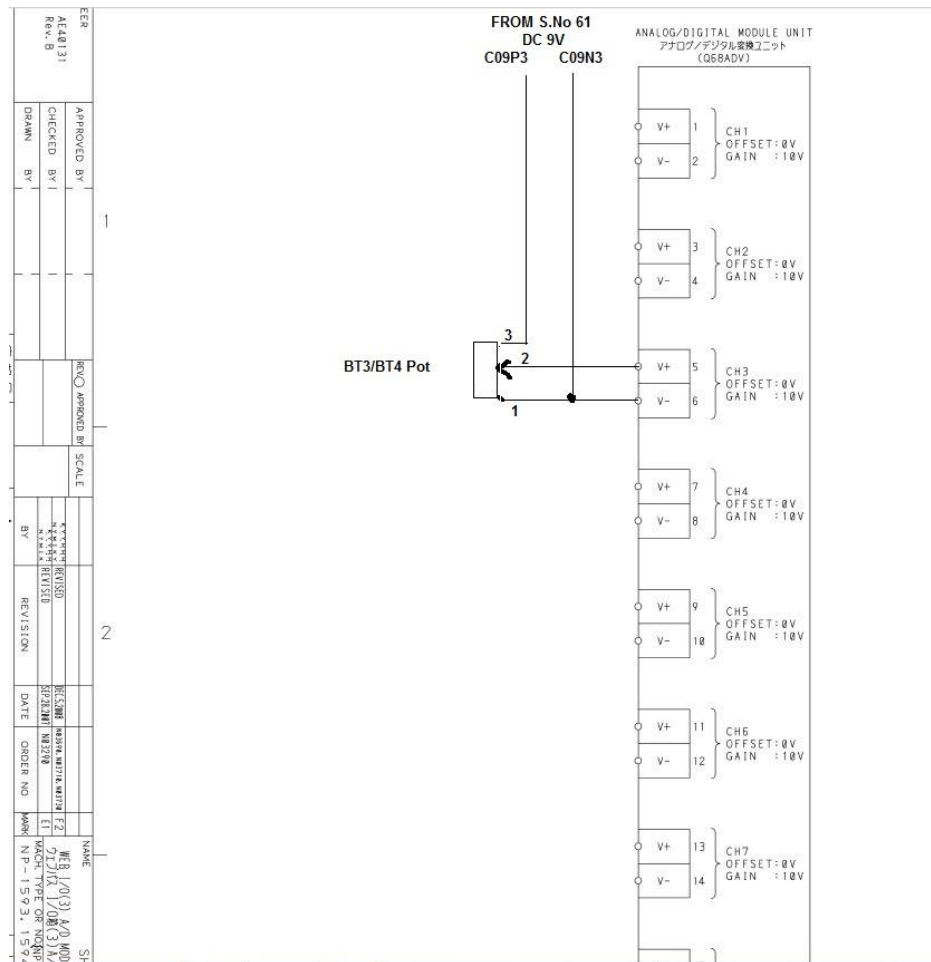


ANGLE BAR DISPLAY

- **AIM-** To display the value of Angle bar movement with the help of potentiometer having a span of 30 (+15to-15) in Touch monitor.
- For testing purpose, BT3/BT4 potentiometer was fixed and connections are given as per below diagram.



So as per above schematic diagram, channel 3 is used in second Q68ADV available in webpath I/O box 3. So variable end of pot is connected to V+ of channel 3.

- Mechanical engineers adjusted the pot physically to two extreme ends for calibration. On connecting the laptop to PLC online, the digital count values for two extreme ends are noted.

- The Noted digital count values are as follows.

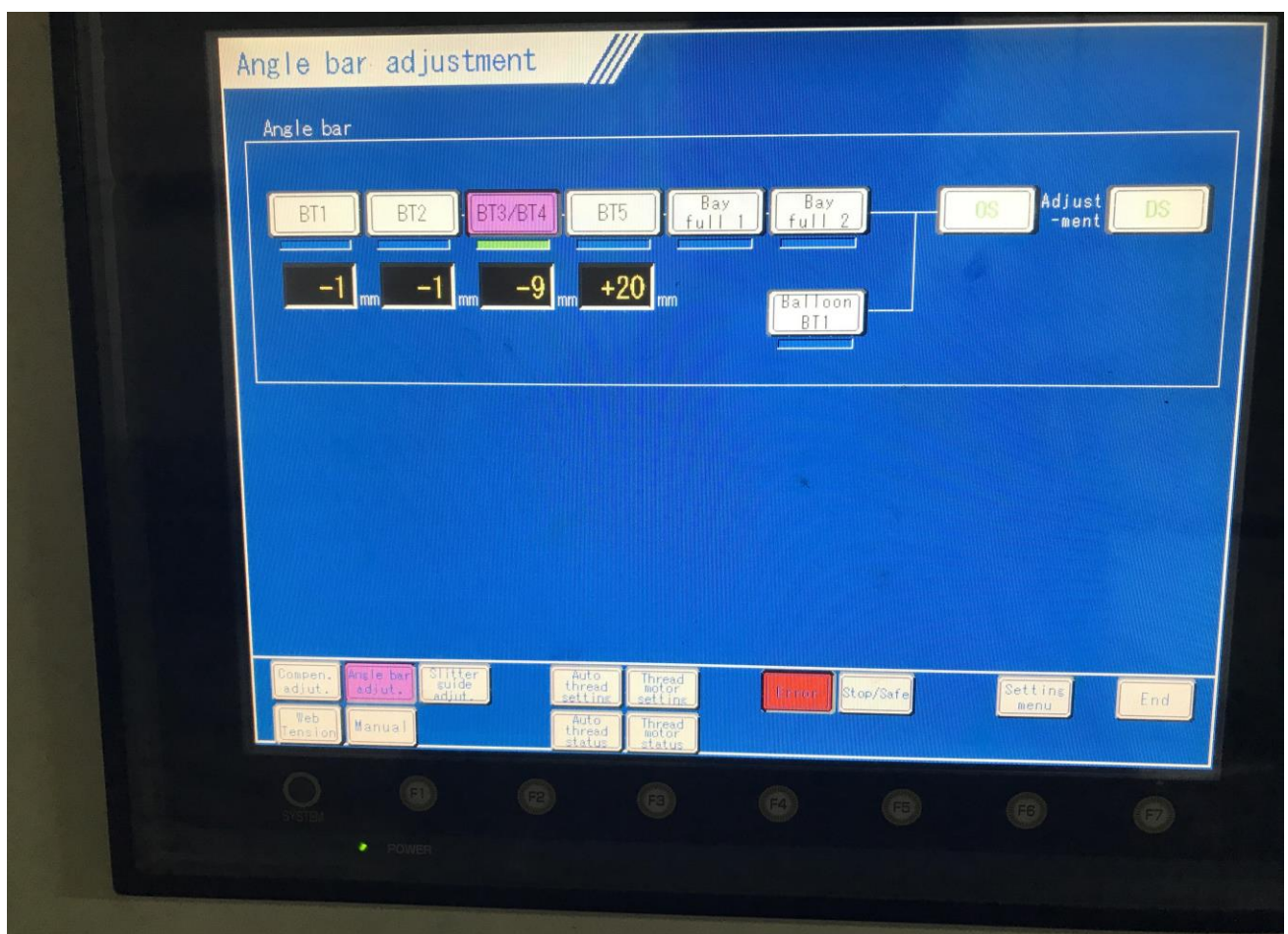
1. DS side 2584 digits

2. OS side 674 digits

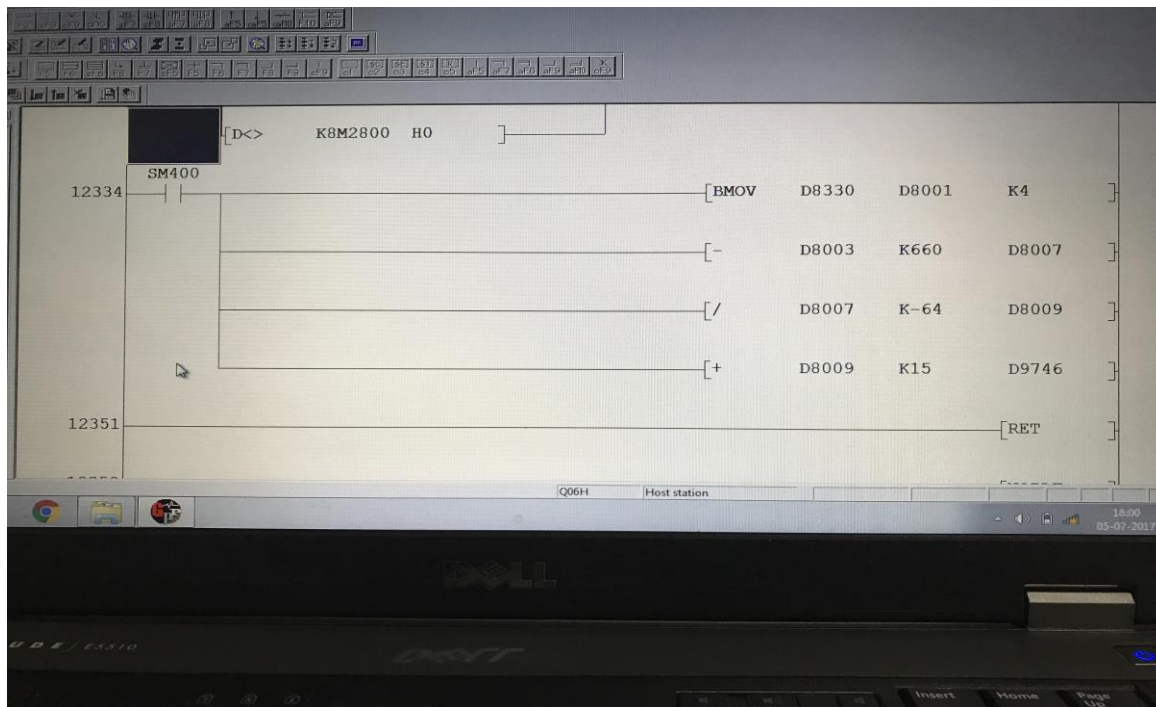
These digits have to be calibrated to -15 and +15 respectively in touch screen.

This is done by arithmetic operations.

- D9744 to D9747 address is used for display in touch screen program. Modification is done for only BT3/BT4 so only D9746 is currently in use (i.e. -9 value box only in use).



PLC Modification



- **LOGIC**

DS

OS

2584

674

STEP 1- SUBTRACT 674 .

1910

0

STEP 2- SPAN IS 30 (+15 TO-15). ON ANALYSIS DIVIDING 1910 BY 30 WE GET 63.6.

SO DIVIDE BY -64. MINUS IS BECAUSE +15 SHOULD BE IN OS.

-29.8

0

STEP 3- ADD 15

-14.8

+15

STEP 4- IN ORDER TO ROUND OFF WE SLIGHTLY CHANGE THE OFFSET VALUE FROM 674 TO 660 IN FIRST STEP.

Result-

Thus this modification is done for BT3/BT4 found in webpath control cabinet screen. Similarly it can be done other towers and other presses using the same principle.

