Double-tap:

- 2 quick taps on the screen
- 2 quick left mouse clicks

Long-press:

- 1 long press on the screen
- 1 right mouse click

Basic Software Operating Procedure

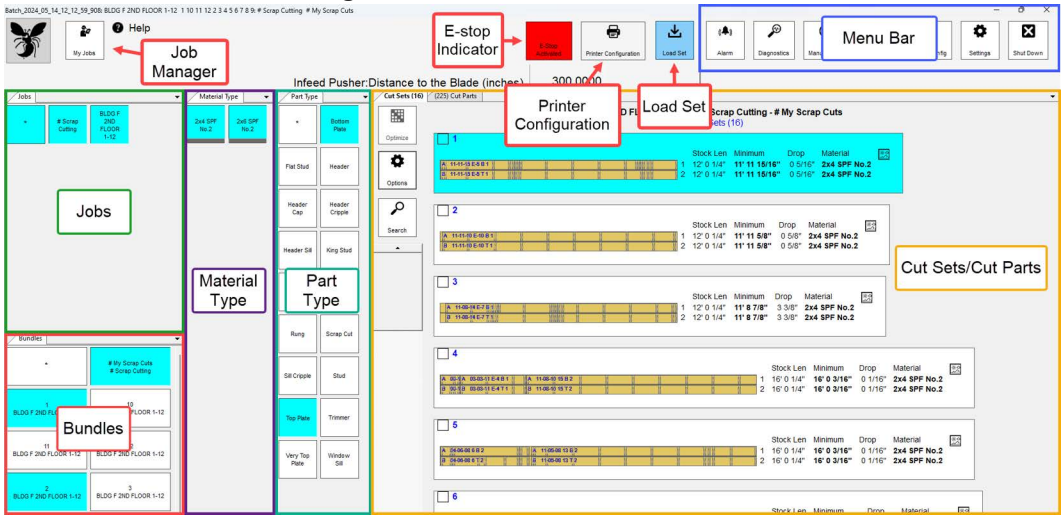
A basic overview of preparing jobs for processing using the CutBuilder application is as follows:

1. Load a job using the Job Manager. Jobs can be loaded via the network or locally via USB.
2. Select the job to be processed, then the desired bundles in the Jobs and Bundles sections.
3. Select the desired parts for processing in the Part Type section.
4. As part types are selected, the Material Type section will populate. Select the desired material types for the selected part types in the Material Type section.
   - Once a material is selected, a screen for selecting available lengths of that specific material appears.
5. After the desired Job, Bundles, Materials, and Parts have been selected, the software is ready to optimize and load cut sets. Select the Optimize button to begin optimizing and loading the cut sets.
   - The generated cut sets are based on all options selected before. Further settings available in the Cut Set Options menu (such as scrap cuts and least waste optimizing) can also affect how cut sets are generated.
   - Pick lists (a list of lumber necessary to process the cut sets) organized by either Cut Sets or Footage are also available in the Cut Set Options menu. See for more information.
6. Select Load Sets to prep the software for processing the job.
   - The saw will automatically load all cut sets unless a specific cut set is selected. See Cut Sets and Cut Parts for more information.
7. Select the desired feed mode in the load cut sets window, then select Start.

Overview of the Home Screen

The home screen shows data for each part to be cut and provides access to all of the functionality required during normal production use. Figure 6-9 shows each section of the home screen.

Figure 6-9: Home Screen Sections



Menu Bar and Ribbon

The menu bar refers to the selections at the top of the home screen. As shown in Figure 6-9, there are multiple functions that appear on the menu bar. See Printer Configuration Window on page 76 for a detailed description of each menu and ribbon.

Help Link

This link will direct you to multiple options for machine information and support. Table 6-3 gives a brief overview of each option.

Table 6-3: Help Options

Name	Function
About	Displays software information, including the version.
Contact Us	Contact information for machine support.
Remote Support	Opens a browser window to a service that allows for remote support with a MiTek representative.

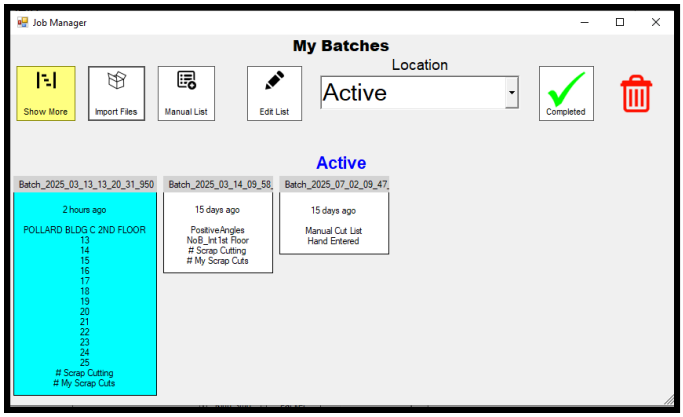
Job Manager

For best performance, the recommended maximum size for job files is 31 megabytes.

The job manager is used to generate jobs for processing. Jobs can be imported from a file or manually created.

Jobs that are currently loaded are highlighted in blue. Select a job to load it.

Figure 6-10: Job Manager

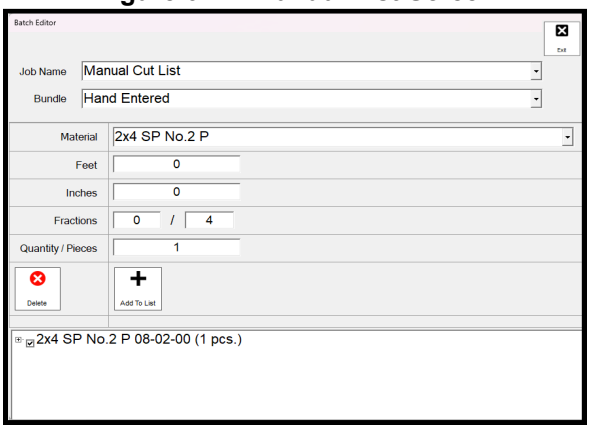


- Import Files — Displays a file explorer for importing jobs. The following file types are supported:
  - Shopnet
  - Virtek (limited support)
  - WBX

  Jobs can be imported via a USB drive or over the network.

- Manual List — Allows for building a custom cutting list. Build a cutting list by selecting the desired material and entering the length and quantity before adding it to the list.

Figure 6-11: Manual List Screen



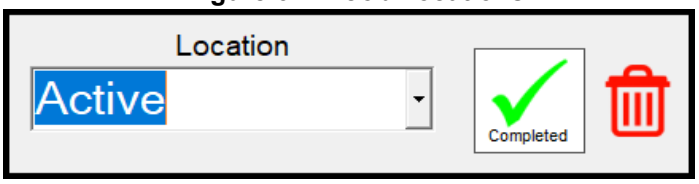
- Edit List — Allows for editing of the currently selected list. The interface is identical to Figure 6-11.

- Location

Jobs can be categorized using the following locations:

- **Active** includes currently loaded jobs available for processing.
- **Trash** includes jobs that have been discarded. Jobs can be placed in the trash by selecting and dragging them to the trash can icon. See Figure 6-12.
- **Completed** includes jobs that have been processed. Use the Completed button to display completed jobs. See Figure 6-12.

Figure 6-12: Job Locations



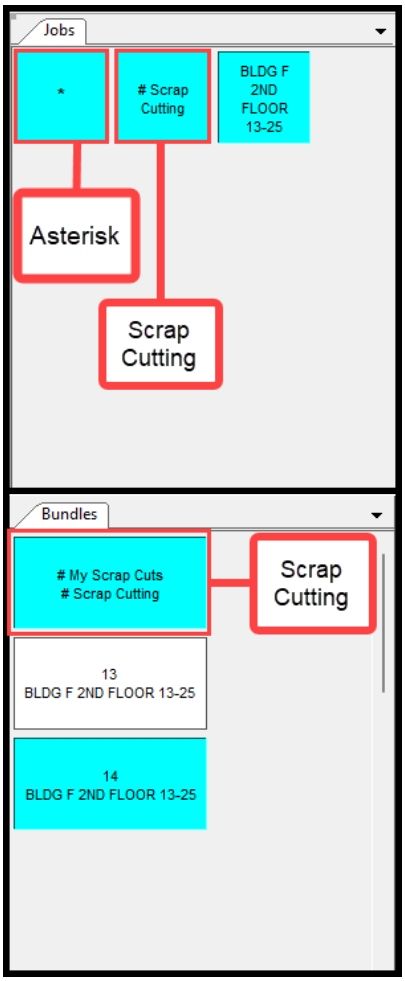
The currently displayed location (active, trash, or completed) will be indicated on the Job Manager screen. See Figure 6-10.

Jobs and Bundles

The jobs section displays the jobs that have been loaded utilizing the Job Manager. For more information, see Job Manager on page 64.

Once a job(s) has been selected, the bundles section will populate with the available bundles. Selected jobs and bundles will be highlighted in blue.

Figure 6-13: Jobs and Bundles Sections



The jobs, bundles, and part type sections may have two extra items available depending on the configuration - the Asterisk and Scrap Cutting

- * (Asterisk) — Selects every job available.
- Scrap Cutting — Selects items designated for scrap cutting. See Cut Set Options (Optimization, Scrap Cutting, and Pick Lists) on page 93 for more information on utilizing scrap cutting.

Once jobs and bundles are selected, the Part Type section will populate.

Part Type

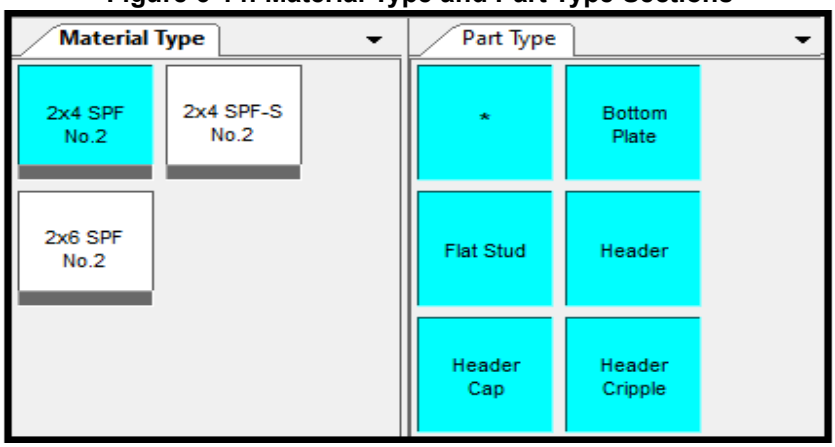
The part type section displays different part types available for processing. The part types are populated based on the selected job and bundles (see Jobs and Bundles on page 66 for more information).

Selected part types are highlighted in blue.

- * (Asterisk) Selects every job available.

Selecting different part types will also change what appears on the Cut Parts tab. See Cut Sets and Cut Parts on page 69 for more information.

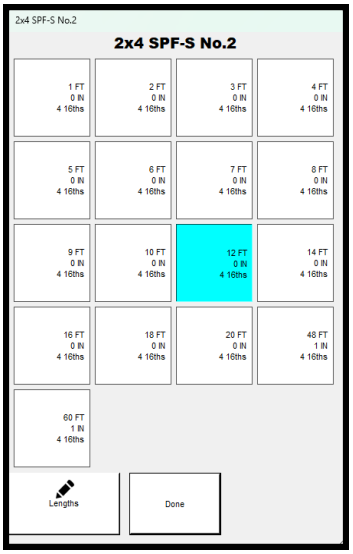
Figure 6-14: Material Type and Part Type Sections



Material Type

The material type section will populate as part types are selected. Once the desired material types for the job are selected, they will be highlighted blue. Selecting a material type will open a dialog box that allows for specifying which material lengths are available for processing the job as shown in Figure 6-15.

Figure 6-15: Available Length Selector



- Lengths Used to add additional custom lengths if the desired length is unavailable for selection.

Cut Sets and Cut Parts

After loading a job and selecting the desired material types and part types, the Optimize button in the cut sets section will blink (see Figure 6-16) and must be selected to proceed.

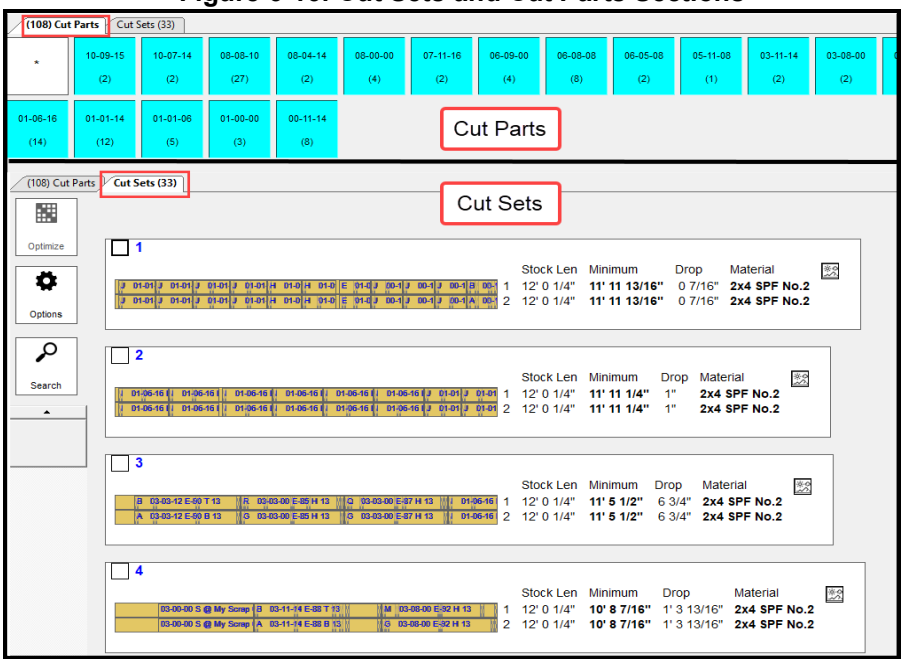
- Note that by default, Optimize will not optimize the job for the least amount of waste. Least Waste Optimization must be selected in Cut Set Options.
- Pick lists (a list of lumber necessary to process the cut sets) organized by either Cut Sets or Footage are also available in the Cut Set Options menu.

For more information regarding job optimization and cut set options, see Cut Set Options (Optimization, Scrap Cutting, and Pick Lists) on page 93.

After optimizing, the cut sets section will populate.

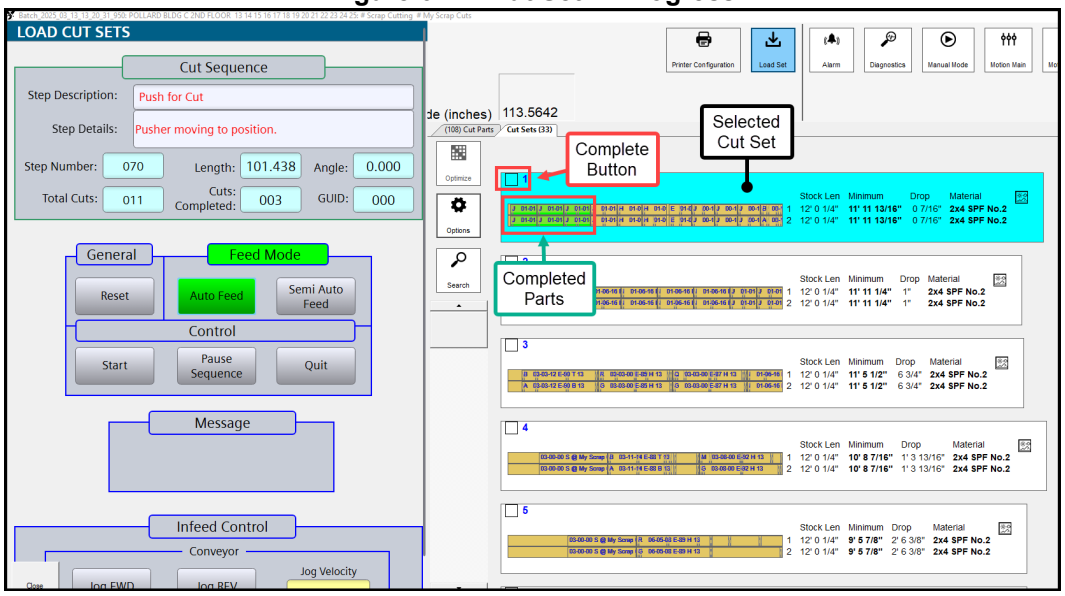
Switch between which screen is active (Cut Sets or Cut Parts) by selecting the appropriate tab at the top of the section; see Figure 6-16.

Figure 6-16: Cut Sets and Cut Parts Sections



Cut Sets

Figure 6-17: Cut Set In Progress



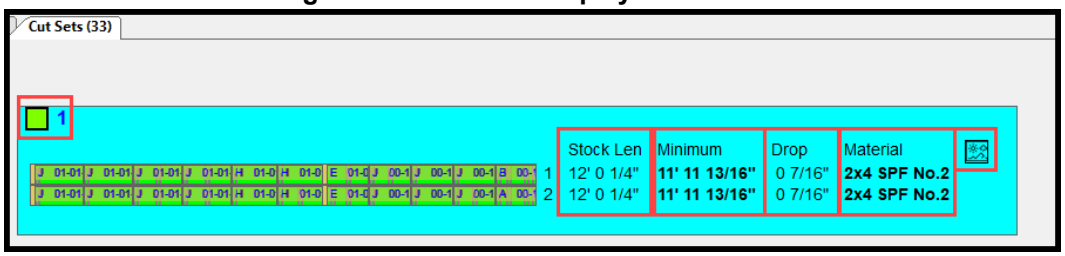
The cut sets section displays the cut sets in the order they will be processed by the saw.

By default, all cut sets will be loaded for processing when using the Load Set function. Alternatively, individual cut sets can be selected for loading. A currently selected cut set is highlighted in blue.

As the saw processes the cut sets, the software will communicate where the saw is in the process. Completed parts are highlighted in green. Once a cut set is completed entirely, the complete button becomes green.

Cut Sets can be changed to a complete status manually before loading sets by selecting the complete button. See Figure 6-18 for a completed cut set example.

Figure 6-18: Cut Set Display Information



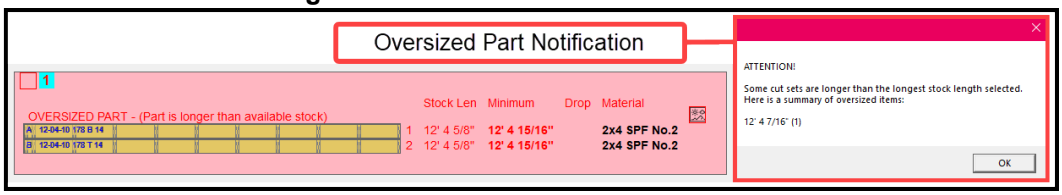
- Complete Button — Toggle to complete a cut set manually. The complete button is green when a cut set is in a completed status.The cut set number is displayed next to the complete button.
- Stock Len — The intended length of the material for that cut set, based on the selected material lengths.

- Minimum — The minimum length of material required for that cut set.
- Drop — The length of waste (does not include intended scrap cuts).
- Material — The intended material type for that cut set.

Double-tap the picture icon to display a pop-up with an image of what will be marked on the part. See Operating the Printer (Printer Settings) on page 90 for more information regarding marking.

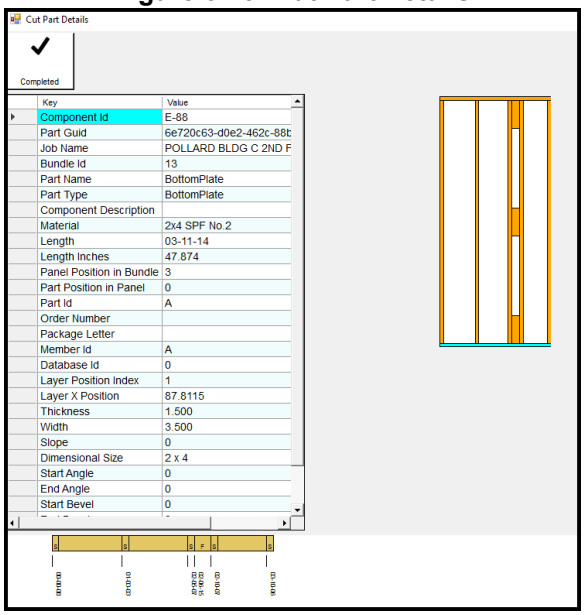
Cut sets may also display in red if it includes an oversized part. An oversized part is a part that is longer than the longest available length selected under Material Type.

Figure 6-19: Oversized Part Notification



Each cut set also has a graphical representation of what will be processed. Selecting an individual part in the cut set will open a Cut Part Details window that includes a graphic of where the part is in the assembly and indicates if it has been completed or not.

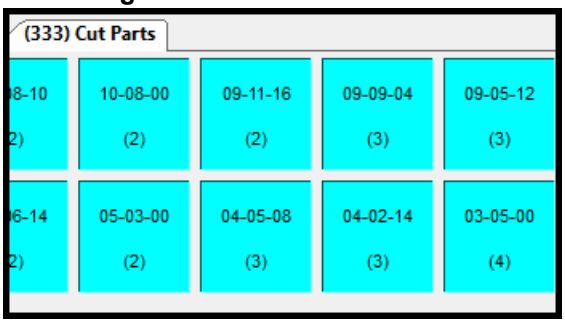
Figure 6-20: Cut Part Details



Cut Parts

The cut parts section allows for selecting or deselecting particular parts from being processed. Selected parts for processing are highlighted in blue. The selections available in the Cut Parts tab changes based on what Part Types are selected.

Figure 6-21: Cut Parts Section



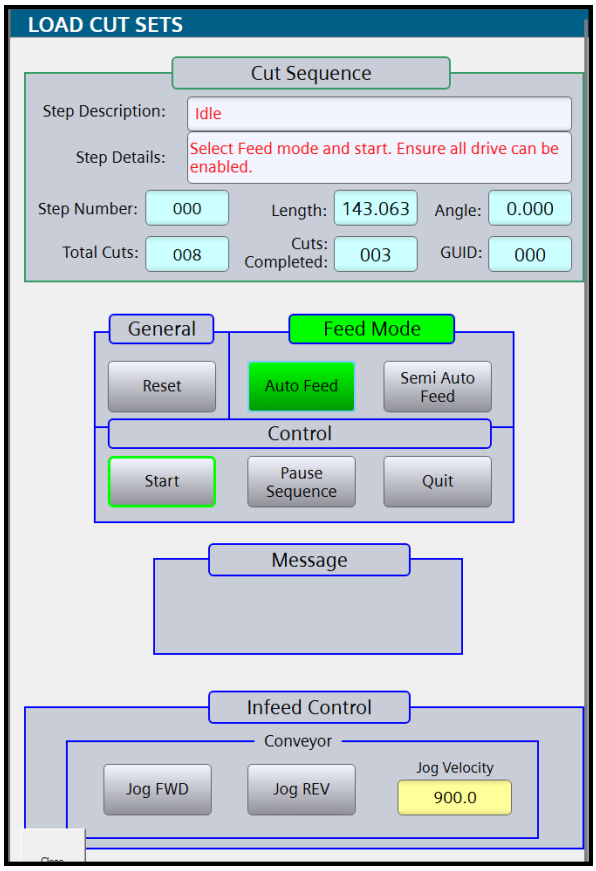
Load Sets

The load set function is used to start the job for processing after selecting from the available items from jobs, bundles, material type, and part type. See Figure 6-9 for the location of the load set button.

Selecting the load set button opens the *Load Cut Sets* dialog box.

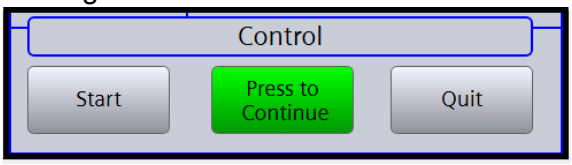
To begin processing cut sets, select the desired feed mode, then Start.

Figure 6-22: Load Cut Sets

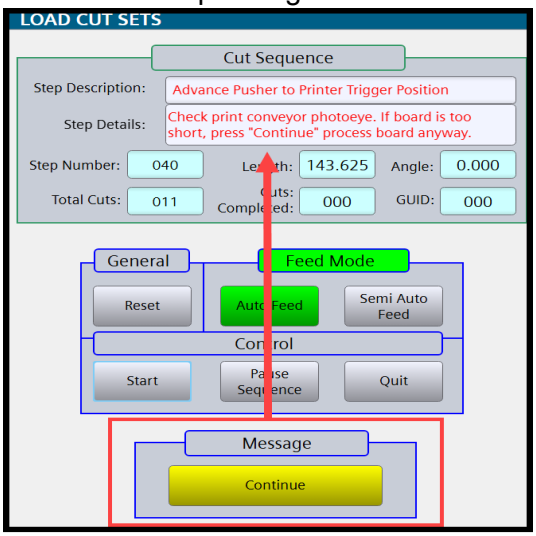


- Cut Sequence — Displays information regarding what the saw is currently processing. It will also display error messages if the saw is unable to start or continue processing material.
- General — Features a reset button that will be highlighted red when there is a fault. The reset button has the same functionality as the physical reset button on the control interface.
- Feed Mode — Select between *Auto* and *Semi Auto* feed modes. The options shown may vary depending on machine configuration.
  - **Auto**: The saw will continue automatically move to the next cut set when complete the current one is complete.
  - **Semi-Auto**: The saw will pause when a cut set is complete. Select “Start” to process the next cut set.

- Control
  - **Start:** Starts processing the cut sets. The machine will check that material is in place for processing and start motion of the pusher and auto loading live deck (if equipped).
  - **Pause Sequence:** Pauses all motion of the saw and puts it in an idle state.
    - When paused, the Pause Sequence button will change to a “Press to Continue” button.



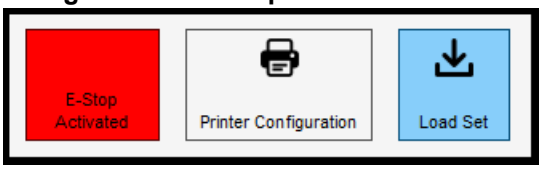
  - **Quit:** Stops job processing.
- Message — Displays an interactive status button when appropriate. The Cut Sequence section will display further information depending on the situation.



- Close — Closes the load set dialog box.
- Infeed Control (optional) — Allows for manual control of the auto loading live deck (if equipped).

E-stop Indicator

Figure 6-23: E-Stop Indicator Active

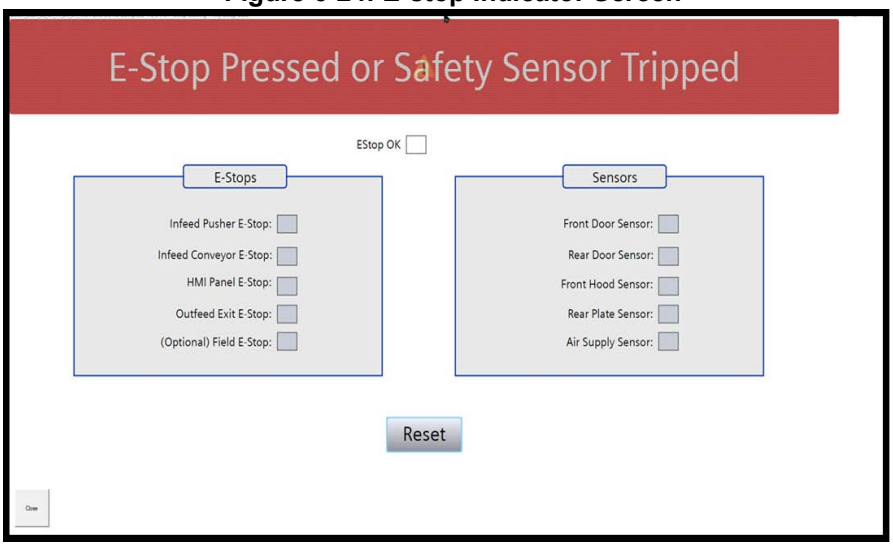


The E-stop indicator will display when there is currently an E-stop active. Clicking the E-stop indicator will display a screen with current E-stop and safety sensor status. If an E-stop of safety sensor is active, the box next to it will be green.

Note that the E-stop indicators screen may vary depending on the saw configuration and options.

The Reset button on the E-stop indicator screen has the same functionality as the physical reset button on the Operator Interface. See Operator Hardware Controls on page 60 for more information.

Figure 6-24: E-stop Indicator Screen

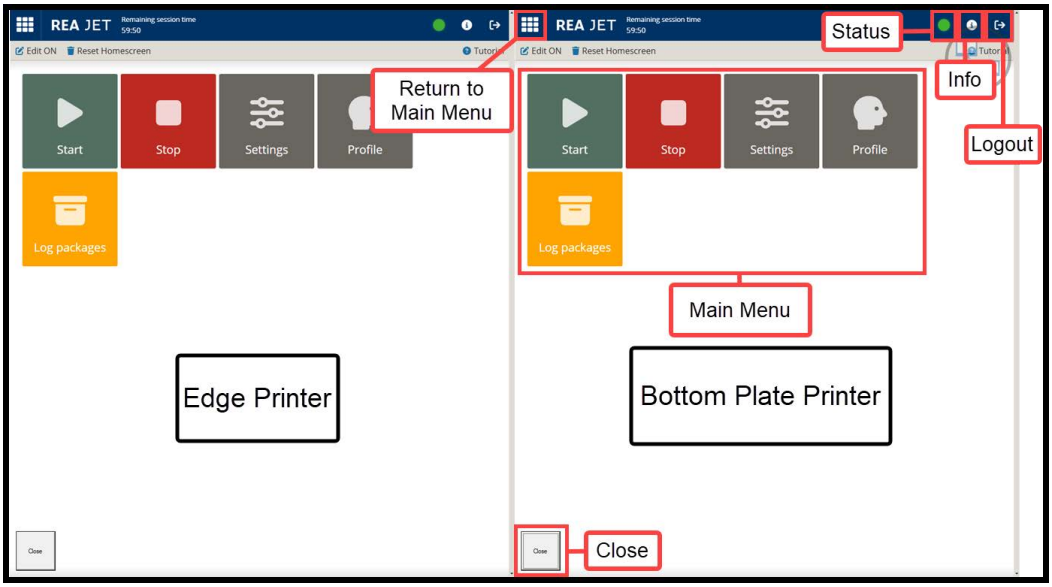


Printer Configuration

Selecting the printer configuration button (see Figure 6-23) will display configuration windows for both the edge printer and bottom plate printer.

- The **Edge Printer** configuration window display is on the *left*.
- The **Bottom Plate Printer** configuration window display is on the *right*.

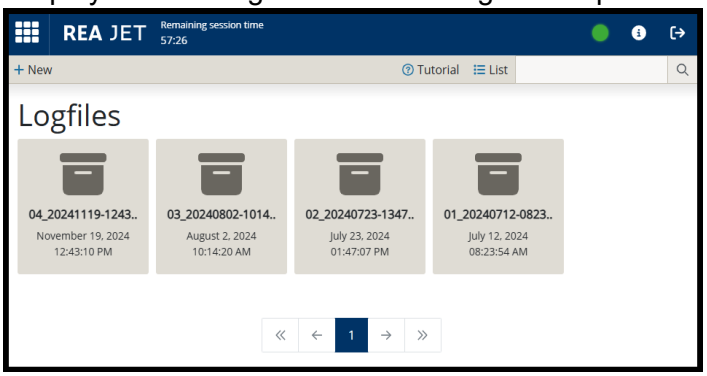
Figure 6-25: Printer Configuration Window



- Return to Main Menu — Returns to the main menu, as displayed in Figure 6-25.
- Status Indicator
  - Displays the current printer status
    - Green indicates the printer is started
    - Red indicates the printer has been stopped
- Logout
  - Log the current user out. This should not be used unless directed by MiTek Automation Support. **Use the CLOSE button to close the configuration windows.**
- Close
  - Closes the configuration window.

Main Menu

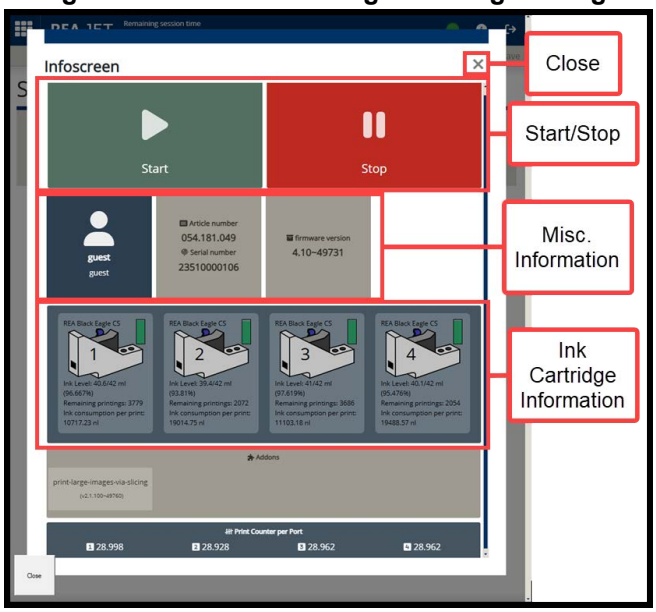
- Start — Starts the printer. The Status Indicator is green wen the printer is started.
- Stop — Stops the printer. The Status Indicator is red when the printer is stopped.
- Profile — Do not use unless directed by MiTek Automation Support.
- Log Packages — Displays current log files. Select a log file to open it.



- Settings — Do not use unless directed by MiTek Automation Support.

Info

Figure 6-26: Printer Settings and Log Packages

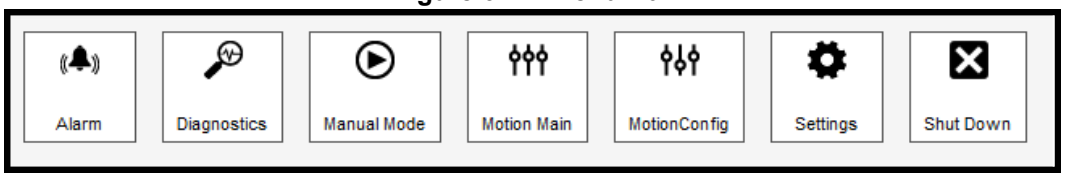


- Start — Has the same functionality as the Start button on the main menu.

• Stop	Has the same functionality as the Stop button on the main menu.
• More Information	Displays miscellaneous troubleshooting information, including: • Logged in User • Article Number/Serial Number • Firmware Version
• Ink Cartridge Information	Displays information about each individual print cartridge, including: • Ink level • Estimated prints remaining • Estimated ink used per print

Menu Bar in Detail

Figure 6-27: Menu Bar



This section addresses the following menus available from the menu bar:

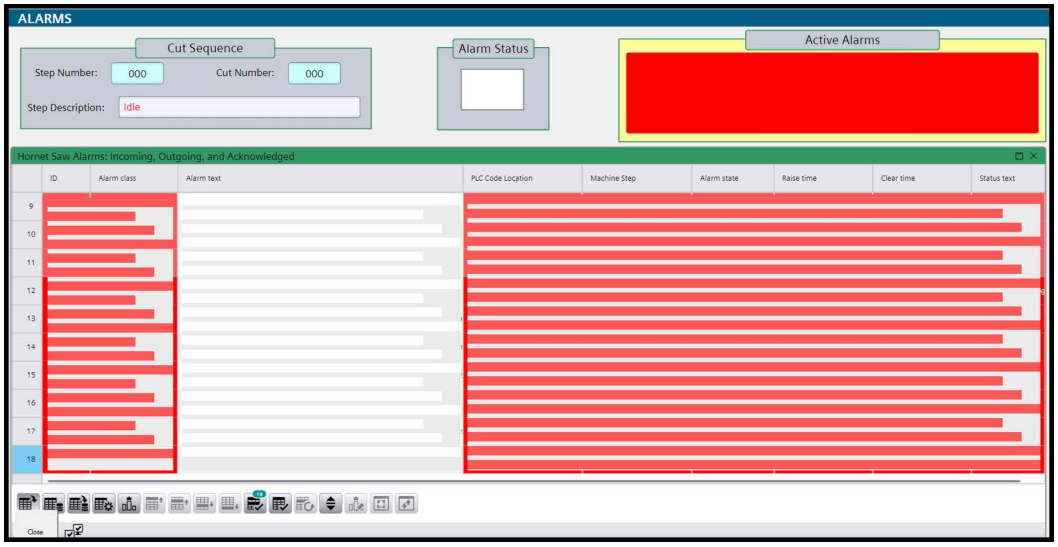
- Alarm
- Manual Mode
- Motion Main
- Motion Config
- Settings
- Shut Down

See the following dedicated section regarding diagnostics:

- System Diagnostics on page 84

Alarm

Figure 6-28: Alarms Window

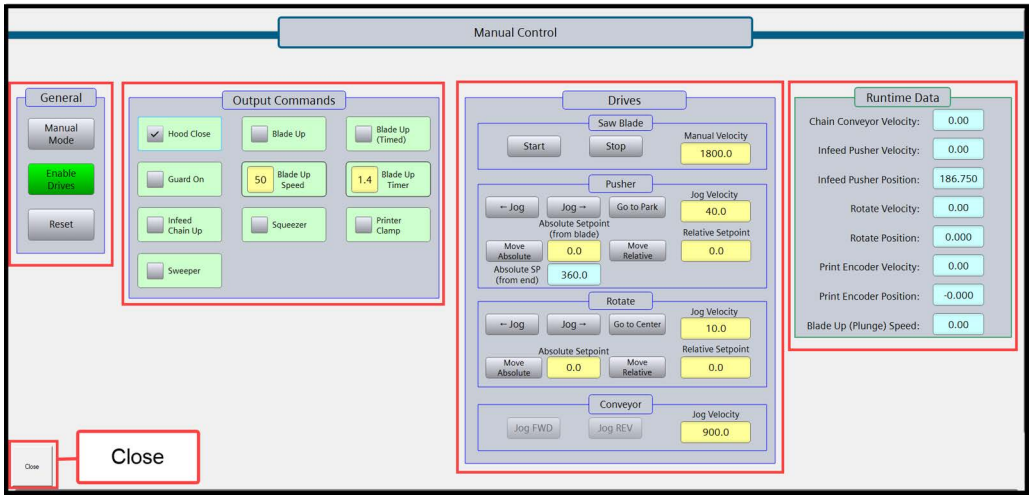


- Cut Sequence — Displays information regarding what the saw is currently processing. It will also display error messages if the saw is unable to start or continue processing material.
- Alarm Status — Displays an image of a red light if there is currently an active alarm.
- Active Alarms — A scrolling list of currently active alarms.
- Hornet Saw Alarms — A compressive list of all alarms with diagnostic information.
- Toolbar — Tools for managing and organizing the alarm list.

Manual Mode

The manual mode button opens the manual control window when selected, which allows for manual control of the different saw functions.

Figure 6-29: Manual Control Window



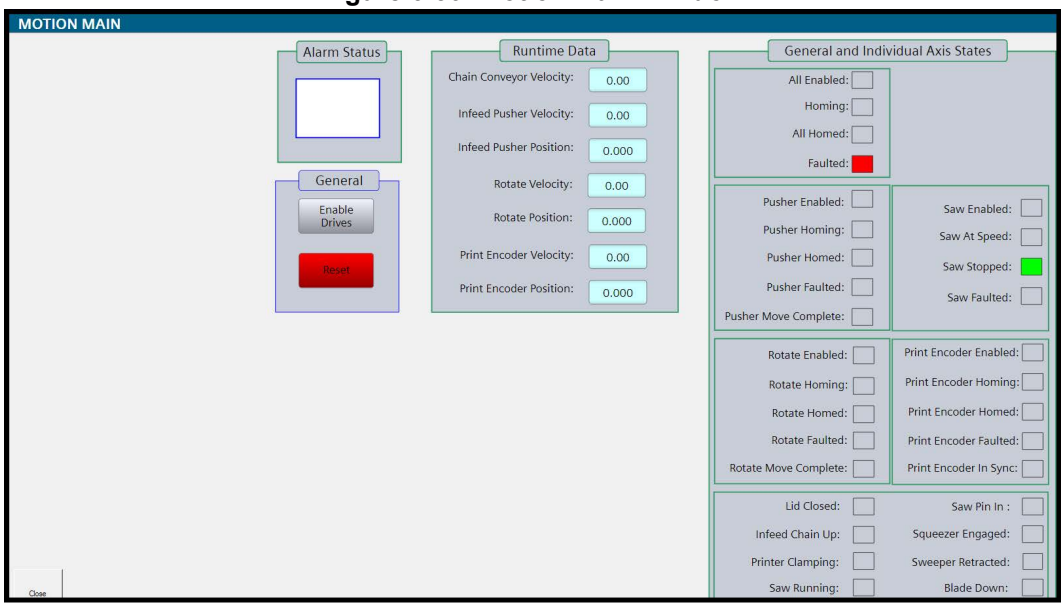
- General — Features the manual mode, enable drives, and reset functions. Manual mode must be selected before output commands can be used.
- Output Commands — Allows for manual manipulation of different saw components. Selecting a component enables that function. Select that function again to disengage it. Enabled functions have a checkmark.

  The Blade Up Speed and Blade Up Timer functions can be modified by selecting them and inputting the desired value.
- Drives — Allows for manual manipulation of various saw drives.
- Runtime Data — Displays various real-time metrics for different saw functions.
- Close — Closes the manual control window.

Motion Main

The motion main menu displays general and individual access states using the color red to indicate a fault. It also has a function for resetting the saw and enabling drives.

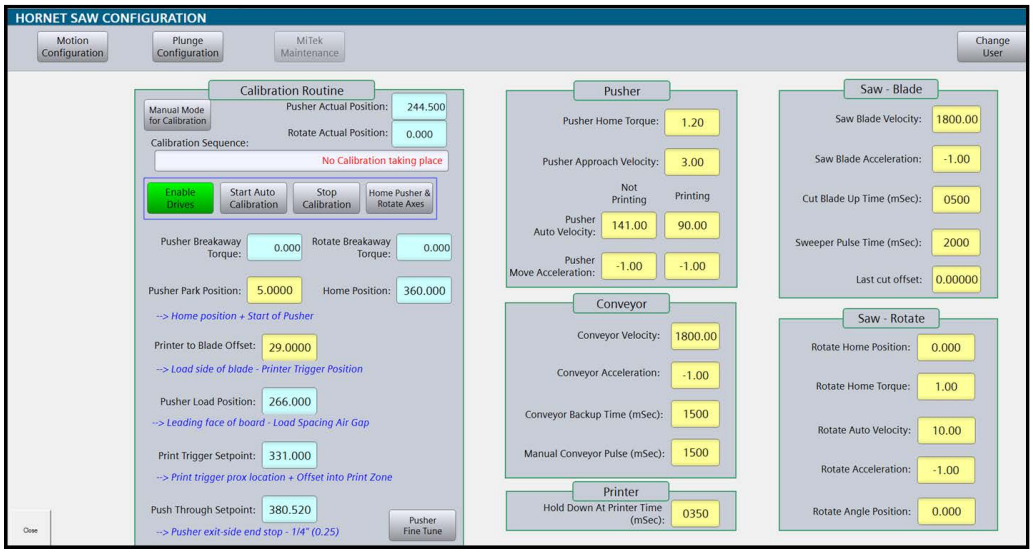
Figure 6-30: Motion Main Window



Motion Config

The motion config window will change depending on which menu is selected. The Motion Configuration menu appears by default. The options include in the motion config menu are used for generally used for troubleshooting purposes.

Figure 6-31: Hornet Saw Configuration Window

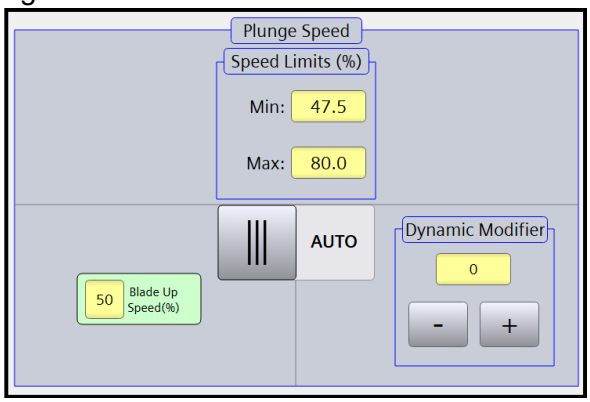


- Motion Configuration
  - Calibration Routine has multiple options for calibration (including automatic calibration). See Calibrating on page 105 for additional information regarding calibration.
  - Various current motion values for the pusher, saw blade, saw rotate, conveyor, and printer motion.

- Plunge Configuration

  The plunge speed values automatically adjust based on material type and other factors.

  The plunge speed values can be manually modified by selecting the “AUTO” switch in the middle to change it to manual.



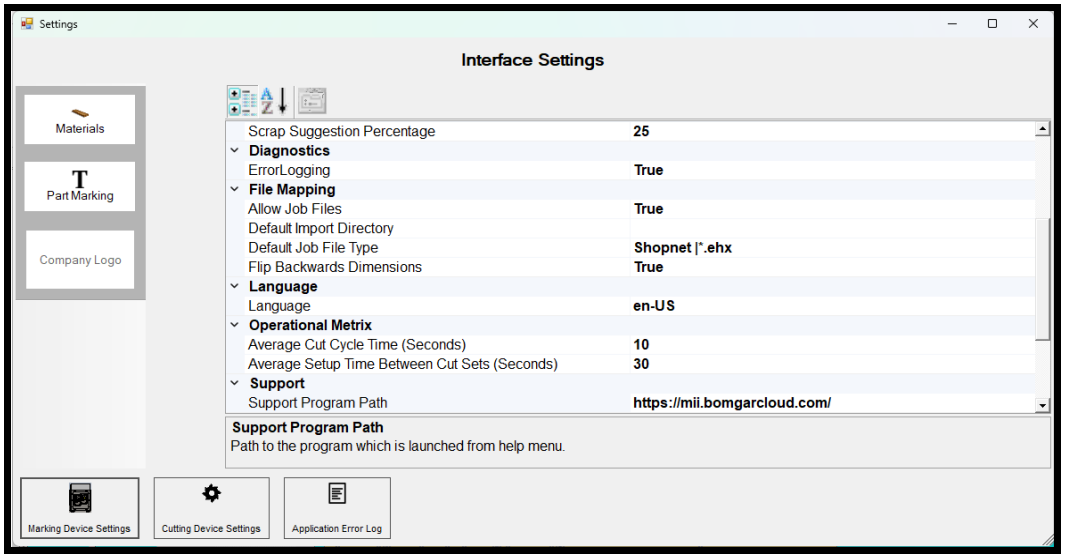
- MiTek Maintenance

  For troubleshooting purposes. Only to be accessed by MiTek support.

- Change User

Settings

Figure 6-32: Settings Window



- Materials

  Change the properties of the available material types, including thickness, width, and grade.

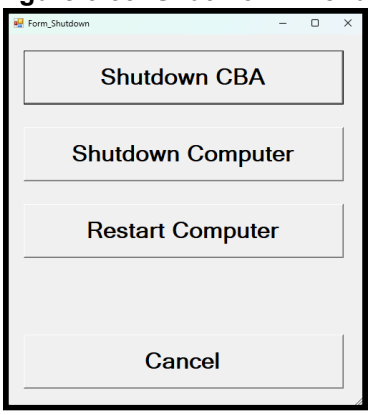
- Print Marking

  Change what information is printed on the processed material. See Operating the Printer (Printer Settings) on page 90 for additional information regarding the print marking menu.

- Company Logo — Upload a logo used in print marking.
- Marking Device Settings — Has an option to disable marking and also includes technical settings for the printer(s).
- Cutting Device Settings — Settings regarding the saw table and blade.
- Application Error Log — A log of application errors for troubleshooting purposes.

Shut Down

Figure 6-33: Shut Down Menu



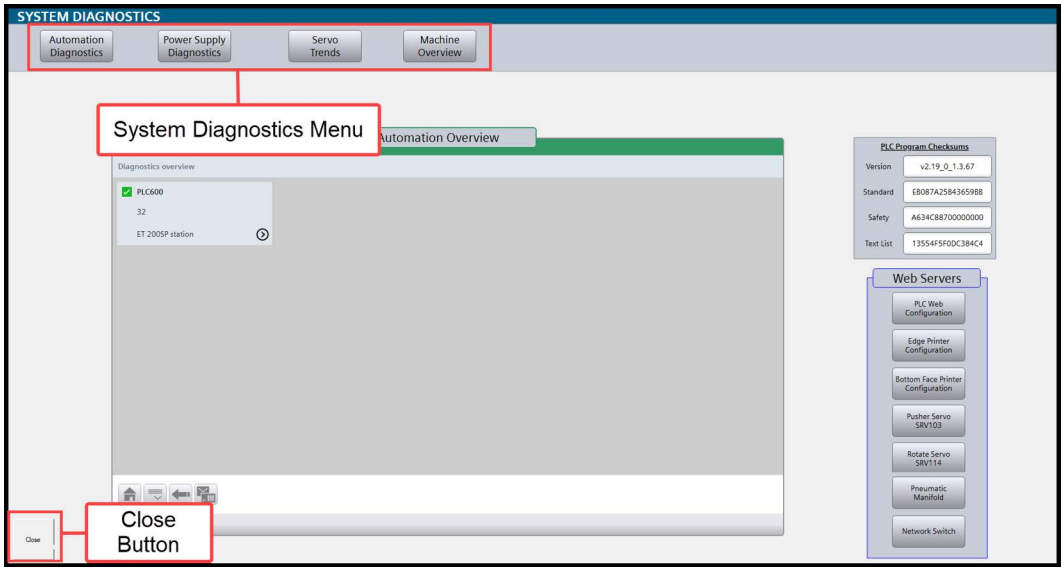
- Shutdown CBA — Closes the *CutBuilder* software.
- Shutdown Computer — Powers off the computer.
- Restart Computer — Restarts the computer.

System Diagnostics

Selecting Diagnostics on the menu bar will open the system diagnostics window.

The system diagnostics window always displays system diagnostics menu and the close button.

Figure 6-34: System Diagnostics Window



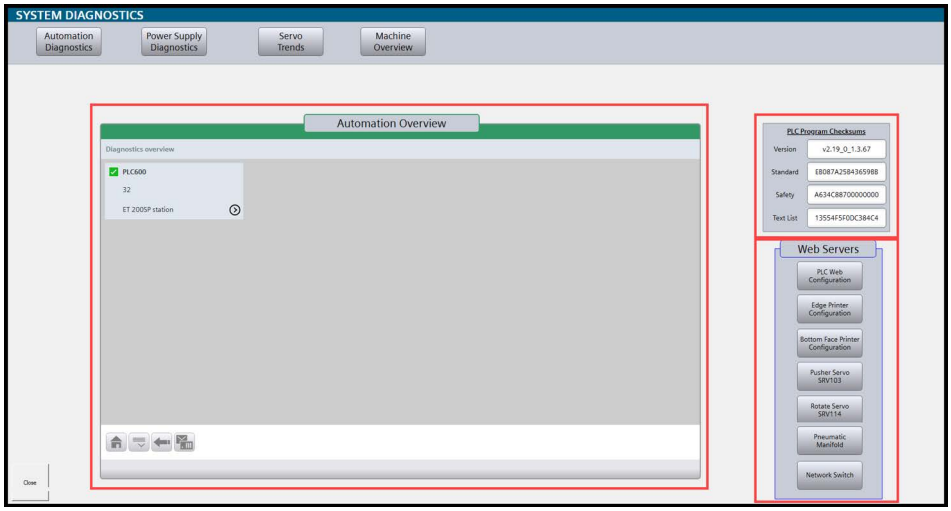
- System Diagnostics Menu — Used to move between the different system diagnostic information displays by selecting the appropriate button.
- Close — Closes the system diagnostics window.

The information displayed changes based on which display is selected:

- Automation Diagnostics
- Automation Diagnostics Display
- Servo Trends
- Machine Overview

Automation Diagnostics

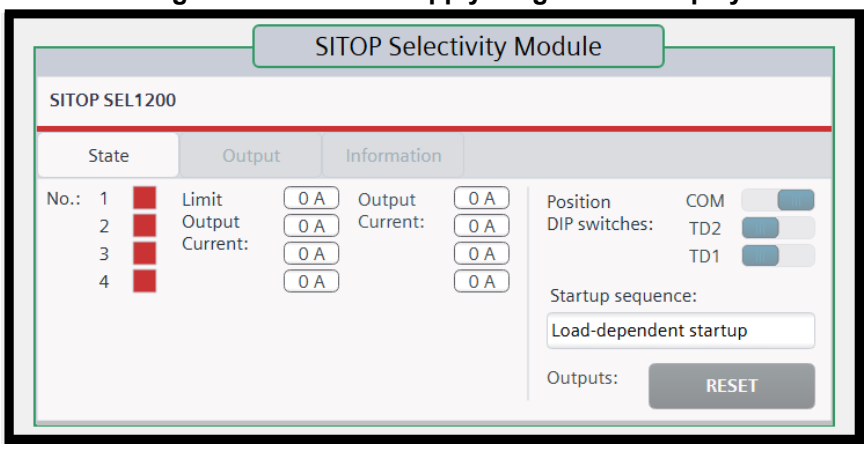
Figure 6-35: Automation Diagnostics Display



- Automation Overview — Displays PLC status information. Clicking on a PLC provides more detailed information.
- PLC Program Checksum — Used for troubleshooting purposes.
- Web Servers — Selecting a web server opens a GUI for that particular component that offers further configuration or troubleshooting options.

Power Supply Diagnostics

Figure 6-36: Power Supply Diagnostics Display

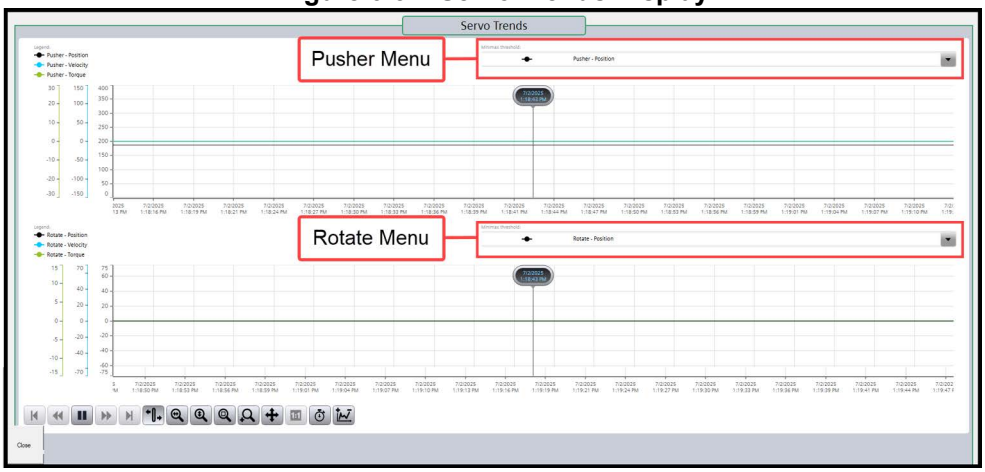


The power supply diagnostics display shows the current status of different SITOP selectivity modules.

- SITOP selectivity modules distribute the current load across several DC load circuits and monitors them for overload and short-circuit conditions.

Servo Trends

Figure 6-37: Servo Trends Display



The servo trends diagnostic menu displays different trends in a graph format for the pusher and rotation servo menus. Different graphs can be displayed by selecting in from the appropriate drop down. See Figure 6-37.

Machine Overview

Figure 6-38: Machine Overview Display

The machine overview menu displays the status of various sensors located throughout the saw with a graphical representation of their location.

If the sensor indicator is:

- Green — Functioning normally
- Red — Has detected an obstruction and/or is not aligned
- Transparent — Not initialized