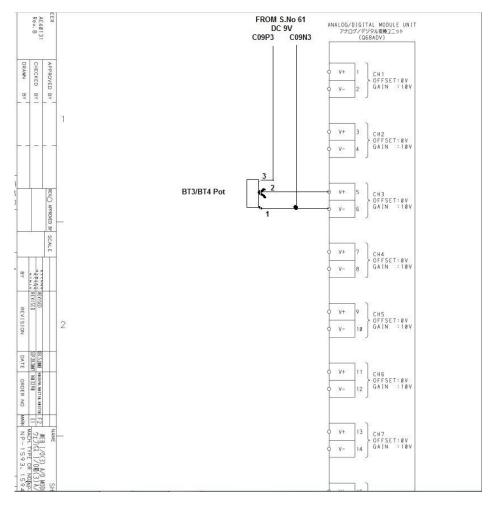
ANGLE BAR DISPLAY

- **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

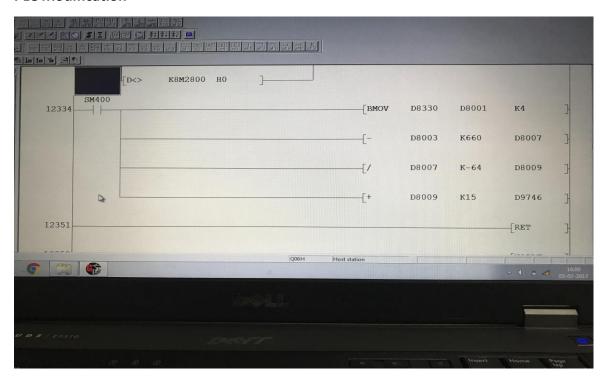
These digits have to be calibrated to -15 and +15 respectively in touch screen.

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



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.

| P352 SM400 29833 - | BMOV | D8330 | D7590 | K4 | ┧ | D8330 A/S 29835 |
|-----------------------|----------------|-------|-------|-------|----------|------------------------|
| 29033 | L | 50330 | 2,000 | *** | 1 | B/D 1288 |
| | | | | | ĺ | D7590 |
| | | | | | | A/S 29840 B/D 29835 |
| SM400 | _ | | | | | D7590 |
| 29839 | | D7590 | K1602 | D7594 | 3 | A/S 29840 |
| | | | | | | B/D 29835 |
| | | | | | | A/S 29844 |
| | | | | | | B/D 29840 |
| | [/ | D7594 | K66 | D7595 | ╗ | D7594 A/S 29844 |
| | Ľ | | | | 1 | B/D 29840 |
| | | | | | | D7595 A/S 29848 |
| | | | | | | B/D 29844 |
| | _ | | | | _ | D7595 |
| | [- | D7595 | K15 | D7596 | 4 | A/S 29848 |
| | | | | | | B/D 29844 |
| | | | | | | A/S 29892 |
| SM400 | | | | | | B/D 29848 |
| 29852 | [- | D7591 | K1468 | D7597 | ╗ | D7591 A/S 29853 |
| | L | | | | 1 | A/S |
| | | | | | | D7597 A/S 29857 |
| | | | | | | B/D 29853 |
| | - | | | | | D7597 |
| | [/ | D7597 | K65 | D7598 | 4 | A/S 29857 |
| | | | | | | B/D 29853 D7598 |
| | | | | | | A/S 29861 |
| | | | | | | B/D 29857 |
| | [- | D7598 | K15 | D7599 | ╗ | D7598 A/S 29861 |
| | L | | | | 1 | B/D 29857 |
| | | | | | | D7599 A/S 29894 |
| | | | | | | B/D 29861 |
| SM400 | г | | | | 4 | D7592 |
| 29865 | [- | D7592 | K660 | D7600 | <u> </u> | A/S 29866 |
| | | | | | | A/S |
| | | | | | | A/S 29870 |
| | | | | | | B/D 29866 |
| | <u></u> [/ | D7600 | K-64 | D7601 |] | A/S 29870 |
| | - | | | | | B/D 29866 |
| | | | | | | D7601 A/S 29874 |
| | | | | | | B/D 29870 |
| | | | K15 | D7602 | ٦ | D7601 A/S 29874 |
| | [+ | DIOUT | T/T J | D/002 | -1 | B/D 29870 |
| | | | | | İ | D7602 |
| | | | | | | A/S 29896 B/D 29874 |
| SM400 | | | | | | B/D 29874 |
| 29878 | [- | D7593 | K1105 | D7603 | 3 | A/S 29879 |
| | | | | | | A/S |
| | | | | | | D7603 A/S 29883 |
| | | | | | | B/D 29879 |
| | <u>[</u> / | D7603 | K65 | D7604 | ┧ | D7603 A/S 29883 |
| | Ľ | D,000 | | | 4 | B/D 29879 |
| | | | | | | D7604 |
| | | | | | | A/S 29887 B/D 29883 |
| | _ | | | | | D7604 |
| | [- | D7604 | K15 | D7605 | } | A/S 29887 |
| | | | | | | B/D 29883 |
| | | | | | | |
| | | | | | | D7605 A/S 29898 |
| | | | | | | |

