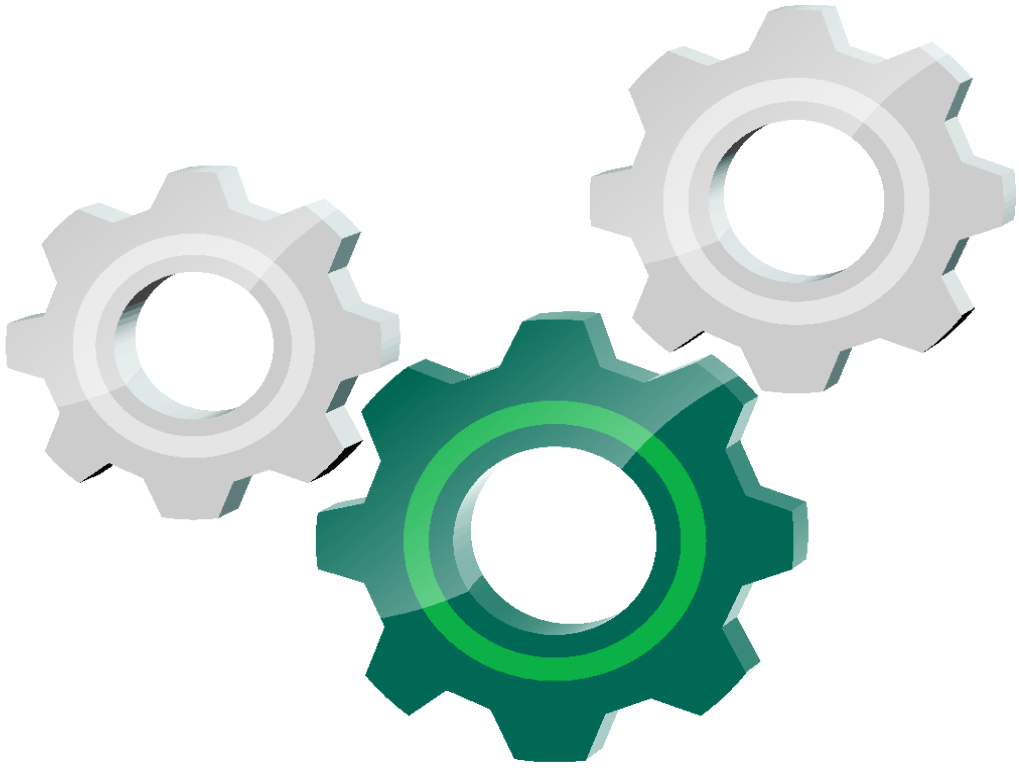

user manual

Instrukcja obsługi | Руководство пользователя
Manuel de l'Utilisateur | Betriebsanweisung
Bruksanvisning | Manual del Usuario
Betjeningsvejledning | Gebruikershandleiding
Käyttöohjeet | Manual de utilizare | Bruksanvisning
Manuale d'uso | Příručka uživatele

Zachować do przyszłego użytku
Сохраните для последующего использования
A conserver pour une utilisation future
Für zukünftige Benutzung aufbewahren
Behold for senere bruk
Säilytä nämä käyttöohjeet tulevaa tarvetta marten
Opbevar manualen til fremtidig brug
Bewaren voor gebruik in de toekomst
Conservare il presente manuale a l'uso futuro
Păstrați acest manual pentru utilizare viitoare
Conservar para futuras consultas
Uchovejte pro další použití

www.wood-mizer.eu

INDUSTRIAL PRODUCTS

Safety, Setup & Operation Manual

4250SCH rev. A1.00

Safety is our #1 concern! Read and understand all safety information and instructions before operating, setting up or maintaining this machine.

Form #1576

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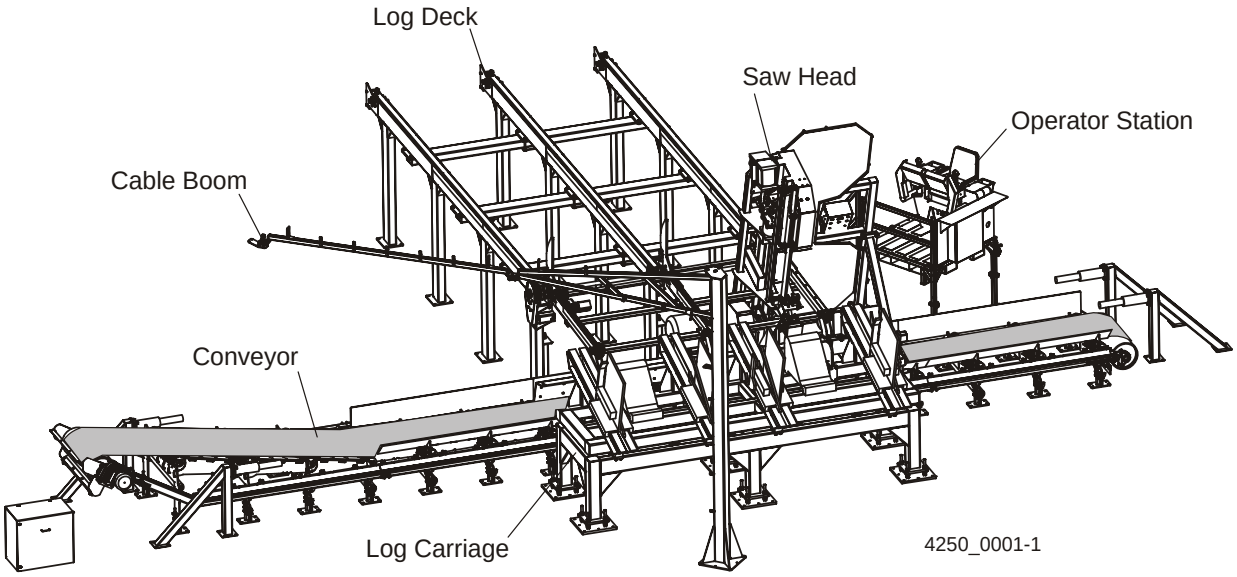
ABOUT THIS MANUAL

This manual is to replace or to be used with all previous information received on the AWMV sawmill. All future mailings will be an addition to or a revision of individual sections of this manual as we obtain new information.

The information and instructions given in this manual do not amend or extend the limited warranties for the equipment given at the time of purchase.

For general information regarding AWMV and our “Forest to Final Form” products, please refer to the All Products Catalog in your support package.



SECTION 1 SERVICING THE SAWMILL

Wood-Mizer is committed to providing you with the latest technology, best quality and strongest customer service available on the market today. We continually evaluate our customers' needs to ensure we're meeting current wood-processing demands. Your comments and suggestions are welcome.

1.1 If You Need To Order Parts

From Europe call our European Headquarters and Manufacturing Facility in Kolo, ul Nagórna 114, Poland at ***+48-63-2626000***

From the continental U.S., call our toll-free Parts hotline at ***1-800-448-7881.***

Please have the vehicle identification number and your customer number ready when you call. Wood-Mizer will accept these methods of payment:

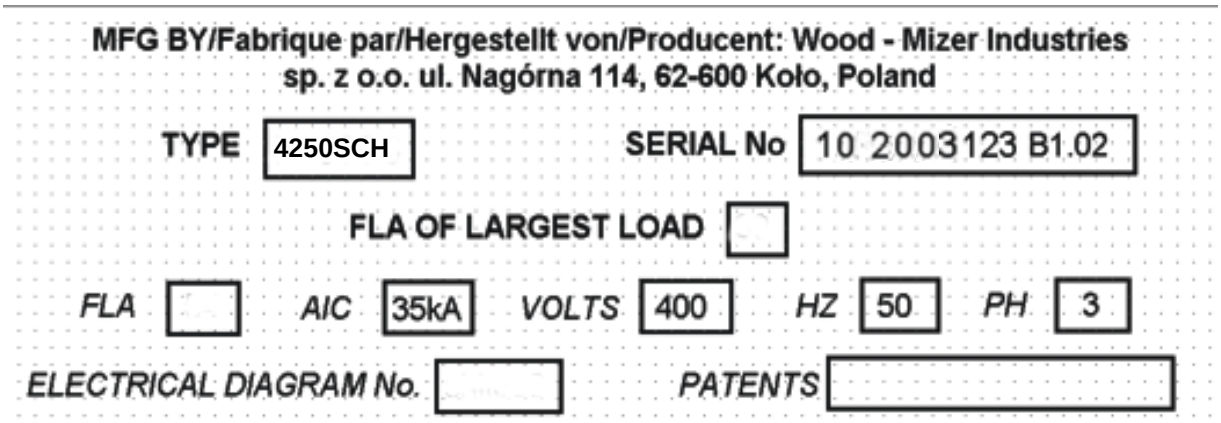
- Visa, Mastercard, or Discover
- COD
- Prepayment
- Net 15 (with approved credit)

Be aware that shipping and handling charges may apply. Handling charges are based on size and quantity of order. In most cases, items will ship on the day they are ordered. Second Day and Next Day shipping are available at additional cost.

If your sawmill was purchased outside of the United States, contact your distributor for replacement parts.

1.2 Customer and Sawmill Identification

Each Wood-Mizer 4250SCH sawmill is identified with a serial number, revision, and electrical information (see the figure below).



IDENTIFICATION PLATE

The serial number contains the year and month of manufacture and a sequence number. The revision number helps identify the exact design of the equipment. See the table for a description of the serial and revision numbers as shown in the example above.

Model No.	Date Of Manufacture		Machine No.	Revision
	Month	Year		
4250SCH	01	2003	123	B1.02

SERIAL NUMBER DESCRIPTION

See the figure below for locations of the identification plates.

IDENTIFICATION PLATE LOCATIONS

1.3 If You Need Service

From Europe call our European Headquarters and Manufacturing Facility in Kolo, Nagórna 114, Poland at ***+48-63-2626000*** or ***+48-3912-1319.*** From the continental U.S., call us toll-free at ***1-800-525-8100.*** Ask to speak with a Customer Service Representative. Please have your vehicle identification number and your customer number ready when you call. The Service Representative can help you with questions about alignment of your mill, blade sharpening, or cutting a particular species of wood. He also can schedule you for a service call.

Office Hours: All times are Eastern Standard Time. Please remember that Indiana does not go on Daylight Savings Time in the summer.

Country	Monday - Friday	Saturday	Sunday
U.S., Indiana	8 a.m. to 5 p.m.	Closed	Closed
Poland	8 a.m. to 4:30 p.m.	Closed	Closed

IMPORTANT! Read the entire Operator's Manual before operating the sawmill. Take notice of all safety warnings throughout this manual and those posted on the machine. Keep this manual with this machine at all times, regardless of ownership.

SECTION 2 SAFETY

2.1 Safety Symbols

The following symbols and signal words call your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions.

DANGER! indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING! suggests a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION! refers to potentially hazardous situations which, if not avoided, may result in minor or moderate injury or damage to equipment.

IMPORTANT! indicates vital information.

NOTE: gives helpful information.

Warning stripes are placed on areas where a single decal would be insufficient. To avoid serious injury, keep out of the path of any equipment marked with warning stripes.

2.2 Safety Instructions

NOTE: ONLY safety instructions regarding personal injury are listed in this section. Caution statements regarding only equipment damage appear where applicable throughout the manual.

OBSERVE SAFETY INSTRUCTIONS

IMPORTANT! Read the entire Operator's Manual before operating the sawmill. Take notice of all safety warnings throughout this manual and those posted on the machine. Keep this manual with this machine at all times, regardless of ownership.

Also read any additional manufacturer’s manuals and observe any applicable safety instructions including dangers, warnings, and cautions.

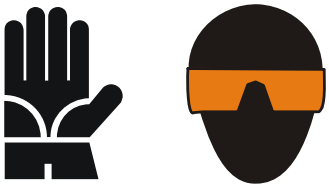
Only persons who have read and understood the entire operator's manual should operate the sawmill. The sawmill is not intended for use by or around children.

IMPORTANT! It is always the owner's responsibility to comply with all applicable national and local laws, rules and regulations regarding the ownership and operation of your AWMV sawmill. All AWMV mill owners are encouraged to become thoroughly familiar with these applicable laws and comply with them fully while using the mill.

WEAR SAFETY CLOTHING

WARNING! Secure all loose clothing and jewelry before operating the sawmill. Failure to do so may result in serious injury or death.

WARNING! Always wear gloves and eye protection when handling bandsaw blades. Changing blades is safest when done by one person! Keep all other persons away from area when coiling, carrying or changing a blade. Failure to do so may result in serious injury.



WARNING! Always wear eye, ear, respiration, and foot protection when operating or servicing the sawmill.

KEEP SAWMILL AND AREA AROUND SAWMILL CLEAN

DANGER! Maintain a clean and clear path for all necessary movement around the mill and lumber stacking areas. Failure to do so will result in serious injury.

HANDLE FUEL/LUBRICANTS SAFELY

WARNING! Use ONLY water or approved additives with the lube system. Never use flammable fuels or liquids. If these types of liquids are necessary to clean the blade, remove it and clean with a rag. Failure to do so may result in serious injury or death.

IMPORTANT! If sawing in freezing temperatures, use anti-freez additive.

DISPOSE OF SAWING BY-PRODUCTS PROPERLY

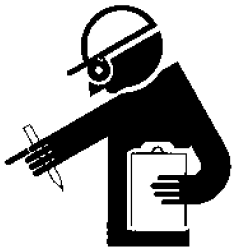
IMPORTANT! Always properly dispose of all sawing by-products, including sawdust and other debris.

CAUTIONS FOR SAWMILL SETUP

WARNING! Securely fasten the feet of the sawmill to the floor before operating the sawmill. Failure to do so may result in serious injury or death. Prepare a firm, level area where the sawmill can be anchored.

CHECK SAWMILL/BLADES BEFORE OPERATION

DANGER! Make sure all guards and covers are in place and secured before operating the sawmill. Failure to do so may result in serious injury.



WARNING! Blade guide alignment is essential for optimal cutting performance, blade life and safety. Failure to check and maintain proper blade guide alignment will result in stress cracks forming in the blade. These cracks will lead to premature blade breakage. If the blade breaks during operation and the blade has multiple stress cracks, the blade could shatter into several pieces and escape from the protective guards of the sawmill. Small blade pieces projected into the area around the sawmill creates a safety hazard for the operator and any bystanders surrounding the mill.

WARNING! DO NOT use blades with stress cracks. Blades with stress cracks can shatter causing bodily injury and/or machine damage.

KEEP PERSONS AWAY

DANGER! Keep all persons out of the path of moving equipment and logs when operating sawmill or loading and turning logs. Failure to do so will result in serious injury.

DANGER! Always be sure all persons are out of the path of the blade before starting the motor. Failure to do so will result in serious injury.

DANGER! 4250SCH Sawmill can be operated by one person only.

KEEP HANDS AWAY

DANGER! Always shut off the sawmill and wait until the blade wheels have come to a complete stop before changing the blade. Failure to do so will result in serious injury.

DANGER! Always keep hands away from moving bandsaw blade. Failure to do so will result in serious injury.

DANGER! Always be aware of and take proper protective measures against rotating shafts, pulleys, fans, etc. Always stay a safe distance from rotating members and make sure that loose clothing or long hair does not engage rotating members resulting in possible injury.

WARNING! Do not spin the blade wheels by hand. Spinning the blade wheels by hand may result in serious injury.

WARNING! Always stop the blades when the sawmill is not cutting. Failure to do so may result in serious injury.

WARNING! Do not for any reason adjust the drive belts with the motor running. Doing so may result in serious injury.

WARNING! Always keep clear of exiting sawdust. Keep hands, feet and any other objects away from the sawdust chute when operating sawmill. Failure to do so may result in serious injury.

USE PROPER PROCEDURE WHEN CONDUCTING ELECTRICAL SAFETY CHECKS AND MAINTENANCE

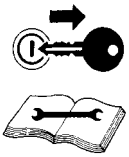
DANGER! Make sure all electrical installation, service and/or maintenance work is performed by a qualified electrician and is in accordance with applicable electrical codes.

DANGER! ARC FLASH AND SHOCK HAZARD! Hazardous voltage inside the electric sawmill disconnect box, starter box, and at the motor can cause shock, burns, or death. Disconnect and lock out power supply before servicing! Keep all electrical component covers closed and securely fastened during mill operation. Wear appropriate Personal Protection Equipment.

WARNING! Consider all electrical circuits energized and dangerous.

WARNING! Never assume or take the word of another person that the power is off; check it out and lock it out.

WARNING! Do not wear rings, watches, or other jewelry while working around an open electrical circuit.



WARNING! Before performing service near moving parts such as blades, pulleys, motors, belts and chains, first turn the key switch to the OFF (#0) position and remove the key. If the key is turned on and moving parts activated, serious injury may result.

WARNING! Remove the blade before performing any service to the engine or sawmill. Failure to do so may result in serious injury.

DANGER! Lockout procedures must be used during:

Changing or adjusting blades
Unjamming operations
Cleaning
Mechanical repair
Electrical maintenance
Retrieval of tools/parts from work area
Activities where guards or electrical panel guard is open or removed

Maintenance hazards include:

Blade contact
Pinch points
Kickbacks
Missiles (thrown blades/wood chips)
Electrical

Failure to lockout may result in:

Cut
Crush
Blindness
Puncture
Serious injury and death
Amputation
Burn
Shock
Electrocution

To control maintenance dangers:

Lockout procedures must be followed (see ANSI Standard Z244.1-1982 and OSHA regulation 1910.147).
Never rely on machine stop control for maintenance safety (emergency stops, on/off buttons, interlocks).
Do not reach into moving blades or feed systems. Allow all coasting parts to come to a complete stop.
Electrical power supply and air supply must both be locked out.
Where established lockout procedures cannot be used (electrical troubleshooting or mechanical dynamic troubleshooting), alternative effective protective techniques shall be employed which may require special skills and planning.
Always follow safe operations practices in the workplace.

LOCKOUT PROCEDURE

Lockout procedures must be followed (see ANSI Standard Z244.1-1982 and OSHA regulation 1910.147).

Purpose:

This procedure establishes the minimum requirements for lockout of energy sources that could cause injury.

Responsibility:

The responsibility for seeing that this procedure is followed is binding upon all workers. All workers shall be instructed in the safety significance of the lockout procedure. It is your responsibility to ensure safe operation of the machine.

Preparation For Lockout:

The sawmill must be locked out both electrically and pneumatically (lockout air valve).

Sequence of Lockout Procedure:

1. Notify all persons that a lockout is required and the reason therefore.
2. If the sawmill is operating, shut it down by the normal stopping procedure.
3. Operate the switch and valve so that the energy sources are disconnected or isolated from the sawmill. Stored energy such as moving blades, feed system and air pressure shall be dissipated.
4. Lockout the energy isolating devices with assigned individual locks.
5. After ensuring that no persons are exposed and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the sawmill will not operate. Caution: Return operating controls to neutral position after the test.
6. The sawmill is now locked out.

Restoring Equipment to Service

1. When the job is complete and the sawmill is ready for testing or normal service, check the sawmill area to see that no one is exposed.

2. When the sawmill is all clear, remove all locks. The energy isolating devices may be operated to restore energy to the sawmill.

Procedure Involving More Than One Person

In the preceding steps, if more than one individual is required to lock out the sawmill, each shall place his own personal lock on the energy isolating devices.

Rules for Using Lockout Procedure

The sawmill shall be locked out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch or valve bearing a lock.

Owner's Responsibility

The procedures listed in this manual may not include all ANSI, EN or locally required safety procedures. It is the owner/operator's responsibility and not AWMV Products to ensure all operators are properly trained and informed of all safety protocols. Owner/Operators are responsible for following all safety procedures when operating and performing maintenance to the sawmill.

KEEP SAFETY LABELS IN GOOD CONDITION

IMPORTANT! Always be sure that all safety decals are clean and readable. Replace all damaged safety decals to prevent personal injury or damage to the equipment. Contact your local distributor, or call your Customer Service Representative to order more decals.

IMPORTANT! If replacing a component which has a safety decal affixed to it, make sure the new component also has the safety decal affixed.

See Table 2-1. Pictogram decals used to warn and inform the user about danger.

TABLE 2-1

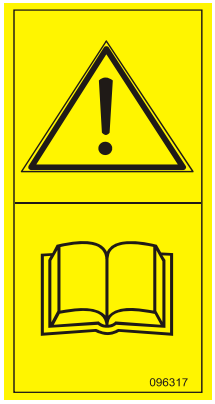
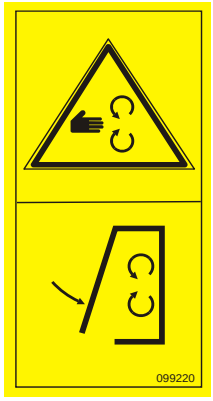
Decal View	W-M No.	Description
	096317	CAUTION! Read thoroughly the manual before operating the machine. Observe all safety instructions and rules when operating the sawmill.
	099220	CAUTION! Close all guards and covers before starting the machine.

TABLE 2-1

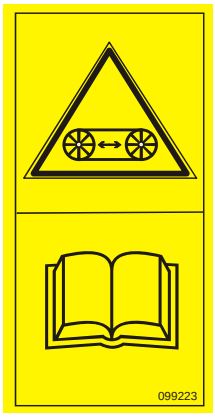
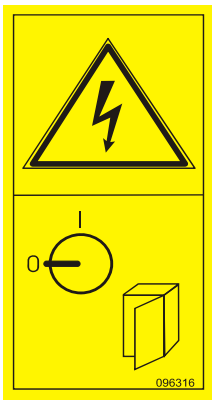
	099219	Blade tension. Refer to manual for blade tension instructions.
	099221	CAUTION! Gear danger – keep a safe distance away!
	096316	CAUTION! Do not open or close the electric box when the switch **is not** in the “0” position.

TABLE 2-1

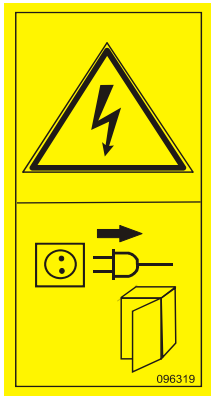
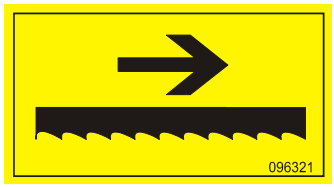
	096319	CAUTION! Disconnect power supply before opening the box.
	096321	Blade movement direction
	101140	CAUTION! Read thoroughly the manual before servicing the machine. This machine must be locked out prior to servicing.
	099504	Visible and/or invisible laser radiation. Avoid eye or skin exposure to direct or scattered radiation.

TABLE 2-1

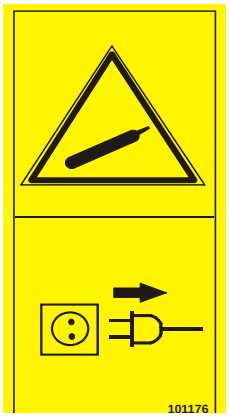
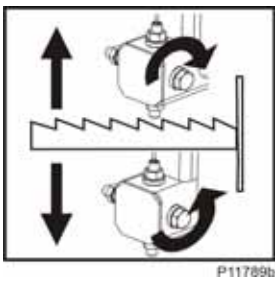
	101176	CAUTION! High air pressure in the installation even after disconnecting the power.
	101177	CAUTION! Keep all persons away. Only operator can enter the fence.
	S12004G	CAUTION! Always wear safety goggles when operating the sawmill!
	S12005G	CAUTION! Always wear protective ear muffs when operating the sawmill!

TABLE 2-1

	P11789	Aligning the blade on the wheels
	P85070	CE safety certification
	099401	Russian safety certification
	S20097F	1400 RPM - Motor rotation direction

USE CAUTION WHEN WORKING WITH HEAVY LOGS

WARNING! Always make sure log is clamped securely before sawing. Failure to do so may result in serious injury or death.

AUTOMATIC BOARD RETURN SAFETY

DANGER! Keep all persons out of the path of returning boards. Failure to do so will result in serious injury.

POWER FEED AND UP/DOWN SYSTEM SAFETY

DANGER! If leaving the blade engaged for maximum production rates, make sure the off-bearer stays out of the path of the blade. Failure to do so will result in serious injury or death.

CAUTION! Be sure the transducer sensor is adjusted properly before raising or lowering the saw head against the upper or lower travel limits. Failure to do so may result in damage to the machine.

SAWMILL SETUP

IMPORTANT! The 4250SCH sawmill can be operated only with additional fence around the machine . All 4250SCH sawmills owners must prepare the fence according to EN 1807 and EN 294/ ISO 13857 standards. Fence door must be equipped with safety switch, which turns off the sawmill when the fence door are open.

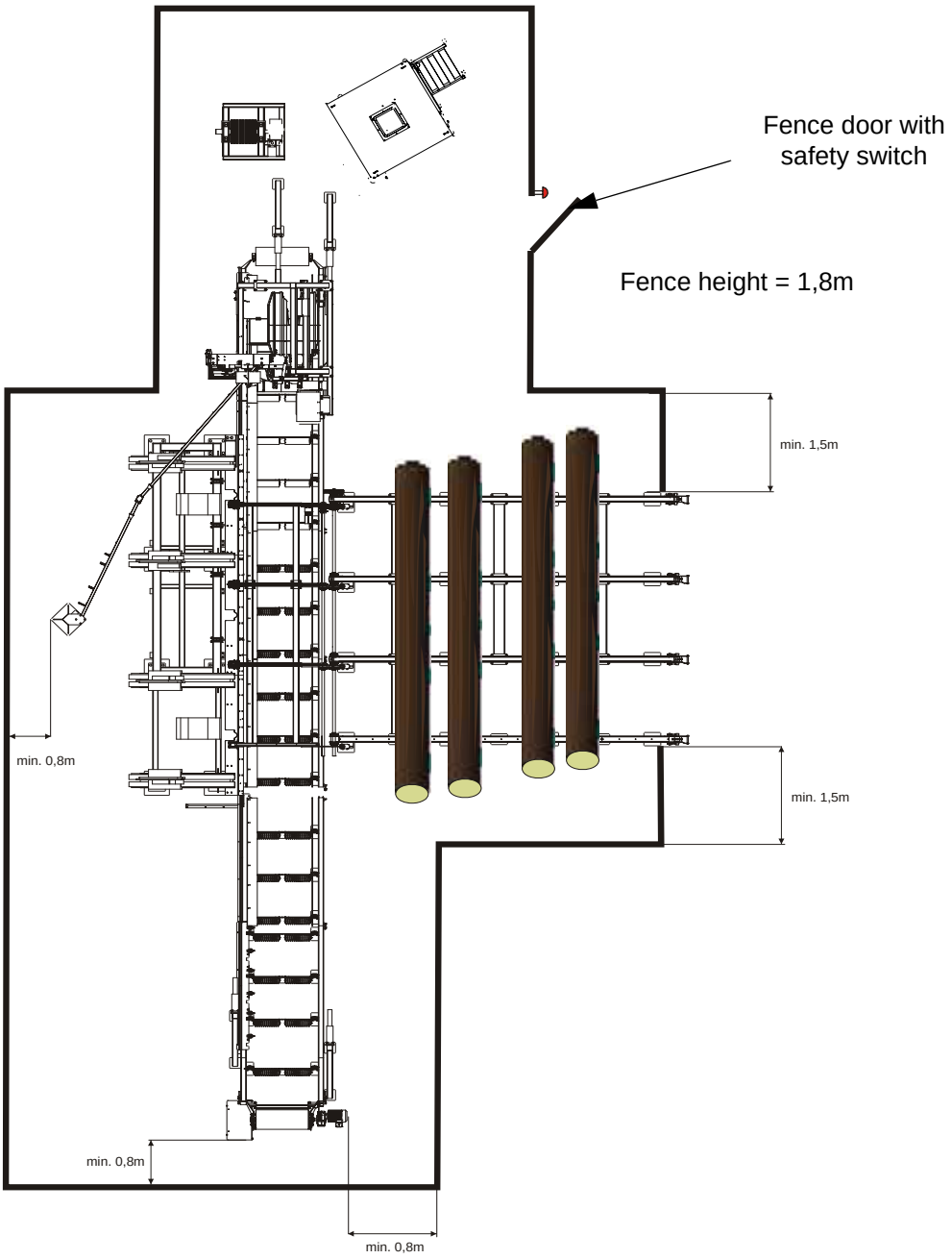


FIG. 2-0

SECTION 3 OPERATION

3.1 Control Overview

See Figure 3-1. Control functions are provided at the operator position.

FIG. 3-1

Left/Right Touch-Menu Screens: Upon initial power-up, both screens will display the Home Screen. You can display the Setworks Run screen and the System Dashboard on whichever screen you prefer.

Emergency Stop: Push the button in to stop all sawmill functions. Twist the button clockwise and release enable start-up of the machine. **NOTE:** A second Emergency Stop is located at the end of the carriage bed.

Keyswitch: With the Start Button on, the keyswitch controls operation of all motors. Turn the keyswitch to the left position to stop all motors. Turn the keyswitch to the middle position to start all motors except the blade motor. Turn the keyswitch to the right position and release to start the blade motor.

Start Button: With both Emergency Stops disengaged, push the button to start the machine. Push either Emergency Stop to stop the machine.

3.2 Distribution Box Overview

See Figure 3-2. The distribution box on the saw head contains controls for the blade tension. A description of each box component is provided below.

FIG. 3-2

Tension Regulator: Turning this knob adjusts the blade tension pressure. Turn the knob clockwise to increase blade tension, counterclockwise to reduce blade tension.

Tension Pressure: Gauge indicates current blade tension pressure.

Manual Brake Release: Push in and hold to release the blade wheel brake.

Blade Tension: Push in to release the blade tension, pull out to tension the blade.

3.3 Joystick Control Overview

See Figure 3-3. The joysticks located at the operator seat control all of the sawmill functions. Each joystick can be moved forward, backward, left and right to perform various functions. Each joystick also has a thumbstick, two front buttons and a rear switch to perform additional functions.

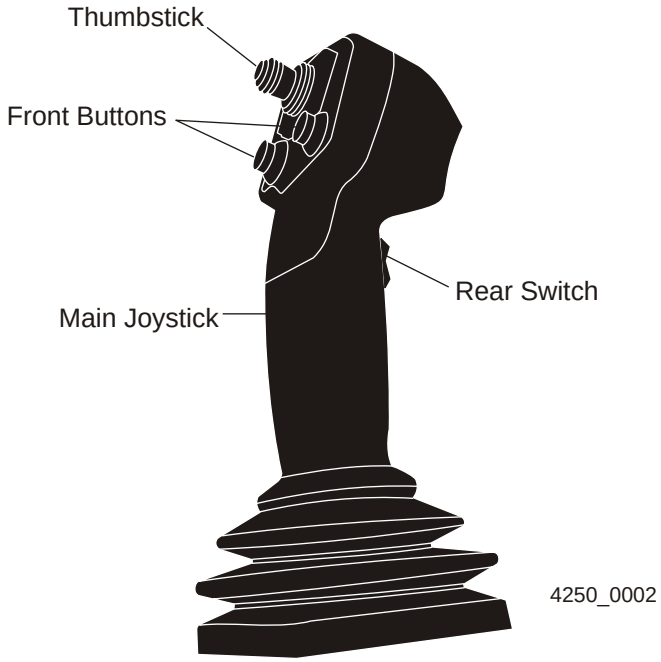


FIG. 3-3

See Figure 3-4. The right main joystick controls the saw head forward/reverse and the rear taper plates in and out. Pull the main joystick to toward you to move the saw head toward the operator. The further you pull the joystick, the faster the saw head will advance. Push the joystick away to return the saw head to the rear of the sawmill. Push the joystick right to move the rear of the log toward the blade, left to move the rear of the log away from the blade.

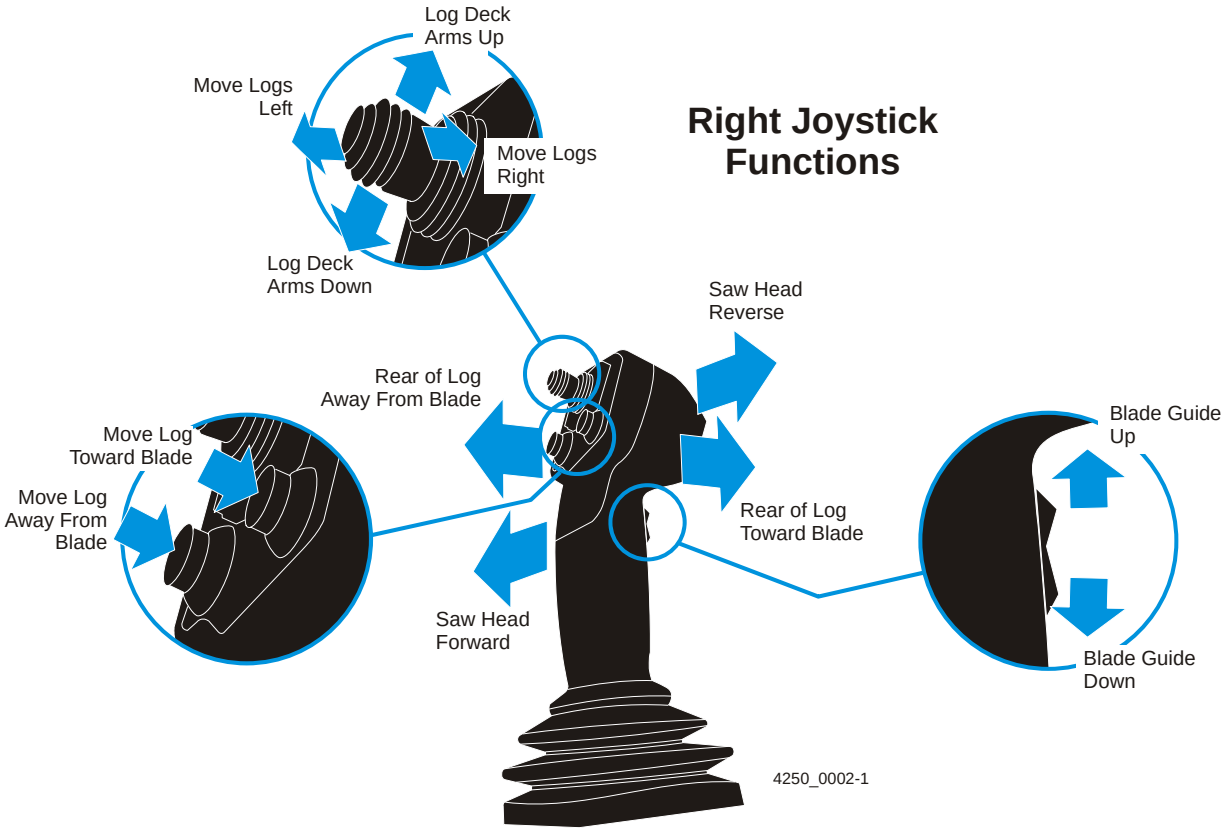


FIG. 3-4

The right joystick thumbstick controls the log deck. Push the thumbstick down to lower the log deck arms. Push the thumbstick up to raise the arms. **NOTE:** The log deck arms will raise all the way up with a single bump-up of the thumbstick. Push the thumbstick left to move the logs on the log deck left and right to move the logs right. Both log deck arm and left/right functions may be operated at once by placing the thumbstick between two positions. **Example:** Push the thumbstick diagonally down and to the left to lower the log deck arms and move logs to the left to load a log onto the sawmill.

The right joystick front buttons control the log positioning supports. Push the left button to move the log away from the blade and the right button to move the log toward the blade (when in setworks mode, the log/cant will automatically position for the next cut).

The right joystick rear switch controls the adjustable blade guide. Push the switch up to move the blade guide up and down to move the blade guide down.

See Figure 3-5. The left main joystick controls the clamping dogs and the front taper plates in and out. Push the main joystick away to engage the clamping dogs. Pull the joystick toward you to release the clamping dogs. Push the joystick right to move the front of the log toward the blade, left to move the front of the log away from the blade.

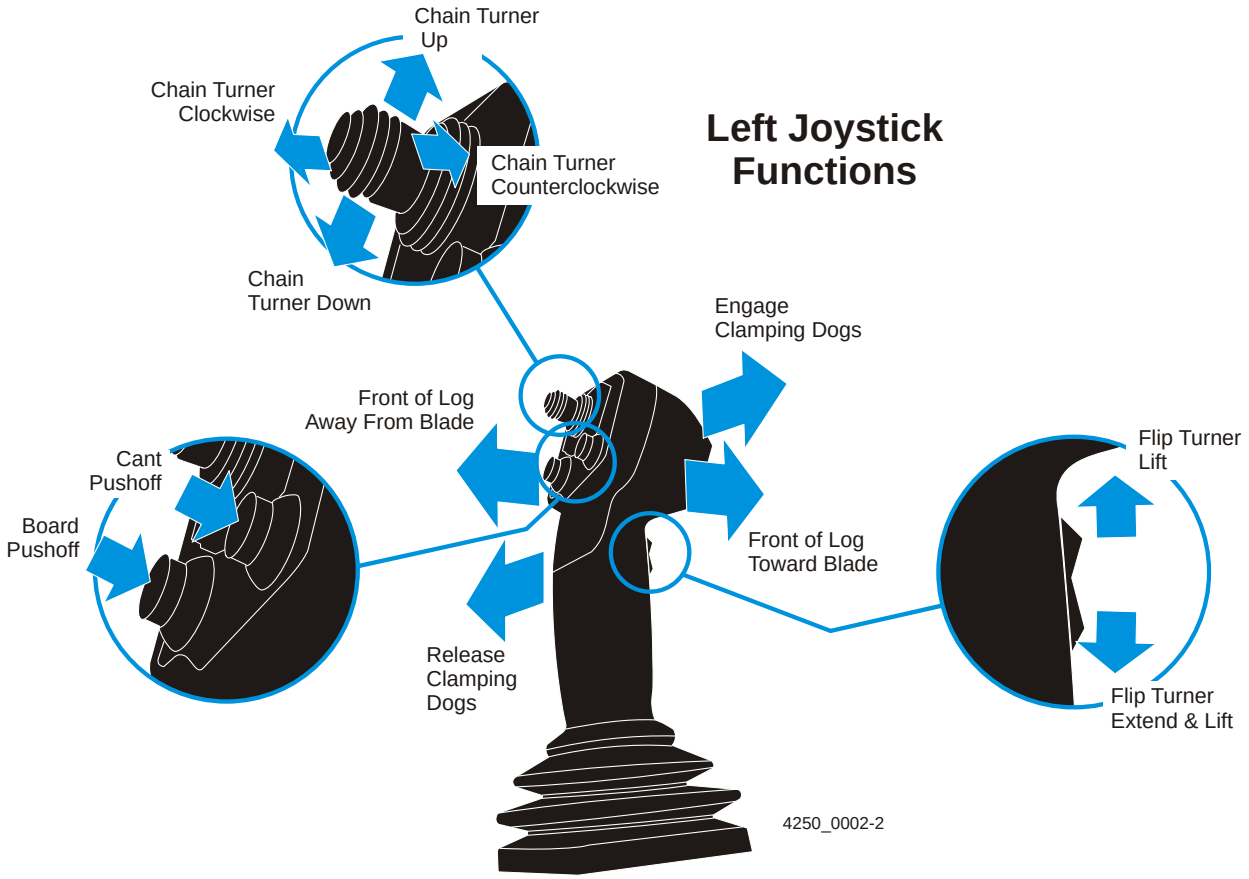


FIG. 3-5

The left joystick thumbstick controls the chain turner. Push the thumbstick up to raise the chain turner. Push the thumbstick down to lower the chain turner. Push the thumbstick left to rotate the log counterclockwise and right to rotate the log clockwise.

The left joystick front buttons control the board and cant push-off pistons. Push the left button to push thin boards from the carriage. Push the right button to push larger cants from the carriage.

The left joystick rear switch controls the brownsville flip turner. Push the switch up to lift the flip turner straight up and down to extend the flip turner out and lift.

3.4 Programming the Control

3.4.1 Select Language

See Figure 3-6. From the Home Screen on either touch-menu screen, push the desired language button. The Home Screen will re-display in the selected language.

4250_0005

FIG. 3-6

3.4.2 System Setup

See Figure 3-7. Push the System Setup button. This menu provides the ability to adjust certain machine parameters:

4250_0004

FIG. 3-7

Hour Meter: This box displays the total hours of operation.

Hour Meter Temp: This box displays a temporary count of hours of operation. Touch the screen in this area to reset the counter to zero.

Taper Assignments: Push to change the arrows to point to the joystick you wish to control the taper plates.

Bumpback: This setting controls the time the saw head is locked from reversing after the bumpback button is pressed after a cut (1/100 second). To adjust the Bumpback setting, drag the slider bar close to the desired setting and use the up and down arrows to fine tune the setting.

Lube Duty: Controls the amount of lubricant applied to the blade while sawing. Some types of wood require more or less lubrication to prevent sap buildup on the blade. To adjust the Lube Duty setting, drag the slider bar close to the desired setting and use the up and down arrows to fine tune the setting.

Install and Calibration: This menu has no function at this time.

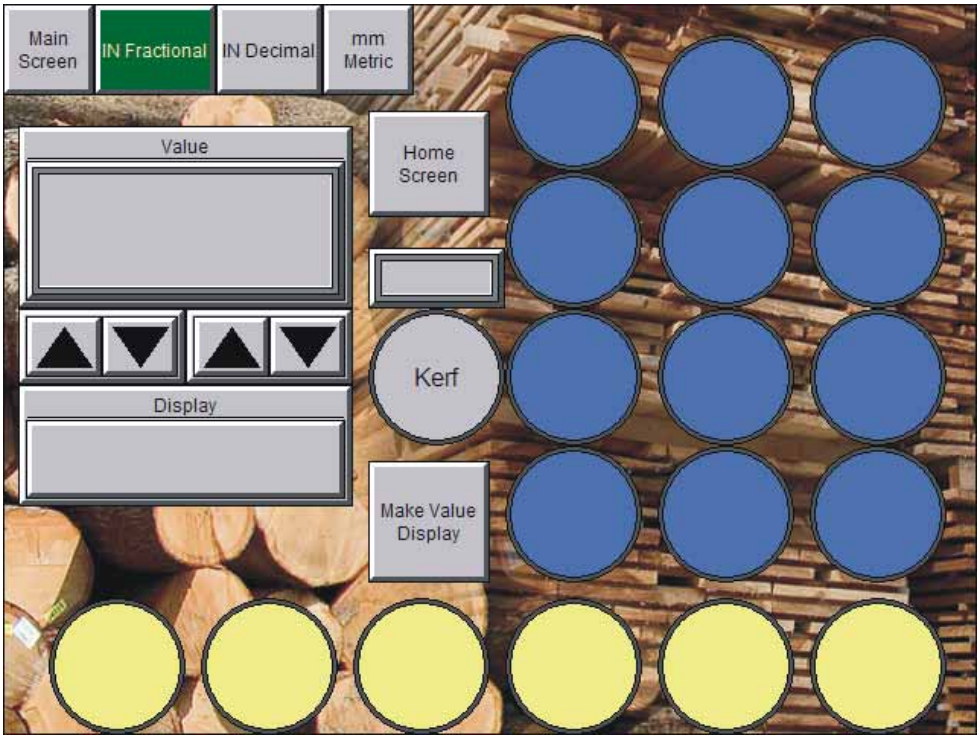
Home Screen: Touch to return to the Home screen.

Main Screen: Touch to go to the System Dashboard screen.

3.4.3 Setworks Setup

From the Home screen, touch the Setworks Setup button. You can also access the Setworks Setup menu from the Setworks Run screen by touching the Set-up Mode button.

See Figure 3-8. This menu allows you to program setworks values for board thickness, cant size and blade kerf.



4250_0006

FIG. 3-8

Board Thickness

See Figure 3-9. The six yellow Board Thickness buttons control the distance the material is moved for each cut. To enter a value to a button, first select a unit of measure. Select IN Fractional to display units in fractions, IN Decimal to display units in decimals and mm Metric to display units in millimeters. The unit of measure will be highlighted green when selected.

Use the left set of up and down arrows to increase or decrease the value by 1 full inch (Fractional/Decimal units) or 10 millimeters (Metric units). Use the right set of arrows to increase or decrease the value by 1/32 inch (Fractional units), .10 inch (Decimal units) or 1 millimeter (Metric units).

Once the value is entered, you can determine how the button will be labeled. If you simply want to use the value for the label, touch the Make Value Display button. The value will be shown in the Display field. If you want to customize the button label (for example 4QTR to represent 1”), touch the Display box to display the character entry screen. Enter the text (up to six characters) to be displayed and touch Enter.

Touch the board thickness button you wish to assign this value to. The button will flash and the value (or customer label) will display on the button.

Enter values as desired and touch the Main Screen button to return the Setworks Run screen or the Home Screen button to exit.

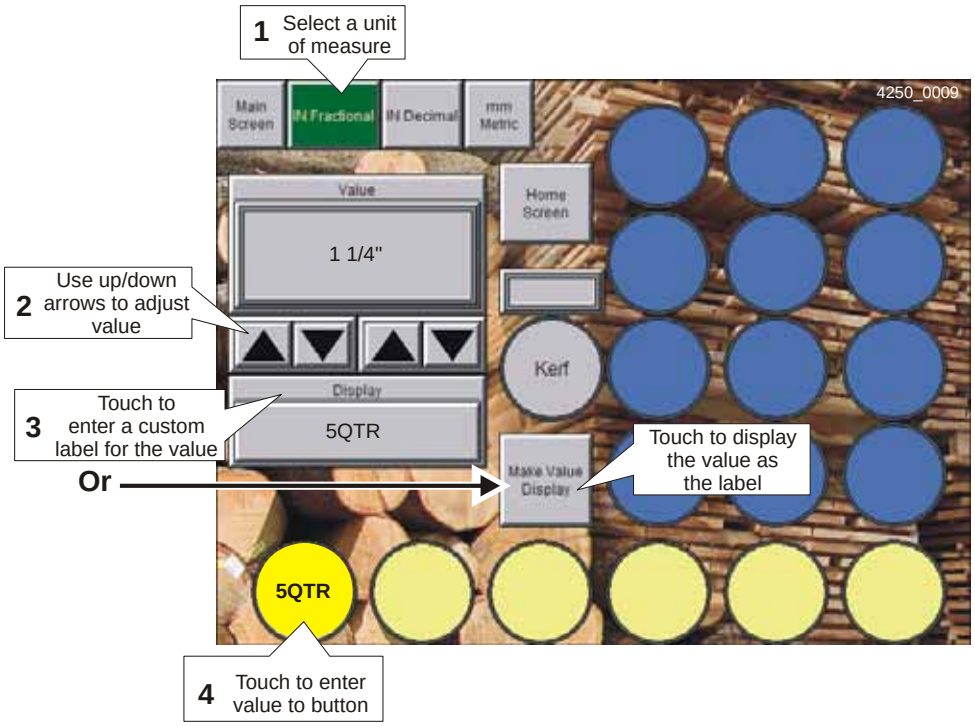


FIG. 3-9

Cant Size

The twelve blue Cant Size buttons are used in conjunction with the Board Thickness buttons in pattern mode to control the size of the cant leftover after boards are sawn from the log.

See Figure 3-10. The twelve blue Board Thickness buttons control the distance the material is moved for each cut. To enter a value to a button, first select a unit of measure. Select IN Fractional to display units in fractions, IN Decimal to display units in decimals and mm Metric to display units in millimeters. The unit of measure will be highlighted green when selected.

Use the left set of up and down arrows to increase or decrease the value by 1 full inch (Fractional/Decimal units) or 10 millimeters (Metric units). Use the right set of arrows to increase or decrease the value by 1/32 inch (Fractional units), .10 inch (Decimal units) or 1 millimeter (Metric units).

Once the value is entered, you can determine how the button will be labeled. If you simply want to use the value for the label, touch the Make Value Display button. The value will be shown in the Display field. If you want to customize the button label (for example BEAM to represent 6”), touch the Display box to display the character entry screen. Enter the text (up to six characters) to be displayed and touch Enter.

Touch the cant thickness button you wish to assign this value to. The button will flash and the value (or customer label) will display on the button.

Enter values as desired and touch the Main Screen button to return to the Setworks Run screen or the Home Screen button to exit.

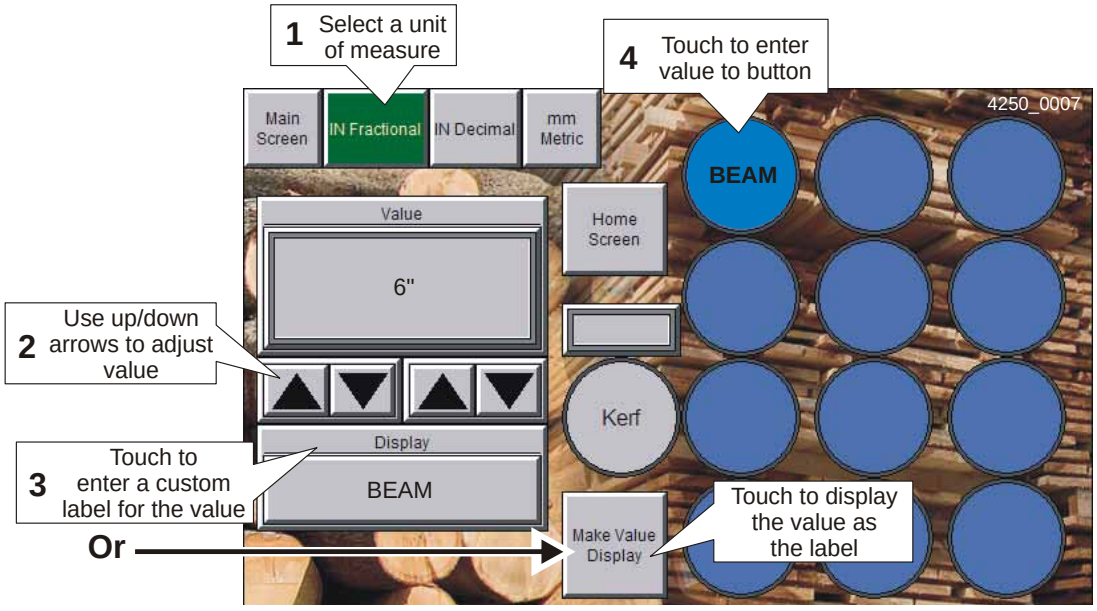


FIG. 3-10

Kerf

The kerf value is automatically added to the board thickness setting to compensate for the thickness of the blade. Select the desired unit of measure and use the up and down buttons to adjust the value.

See Figure 3-11. Once the value is entered, you can determine how the kerf setting will be labeled. If you simply want to use the value for the label, touch the Make Value Display button. The value will be shown in the Display field. If you want to customize the button label (for example WM055 to represent .055”), touch the Display box to display the character entry screen. Enter the text (up to six characters) to be displayed and touch Enter.

Touch the Kerf button to enter the value into the kerf setting. The kerf value (or custom label) will display above the Kerf button.

Enter values as desired and touch the Main Screen button to return the Setworks Run screen or the Home Screen button to exit.

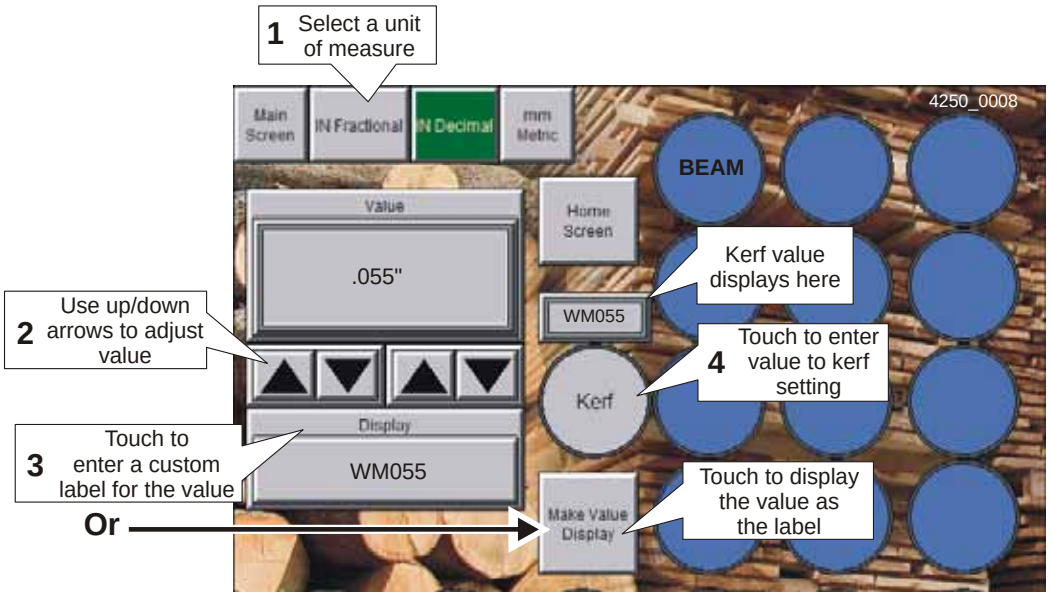


FIG. 3-11

3.5 Starting The Machine

DANGER! Make sure all guards and covers are in place and secured before operating the sawmill. Failure to do so may result in serious injury. Be sure the blade housing and pulley covers are in place and secure.

DANGER! Always be sure all persons are out of the path of the blade before starting the motor. Failure to do so will result in serious injury.

WARNING! Always wear eye, ear, respiration, and foot protection when operating the sawmill. Failure to do so may result in serious injury.

1. If necessary, release the EMERGENCY STOP button by turning it clockwise until it pops out. Be sure the second emergency stop button at the rear of the log carriage is also disengaged.

   See Figure 3-12.

FIG. 3-12

2. **IMPORTANT!** All 4250SCH sawmills with CE safety certificate are equipped with additionall safety switch located under operators seat. The sawmills is off when operator is not seating on the seat.

3. To turn the sawmill power on, push the green start button on the control.

3.6 Installing A Blade

DANGER! Always shut off the sawmill and wait until the blade wheels have come to a complete stop before changing the blade. Failure to do so will result in serious injury.

WARNING! Always turn the key switch to OFF and remove the key before changing the blade. Failure to do so may result in serious injury.

WARNING! Always wear gloves and eye protection when handling bandsaw blades. Changing blades is safest when done by one person! Keep all other persons away from area when coiling, carrying or changing a blade. Failure to do so may result in serious injury.

WARNING! DO NOT use blades with stress cracks. Blades with stress cracks can shatter causing bodily injury and/or machine damage.

1. Pull the right joystick forward to move the saw head past the front of the log carriage so you can access the blade housing cover.

2. Push the EMERGENCY STOP button to turn the machine off. Turn the key switch to OFF and remove the key.

3. Stand clear of the blade housing cover and push the blade housing cover air switch located at the front of the saw head carriage. The blade housing cover will pivot open.

   See Figure 3-13.

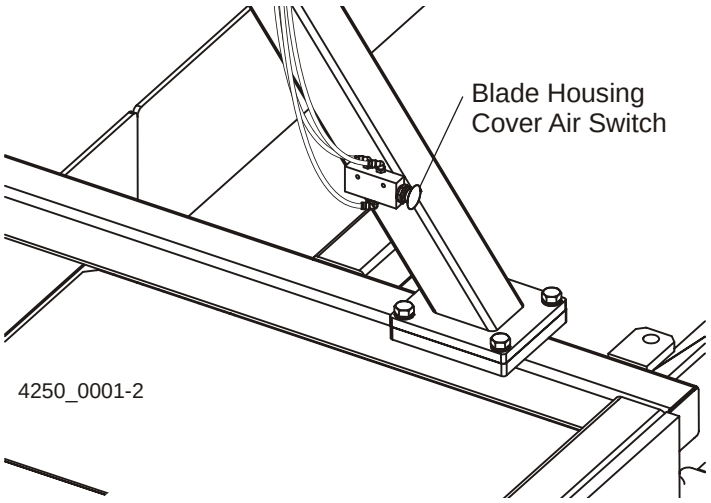


FIG. 3-13

4. At the saw head distribution box, push the BLADE TENSION air switch in. This will release the tension on the existing blade (if applicable).

5. Remove the blade if necessary.

6. Install the blade around both blade wheels and between the blade guides. Make sure the teeth are pointing the correct direction. The teeth on the portion of the blade between the blade guides should be pointing down.

   See Figure 3-14. Position the blade on the wheels so the gullet extends past the front edge of the wheel approximately 1/4” (+1/16”, -0).

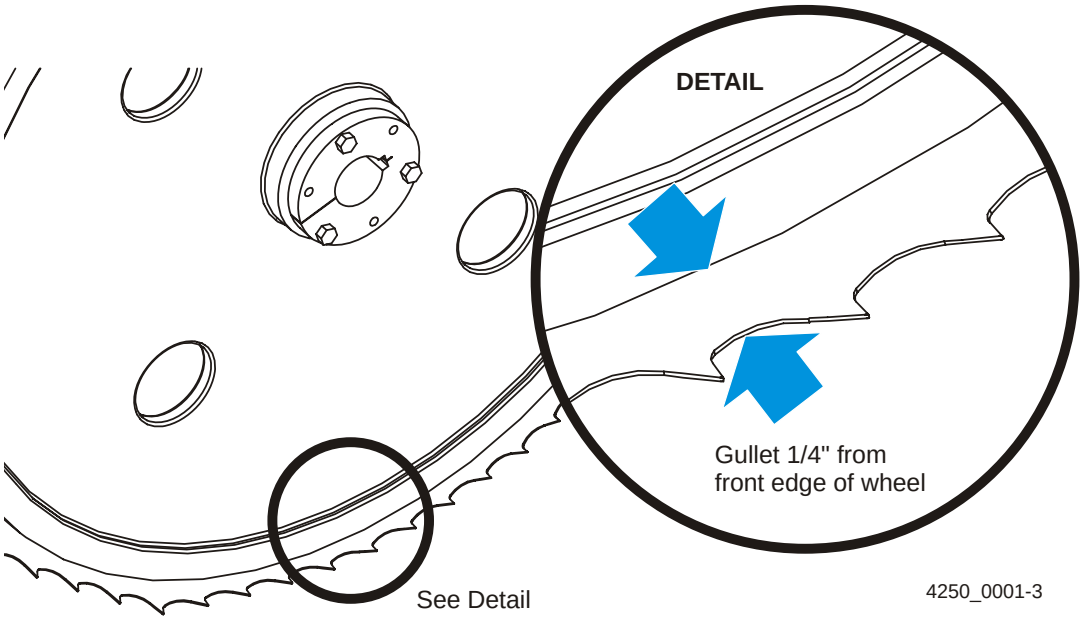


FIG. 3-14

7. Pull the BLADE TENSION button. The TENSION PRESSURE gauge should read 80 psi. To adjust the blade tension pressure, use the TENSION REGULATOR knob. Push the BLADE TENSION button to release the blade tension. Turn the TENSION REGULATOR knob counterclockwise to reduce blade tension, clockwise to increase blade tension. Pull the BLADE TENSION button to re-tension the blade.

8. Stand clear of the blade housing cover and pull the air switch to close the cover.

9. Insert the key and turn the key switch to the MOTOR START position and release, leaving the key switch in the MOTOR ON position. Let the motor spin the blade for a few seconds, turn the key switch to OFF and remove the key.

WARNING! Do not spin the blade wheels by hand. Spinning the blade wheels by hand may result in serious injury.

10. Open the blade housing cover and recheck the position of the blade on the blade wheels. Make sure the blade has maintained the proper position on the blade wheels as described above. If adjustment is needed, push the BLADE TENSION button to release the blade tension and adjust the wheel as described below.

See Figure 3-15. To adjust the position of the blade on the blade wheels, loosen the jam nuts on the tilt adjustment bolts located at the end of the top blade wheel shaft housing.

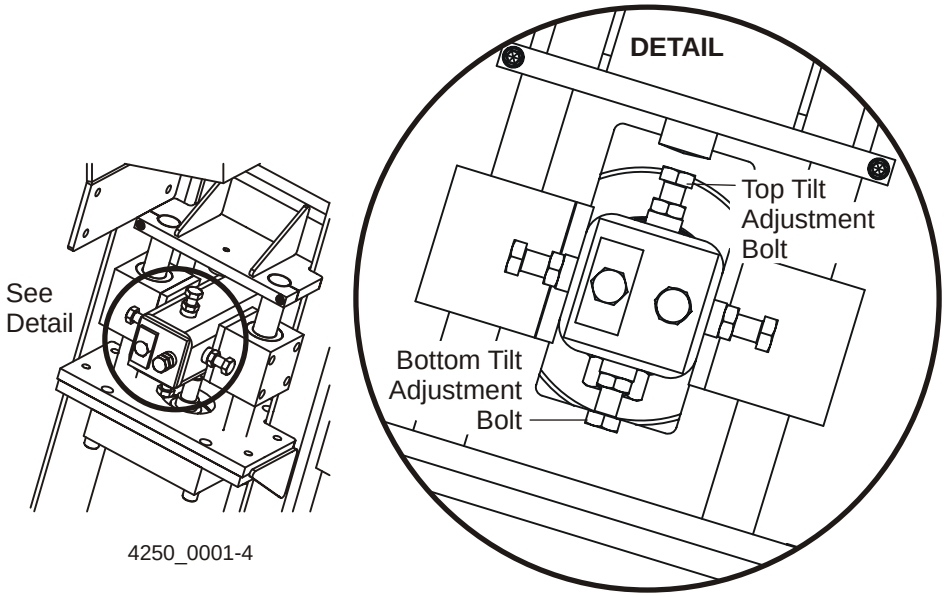


FIG. 3-15

To move the blade out on the blade wheel, loosen the top bolt and tighten the bottom bolt. To move the blade in on the blade wheel, loosen the bottom bolt and tighten the top bolt.

11. Tighten the tilt adjustment bolt jam nuts, close the blade housing cover, re-tension the blade and spin the blade again. Repeat this procedure until the blade tracks on the blade wheels properly.

3.7 Loading, Turning And Clamping Logs

DANGER! Keep all persons out of the path of moving equipment and logs when operating sawmill or loading and turning logs. Failure to do so will result in serious injury.

CAUTION! Before loading a log, be sure the cutting head is moved far enough back so the log does not hit it. Failure to do so may result in machine damage.

CAUTION! Be sure the log clamps, turning arm and taper plates are adjusted out of the path of the log before loading a log onto the bed. Failure to do so may result in machine damage or cause misalignment.

1. Move the saw head to the rear of the sawmill before loading a log. Push the right joystick forward to move the saw head to the rear of the sawmill.

   See Figure 3-16.

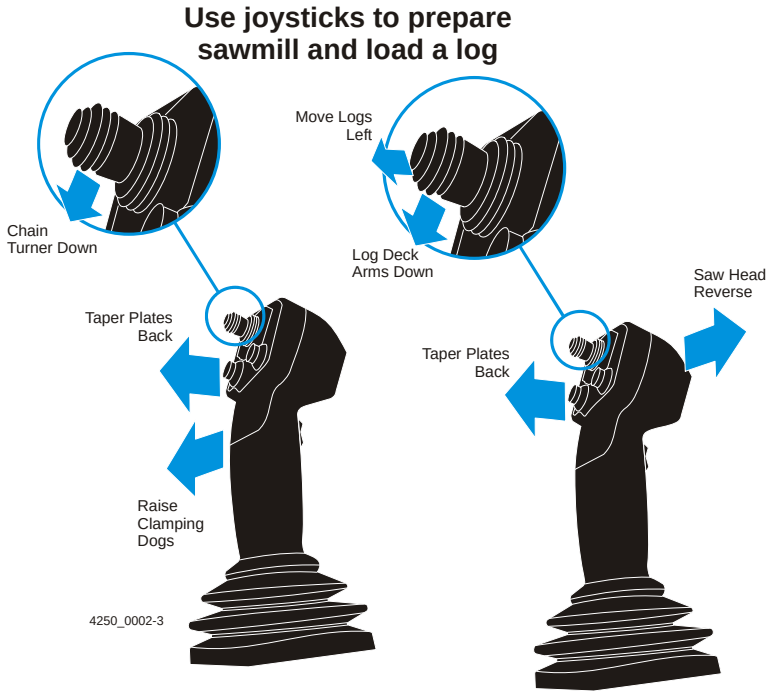


FIG. 3-16

2. If the taper plates are extended, push the right and/or left joystick to the left to move the taper plates all the way back.

3. If the chain turner is positioned above the log bed, push the left joystick thumbstick down to lower the chain turner.

4. If the clamping dogs are down, pull the left joystick back to raise the clamping dogs all the way up.

5. Push the right joystick thumbstick down and to the left to lower the log deck arms and move a log left until it rolls down the arms onto the bed carriage.

   See Figure 3-17.

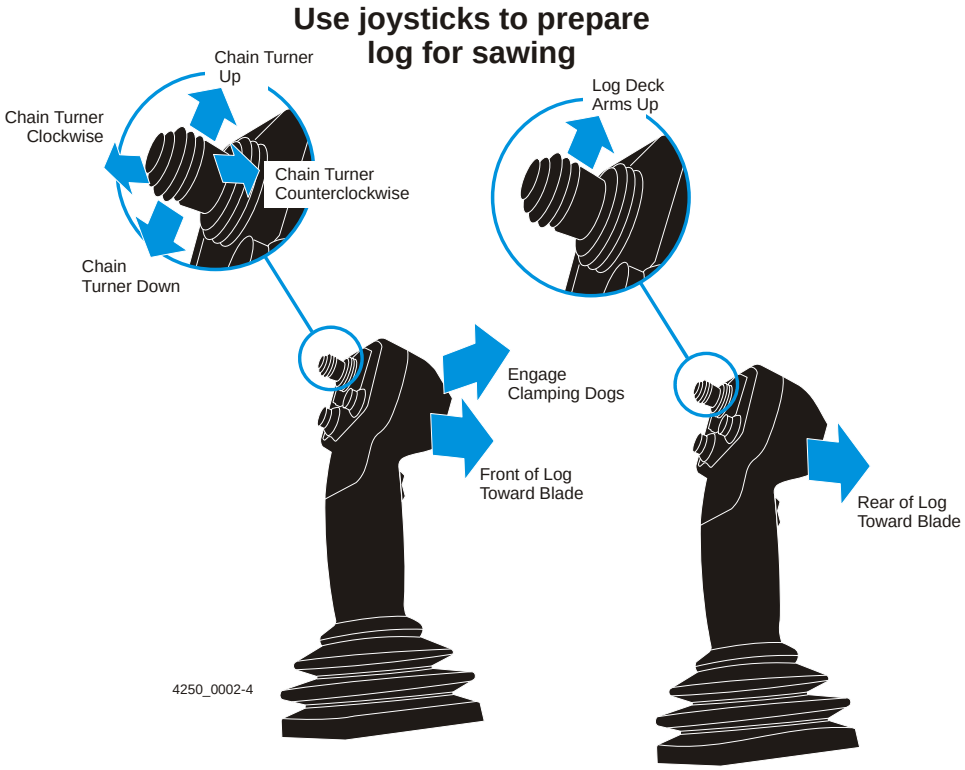


FIG. 3-17

6. Push the right thumbstick up to raise the log deck arms.

7. Push the left thumbstick up to raise the chain turner until it engages the log. Push the thumbstick left to spin the log counterclockwise or right to spin clockwise until the log is positioned as desired for the first cut. Push the left joystick thumbstick down to lower the chain turner.

8. If the log is tapered and you wish to saw parallel to the heart of the log, use the taper plates to move the small end of the log. Push the right joystick to the right to move the rear of the log towards the blade. Push the left joystick to the right to move the front of the log towards the blade.

9. Push the left joystick forward to engage the clamping dogs. Engaging the clamping dogs disables the turner functions.

3.8 Setworks Overview

See Figure 3-18. From the Home Screen, touch the Setworks Run button and select the sawing mode you wish to use. The mode button will highlight green when selected. There are three sawing methods that can be used to saw logs:

FIG. 3-18

MANUAL mode: the joystick controls will move the material to any position until the joy-stick control is released.

REFERENCE mode: the control references a temporary position of the material and automatically moves the material the distance determined by the selected BOARD THICKNESS button. Mostly used when sawing for grade where the outer perimeter of the log contains the highest-quality boards.

PATTERN mode: The control references the position of the material from the blade determined by the selected CANT SIZE button. The control will automatically move the blade the distance determined by selected BOARD THICKNESS button starting at the distance from the bed determined by the selected CANT SIZE button. Typically used when dimensional sawing or finishing a hardwood log to a finish sized cant.

3.8.1 Reference Mode

This mode allows the operator to temporarily set any position of the material as a reference for subsequent cuts. Reference Mode is best used when sawing for grade where the outer perimeter of the log contains the highest-quality boards.

Touch the Reference Mode button from the Setworks Run menu. All the thickness value buttons will turn yellow when sawing in Reference Mode.

1. The saw head will still operate as if in Manual Mode until the reference position is locked by using the REF A button as described later.

2. Choose a BOARD THICKNESS button as desired. *See Section 3.4.3* for instructions to program the BOARD THICKNESS buttons.

3. Move the log using the right joystick top buttons until the log is positioned where you want to make the first cut.

4. Touch the REF A and NEXT CUT buttons.

See Figure 3-19. With the position of the material now stored and locked as REF A, setworks will move the material the distance determined by the selected BOARD THICKNESS button. With NEXT CUT enabled, Setworks will automatically position for the next cut below the last set position of the material.

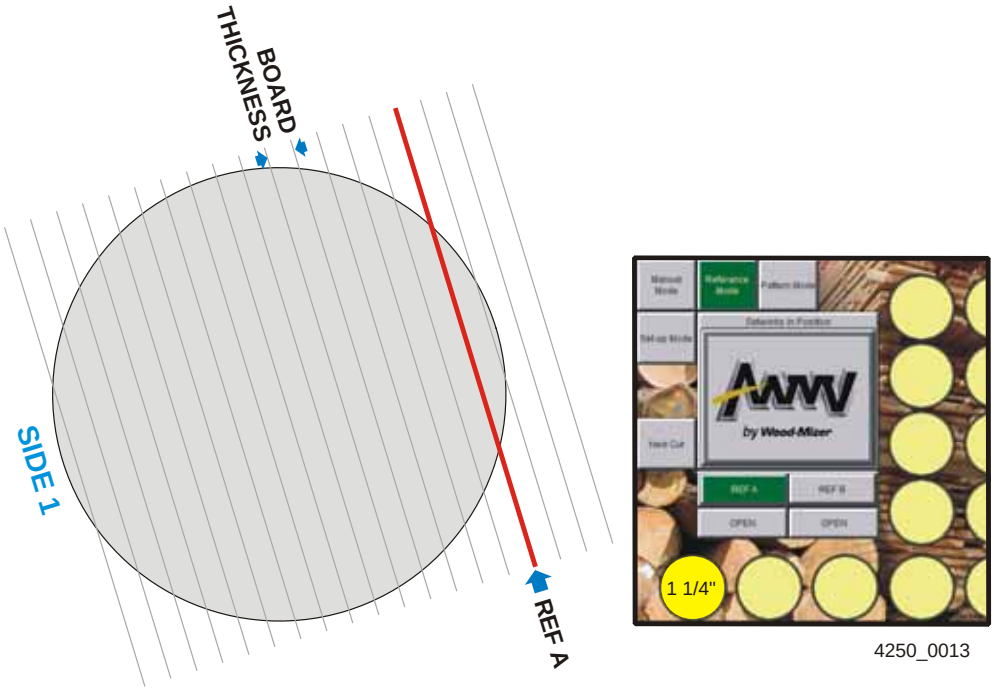


FIG. 3-19

5. After making the first cut, bump the material away from the blade and return the saw head.

6. Bump the material forward and setworks will automatically position the material for the next cut. When the material is successfully located in a setworks position, the gray “Setworks In Position” area on the screen will turn green.

7. Make cuts as desired until you are ready to turn the log.

8. Return the saw head and touch the OPEN button under REF A to disable the lock.

> **NOTE:** Since the log was resting on a round, REF A is a throw-away reference. You don’t need to keep the REF A value until the log is resting on a flat.

9. Turn the log. Adjust the material until the blade is positioned as desired. Enable REF A and NEXT CUT.

   See Figure 3-20. With the position of the blade now stored and locked as REF A, setworks will move the material the distance determined by the selected BOARD THICKNESS button. With NEXT CUT enabled, Setworks will automatically position for the next cut below the last set position of the material.

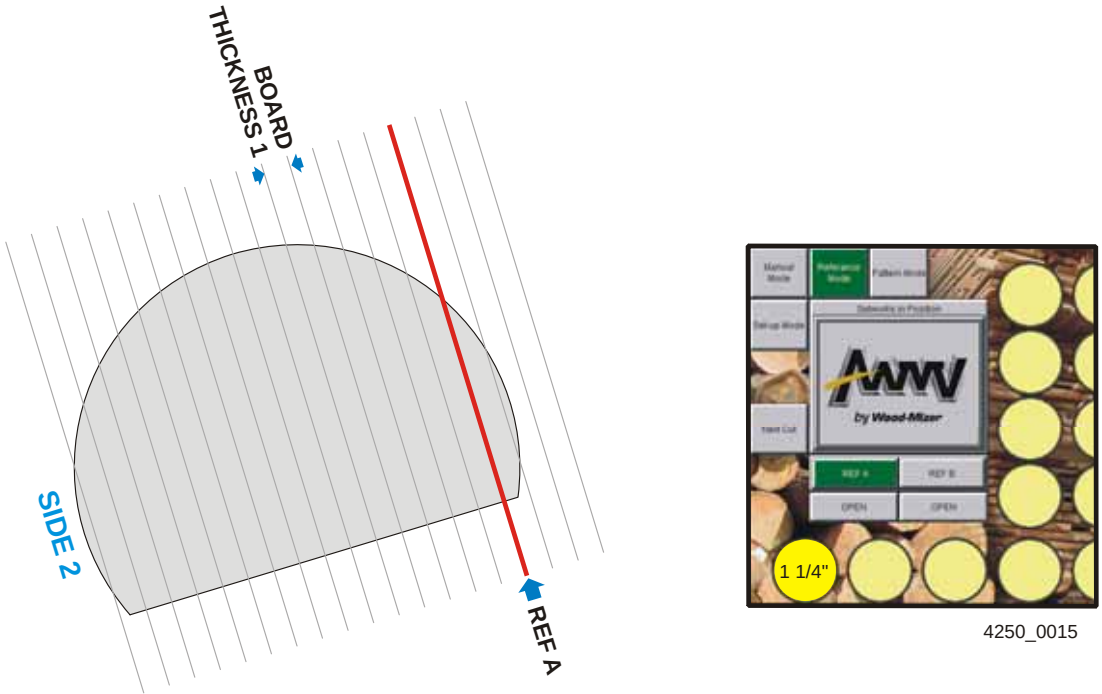


FIG. 3-20

10. Bump the material away from the blade and return the saw head.

11. Bump the material forward and setworks will automatically position the material for the next cut.

12. Make cuts as desired until you are ready to turn the log.

13. Return the saw head and touch the OPEN button under REF A to disable the lock.

14. Turn the log. Locate the material until it is positioned as desired. Enable REF A and NEXT CUT.

See Figure 3-21. With the position of the material now stored and locked as REF A, setworks will move the material the distance determined by the selected BOARD THICKNESS button. With NEXT CUT enabled, Setworks will automatically position for the next cut below the last set position of the material. Since the log was resting on a flat, the REF A value should be kept and REF B used for the next side of the log.

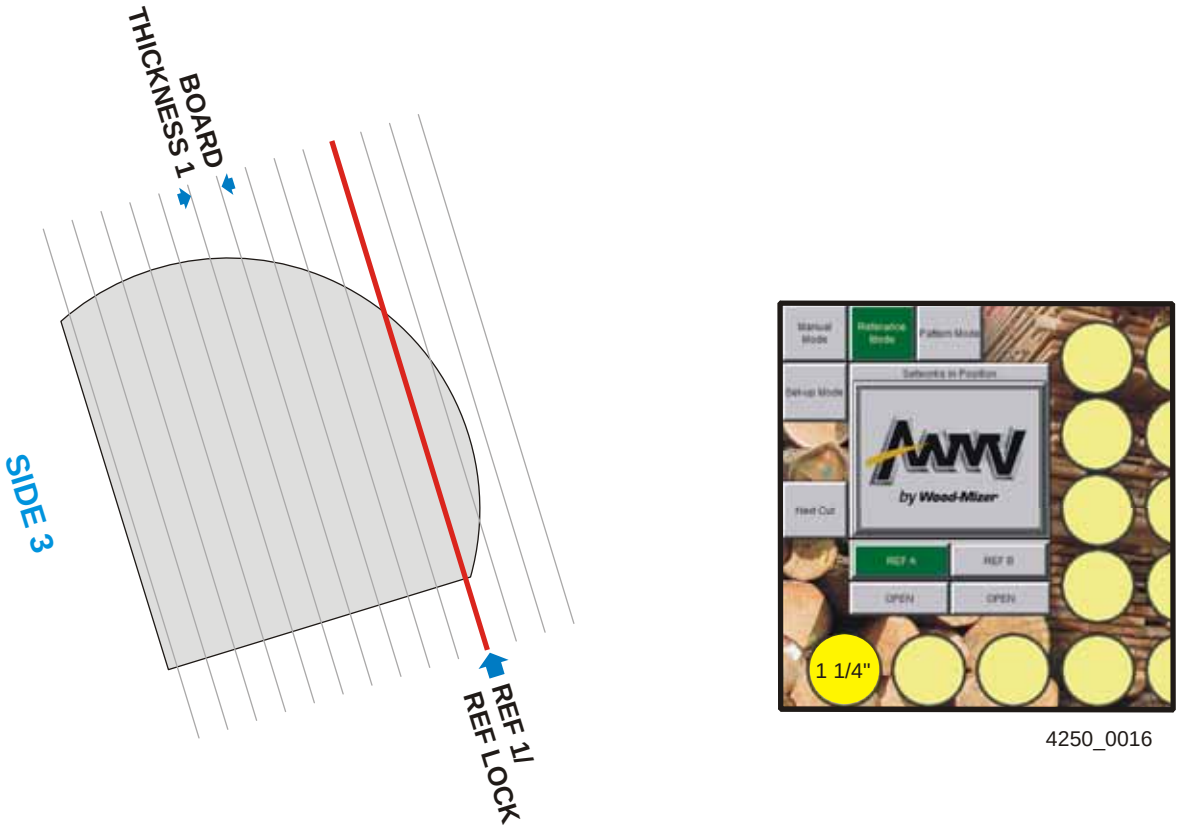


FIG. 3-21

15. Bump the material away from the blade and return the saw head.

16. Bump the material forward and setworks will automatically position the material for the next cut.

17. Make cuts as desired until you are ready to turn the log.

18. Return the saw head. Now that three sides of the log are flat, you can retain REF A to cut sides 1 and 3. DO NOT push the OPEN button or you will lose the REF A setting. Push the REF B button to leave REF A and enable REF B. REF A dimensions will remain 'locked' until you unlock it by pushing the OPEN button.

19. Turn the log. Locate the material until it is positioned as desired. Enable REF B and NEXT CUT.

See Figure 3-22. With the position of the material now stored and locked as REF B, setworks will move the material the distance determined by the selected BOARD THICKNESS button. With NEXT CUT enabled, Setworks will automatically position for the next cut below the last set position of the material.

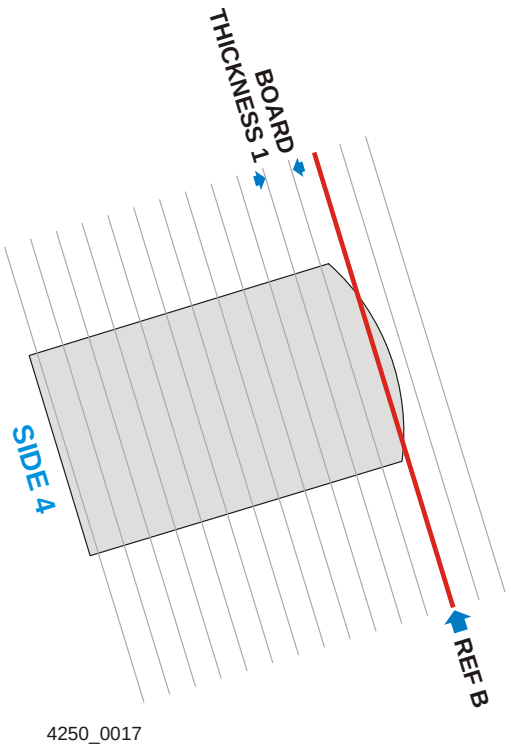


FIG. 3-22

20. Bump the material away from the blade and return the saw head.

21. Bump the material forward and setworks will automatically position the material for the next cut.

22. Make cuts as desired until you are ready to turn the log. Now that all four sides of the log are flat, you can simply toggle between REF A and REF B as you turn the log.

23. Return the saw head and turn the log. Push the REF A button and bump the material toward the blade. Setworks will position the material for the next cut referenced from the last cut made in REF A.

> **NOTE:** With NEXT CUT enabled, the material will move to the next sawing position if you bump the material forward or backward. If the material needs to move forward to reach the NEXT CUT, even if you bump the material back, the material will move forward.

See Figure 3-23. When you bump the material, setworks will move the material the distance determined by the selected BOARD THICKNESS button.

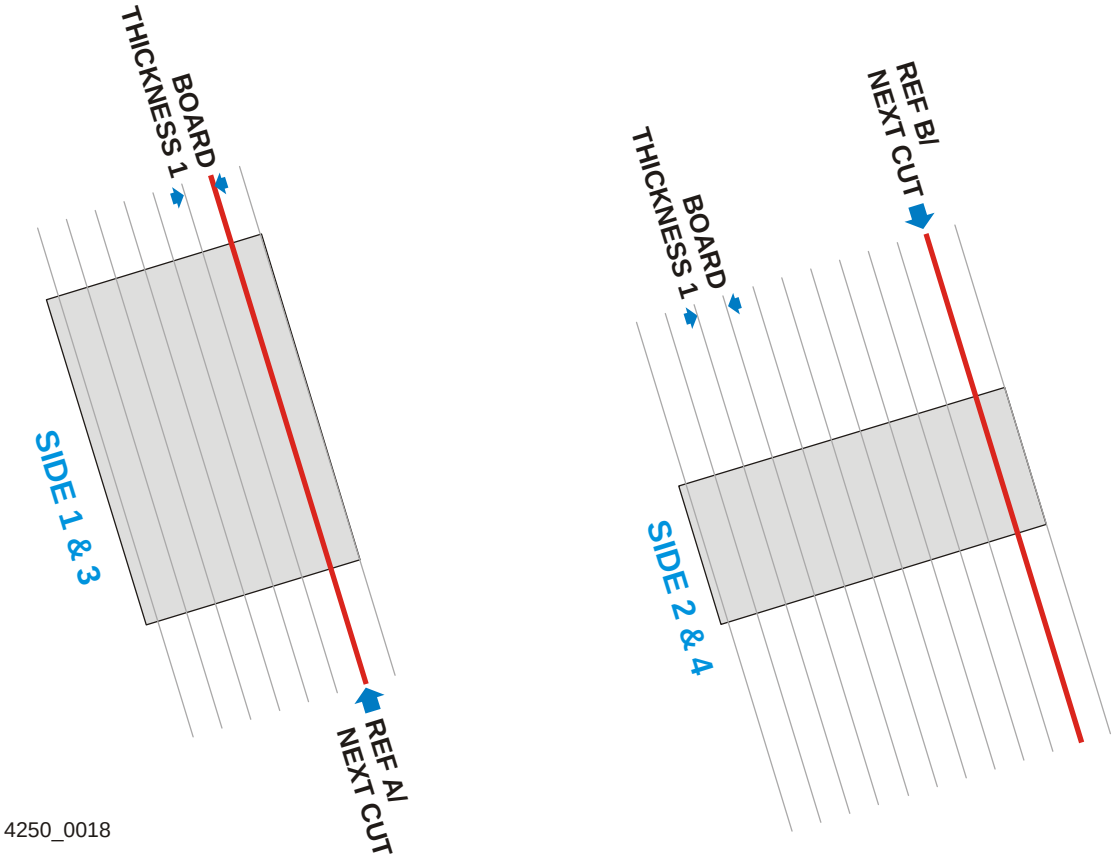


FIG. 3-23

24. Continue turning and sawing the log, using REF A, REF B and NEXT CUT. You can switch BOARD THICKNESS buttons or change to Pattern Mode (*See Section 3.8.2*) at any time.

3.8.2 Pattern Mode

This mode allows the operator to position the material referenced from the taper plates. Pattern Mode is best used when sawing dimensional lumber or finishing a cant to size when grade sawing.

1. Use Reference Mode until at least two adjacent sides of the log are flat (*See Section 3.8.1*).

2. With the log resting on a flat, touch the Pattern Mode button. By default, the Cant Mode menu (blue CANT SIZE buttons and yellow BOARD THICKNESS buttons) will be displayed. Touch the button labeled Board Mode enter the Board Mode menu (all yellow buttons described later). Select the desired CANT SIZE and BOARD THICKNESS buttons. *See Section 3.4.3* for instructions to program the CANT SIZE and BOARD THICKNESS buttons.

3. In Pattern Mode, setworks calculates the blade position in increments defined by the BOARD THICKNESS setting, starting at the position determined by the CANT SIZE setting.

   See Figure 3-24. With CANT SIZE programmed for 6” and BOARD THICKNESS programmed for 1 1/4”, setworks calculates the material position as shown.

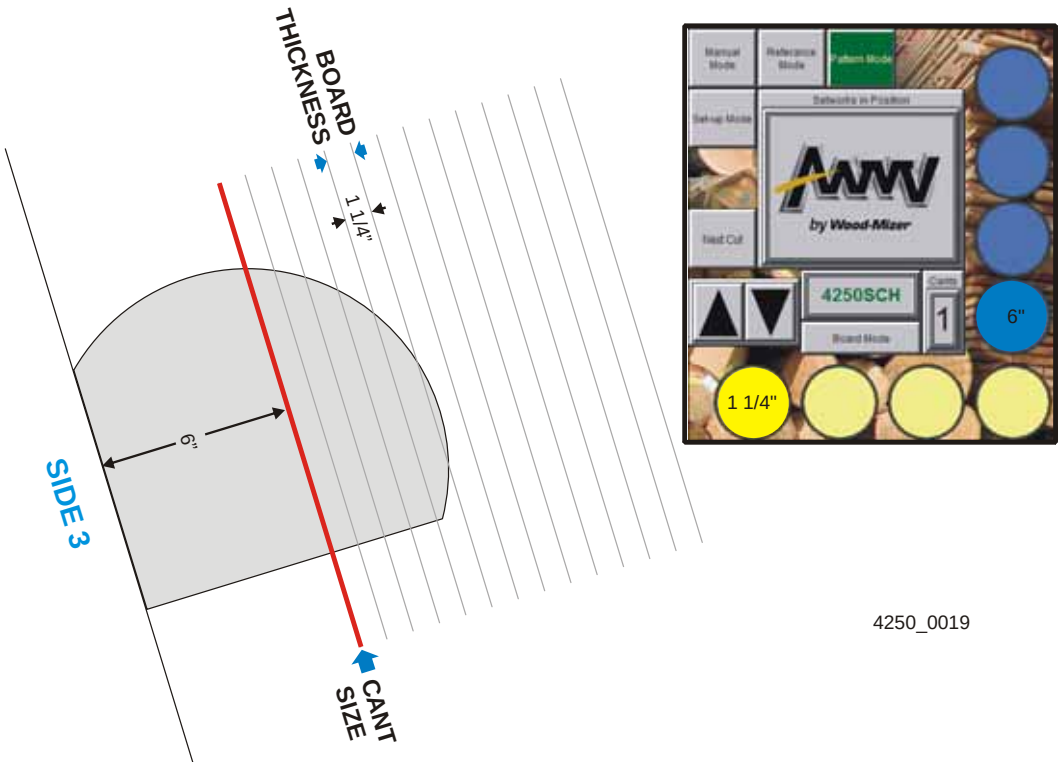


FIG. 3-24

4. Bump the material forward and setworks will automatically position the material for the next cut. When the material is successfully located in a setworks position, the gray “Setworks In Position” area on the screen will turn green. Touch the NEXT CUT button.

5. After making the first cut, bump the material away from the blade and return the saw head.

6. Bump the material toward the blade and setworks will automatically position the material for the next cut.

7. Make cuts as desired until you are ready to turn the log.

8. You can choose a different CANT SIZE setting for the second side of the log.

   See Figure 3-25. With CANT SIZE programmed for 4” and BOARD THICKNESS programmed for 1 1/4”, setworks calculates the blade position as shown.

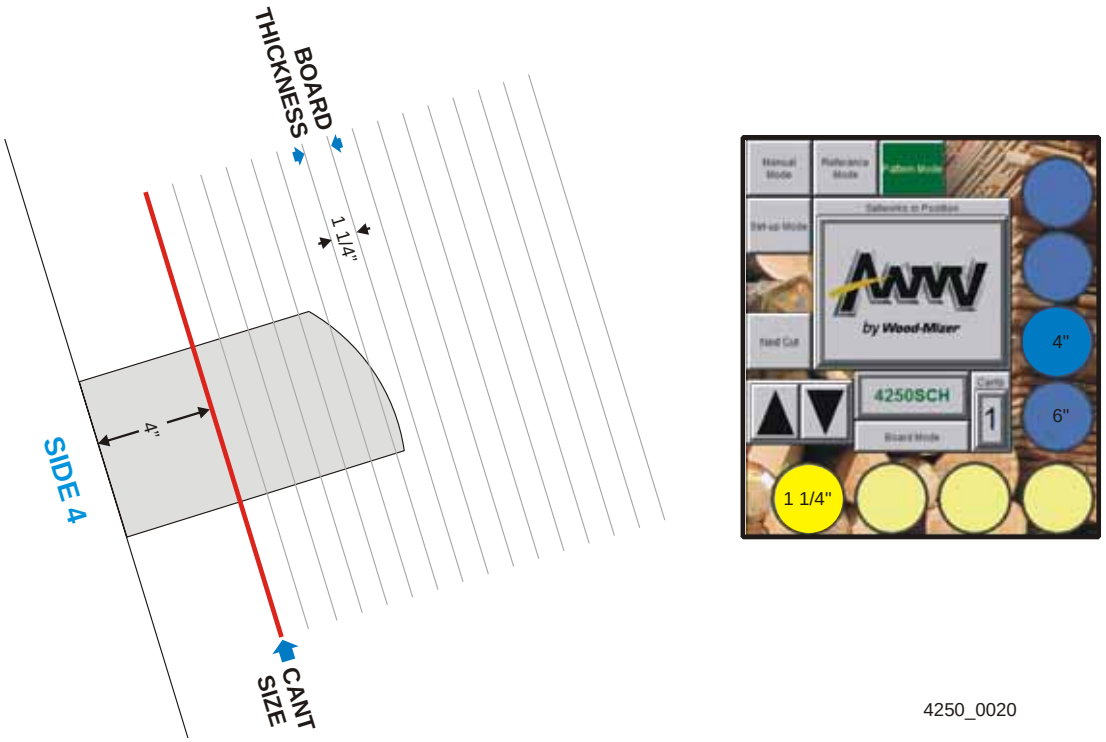


FIG. 3-25

Use the CANT SIZE and BOARD THICKNESS buttons in combination to continue sawing the rest of the log. In this example, you are left with a 4x6 cant.

You can program setworks for multiple cants. Use the up and down arrows to change the cant value as desired.

See Figure 3-26. Board Mode allows you to use any of board thicknesses calculated from the taper plates. Touch the Board Mode button to enter the Board Mode menu (all thickness buttons will be displayed yellow).

Select the desired thickness button and saw the remainder of the cant.

Touch the Cant Mode button to return to the Cant Mode menu.

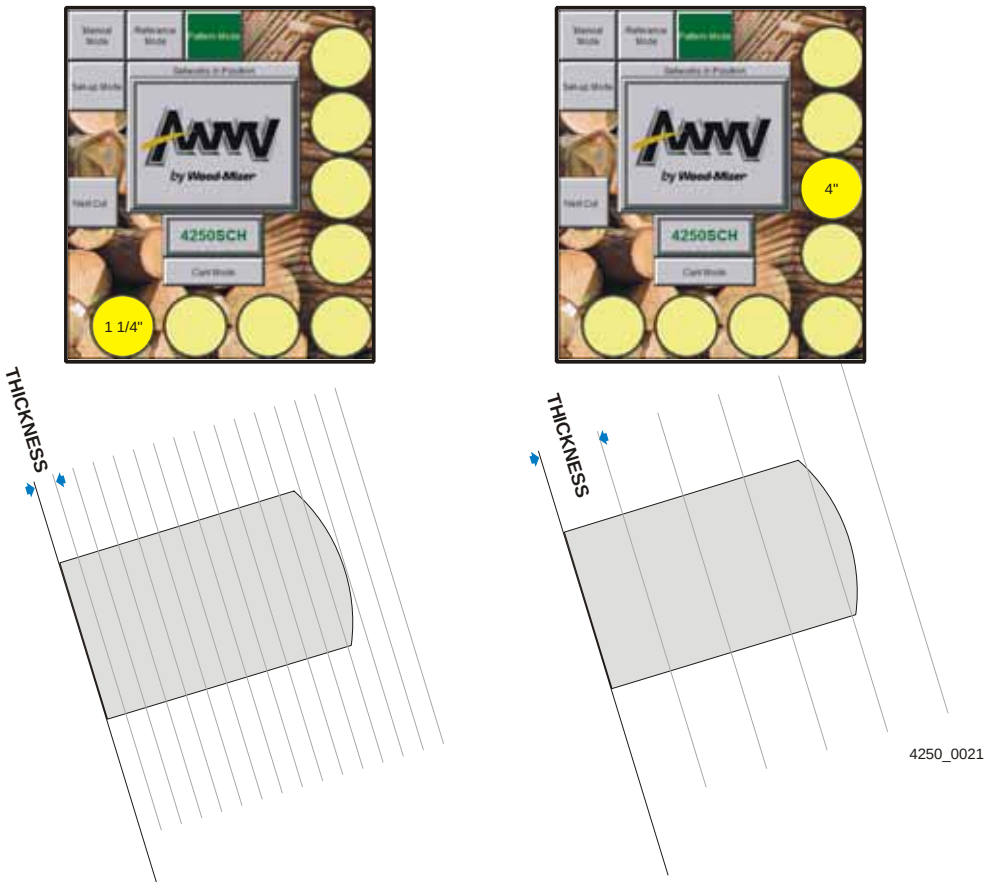
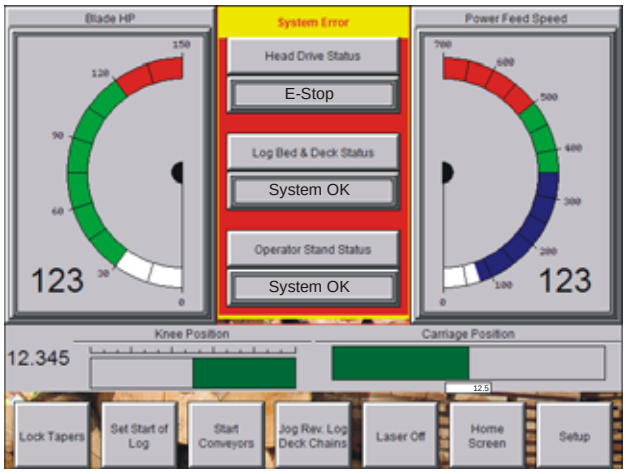


FIG. 3-26

3.9 System Dashboard Overview

See Figure 3-27. From the Home Screen, touch the System Dashboard button. The dashboard allows you to monitor certain functions during the sawing operation.

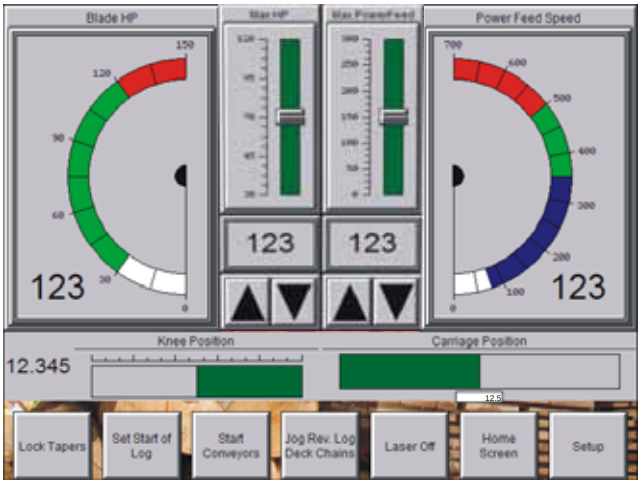


4250_0022

FIG. 3-27

When you first enter the dashboard menu, the center of the display will show any errors that should be corrected before continuing. Once the problem is corrected, touch the corresponding Status button to clear the error. The E-Stop error will automatically clear if the Emergency Stops are disengaged and the green START button is pressed.

See Figure 3-28. When the machine is started, the center of the display will show the Max HP and Max PowerFeed settings.



4250_0023

FIG. 3-28

Blade HP: the meter indicates the percentage of horsepower being used by the blade motor during sawing.

Max HP/Max PowerFeed: These settings affect the cruise control function of the sawmill. Cruise control allows the operator to let the machine choose the maximum cutting speed based on the amount of horsepower required by the blade motor. This feature is especially helpful for new operators who are not familiar with the cutting speeds of the 4250SCH.

Cruise control should only be used when the logs being cut allow for consistent cutting speeds. Avoid using cruise control when sawing various size logs, logs with excessive knots, or logs that are tapered from one end to the other. Cruise control should not be engaged when sawing through the outer (cadmium) layer or rotten portions of wood, frozen timber, or difficult to saw species.

The Max HP and Max PowerFeed settings are used together to control the function of the cruise control. These settings are adjusted by touching and dragging the slider bar of the desired function and using the up/down arrows to fine tune each value.

The Max HP setting represents the target horsepower of the blade motor the cruise control will attempt to maintain. As conditions such as the width of cut, denseness of the wood or condition of the blade change, the cruise control will adjust the power feed speed to maintain the Max HP that you select. To determine where to set the Max HP, observe the horsepower value on the display while making a straight, clean cut controlling the power feed manually. Use this value minus 5 to set the Max HP. You can adjust this value once you make a few cuts using the cruise control.

Example: You have trimmed a typical log to a square cant. As you manually use the power feed to saw the cant into boards as fast as you can while maintaining a straight cut, you observe the horsepower value displayed on the control. If the maximum value during the cut is 55, set the cruise control Max HP value to 50 (55 - 5).

Power Feed Speed: the meter indicates the speed of the saw head as it travels in forward or reverse.

Knee Position: this represents the distance from the far edge of the material being sawn to the blade.

Carriage Position: represents the distance of the saw carriage to the back of the machine.

Lock Tapers: when engaged, the four taper plates are fully retracted and operate in unison with the left or right joystick.

Set Start of Log: sets the position the saw head will stop when returned to the end of the log. This prevents unnecessary travel of the saw head during sawing.

Start Conveyors: press to engage conveyors to remove boards and sawdust during operation.

Jog Rev. Log Deck Chains: push to jog the log deck chains in reverse.

Laser On/Off: push to turn the laser sight on and off.

Home Screen: push to exit System Dashboard and return to the Home Screen.

Setup: push to display the System Setup menu.

3.10 Sawing Logs

DANGER! Keep all persons out of the path of moving equipment and logs when operating sawmill or loading and turning logs. Failure to do so will result in serious injury.

The following is a general procedure for sawing a log. See the previous sections of this manual for details concerning the operations listed.

3.10.1 Prepare to load a log

1. Disengage the Emergency Stops and push the START button on the control panel to turn the machine on. Be sure the keyswitch is in the ON position to operate hydraulic motors.

2. If the taper plates are extended, push the right and/or left joystick to the left to move the taper plates all the way back.

3. If the chain turner is positioned above the log bed, push the left joystick thumbstick down to lower the chain turner.

4. If the clamping dogs are down, pull the left joystick back to raise the clamping dogs all the way up.

3.10.2 Load the log

1. Push the right joystick thumbstick down and to the left to lower the log deck arms and move a log left until it rolls down the arms onto the bed carriage.

2. Push the right thumbstick up to raise the log deck arms.

3.10.3 Turn the log & adjust for taper

1. Push the left thumbstick up to raise the chain turner until it engages the log. Push the thumbstick left to spin the log counterclockwise or right to spin clockwise until the log is positioned as desired for the first cut. Push the left joystick thumbstick down to lower the chain turner.

2. Push the right joystick to the right to move the rear of the log towards the blade. Push the left joystick to the right to move the front of the log towards the blade.

3.10.4 Clamp the log

1. Push the left joystick forward to engage the clamping dogs. Engaging the clamping dogs disables the turner functions.

3.10.5 Saw the log

1. Turn the key switch to MOTOR START and release.

2. Pull the right joystick back until the blade is close to the end of the log. Release the joystick to stop the saw head. Touch the Set Start of Log button on the System Dashboard screen.

3. Push the top buttons on the right joystick to move the material toward or away from the blade until it is positioned for the first cut. Use the laser sight to help you determine the best location for the cut. The laser beam indicates the path of the blade down the entire log.

4. Use the rear switch on the right joystick to move the upper blade guide close to the log.

5. Select the desired setworks mode and the desired board thickness/cant size buttons.

6. Push the Start Conveyors button on the System Dashboard.

7. Slowly pull the right joystick back toward you. When the blade is completely in the log, pull the joystick further until the desired cutting speed is reached.

8. As you make the cut, watch the position of the outer blade guide and adjust up or down as necessary.

9. When the blade exits the log, release the right joystick and push the left upper button on the right joystick to bump the material back away from the blade.

10. Push the right joystick forward to return the saw head.

11. Push the right top button on the right joystick to bump the material in position for the next cut or turn the log.

12. Pull the left joystick toward you to release the clamping dogs.

13. Push the thumbstick on the left joystick up to raise the chain turner and push the thumbstick right or left to rotate the log clockwise or counterclockwise.

14. Once the log has been squared into a cant, engage the Lock Tapers button on the System Dashboard menu and push the right joystick forward to fully extend the taper plates.

15. Use the rear switch on the left joystick to quickly flip squared cants. Push the switch up to lift the cant. Push the switch down to extend the flip turner and lift the cant.

SECTION 4 SPECIFICATIONS

4.1 Overall Dimensions and weights

See Table 4-1. The overall dimensions of the 4250SCH sawmill are listed below.

Length	16505 mm
Width	11500 mm
Height	3894 mm
Weight	12500 kg

TABLE 4-1

See Table 4-2. The weights of the 4250SCH sawmill components are listed below.

Component	Weight
Conveyor/Track Section	1814 kg
Incline Section	589 kg
Cleereman with Stand	5216 kg
Operators Station	680 kg
Head	1133 kg
Head Carriage	907 kg
Drive Unit	1360 kg
Total	**12519 kg**

TABLE 4-2

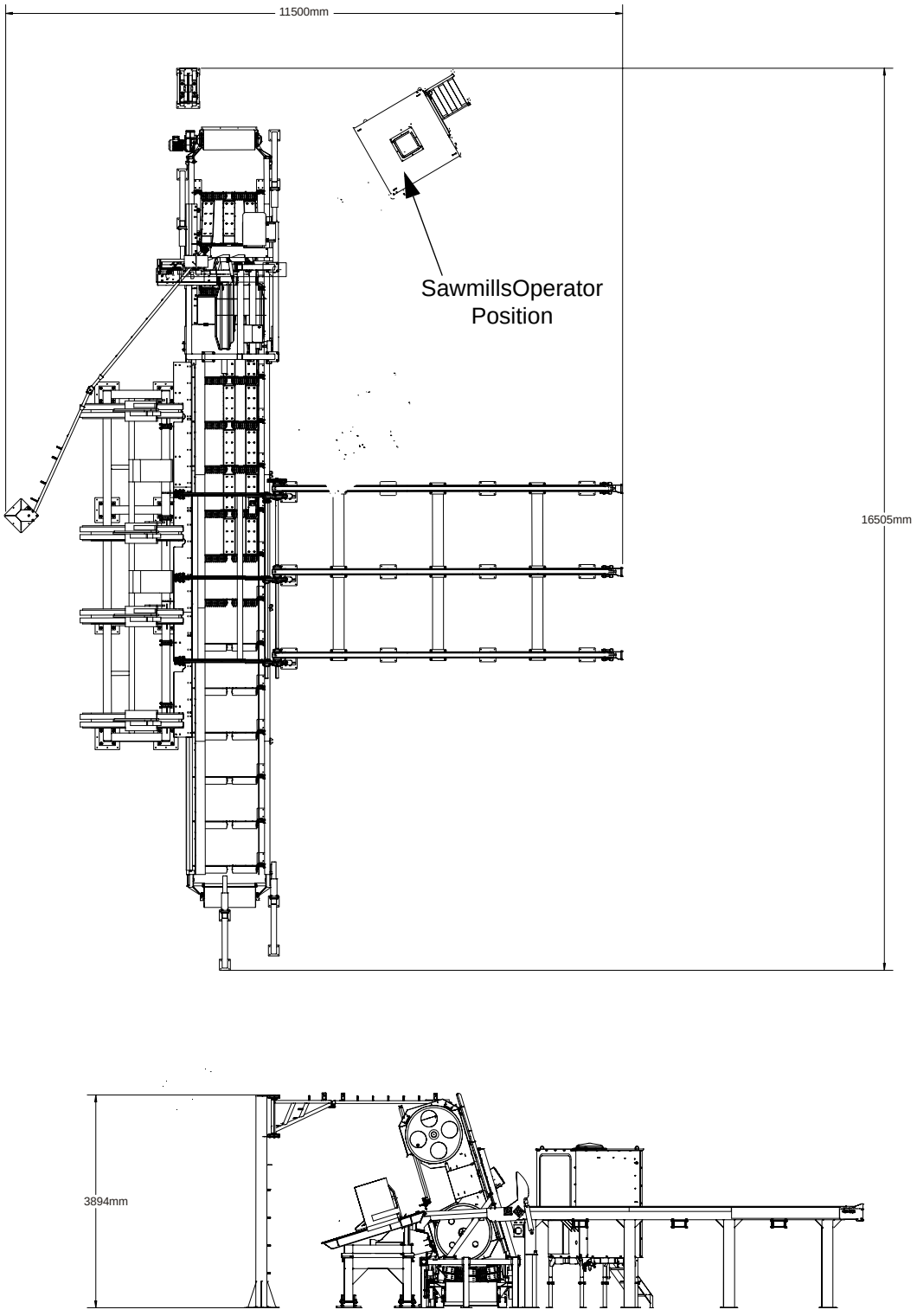


FIG. 4-0

4.2 Engine/Motor Specifications

See Table 4-3. The 4250SCH sawmills motors are listed below.

Engine/Motor Type	Manufacturer	Model No.	Power	Other Specifications
Blade motor - 50HP [1]	Siemens, Germany	1LG4220-4AA60	37kW	68 A, 1475 RPM
Carriege Feed Motor - 20HP	Lenze, Germany	---	15kW	1400 RPM
Conveyor Motor - 7,5 HP	SEW Euro-drives, USA	DFVI3234	5,5Kw	1400 RPM
Hydraulic Pump Motor - 15HP	Weg, USA	BLNC-15-18-2591	11kW	1400 RPM
Blade lubrication motor	Flojet	2100-312	84W	24VDC, flow-8l/min (max)

TABLE 4-3

[1] The electric motors supplied on Wood-Mizer sawmills carry a rating assigned by the motor manufacturer for the continuous duty operation of the motor, potentially, 24 hours per day, day after day. This rating is useful in sizing motors for use in applications like blowers for heating and ventilation that are never cycled off except for system maintenance.

See Table 4-4. The noise levels of the 4250SCH sawmill are listed below[123].

Noise level	L_{EX8} = 91,5 dB (A)

TABLE 4-4

1 The noise level measurement was taken in accordance with PN-EN ISO 3746 Standard. The noise exposure level given above concerns an 8-hour work day.
2 The measured values refer to emission levels, not necessarily to noise levels in the workplace. Although there is a relation between emission levels and exposure levels, it is not possible to determine with certainty if preventives are needed or are not needed. The factors affecting a current level of noise exposure during work are inter alia room characteristics and characteristics of other noise sources, e.g. number of machines and machining operations nearby. Also, the permissible exposure level value may vary depending on country. This information enables the machine's user to better identify hazards and a risk.
3 It is necessary to perform the noise level measurement by the customer in the work place, after sawmill installation.

Have a qualified electrician to install the power supply (according to EN 60204 Standard). The power supply must meet the specifications given in the table below.

3-Phase Volts	Fuse Disconnect	Power Supply Current	Suggested Wire Size
400 VAC	225 Amps	150 Amps	35 mm^2, up to 15 m long

TABLE 4-0

DANGER! It is recommended to use 30mA GFI (Ground Fault Interrupter.

4.3 Hydraulic System

See Table 4-5. The specifications of the hydraulic system are shown below.

Hydraulic Pump	11kW
Pressure Rating	
Max. Pressure	

TABLE 4-5

4.4 Air System

See Table 4-6. The specifications of the air system are shown below.

Air Source	7bar

TABLE 4-6

4.5 Cutting Capacity

See Table 4-7. The material size and performance capacities of the 4250SCH are given below.

Maximum Log Length	5,18m
Minimum Log Length	1,22m
Maximum Cant Width	762mm

TABLE 4-7

Feed Speed	Forward - m/min Return - 183/min
Minimum Log Diameter	203mm
Maximum Log Diameter	1219mm
Maximum Log Weight	2722kg
Production Rate	~3,37m^3/hour

TABLE 4-7

4.6 Environmental Specification

See Table 4-8. Environmental specifications are listed below.

Temperature	-10^{oC} to +50^{o}C
Humidity	max. 93%, non-condensing, under roof only

TABLE 4-8

4.7 Dust Extractor Specifications

See Table 4-9. Specifications of the dust extractors used on the 4250SCH sawmill are listed below.

Airflow	2300m^3/h
Inlet diameter	150mm
Motor power	3kW
Number of sacks	2pcs
Sack capacity	0.25mp
Weight	110kg
Recommended conveying air velocity in the duct	20 m/s

TABLE 4-9

SECTION 5 ELECTRICAL INFORMATION

5.1 Electrical Schematic

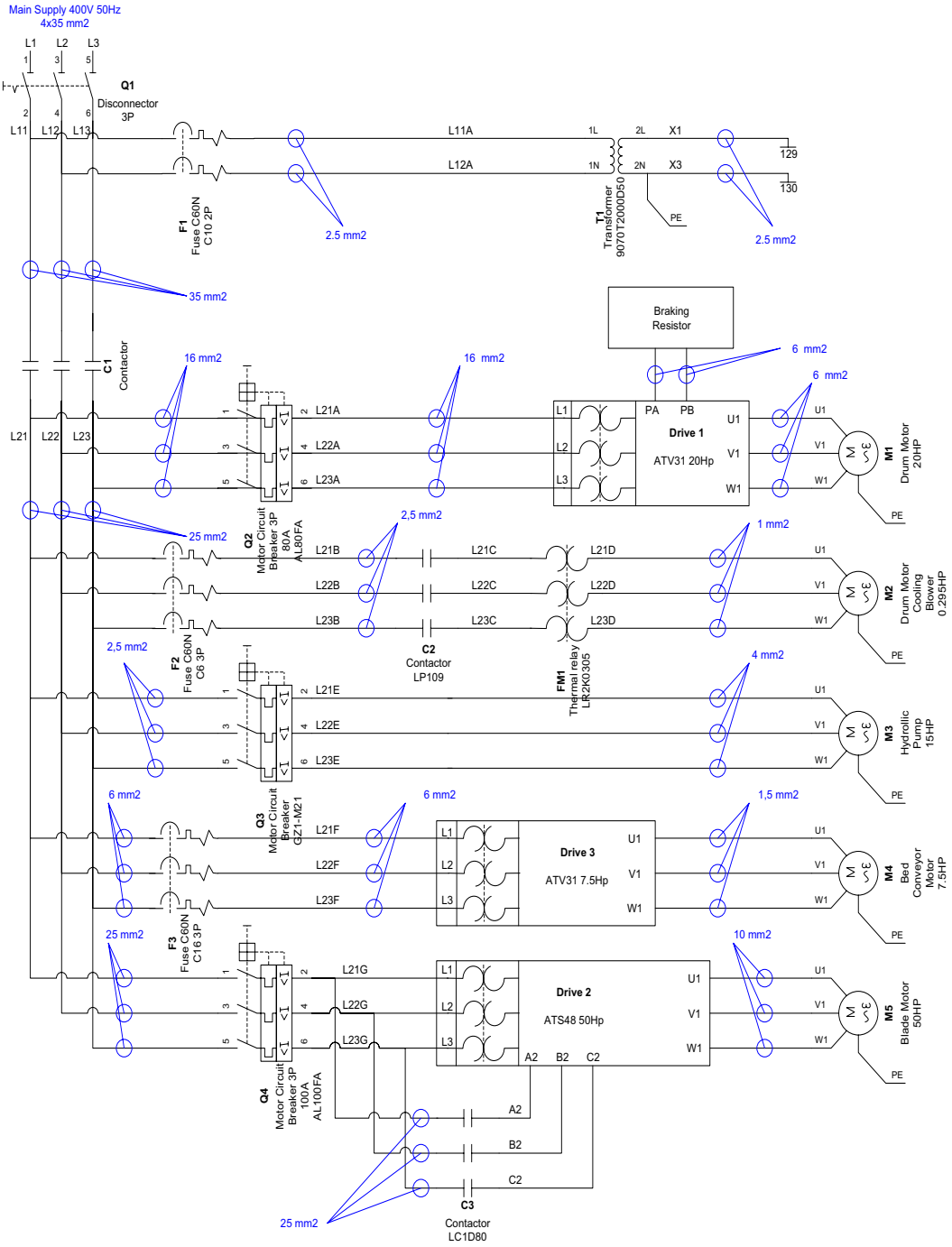


FIG. 5-1 (PAGE 1 OF 8)

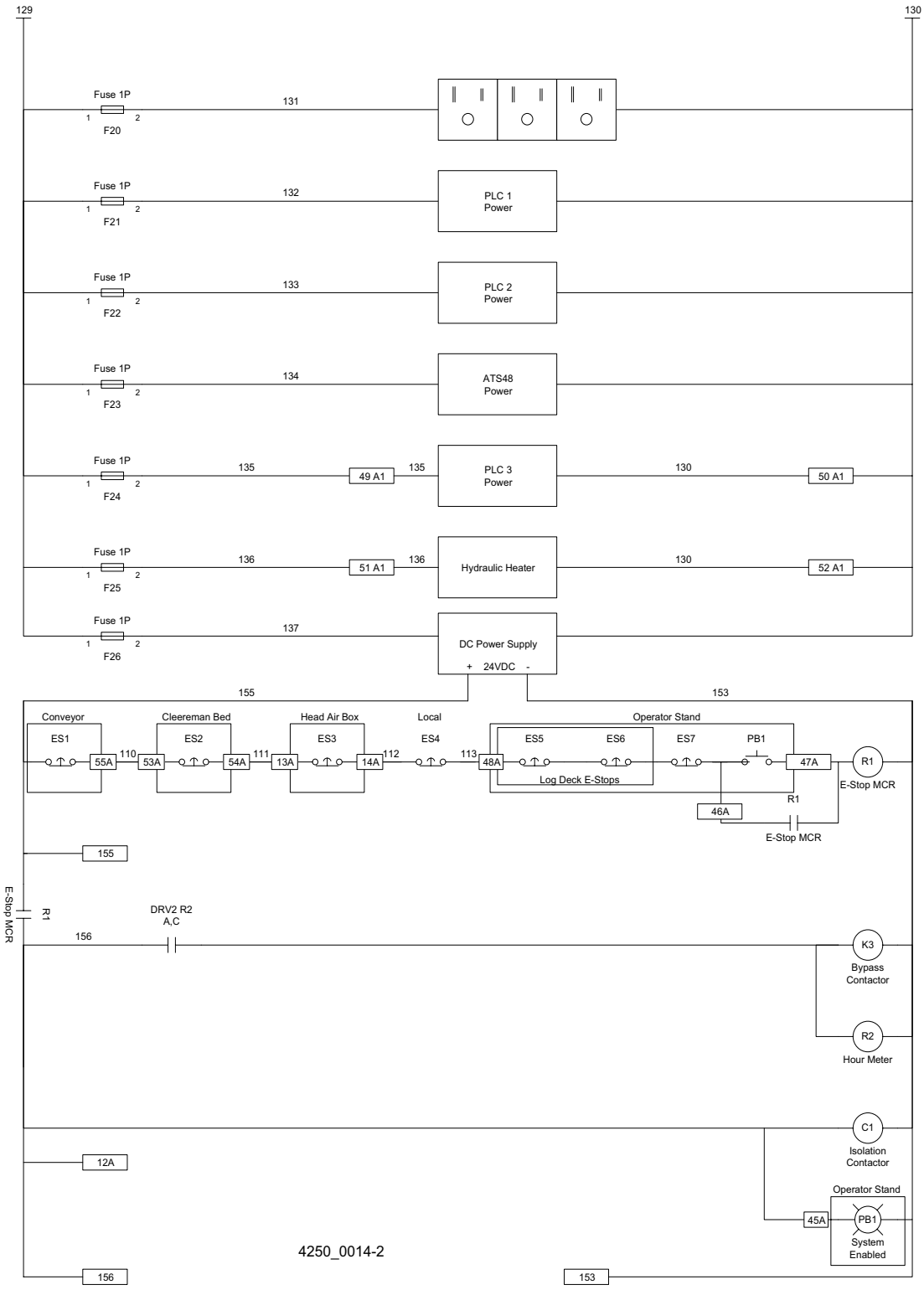


FIG. 5-2 (PAGE 2 OF 8)

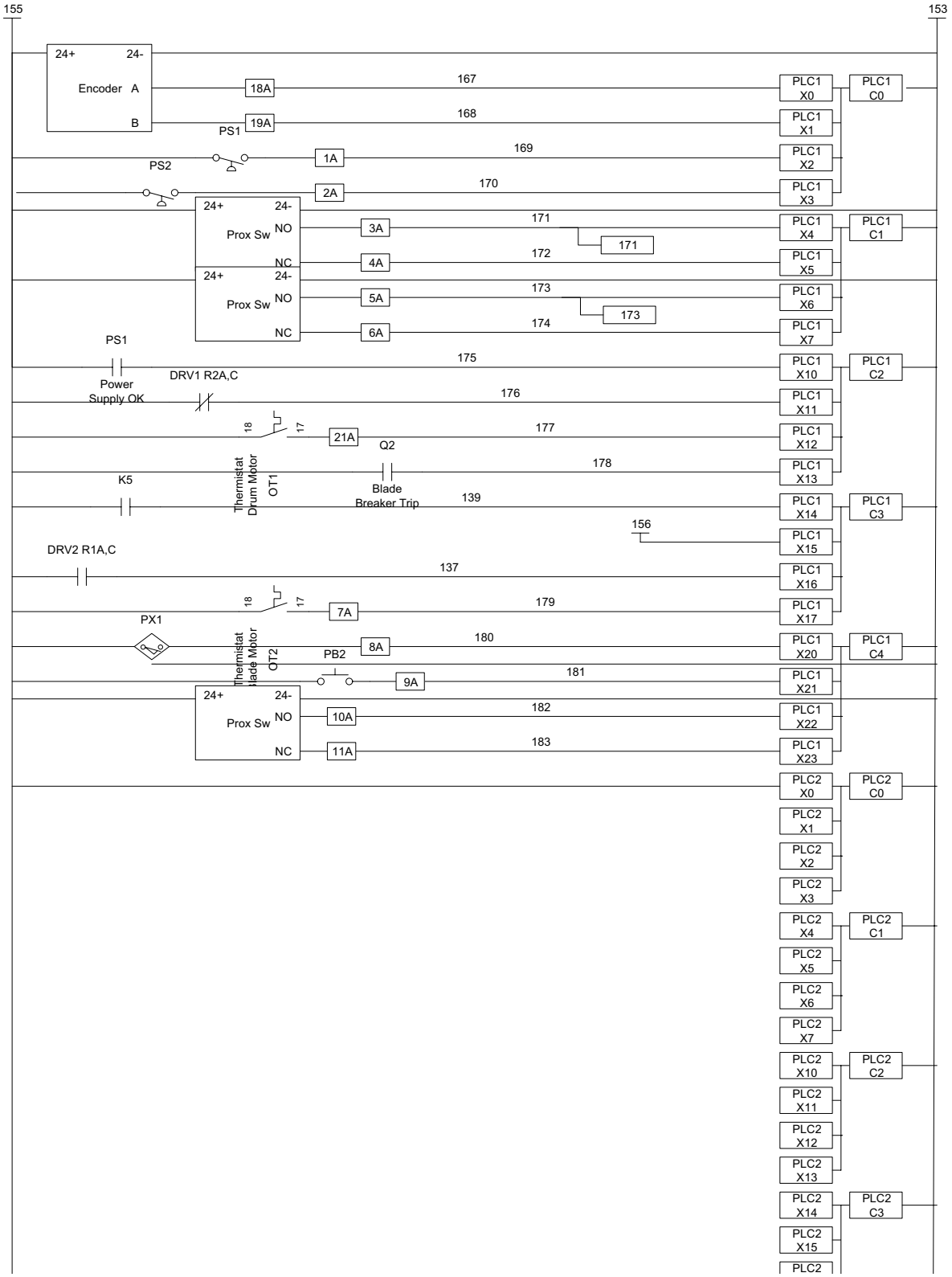
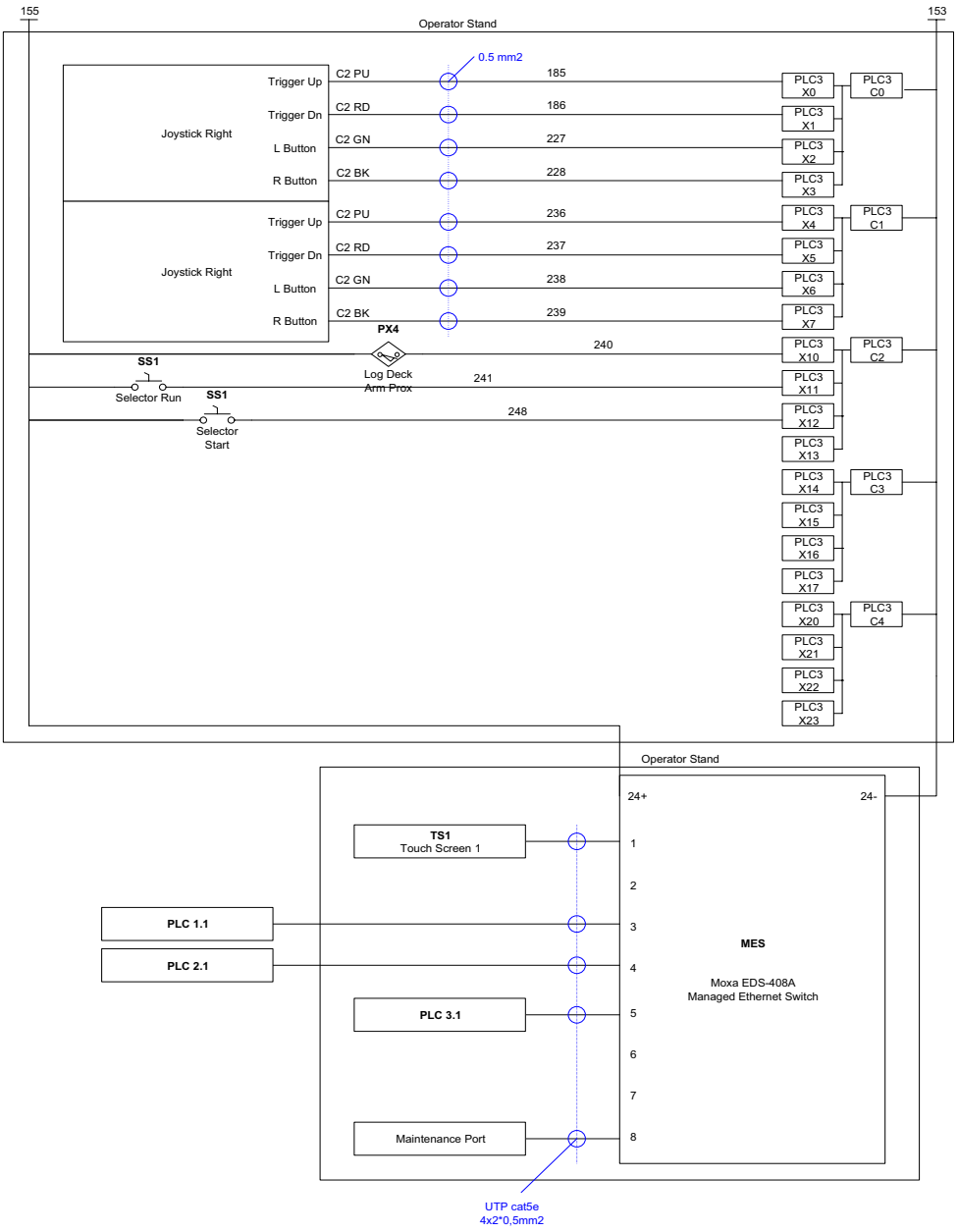


FIG. 5-3 (PAGE 3 OF 8)



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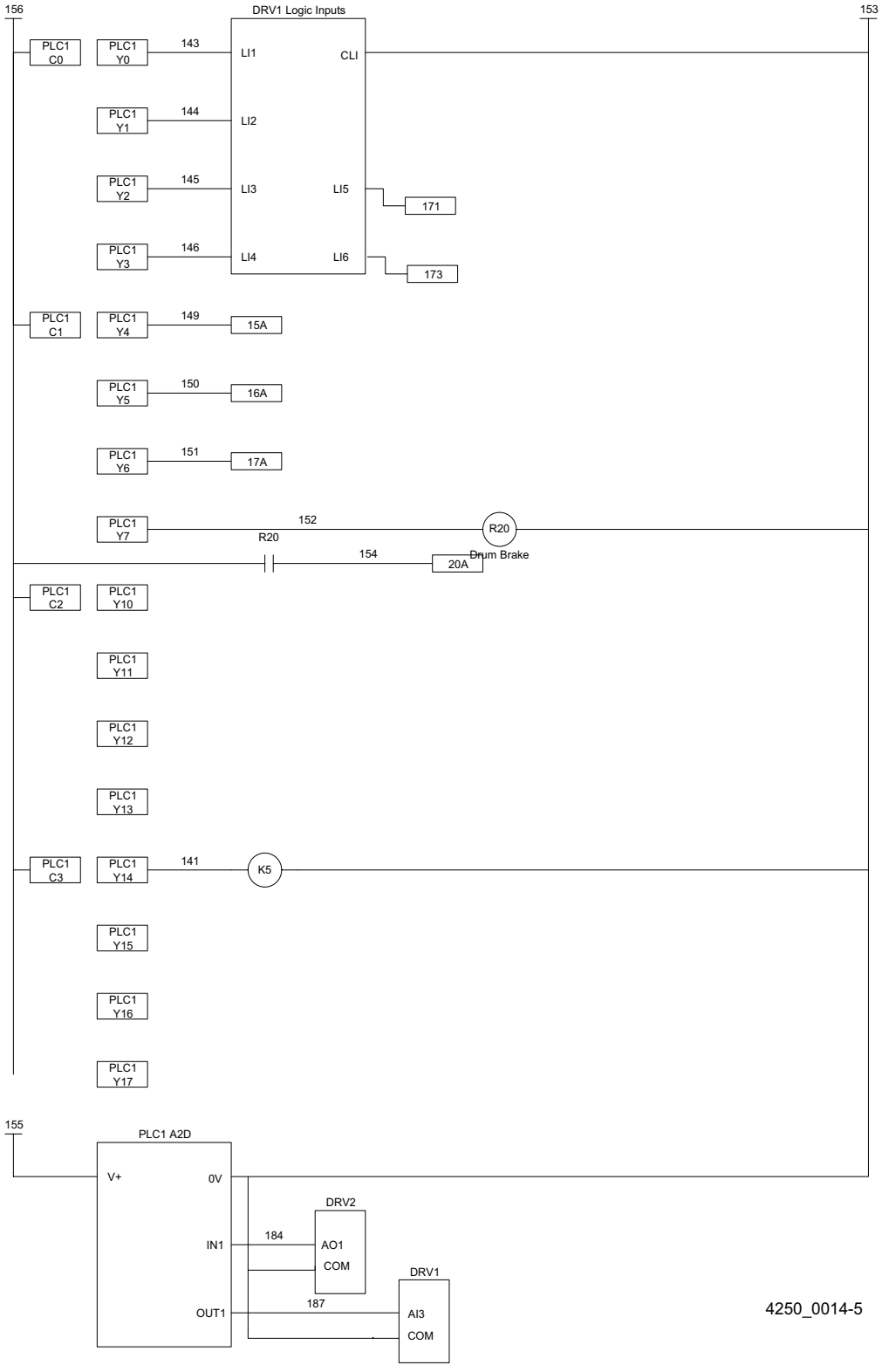

FIG. 5-5 (PAGE 5 OF 8)

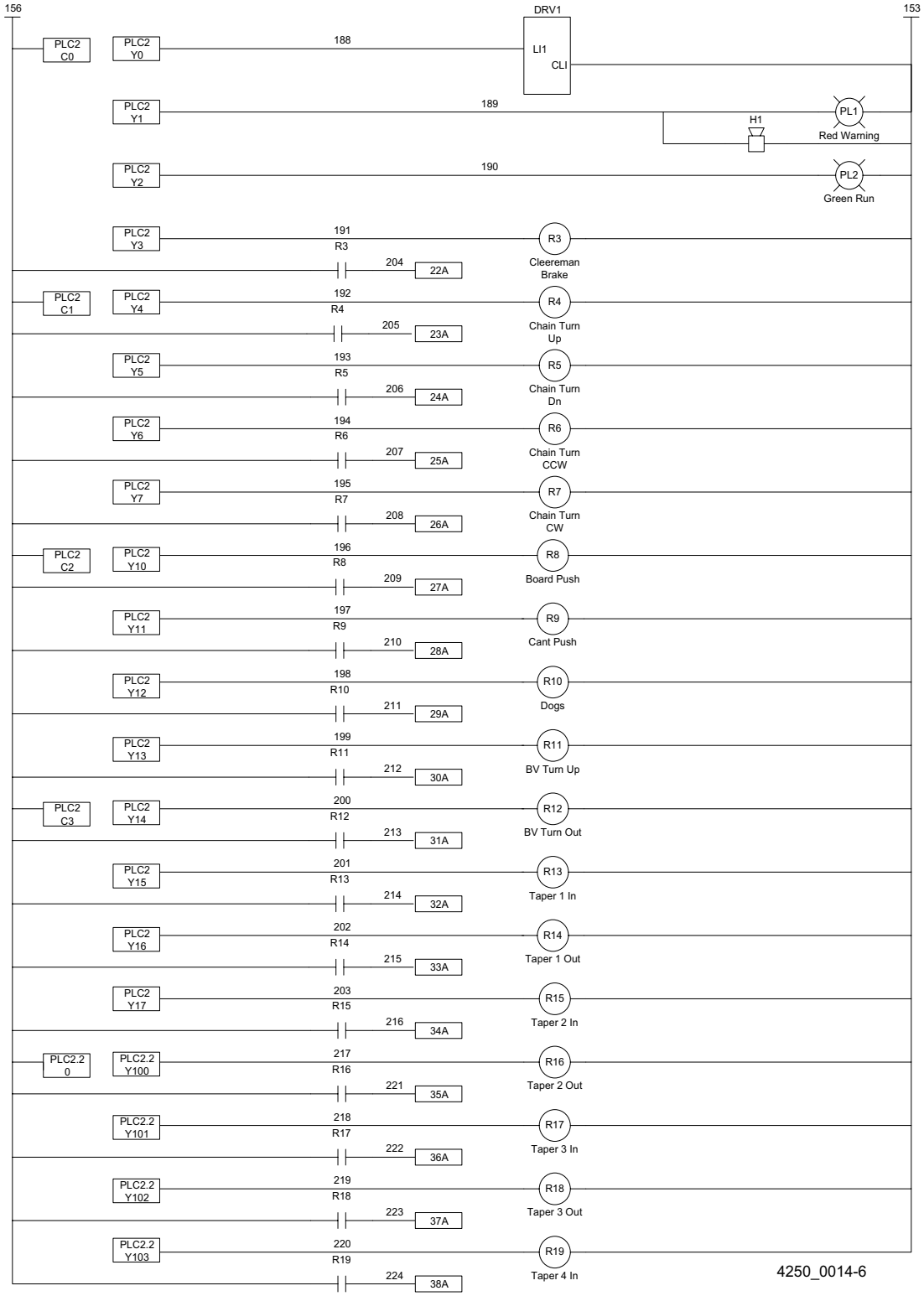

FIG. 5-6 (PAGE 6 OF 8)

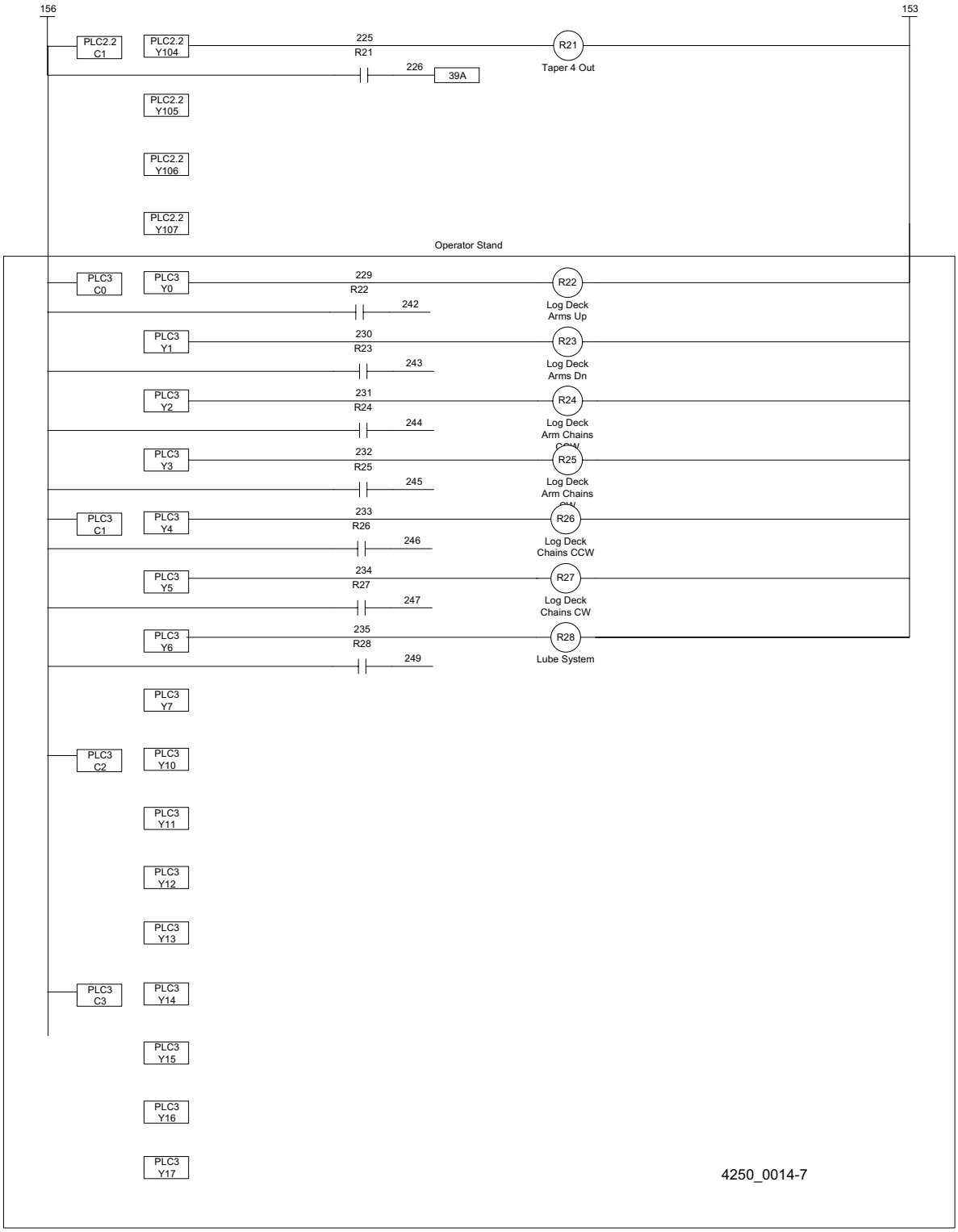

FIG. 5-7 (PAGE 7 OF 8)

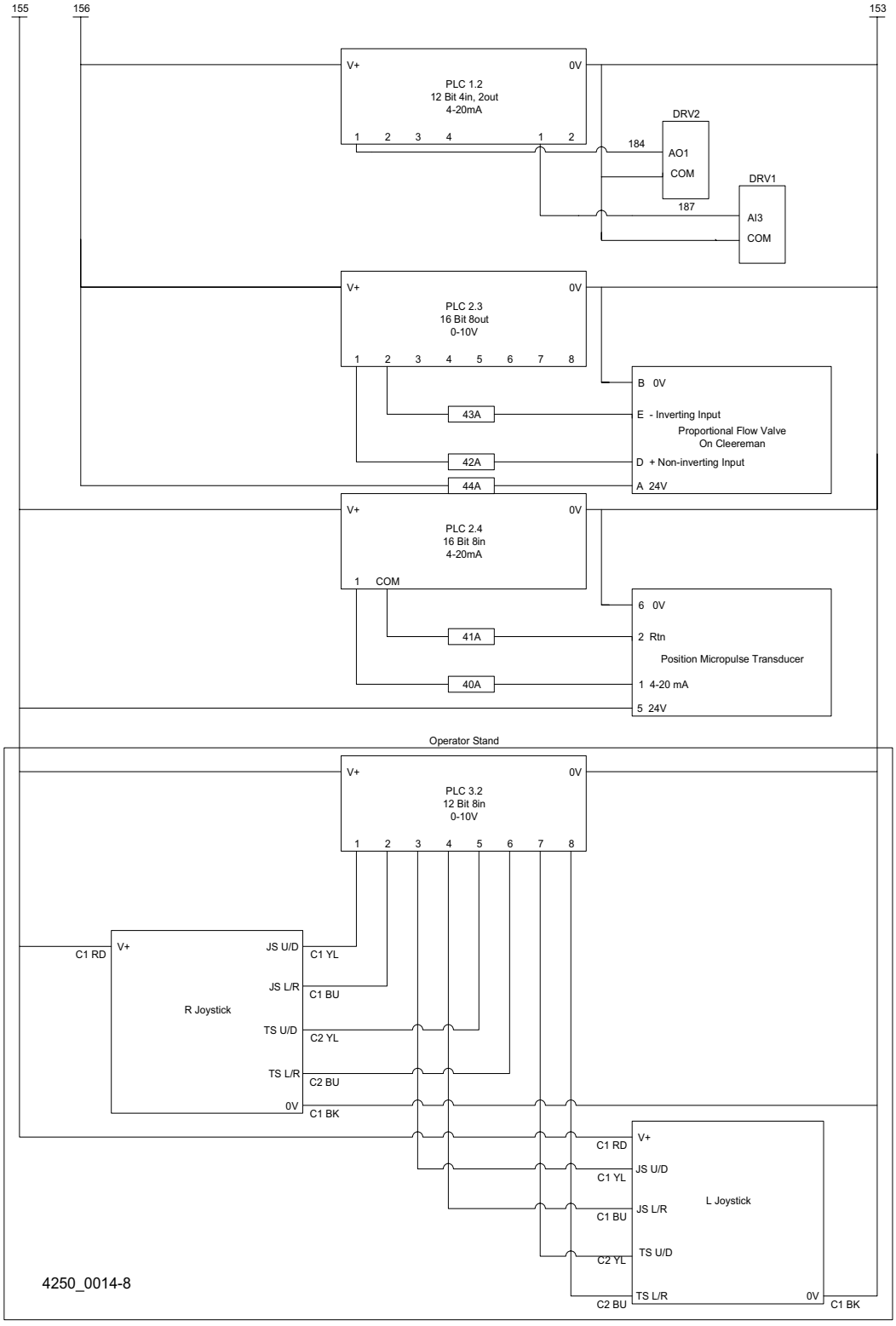

FIG. 5-8 (PAGE 8 OF 8)

5.2 Electrical Components

Ref.	Symbol	Description	Manufacturer
1.	Q1	Switch LK3 MU3	Schneider Electic
2.	F1	Circuit Breaker, C60 C10 2P	Schneider Electic
3.	T1	Transformer, 9070T 2000 DS0	Schneider Electic
4.	C1	Contactor, LC1 F225	Schneider Electic
5.	Q2	Motor Switch AL80FA	Schneider Electic
6.	DRIVE 1	Power Feed Controller ATV31HD15N4	Schneider Electic
7.	M1	Power Feed Motor MDXMA2M160-32	LENZE
8.	F2	Circuit Breaker C60 C6 3P	Schneider Electic
9.	C2	Contactor LP1K09	Schneider Electic
10.	FM1	Thermal Relay LR2K0305	Schneider Electic
11.	M2	Power Feed Motor Fan C60-IL-2-2	LENZE
12.	Q3	Motor Switch GZ1-M21	Schneider Electic
13.	M3	Hydraulic Motor, MOT W254/6TC BLNC-15-18-254	TWEG
14.	F3	Circuit Breaker C60N C16 3P	Schneider Electic
15.	DRIVE 2	Conveyor Controller ATV31HU55N4	Schneider Electic
16.	M4	Conveyor Motor DFV13254	SEW
17.	Q4	Motor Switch AL100FA	Schneider Electic
18.	DRIVE 3	Main Motor Softstart ATS48D75YU	Schneider Electic
19.	C3	Contactor LC1 D80	Schneider Electic
20.	M5	Main Motor P1L642204AA60	Siemens
21.	F4,F5,F6,F7	Circuit Breaker C60 C1 1P	Schneider Electic
22.	PLC1,PLC2 ,PLC3	Controller PLC D0-06DD2	Automation Direct
23.	F8	Circuit Breaker C60 C4 1P	Schneider Electic
24.	PSM24	Power Supply 24V PSM24-600S	Automation Direct
25.	ES1,ES2	Emergency stop XB4-BS542	Schneider Electic
26.	W1,W2	Limit Switch GSCA01S2	Honeywell
27.	W3	Limit Switch GLLC01A2B	Honeywell
28.	PB1	Switch M22 XB4BVB3 (green)	Schneider Electic

Table 1:

29.	K1,K2	Contactor CA3SK 20	Schneider Electic
30.	LL1	Control Lights	SLMoeller
31.	HR	Hour Meter SH-17	Kubler
32.	ENC	Encoder DGS66	Sick
33.	PX1,PX2	Inductive sensor, NC NO NBB4-12GM50-A2-V1	Pepperl+Fuchs
34.	PX3,PX4	Inductive sensor NO BI4U-M12-AP6X-H1141	Turck
35.	PB2	Switch M22 XB4 (yellow)	Schneider Electic
36.	SS1	Control Switch, 3-Position ZB4-BJ8 + ZB4-BZ103	Schneider Electic
37.	PLC1.1,PLC2.1,PLC3.1	Ethernet Module PLC – H0-ECOM10	Automation Direct
38.	TS1	Panel TFT EA7-T8C	Automation Direct
39.	MES	Industrial Ethernet Switch MOXA EDS-408A	MOXA
40.	R1-R26	Interface Relay 38.81.7.024.9024	Finder
41.	Laser	Laser SET24 5mW Green	Rasnellaser
42.	PLC1.2	Analog Module IN/OUT PLC – F0-4AD2DA-1	Automation Direct
43.	M6	LMS Pump 02100312A	Flojet
44.	PLC2.2	Relay Module PLC – D0-08TR	Automation Direct
45.	PLC2.3	Analog Module OUT PLC – F0-04DAH-2	Automation Direct
46.	PLC2.4	Analog Module IN PLC – F0-08ADH-1	Automation Direct
47.	PMT	Transducer BTL5-E10-M1220-Z-S32	Balluff
48.	PLC3.2	Analog Module IN PLC – F0-08ADH-2	Automation Direct

Table 1:

SCETION6 AIR SYSTEM INFORMATION

6.1 Schematic

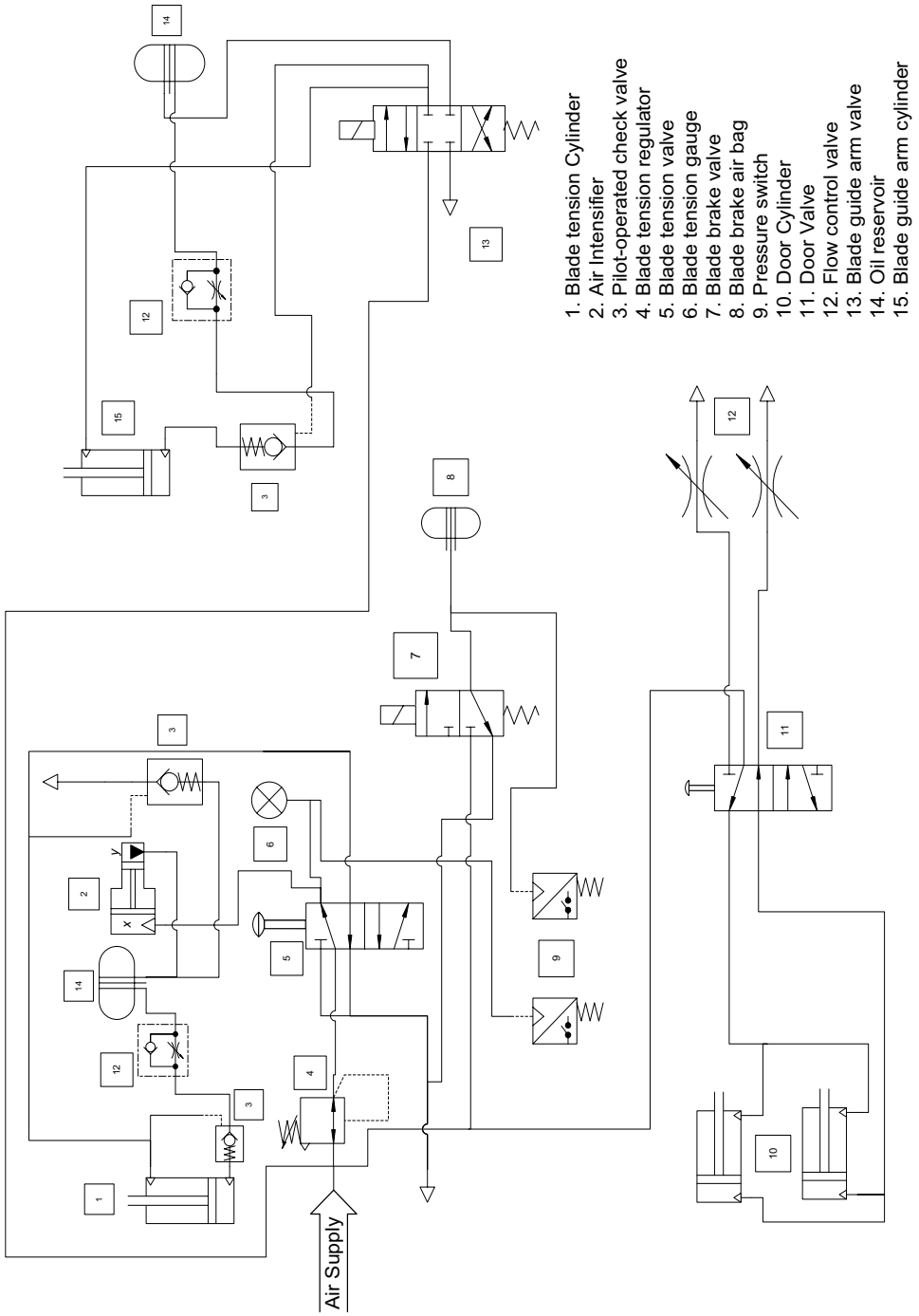

FIG. 6-1

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