

# Escena5\_ST

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1|      10|      20|      30|      40|      50|      60|      70|      80|      90|     100|     110|
1  R_TRIG_2 (CLK := Start);
2
3  if em_stop and stop and not reseteo and R_TRIG_2.Q then
4  SET (OUT => start_light);
5  RESET (OUT => stop_light);
6  RESET (OUT => reset_light);
7  RESET (OUT => %M50);
8  end_if;
9
10 if not stop and not auto then
11 RESET (OUT => lids_conveyor);
12 RESET (OUT => bases_conveyor);
13 RESET (OUT => start_light);
14 SET (OUT => stop_light);
15 end_if;
16
17
18
19 (*----- Modo Automático-----*)
20 F_TRIG_2 (CLK := moving_z);
21 if start_light and em_stop and auto then
22     if (R_TRIG_2.Q and not clamp_base) or (move_x and F_TRIG_2.Q and not moving_x and not grab and pos_rai
22>>seb) then
23         lids_conveyor:=1;
24         bases_conveyor:=1;
25     end_if;
26 F_TRIG_3 (CLK := lid_at_place);
27 if F_TRIG_3.Q and not lid_clamped then
28     clamp_lid:=1;
29 end_if;
30 F_TRIG_4 (CLK := base_at_place);
31 if F_TRIG_4.Q and not base_clamped then
32     clamp_base:=1;
33 end_if;
34 F_TRIG_5 (CLK := moving_x);
35 if (lid_clamped and not item_detected and not moving_z and clamp_lid) or (move_x and F_TRIG_5.Q) then
36     move_z:=1;
37     grab:=1;
38 end_if;
39 if item_detected and lid_clamped and moving_z and not move_x then
40     move_z:=0;
41 end_if;
42 F_TRIG_6 (CLK := move_z);
43 if not move_x and F_TRIG_6.Q then
44     clamp_lid:=0;
45 end_if;
46 if item_detected and not moving_z and not move_z and not moving_x then
47     move_x:=1;
48 end_if;
49 F_TRIG_7 (CLK := moving_z);
50 if move_x and F_TRIG_7.Q and not moving_x then
51     if move_z then
52         grab:=0;
53     end_if;
54     if not grab then
55         move_z:=0;
56         clamp_base:=0;
57     end_if;
58 end_if;
59 F_TRIG_8 (CLK := moving_z);
60 if move_x and F_TRIG_8.Q and not moving_x and not grab and not move_z then
61     pos_raiseb:=1;
62 end_if;
63 F_TRIG_9 (CLK := part_leaving);
64 if F_TRIG_9.Q then
65     move_x:=0;
66     pos_raiseb:=0;
67     if %M50 then
68         start_light:=0;
69     end_if;
70 end_if;
71 F_TRIG_10 (CLK := lid_at_place);
72 F_TRIG_11 (CLK := part_leaving);
73 if F_TRIG_10.Q or (F_TRIG_11.Q and %M50) then
74     lids_conveyor:=0;
75 end_if;
76 F_TRIG_12 (CLK := part_leaving);
77 F_TRIG_13 (CLK := base_at_place);
78 if (F_TRIG_12.Q and %M50) or (F_TRIG_13.Q) then
79     bases_conveyor:=0;
80 end_if;
81 end_if;
82
83 F_TRIG_17 (CLK := lid_at_place);
84
85 CTU_4 (CU := F_TRIG_17.Q,
86 R := aux_cont,
87 CV => cont);
88 F_TRIG_18 (CLK := part_leaving);
89
90 if F_TRIG_18.Q and %M50 and not lids_conveyor and not bases_conveyor and not clamp_lid and not clamp_base then
91     aux_cont:=1;
92 end_if;
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1|      10|      20|      30|      40|      50|      60|      70|      80|      90|     100|     110|
93
94  if cont =0 then
95      aux_cont:=0;
96  end_if;
97
98
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103
104
105  (*-----Parada de Emergencia-----*)
106
107  R_TRIG_3 (CLK := reseteo);
108
109  if R_TRIG_3.Q then
110      %M51:=0;
111  end_if;
112
113  if (R_TRIG_3.Q and not start_light) or (not em_stop) then
114      move_x:=0;
115      move_z:=0;
116      clamp_base:=0;
117      clamp_lid:=0;
118      pos_raiseb:=0;
119      lids_conveyor:=0;
120      bases_conveyor:=0;
121      grab:=0;
122      reset_light:=1;
123      start_light:=0;
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_14 (CLK := stop);
134
135      if F_TRIG_14.Q then
136          stop_light:=1;
137          %M50:=1;
138      end_if;
139
140  F_TRIG_15 (CLK := em_stop);
141      if F_TRIG_15.Q then
142          %M51:=1;
143      end_if;
144  (*-----Modo Manual-----*)
145  F_TRIG_16 (CLK := moving_z);
146  if start_light and em_stop and manual then
147      if (R_TRIG_2.Q and not clamp_base) or (move_x and F_TRIG_16.Q and not moving_x and not grab and pos_ra
147>>iseb) then
148          lids_conveyor:=1;
149          bases_conveyor:=1;
150      end_if;
151  F_TRIG_3 (CLK := lid_at_place);
152      if F_TRIG_3.Q and not lid_clamped then
153          clamp_lid:=1;
154      end_if;
155  F_TRIG_4 (CLK := base_at_place);
156      if F_TRIG_4.Q and not base_clamped then
157          clamp_base:=1;
158      end_if;
159  F_TRIG_5 (CLK := moving_x);
160      if (lid_clamped and not item_detected and not moving_z and clamp_lid) or (move_x and F_TRIG_5.Q) then
161          move_z:=1;
162          grab:=1;
163      end_if;
164      if item_detected and lid_clamped and moving_z and not move_x then
165          move_z:=0;
166      end_if;
167  F_TRIG_6 (CLK := move_z);
168      if not move_x and F_TRIG_6.Q then
169          clamp_lid:=0;
170      end_if;
171      if item_detected and not moving_z and not move_z and not moving_x then
172          move_x:=1;
173      end_if;
174  F_TRIG_7 (CLK := moving_z);
175      if move_x and F_TRIG_7.Q and not moving_x then
176          if move_z then
177              grab:=0;
178          end_if;
179          if not grab then
180              move_z:=0;
181              clamp_base:=0;
182          end_if;
183      end_if;
184  F_TRIG_8 (CLK := moving_z);
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185         if move_x and F_TRIG_8.Q and not moving_x and not grab and not move_z then
186             pos_raiseb:=1;
187         end_if;
188 F_TRIG_9 (CLK := part_leaving);
189         if F_TRIG_9.Q then
190             move_x:=0;
191             pos_raiseb:=0;
192             start_light:=0;
193         end_if;
194 F_TRIG_10 (CLK := lid_at_place);
195 F_TRIG_11 (CLK := part_leaving);
196         if F_TRIG_10.Q or F_TRIG_11.Q then
197             lids_conveyor:=0;
198         end_if;
199 F_TRIG_12 (CLK := part_leaving);
200 F_TRIG_13 (CLK := base_at_place);
201         if (F_TRIG_12.Q ) or (F_TRIG_13.Q) then
202             bases_conveyor:=0;
203         end_if;
204     end_if;
```