```
1   PROGRAM Right_Exit_Station
2   VAR
3       Box_At_Right_Convey             : BOOL ;
4       Ons13_Right_Entry               : R_TRIG ;
5       Ons14_Exit_Right                : R_TRIG ;
6       Ons15_Re_Energize               : F_TRIG ;
7       Ons16_Counter                   : R_TRIG ;
8   END_VAR
9
```

```
1   (*
2   * File: Right Exit Conveyor
3   * Author: Jaime Calvente Mieres
4   * Date: 13-08-2022
5   * Description: Program to control the right exit path of the boxes.
6   *)
7
8
9   (*
10  * If the systme is active and sensor at left entry
11  * fires up, activate the conveyor and count one box.
12  * If the Exit sensor Negative edge detects a box,
13  * decrease the counter by one and check if conveyor
14  * needs to be stopped or not.
15  *)
16  IF System_Active THEN
17
18      // One shot call
19      Ons13_Right_Entry ( CLK := At_Right_Entry ) ;
20      Ons14_Exit_Right ( CLK := At_Exit_Right ) ;
21      Ons16_Counter ( CLK := At_Right_Entry ) ;
22
23      // Convey Activation conditions
24      IF Ons15_Re_Energize . Q AND ( Right_Counter <> 0 OR At_Right_Entry )
    OR Ons13_Right_Entry . Q THEN
25          M_Right_Convey := TRUE ;
26      END_IF
27
28      // Set box at scale and increment counter
29      IF Ons16_Counter . Q THEN
30          //Box_At_Right_Convey := TRUE;
31          Right_Count := Right_Count + 1 ;
32          Right_Counter := Right_Counter + 1 ;
33      END_IF
34
35      // Counter decrement and Box at convey deactivation
36      IF Ons14_Exit_Right . Q THEN
37          //Box_At_Right_Convey := FALSE;
38          // Check the counter to decrease it
39          IF Right_Counter <> 0 THEN
40              Right_Counter := Right_Counter - 1 ;
41          // Check the counter to deactivate the Convey
42          ELSIF Right_Counter = 0 THEN
43              M_Right_Convey := FALSE ;
44          END_IF
45      END_IF
```

```
46
47      END_IF
48
49
50      (* Conditions to Re-Start the program after
51      a soft stop *)
52      Ons15_Re_Energize ( CLK  :=  Soft_Stop_Active ) ;
53      IF  Soft_Stop_Active  THEN
54          M_Right_Convey  :=  FALSE ;
55      END_IF
56
```