Conveyor Control application

Conveyor Control application will help you in understanding bit logic instructions in STEP7 program.

The following figure (fig.1) shows a conveyor belt that can be activated electrically. There are two push button switches at the beginning of the belt: START1 and STOP1. There are also two push button switches at the end of the belt: START2 and STOP2. It is possible to start or stop the belt from either end. Also, Limit switch SW stops the belt when an item on the belt reaches the end.

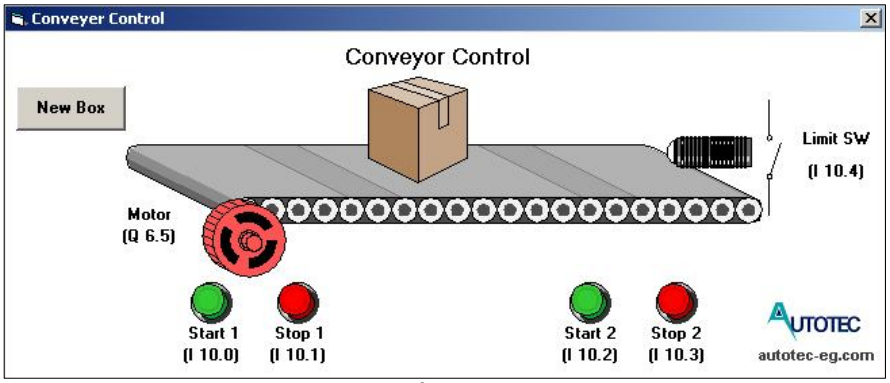

Fig.1

When the motor starts the belt will start moving and the product on it will move till it reach the limit switch SW the product should stop, then the product is suppose to be manually removed when it reaches the limit switch.

If the product reaches the limit switch and didn't stop (due to a bug in your s7 program) the product will fall as shown in figure (fig.2)

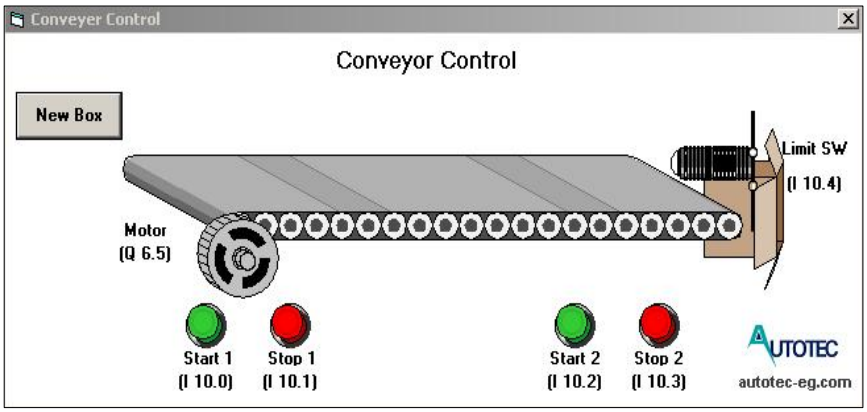

Fig.2

If the product felled or stopped at the limit switch, you can replace a new product from the start point by clicking on "New Box" button

Absolute and symbolic Programming

You can write a program to control the conveyor belt using absolute values or symbols that represent the various components of the conveyor system. You need to make a symbol table to correlate the symbols you choose with absolute values (see the STEP 7 Online Help).