

## CNTR8011 – FACTORY TALK AUTOMATION

Summer  
2025

### PROJECT 1

Name: Vatsal Patel (8827824)

## LIST OF SCREENS:

1. MAIN
2. MENU
3. LINE MONITOR
4. MANUAL CONTROLS
5. TRENDS
6. FASTENER LIMIT
7. DATA
8. SHIFT DATA
9. POPUP SCREEN
10. 90-ACTIVE ALARMS
11. 91-ALARM HISTORY

## Passwords:

MAINT – 4321

MGNT – 1234

## NAVIGATION FOR SCREENS

Main > Menu or Trends

Menu > All the screens

Line Monitor > Menu or Main or Manual controls or Return

Manual Controls > Menu or Line Monitor

Trends > Menu or Return

Fastner Limit Screen > Line Monitor or Main Or Menu

Data > Line Monitor or Menu

Shift Data > Line Monitor or Menu

Popup > Close

Active Alarms > Menu or Alarm History

Alarm History > Menu

ALL SCREENS

Current User : VATSAL\VMPTAT

LOGIN

LOGOUT

20-06-2025 05:20:19

MAIN SCREEN

MENU

AUTO MODE

MANUAL MODE

HOME BUTTON

TRENDS

SHUTDOWN

TOTAL PARTS

GOOD PARTS

BAD PARTS

4

2

2

START

LIGHT CURTAIN

E-STOP

ALARM

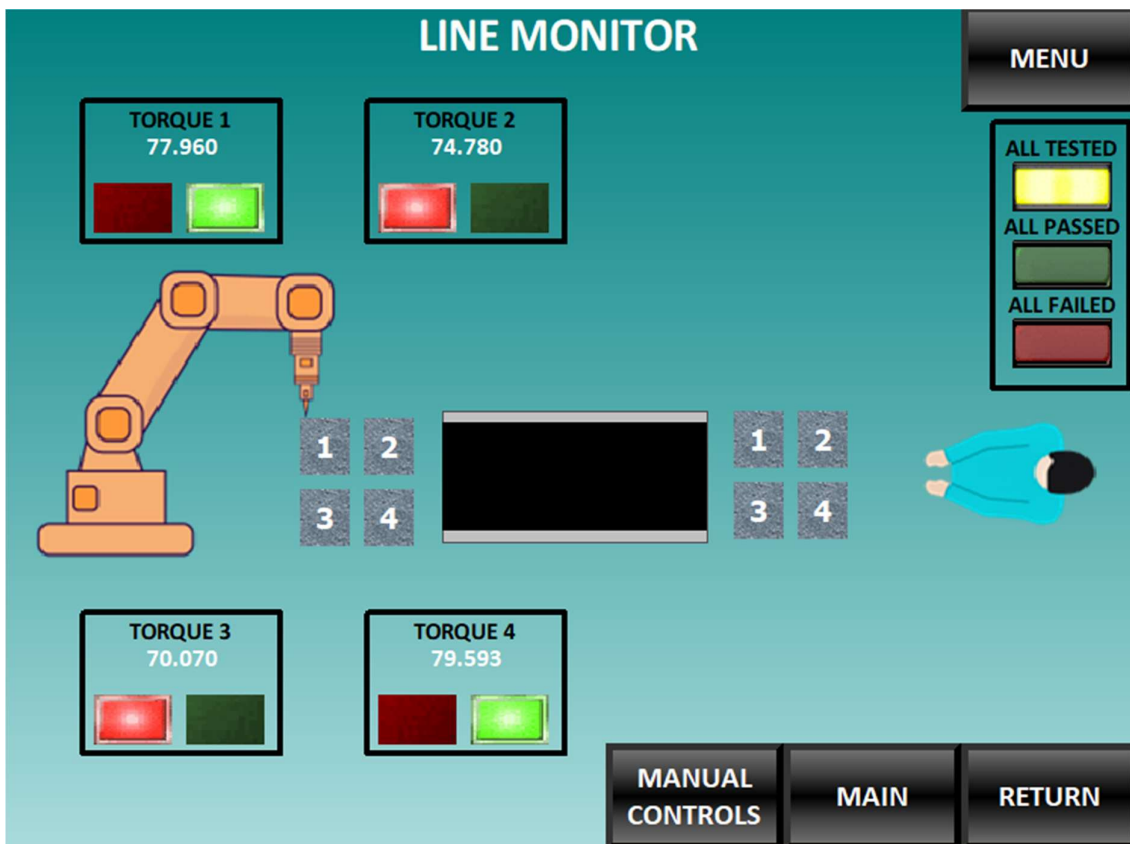
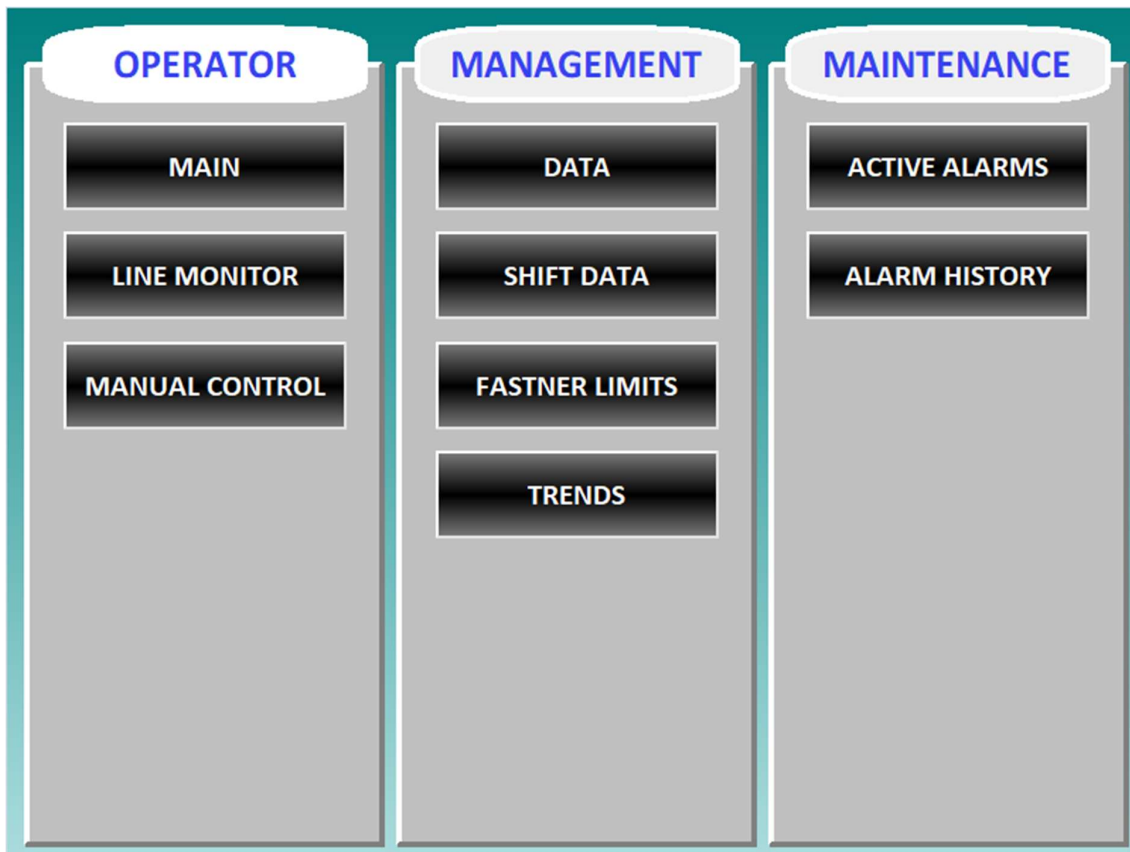
START

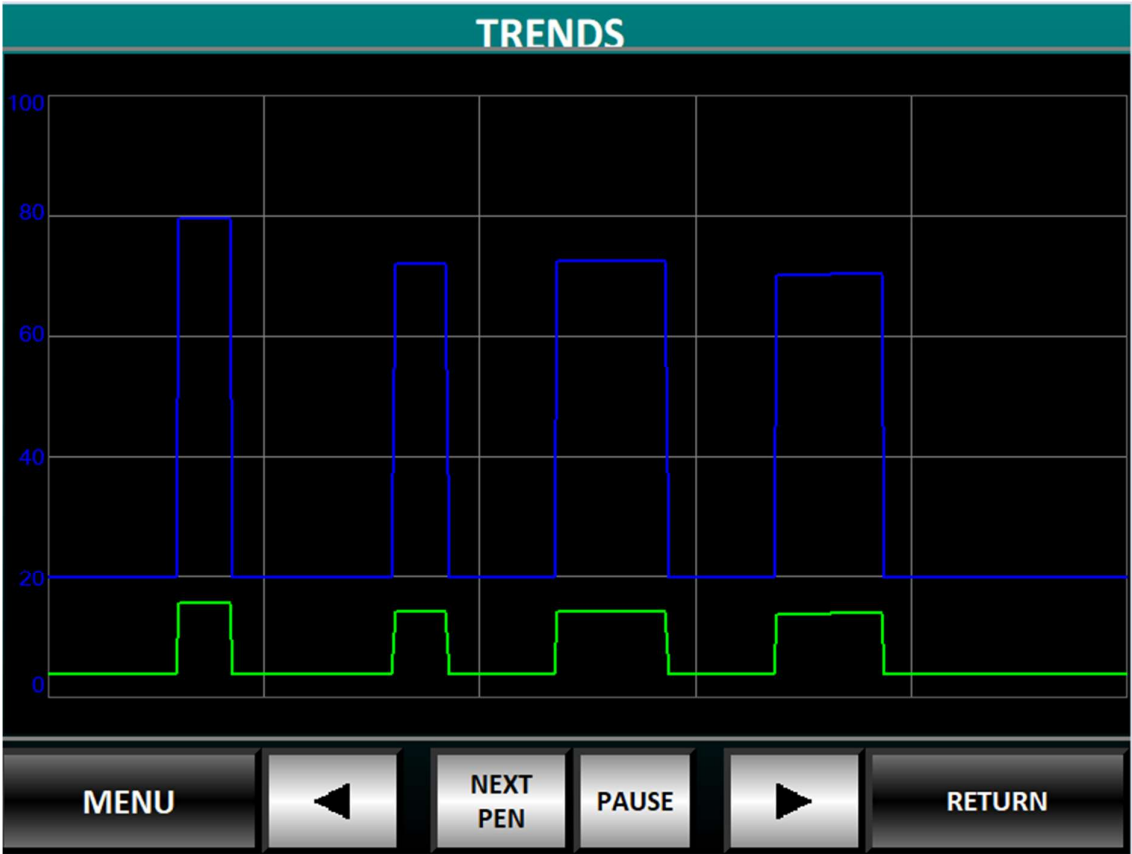
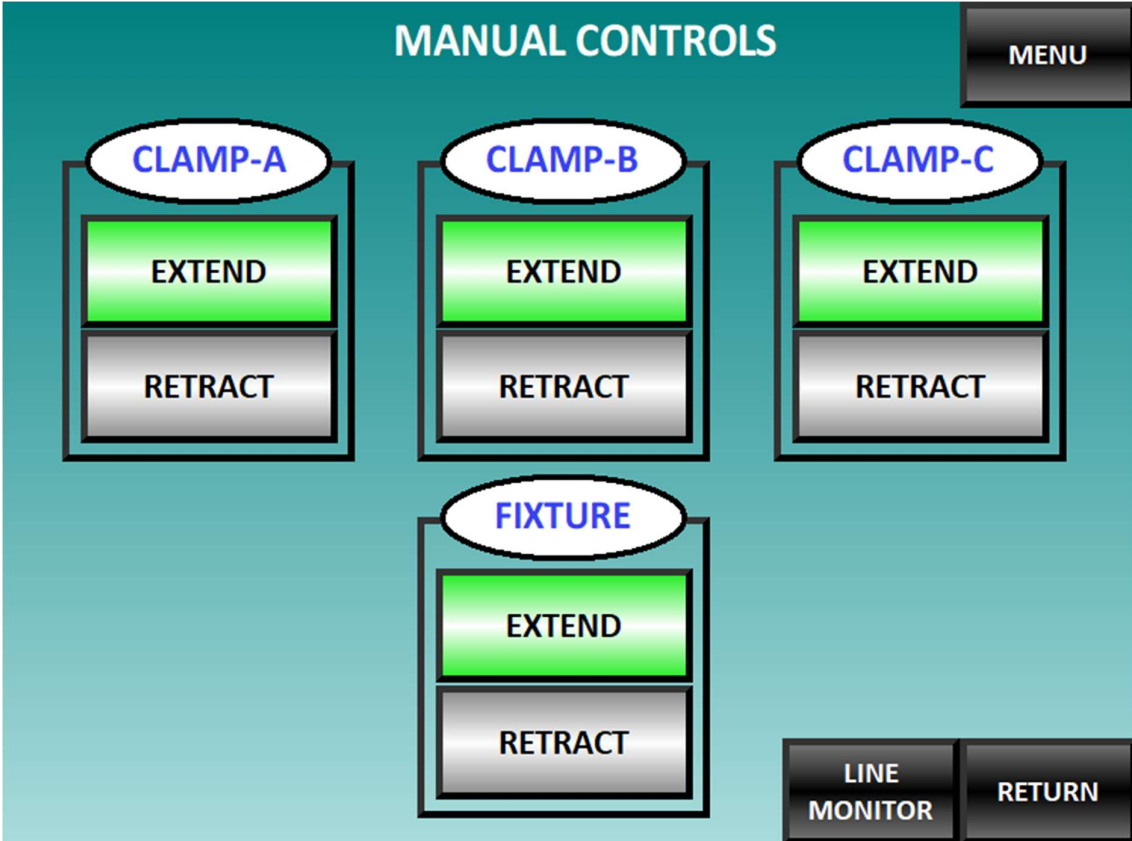
STOP

E-STOP

ALARM RESET

FAIL





## FASTNER LIMIT SET SCREEN

MENU

1

LOW LIMIT

75.0000

HIGH LIMIT

95.0000

2

LOW LIMIT

75.0000

HIGH LIMIT

85.0000

3

LOW LIMIT

75.0000

HIGH LIMIT

85.0000

4

LOW LIMIT

75.0000

HIGH LIMIT

95.0000

LINE  
MONITOR

MAIN

RETURN

## DATA

MENU

TOTAL TESTED

FASTNER 1:	13.000	FASTNER 2:	13.000
FASTNER 3:	13.000	FASTNER 4:	13.000

TOTAL FAILED

FASTNER 1:	6.000	FASTNER 2:	4.000
FASTNER 3:	4.000	FASTNER 4:	4.000

TOTAL PASSED

FASTNER 1:	10.000	FASTNER 2:	4.000
FASTNER 3:	6.000	FASTNER 4:	6.000

END SHIFT

RESET STATS

LINE  
MONITOR

RETURN

SHIFT TIME: 0.000

SHIFT DATA

MENU

CURRENT SHIFT

TESTED: 0.000

PASSED: 0.000

FAILED: 0.000

EFFICIENCY: \*\*\*\*\* %

1HR SHIFT

2HR SHIFT

3HR SHIFT

	TESTED	PASSED	FAILED	EFFICIENCY
PAST SHIFT:	0.000	0.000	0.000	***** %
PAST SHIFT:	4.000	2.000	2.000	50.000 %
PAST SHIFT:	4.000	3.000	4.000	75.000 %
PAST SHIFT:	0.000	0.000	4.000	***** %
PAST SHIFT:	52.000	26.000	18.000	50.000 %

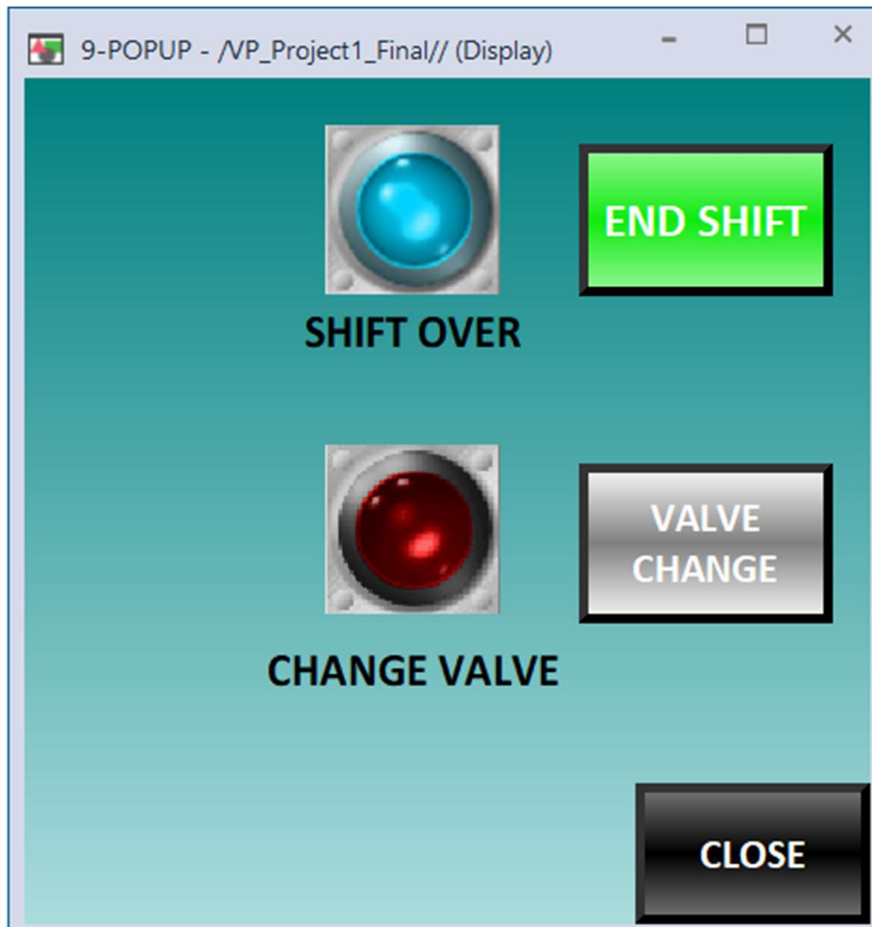
END SHIFT

RESET STATS

LINE MONITOR

RETURN

I used Parameters for 1 or 2 or 3 hrs shift selection.



I used the control from plc tags to get to the popup screen so whenever the shift is over, it will show the popup so one can manually end the shift otherwise after certain time the shift will end as I have put the timer for that.

And the other way this screen will popup is when the total completed parts reach some specific number.



▲

▲▲

▼▼

▼

ACTIVE ALARMS

Alarm time	Message
20-06-2025 06:05:52	ESTOP PRESSED

MENU

ALARM HISTORY

ALARM RESET

RETURN

▲

▲▲

▼▼

▼

ALARM HISTORY

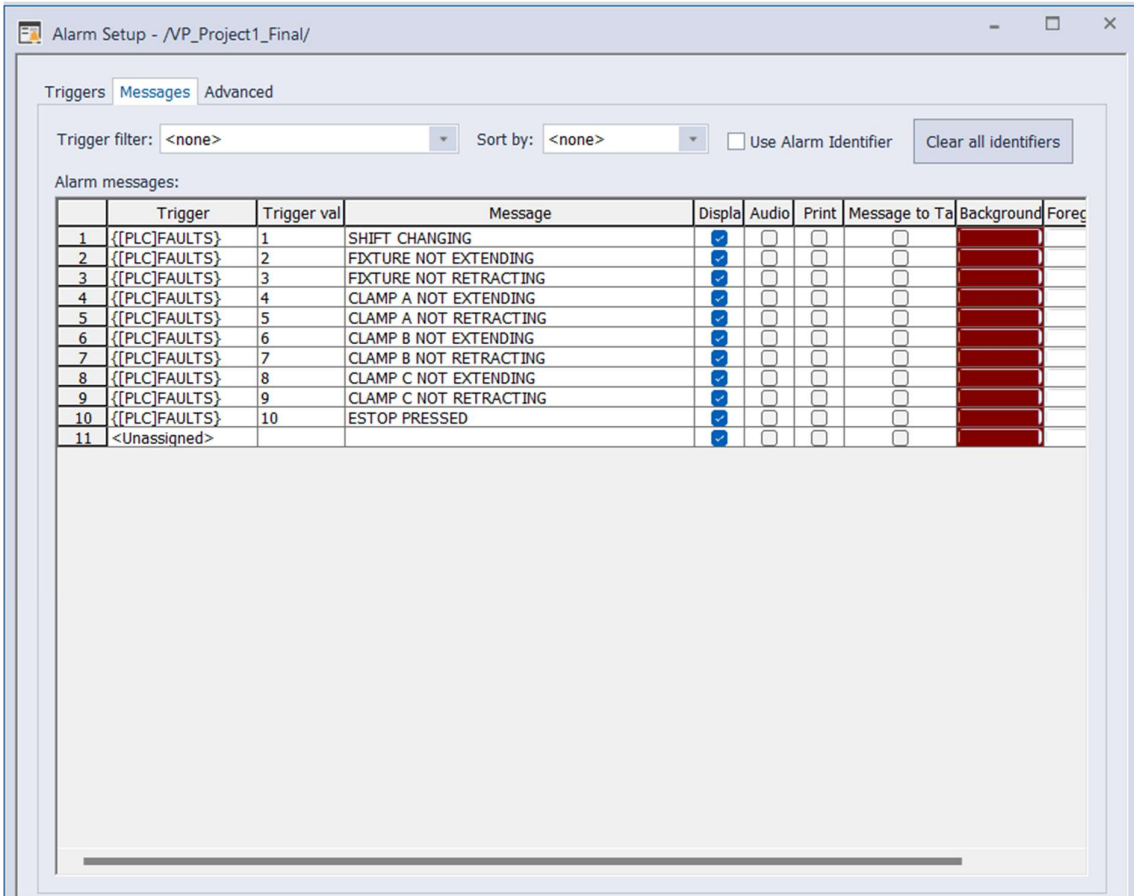
Alarm time	Message
20-06-2025 06:05:52	ESTOP PRESSED
20-06-2025 06:03:28	ESTOP PRESSED

MENU

ACTIVE ALARM

RETURN

# ALARM SETUP



## HMI TAGS

{[PLC]CURRENT\_SHIFT.COMPLETED}

{[PLC]CURRENT\_SHIFT.PASSED}

{[PLC]CURRENT\_SHIFT.FAILED}

{[PLC]SYS\_CycleActive}

{[PLC]I1.14}

{[PLC]EStop}

{[PLC]FAULTSIND}

{[PLC]FromHMI\_StartPB}

{[PLC]FromHMI\_StopPB}

{{PLC}FAULTRESET\_PB}  
{{PLC}SYS\_AutoModeActive}  
{{PLC}SYS\_ManualModeActive}  
{{PLC}HomePB}  
{{PLC}RESET\_STATS}  
{{PLC}FASTEN\_AllTorquesPass}  
{{PLC}FASTEN\_F1Torque}  
{{PLC}FASTEN\_F1TorqueFail}  
{{PLC}FASTEN\_F1TorquePass}  
{{PLC}FASTEN\_F2Torque}  
{{PLC}FASTEN\_F2TorqueFail}  
{{PLC}FASTEN\_F2TorquePass}  
{{PLC}FASTEN\_F3Torque}  
{{PLC}FASTEN\_F3TorqueFail}  
{{PLC}FASTEN\_F3TorquePass}  
{{PLC}FASTEN\_F4Torque}  
{{PLC}FASTEN\_F4TorqueFail}  
{{PLC}FASTEN\_F4TorquePass}  
{{PLC}FASTEN\_F1Complete}  
{{PLC}FASTEN\_F2Complete}  
{{PLC}FASTEN\_F3Complete}  
{{PLC}FASTEN\_F4Complete}  
{{PLC}I1.8}  
{{PLC}I1.9}  
{{PLC}I1.10}  
{{PLC}I1.11}  
{{PLC}FASTEN\_AllComplete}  
{{PLC}FASTEN\_AllTorquesFail}  
{{PLC}FromHMI\_ExtClampA\_PB}  
{{PLC}FromHMI\_RetClampA\_PB}  
{{PLC}FromHMI\_ExtClampB\_PB}

{{PLC}FromHMI\_RetClampB\_PB}  
{{PLC}FromHMI\_ExtClampC\_PB}  
{{PLC}FromHMI\_RetClampC\_PB}  
{{PLC}FromHMI\_ExtFixture\_PB}  
{{PLC}FromHMI\_RetFixture\_PB}  
{{PLC}FASTEN\_TorqueFeedback}  
{{PLC}I2\_CHA}  
{{PLC}FromHMI\_F1LowLim}  
{{PLC}FromHMI\_F1UppLim}  
{{PLC}FromHMI\_F2LowLim}  
{{PLC}FromHMI\_F2UppLim}  
{{PLC}FromHMI\_F3LowLim}  
{{PLC}FromHMI\_F3UppLim}  
{{PLC}FromHMI\_F4LowLim}  
{{PLC}FromHMI\_F4UppLim}  
{{PLC}F1\_Count.ACC}  
{{PLC}F2\_Count.ACC}  
{{PLC}F3\_Count.ACC}  
{{PLC}F4\_Count.ACC}  
{{PLC}F1\_FAIL.ACC}  
{{PLC}F2\_FAIL.ACC}  
{{PLC}F3\_FAIL.ACC}  
{{PLC}F4\_FAIL.ACC}  
{{PLC}F1\_PASS.ACC}  
{{PLC}F2\_PASS.ACC}  
{{PLC}F3\_PASS.ACC}  
{{PLC}F4\_PASS.ACC}  
{{PLC}END\_SHIFT\_PB}  
{{PLC}TIME}  
{{PLC}CURRENT\_SHIFT.EFFICIENT}  
{{PLC}SHIFTHISTORY[0].COMPLETED}

{[PLC]SHIFTHISTORY[1].COMPLETED}  
{[PLC]SHIFTHISTORY[2].COMPLETED}  
{[PLC]SHIFTHISTORY[3].COMPLETED}  
{[PLC]SHIFTHISTORY[4].COMPLETED}  
{[PLC]SHIFTHISTORY[0].PASSED}  
{[PLC]SHIFTHISTORY[1].PASSED}  
{[PLC]SHIFTHISTORY[2].PASSED}  
{[PLC]SHIFTHISTORY[3].PASSED}  
{[PLC]SHIFTHISTORY[4].PASSED}  
{[PLC]SHIFTHISTORY[0].FAILED}  
{[PLC]SHIFTHISTORY[1].FAILED}  
{[PLC]SHIFTHISTORY[2].FAILED}  
{[PLC]SHIFTHISTORY[3].FAILED}  
{[PLC]SHIFTHISTORY[4].FAILED}  
{[PLC]SHIFTHISTORY[0].EFFICIENT}  
{[PLC]SHIFTHISTORY[1].EFFICIENT}  
{[PLC]SHIFTHISTORY[2].EFFICIENT}  
{[PLC]SHIFTHISTORY[3].EFFICIENT}  
{[PLC]SHIFTHISTORY[4].EFFICIENT}  
{[PLC]CHANGED}  
{[PLC]SHIFT\_TIMER.DN}  
{[PLC]TOHMI\_CHANGEVALVE}  
#1 = ONEHR  
#1 = TWOHR  
#1 = THREEHR  
{[PLC]FROMHMI\_SCREEN}  
{[PLC]TOHMI\_SCREENREQ}