

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
99
100
101
102
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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1|      10|      20|      30|      40|      50|      60|      70|      80|      90|     100|     110|
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;
```