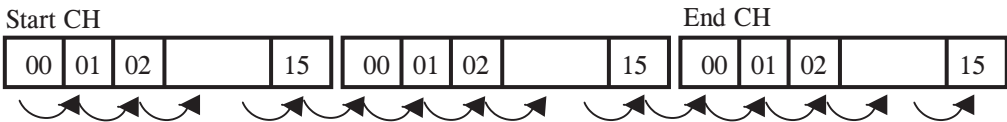
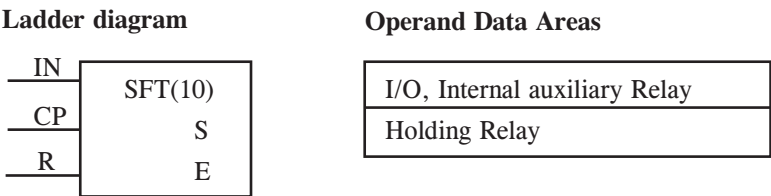


6. APPLICATION EXAMPLES OF BASIC COMMANDS

□ Shift Register – SFT(10)

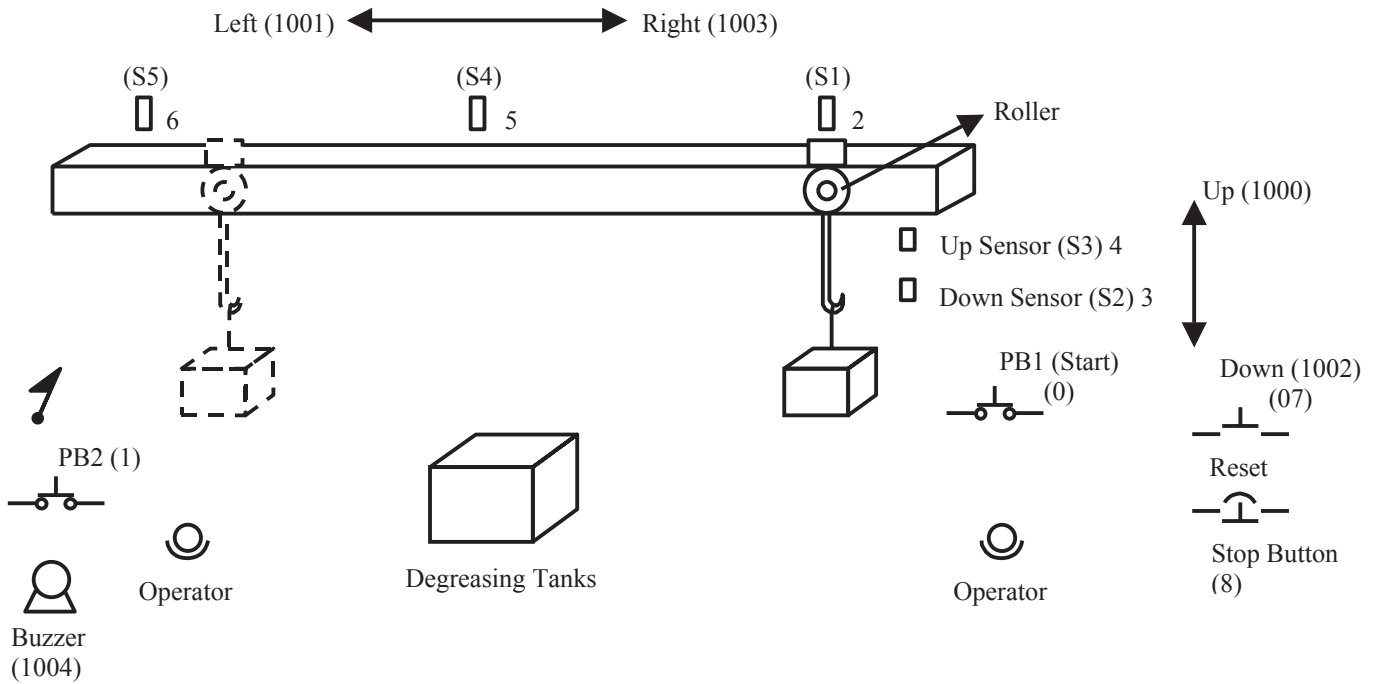
Shift Register (SFT) shifts a 16-bit data in specified channel by 1 bit. Although this instruction shifts data within channels, both a start channel and an end channel must be specified as the data.



6. APPLICATION EXAMPLES OF BASIC COMMANDS

□ Application #6: Overhead Crane Control of Degreasing Operation

In this application, the part needs to be degreased in the degreasing tank before being passed to the next section.



When the PB1 is pressed, the roller will coil up the hook until the up-sensor (S3). The hook will then transverse left (via 01001) until it reaches the S4 position.

It will then stop and lower the product into the degreasing tank. When it reaches down to S2, the product will stay in the degreasing tank for 20 seconds. After the time is up, the product is lifted up and transverse left until S5 position and stop. It continue to come down. Until the down position, where the Buzzer will sound. The operator will collect the product and press the PB2 to return the crane back to the home position.

6. APPLICATION EXAMPLES OF BASIC COMMANDS

At anytime, the Stop Push Button can stop the crane from moving. Upon release, it will continue from where it stops. The Reset Push Button is used when you want to start over again from the beginning.

- **I/O Assignment**

Input	Device
00000	PB1 (Start button)
00001	PB2 (Return button)
00002	S1 (Sensor 1)
00003	S2 (Down sensor)
00004	S3 (Up sensor)
00005	S4 (Degrease sensor)
00006	S5 (End sensor)
00007	RST (Reset button)
00008	Stop (Stop button latch)

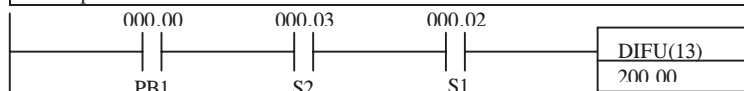
Output	Device
01000	Up motor
01001	Left motor
01002	Down motor
01003	Right motor
01004	Buzzer

6. APPLICATION EXAMPLES OF BASIC COMMANDS

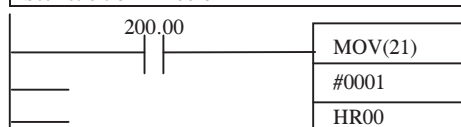
Ladder diagram : Main 1 Network 1

Main 1 –
Program for degreasing tank

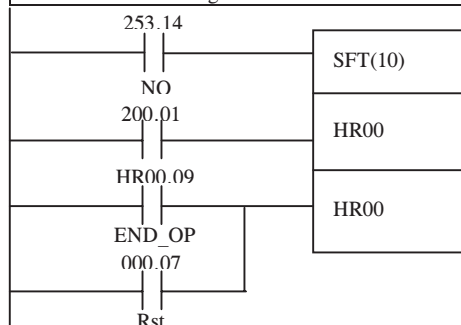
Network 1 – Start
Start operation



Network 2 – Set 1st bit on
Set 1st bit of HR 00 on

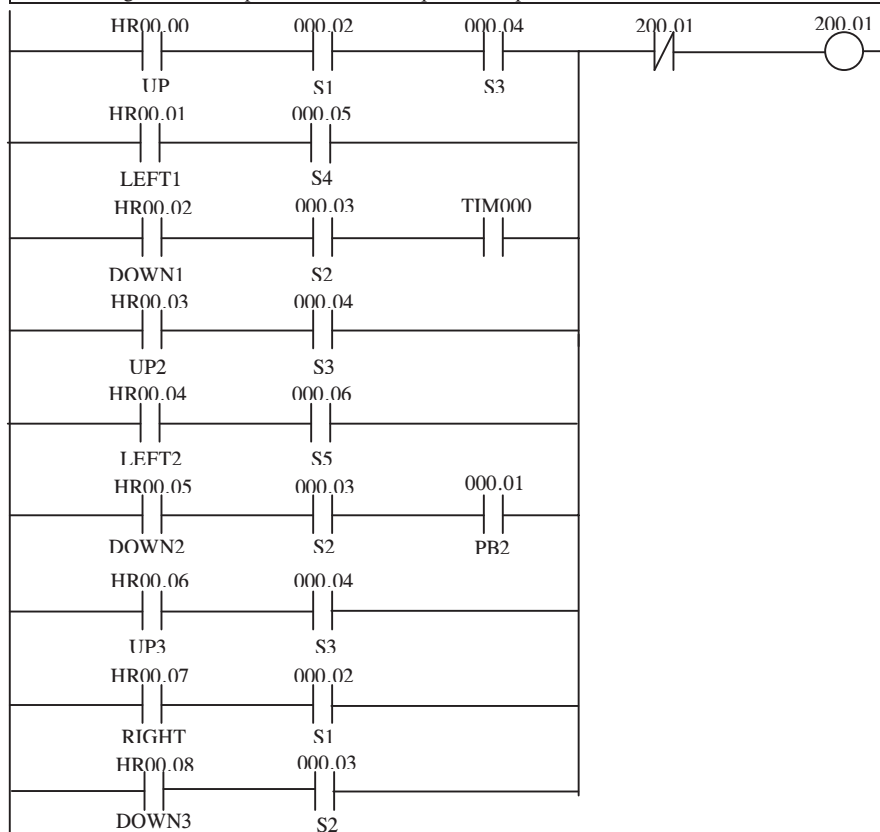


Network 3 – Shift Register



Network 4 – Shift operation

The shift register clock input to control the sequence of operation



6. APPLICATION EXAMPLES OF BASIC COMMANDS

