 if not stop and not auto then
11     conveyor1:=0;
12     conveyor2:=0;
13     start_light:=0;
14     stop_light:=1;
15 end_if;
16 (*Modo automático-----*)
17 if start_light and auto and em_stop then
18     R_TRIG_1 (CLK := start);
19     if R_TRIG_1.Q then
20         aux_reset:=0;
21         conveyor1:=1;
22         conveyor2:=1;
23     end_if;
24     if entry1 then
25         conveyor1:=0;
26     end_if;
27     if entry2 then
28         conveyor2:=0;
29     end_if;
30
31     TON_7 (IN := entry1 and %MW40<>0,
32         PT := t#0.5s);
33     if TON_7.Q then
34         conveyor1:=1;
35         load1:=1;
36     end_if;
37
38     if exit_conveyor and not entry1 then
39         conveyor1:=1;
40     end_if;
41
42     TON_8 (IN := entry2 and %MW40=0,
43         PT := t#0.5s);
44     if (exit_conveyor and not entry2) then
45         conveyor2:=1;
46     end_if;
47     if (TON_8.Q and not transfer2) then
48         Conveyor2:=1;
49         load2:=1;
50     end_if;
51     if load2 and not transfer1 and transfer2 then
52         t_left2:=1;
53         load2:=0;
54         t_left1:=1;
55     end_if;
56     R_TRIG_2 (CLK := transfer1);
57     if R_TRIG_2.Q then
58         load1:=1;
59     end_if;
60     if transfer1 then
61         t_left1:=0;
62         t_left2:=0;
63     end_if;
64     R_TRIG_3 (CLK := at_exit);
65     if R_TRIG_3.Q then
66         exit_conveyor:=1;
67     end_if;
68     %MW40 := MOD (IN1 := aux_cont,
69         IN2 := 2);
70     R_TRIG_4 (CLK := start);
71     R_TRIG_5 (CLK := transfer1);
72     auxiliar := OR (IN1 := r_trig_4.q,
73         IN2 := r_trig_5.q);
74     CTU_1 (CU := auxiliar,
75         R := aux_reset,
76         PV := 5,
77         CV => aux_cont);
78
79     cont:=aux_cont-1;
80     if aux_cont>=5 then
81         aux_reset:=1;
82     end_if;
83
84     TON_9 (IN := aux_reset,
85         PT := t#4s);
86
87     F_TRIG_1 (CLK := at_exit);
88     if (TON_2.Q) or (f_trig_1.Q and %M50 and cont=3) then
89         start_light:=0;
90         conveyor2:=0;
91         conveyor1:=0;
92         t_left2:=0;
93         t_left1:=0;
```

Escena9_ST

```
1|      10|      20|      30|      40|      50|      60|      70|      80|      90|     100|     110|
94          load1:=0;
95          load2:=0;
96      end_if;
97
98      TON_10 (IN := (TON_2.Q) or (f_trig_1.Q and %M50 and cont=3),
99             PT := t#10s);
100     if TON_10.Q then
101         exit_conveyor:=0;
102     end_if;
103
104 end_if;
105
106 (*Reseteo-----*)
107 F_TRIG_0 (CLK := reseteo);
108 if F_TRIG_0.Q then
109     %M51:=0;
110 end_if;
111
112 if F_TRIG_0.Q and not start_light or not em_stop then
113     reset_light:=1;
114     exit_conveyor:=0;
115     conveyor2:=0;
116     conveyor1:=0;
117     t_left2:=0;
118     t_left1:=0;
119     load1:=0;
120     load2:=0;
121     start_light:=0;
122     cont:=0;
123     aux_reset:=1;
124     stop_light:=0;
125 end_if;
126 if %M51 and %s6 then
127     reset_light:=1;
128 end_if;
129 if %M51 and not %s6 then
130     reset_light:=0;
131 end_if;
132
133 F_TRIG_2 (CLK := stop);
134 if F_TRIG_2.Q then
135     stop_light:=1;
136     %M50:=1;
137 end_if;
138 F_TRIG_3 (CLK := em_stop);
139 if F_TRIG_3.Q then
140     %M51:=1;
141 end_if;
142 (*Modo manual-----*)
143 if start_light and manual and em_stop then
144     R_TRIG_6 (CLK := start);
145     if R_TRIG_6.Q then
146         conveyor1:=1;
147         conveyor2:=1;
148     end_if;
149
150     if entry1 then
151         conveyor1:=0;
152     end_if;
153     if entry2 then
154         conveyor2:=0;
155     end_if;
156
157     TON_11 (IN := entry1 and not transfer1 and not transfer2,
158            PT := t#0.5s);
159
160     if TON_11.Q then
161         conveyor1:=1;
162         load1:=1;
163     end_if;
164
165     if entry2 then
166         paso:=1;
167     end_if;
168     if at_exit and not transfer2 and paso then
169         conveyor2:=1;
170         load2:=1;
171     end_if;
172
173     if load2 and not transfer1 and transfer2 then
174         t_left2:=1;
175         load2:=1;
176         t_left1:=1;
177     end_if;
178     R_TRIG_7 (CLK := transfer1);
179     if R_TRIG_7.Q then
180         load1:=1;
181     end_if;
182     if transfer1 then
183         t_left1:=0;
184         t_left2:=0;
185     end_if;
186     R_TRIG_8 (CLK := at_exit);
```

Escena9_ST

1	10	20	30	40	50	60	70	80	90	100	110
187											
188											
189											
190											
191											
192											
193											
194											
195											
196											
197											
198											
199											
200											
201											
202											
203											
204											
205											
206											
207											
208											
209											
210											
211											

```
187         if R_TRIG_8.Q then
188             exit_conveyor:=1;
189             conveyor1:=0;
190         end_if;
191
192         if at_exit then
193             paso:=0;
194         end_if;
195         if at_exit and not entry2 then
196             conveyor2:=0;
197         end_if;
198         TON_12 (IN := not conveyor1 and not paso,
199             PT := t#13s);
200         if TON_12.Q then
201             load2:=0;
202             start_light:=0;
203             load1:=0;
204             exit_conveyor:=0;
205         end_if;
206     end_if;
207
208
209
210
211
```