

In this exercise, you will learn how to have two code blocks that are interlocked, and to use the AXVEL velocity mode stepper block. The interlocking code blocks are similar to program organization for a multiple station turret assembly system or a PLC/robot linked system. You will also learn about timers.

Click "New code-block" icon in project browser window, and name it "Secondary" program.

Main state machine:

- before state 0, put rung with \$FirstScan contact and box "RUN Secondary"
- in state 0, wait 10sec (TMR box) then go to state 1
- in state 1, turn on Y2, wait for Y3 then go to state 2
- in state 2, wait for /Y3 then go back to state 0

Secondary state machine:

- before state 0, configure stepper
- in state 0, wait for Y2 then go to state 1
- in state 1, turn on Y3, run stepper CCW at 1000 steps/sec (AXVEL block) until X0, then go to state 2
- in state 2, wait for /Y2, then go to state 0

