OPERATION MENU

- Press in area (2A) for pop up keyboard and set heater “A” setpoint.
- Press red heater symbol (1A) to turn heater “A” on.
- Press in area (4A) for pop up keyboard and set heater “R” setpoint.
- Press blue heater symbol (3A) to turn heater “R” on.
- Press in area (6A) for pop up keyboard and set hose heat setpoint.
- Press hose symbol (5A) to turn hose heat on.
- Press motor button (9A) to turn motor on.
- Press normal button (8A) to start pump cycle.

SHUTDOWN/RETRACT

- Press normal button (8A) to stop pump cycle.
- Press retract button (7A) to place pump in retract mode.
- Press normal button (8A) once again to move pump to retract position.
- Press motor button (9A) to turn motor off.

CYCLE COUNTER

- To reset cycle counter press reset button (10A), cycles will reset at start of next cycle.

SCREEN NAVIGATION

- To navigate to any screen press the desired screen button in area (11A) and the screen name will turn blue to indicate the current screen.
## OPTIONS MENU

### PRESSURE BALANCE
- PRESSURE BALANCE CONTROL IS NOW PASSWORD PROTECTED THROUGH THE SETUP SCREEN.
- PRESS RED OFF BUTTON (1B) TO TURN PRESSURE BALANCE ON, BUTTON WILL TURN GREEN.
- PRESS IN AREA (3B) FOR POP UP KEYBOARD AND SET PRESSURE DIFFERENCE.
- PRESS IN AREA (2B) TO RESET PRESSURE BALANCE ALARM.

### COUNTDOWN COUNTER
- PRESS RED OFF BUTTON (7B) TO TURN COUNTDOWN COUNTER ON, BUTTON WILL TURN GREEN.
- PRESS IN AREA (4B) FOR POP UP KEYBOARD AND SET COUNTDOWN COUNTER.
- PRESS SET BUTTON (5B) TO SET COUNTER.
- PRESS CLEAR BUTTON (6B) TO CLEAR COUNTER TO 0.

### INLET MONITORING
- USE AREAS (9B AND 10B) TO SET LOW AND HIGH TEMPERATURE LIMITS FOR “A” SIDE.
- USE AREAS (11B AND 12B) TO SET LOW AND HIGH PRESSURE LIMITS FOR “A” SIDE.
- USE AREAS (13B AND 14B) TO SET LOW AND HIGH TEMPERATURE LIMITS FOR “R” SIDE.
- USE AREAS (15B AND 16B) TO SET LOW AND HIGH PRESSURE LIMITS FOR “R” SIDE.
- PRESS AREA (8B) TO TURN THIS FEATURE ON. THIS ENSURES THAT THE TEMPERATURES AND PRESSURES STAY WITHIN THESE PARAMETERS. IF THEY GO ABOVE OR BELOW THE SET VALUES AN ALARM WILL TRIGGER.
ALARMS

- FAULT WILL FLASH TO INDICATE SERVICE REQUIRED OR A FAULT, WHEN FAULT IS CORRECTED THE FAULT WILL RETURN TO SOLID.
- THE TOP FOUR ALARMS ARE CYCLE BASED SO AFTER THE MAINTENANCE IS PERFORMED, PRESS AREAS (1C, 2C, 3C OR 4C) TO RESET THE COUNTER FOR THE CORRESPONDING ALARM.

MANUAL HOSE HEAT

- PRESS IN AREA (6C) FOR POP UP KEYBOARD AND SET HOSE HEAT SETPOINT.
- TO TURN ON THE MANUAL HOSE HEAT SETTING, PRESS THE ON/OFF BUTTON (5C).
- THIS OPTION WILL ONLY BE AVAILABLE WHEN A TEMPERATURE SENSING UNIT FAULT IS ACTIVE AND IF THE PROPER LOGIN IS ACTIVE.
CHEMICAL MENU

- AREA (7D) SHOWS CALCULATED CHEMICAL CONSUMED BASED ON TOTAL CYCLES FOR CHEMICAL “A” OR MEASURED CHEMICAL CONSUMED WHEN FLOW METER OPTION IS ACTIVE.
- AREA (10D) SHOWS CALCULATED CHEMICAL CONSUMED BASED ON TOTAL CYCLES FOR CHEMICAL “R” OR MEASURED CHEMICAL CONSUMED WHEN FLOW METER OPTION IS ACTIVE.
- INPUT CHEMICAL REMAINING IN BARREL “A” BY PRESSING BUTTON IN AREA (6D).
- INPUT CHEMICAL REMAINING IN BARREL “R” BY PRESSING BUTTON IN AREA (9D).
- INPUT ALARM LEVEL FOR LOW FLUID LEVEL IN BARREL “A” BY PRESSING BUTTON IN AREA (5D).
- INPUT ALARM LEVEL FOR LOW FLUID LEVEL IN BARREL “R” BY PRESSING BUTTON IN AREA (8D).
- WHEN EITHER CHEMICAL REACHES THE ALARM LEVEL, THE PUMPS WILL STOP.
- BAR GRAPH WITHIN THE RED AREA WILL DISPLAY REMAINING CHEMICAL IN BARREL “A”.
- BAR GRAPH WITHIN THE BLUE AREA WILL DISPLAY REMAINING CHEMICAL IN BARREL “R”.
- ACTIVATE REMAINING CHEMICAL LEVELS MEASUREMENT BY PRESSING BUTTON IN AREA (1D). RED MEANS THE COUNTDOWN IS NOT ACTIVE.
- “CHEMICAL USED” WILL BE DISPLAYED AND CALCULATED FOR BOTH CHEMICALS WHETHER THE BARREL COUNTDOWN OPTION IS ACTIVE OR NOT.
- THE “RATIO ALARM” SECTION IN AREA (2D) ALLOWS THE USER TO SET AN UPPER AND LOWER LIMIT FOR MATERIAL RATIO. IF A RATIO OUTSIDE OF THOSE VALUES IS DETECTED, THE MACHINE WILL STOP PUMPING.
**PROCESS DATA MENU**

**PROCESS DATA**
- Enter job number in area (1E) to tag data to specific job.
- Press in area (2E) for pop up keyboard and enter date in the format shown to see the historical data.
- Note: current date must be entered in YYYYMMDD format in order to see data, and USB stick must be installed in USB port in front of machine.
- Area (3E) displays the data for date entered in the query if available.

**ALARM DATA**
- Area (4E) displays alarm data in real time.

**USB STATUS**
- Area (5E) displays the presence of USB stick, when removing the USB stick press the button in area (5E).
### SETUP LOGIN MENU

![User Access Login](image)

**User Access Login**

- **User Name:**
- **Access Password:** ***********
- **Login**
- **Logout**

**User Level Login**

- **Level Password:** ***********

### SETUP LOGIN SCREEN

- **User Name:**
- **Access Password:**
- **Level Password:**

1. **User Name:**
2. **Access Password:**
3. **Level Password:**
4. **Login**
5. **Logout**

- **Owner**
- **998**
- **998**

- **User Name** must be in all caps with the space between the words.
- **Access Password** after the keyboard pops up.
- **Level Password** after the number pad pops up.
- **Login Button** in area (3F) to login.
- Pressure balance control and manual hose heat are now available.
- **Logout Button** in area (4F) to logout and no longer allow changes to the pressure balance control or manual hose heat.

### SETUP LOGIN SCREEN

- **User Name:**
- **Access Password:**
- **Level Password:**

1. **User Name:**
2. **Access Password:**
3. **Level Password:**

- **Tech Support**
- **5613**
- **5613**

- **User Name** must be in all caps with the space between the words.
- **Access Password** after the keyboard pops up.
- **Level Password** after the number pad pops up.
- **Login Button** in area (3F) to login.

- **Tech Support**
- **5613**
- **5613**

- **User Name** must be in all caps with the space between the words.
- **Access Password** after the keyboard pops up.
- **Level Password** after the number pad pops up.
- **Login Button** in area (3F) to login.
SETUP MENU

- **LANGUAGE**

  - **1G**
  - **2G**
  - **3G**

- **TEMPERATURE**

  - °F

- **UNITS**

  - PSI

  - GALLONS

  - CHANGE LEVEL

  - 1 PASSWORD

  - ENGLISH

  - 998

SETUP SCREEN

- **MONTH**

  - 2

- **DAY**

  - 25

- **YEAR**

  - 2020

- **HOUR**

  - 10

- **MINUTE**

  - 14

- **SECOND**

  - 29

- **MONTH**

  - 0

- **DAY**

  - 0

- **YEAR**

  - 0

- **HOUR**

  - 0

- **MINUTE**

  - 0

- **SECOND**

  - 0

- **MONTH**

  - 4

- **DAY**

  - 5

- **YEAR**

  - 6

- **HOUR**

  - 7

- **MINUTE**

  - 8

- **SECOND**

  - 9

- **MONTH**

  - 11

- **DAY**

  - 12

- **YEAR**

  - 13

- **HOUR**

  - 14

- **MINUTE**

  - 15

- **SECOND**

  - 16

- **2020/02/25 (TUE) 10:14:29 AM**

- **SET PLC CLOCK**

- **SETFIELD**

- **EXIT**

- **10G**

- **SETUP MENU**

- **FACTORY SETUP**

- **SETUP**

- **OPERATION**

- **LOGOUT**

- **CLICK IN AREA (1G) TO TOGGLE BETWEEN AVAILABLE LANGUAGES.**

- **CLICK IN AREA (2G) TO TOGGLE BETWEEN AVAILABLE UNITS.**

- **TO CHANGE THE ACCESS PASSWORD CLICK AREA (3G) THEN INPUT NEW PASSWORD.**

- **PRESS AREAS (4G, 5G, 6G, 7G, 8G AND 9G) TO SET THE TIME AND DATE TO BE DISPLAYED ON THE SCREEN.**

- **PRESS AREAS (11G, 12G, 13G, 14G, 15G AND 16G) TO SET THE TIME AND DATE INTERNALLY.**

- **AFTER INPUTING TIME AND DATE VALUES TO AREAS (11G, 12G, 13G, 14G, 15G AND 16G), PRESSING AREA (10G) WILL SET BOTH THE INTERNAL AND DISPLAY TIME AND DATE TO THOSE VALUES.**
ACCESSING DATA VIA USB

- PUSH THE “USB MODE” BUTTON IN THE “PROCESS DATA” MENU SO IT READS “REMOVE USB”.
- REMOVE THE USB STICK FROM THE FRONT OF THE MACHINE AND INSERT INTO A LAPTOP OR DESKTOP COMPUTER.
- OPEN THE FILES ON THE USB STICK.
- OPEN THE “trend” FOLDER.
- OPEN THE “HistoryData” FOLDER.
ACCESSING DATA VIA SD CARD

- TURN THE POWER TO THE MACHINE OFF.
- OPEN THE CONSOLE TOP BY REMOVING THE TWO THUMBSCREWS ON EITHER SIDE OF THE CONSOLE.
- OPEN THE LATCH TO THE PLC TO ACCESS THE SD CARD.
- GENTLY PUSH IN THE SD CARD TO REMOVE IT FROM THE PLC.
- INSERT THE SD CARD INTO THE APPROPRIATE PORT ON A LAPTOP/DESKTOP COMPUTER, OR INSERT THE SD CARD INTO THE APPROPRIATE USB ADAPTER.
- OPEN THE FILES ON THE SD CARD.
- DATA WILL BE DISPLAYED IN AN EXCEL SHEET AS SHOWN.