



# MBX BUCKER

USER GUIDE v1.5



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# INTRODUCTION

This User Guide is a comprehensive manual covering the operation and maintenance of the Mobius MBX Bucker as of the date of publication. ETEROS TECHNOLOGIES reserves the right to make updates to the machine from time to time. In the event of an update, this User Guide will remain applicable for the safe operation and maintenance of your unit. This User Guide, as well as any documentation supplied by component manufacturers, are to be considered the information package associated with this device. Every operator must read and understand the User Guide. The Guide should be located within easy access for periodic review.

## DISCLAIMER

ETEROS TECHNOLOGIES recognizes that the MBX BUCKER is a purpose-built machine for processing cannabis by licensed producers. Please check all municipal, provincial/state, and federal laws and regulations before using the MBX BUCKER. ETEROS TECHNOLOGIES does not promote or condone the use of processing equipment in any way that may be deemed illegal.

ETEROS TECHNOLOGIES recognizes that our equipment can be used for processing herbs, hops, flowers and many other products. It is not the responsibility of ETEROS TECHNOLOGIES to confirm alternative applications for our equipment.

# SERVICE & REPAIRS

Repairs must be carried out in consultation with Eteros Technologies' Technical Support department. Only original equipment manufacturer (OEM) Mobius parts are to be used for repairs.

Should the need arise, please notify us:

ETEROS TECHNOLOGIES  
26 Industrial Ave.  
Carleton Place, Ontario, Canada  
K7C 3T2  
[www.eteros.com](http://www.eteros.com)

Improper interfacing, improper repair, or unauthorized modification could result in voided warranty claims.

# WARRANTY

Thank you for purchasing Mobius MBX equipment from Eteros Technologies Inc.

The Mobius MBX Bucker is covered by our manufacturer's warranty as follows:

- No warranty on consumable parts, including rolls and die plates;
- Warranty coverage for one (1) year or 1,000 operating hours, whichever occurs first, on motors, electrical components, and remainder of machine components.

The warranty period begins on the date the equipment is received by the customer. Any damage that occurs during shipping will be the responsibility of Eteros Technologies.

The above terms are valid if Mobius equipment is used and maintained as directed. If the equipment is modified in any way, all terms of this warranty are void. This warranty does not apply to cosmetic damage, such as scratches or general wear and tear.

Should you experience a technical problem with your equipment, please contact Eteros Technologies at the email or phone number outlined in the [Services & Repairs](#) section.

Chipper damage is very rare on a MOBIUS MBX BUCKER and is typically the result of rocks, hard metallic objects, or poor setup. Chipper damage resulting from hard objects entering the chipping chamber is not covered under warranty. In the event of chipper damage, please contact ETEROS TECHNOLOGIES for assessment. Repair and part replacements must be completed by ETEROS TECHNOLOGIES or an authorized agent. To avoid chipper damage, please take care to properly maintain the MOBIUS MBX BUCKER and do not let hard objects enter the chipping chamber.

# WARNING LABELS



## **DANGER:**

Indicates a hazardous situation that, if not avoided, will result in serious injury and / or death. This signal word is to be limited to the most extreme situations; typically for machine components that, for functional purposes, cannot be guarded.



## **WARNING:**

Indicates a potentially hazardous situation that, if not avoided, could result in serious injury and / or death. It includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.



## **CAUTION:**

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

# SAFETY INSTRUCTIONS

To ensure operator safety while in use, this device includes decaling, guarding, and other safety features. Operators are encouraged to use caution and best judgment when using equipment. Equipment should be serviced when required.

To avoid possible damage to the machine and risk of injury to the operator, consult with an ETEROS TECHNOLOGIES representative to answer any questions.

This document refers to the ETEROS TECHNOLOGIES product de-stemming machine as the MBX BUCKER. Since this machine has a rotary cutting unit, special safety precautions must be observed to reduce the risk of personal injury. Careless or improper use may cause serious or even fatal injury. Please read and understand these precautions thoroughly before using the machine.

All operators must read and understand this User Guide and be trained in the safe operation and use of the MBX BUCKER. We recommend the owner of this equipment develop a standard operating procedure specific to each worksite to address any local hazards or other conditions not outlined in this User Guide. The MBX BUCKER must be inspected regularly for damage, component failure, and wear. The results of the inspection activity should be documented.

ETEROS TECHNOLOGIES makes every effort to ensure the MBX BUCKER is compliant with all current safety standards. It is the responsibility of the owner to ensure all municipal, provincial, state, county, territorial, and federal codes, regulations and standards have been met in each working location.

Do not lend or rent your machine without providing the User Guide. A first-time operator should receive practical instruction before using the machine.

This machine is not to be used for any purpose other than those expressly stated in the User Guide, advertising literature, or other ETEROS TECHNOLOGIES written material pertaining to the MBX BUCKER.

Operators must be in good physical condition and mental health to operate this device. Under no circumstances should the device be operated by anyone under the influence of any substance, including drugs or alcohol, which might impair vision, dexterity, or judgment. Do not operate the MBX BUCKER when fatigued. Be alert. If tired while operating the device, take a break. Fatigue may result in loss of control. Working with any equipment can be strenuous. If you have any condition that might

be aggravated by strenuous work, check with your doctor before operating the device.

## **GENERAL SAFETY PRECAUTIONS**

### **KNOW THE SAFETY INFORMATION**

Read and become familiar with the entire User Guide. Learn the equipment applications, limitations, and possible hazards.

### **KEEP GUARDS AND SHIELDS IN PLACE**

Keep all guarding in place and in working order to protect both the device and the operator.

### **WORK IN A SAFE ENVIRONMENT**

Do not use equipment in a dangerous environment or damp/wet locations. Never expose the control panel directly to rain or water. Keep the work area well-illuminated. Operate the equipment on a stable surface with minimal slope to ensure safety and proper function. Engage the locking casters to prevent unintended movement during use.

### **WORK AWAY FROM FLAMMABLE LIQUIDS OR GASES**

Do not use the device in the presence of flammable liquids or gases.

### **KEEP THE WORK AREA CLEAN**

Cluttered areas and workspaces invite accidents. Keep all power cords and ancillary equipment out of walkways/corridors to reduce tripping hazards.

### **TRAINED OPERATORS ONLY**

Keep children and bystanders away from the device. Visitors should be kept at a safe distance from the work area.

### **DON'T FORCE THE EQUIPMENT**

It will operate optimally and safely at the rate for which it was designed.

### **ALWAYS OPERATE DEVICE IN A WELL-VENTILATED AREA**

Dust generated from certain materials can be a health hazard. Use a dust collection system whenever possible.

## **CHECK FOR DAMAGED PARTS BEFORE OPERATION**

Inspect equipment prior to use to ensure proper operation in performing its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. Any damaged part including guards should be properly repaired or replaced.

## **WEAR PROPER APPAREL**

Do not wear loose clothing, neckties, rings, bracelets, or other jewelry that may get caught in moving parts. If gloves are worn, only use Nitrile or Latex gloves and not fabric-style gloves (e.g. Mechanix). Non-slip footwear is recommended. Wear a protective hair covering to contain long hair.

## **USE THE RIGHT TOOL**

Don't force the device to do a job for which it was not designed.

## **WEAR A FACE MASK OR DUST MASK**

This device may produce dust or operate near other dust-producing machines. If dust extraction is not considered, a dust mask must be worn.

## **POWER DOWN AND DISCONNECT**

Power down and disconnect equipment before cleaning, servicing, and when changing any accessories, consumables, or other components.

## **ALWAYS WEAR EYE PROTECTION**

Safety goggles can protect your eyes from fast-moving debris.

## **ALWAYS WEAR EAR PROTECTION**

Wear ear muffs or earplugs when operating loud machinery.

## **ERGONOMICS**

**WARNING:** Repetitive actions such as inserting plant stems that are performed over an extended period of time by one worker can result in permanent repetitive strain injuries. Operators are encouraged to develop a job rotation strategy and provide ergonomic training to workers to reduce the likelihood of RSI occurrences.

# PREFACE

## INTENDED USE OF EQUIPMENT

The MBX Bucker is designed and manufactured for destemming cannabis flowers from stalks and chipping the stalks into short lengths for convenient disposal. It should be used in a laboratory, clean room, or production-type environment. With the optional Offroad kit, the bucker may be used outdoors as long as it is kept dry.

The MBX Bucker can be used with wet or dry cannabis or hemp.

## OPERATING CONDITIONS

Location	Indoor
Altitude	0-2000 metres above sea level
Temperature (Ambient)	5°C - 40°C
Maximum Relative Humidity	80% at 31°C, decreasing linearly to 50% at 40°C
Voltage and Frequency	115V +/- 10% @ 60Hz - (NA) 230V +/- 5% @ 50Hz - (INT)
Current Draw	15 A (NA) 12A (INT)
Pollution Degree	2
Overvoltage Category	II

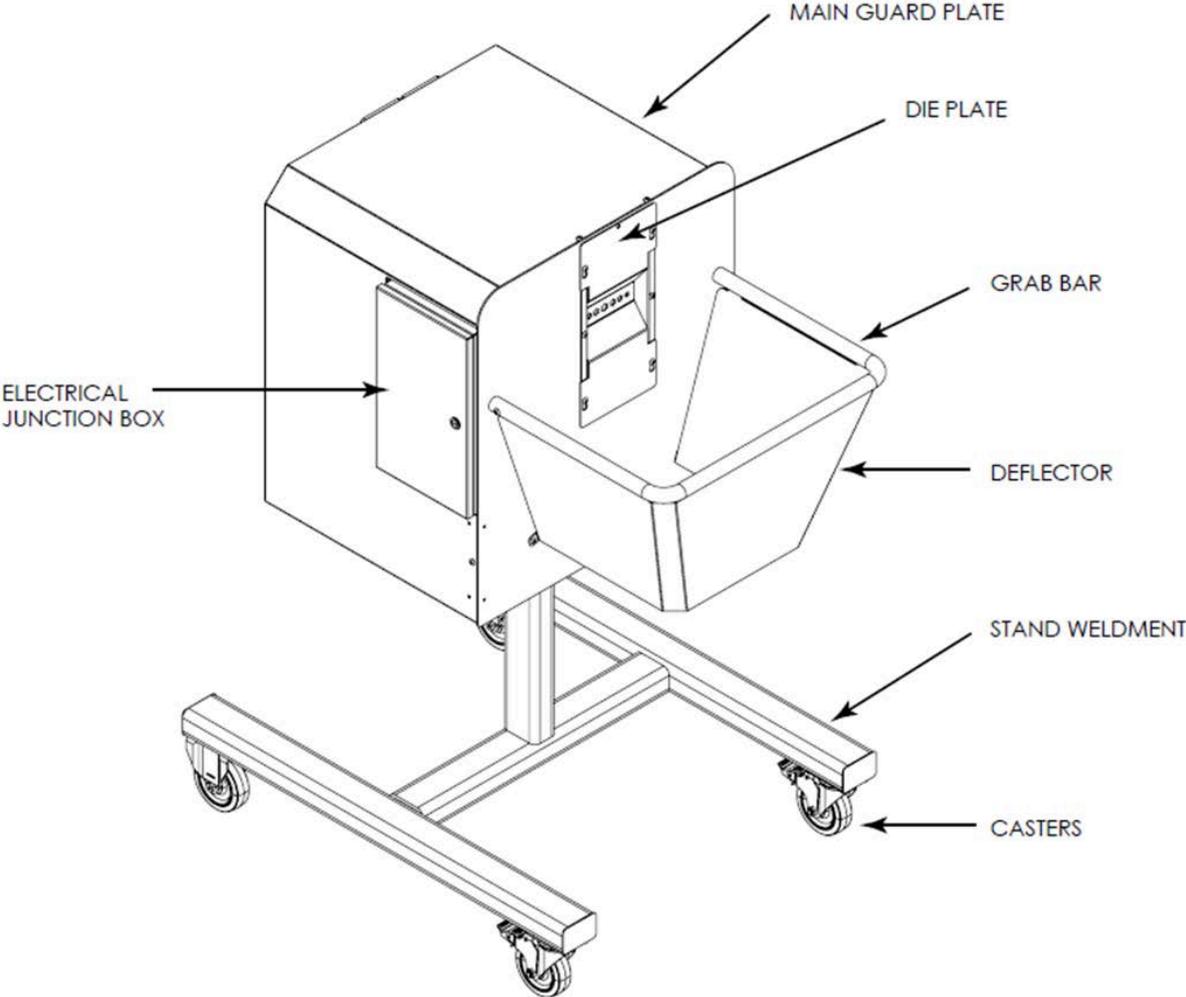
**NOTE: THIS DEVICE IS NOT TO BE OPERATED IN WET LOCATIONS.**

This machine should not be operated in conditions or orientations where accessing the emergency stop would be difficult or impossible. Always ensure that any operators have clear access to the power off and e-stop buttons.

If this equipment is used in conditions outside the specified operating conditions, Eteros Technologies cannot guarantee that the built-in safety functions of the Mobius MBX Bucker will function as intended.

# INITIAL SETUP

## GET TO KNOW YOUR MBX BUCKER



# OPERATION

## WHAT'S IN THE BOX

Your MBX BUCKER comes fully assembled, tested, and ready for operation. When unpacking the device, please ensure the following items are included:

- MBX BUCKER MACHINE
- CLEANING DIE PLATE KIT
- USER GUIDE

## OPERATION PREP

Please take the following steps to confirm the MBX BUCKER is ready to operate:

- Complete a thorough inspection of the equipment to ensure no damage occurred during shipment
- Confirm the power cord is in good condition
- Ensure the front die plate is installed and properly secured
- Ensure all guarding is properly installed and is in good working condition

## CONTROL PANEL OVERVIEW

**ON/OFF** - Enables or disables power to the machine. In the vertical position, the machine is on. Turn counterclockwise to cut power to the machine.



**E-STOP** - Emergency stop button - stops all moving parts on the device.

**START/CHIP** - Energizes the electrical panel and starts the integrated chipper (if equipped). Note: This button will be illuminated when in operation.

**FORWARD** - Initiates forward roller direction for normal operation.

**REVERSE** - Initiates reverse roller direction for removing stems.

**STOP** - Stops infeed motor. Note: Under normal conditions, rollers do not need to be stopped when toggling between forward and reverse directions.

**SPEED** - Turn dial to adjust roller speed to desired rate.

# OPERATION

**PRIOR TO DEVICE OPERATION, ENSURE ALL GUARDS AND THE FRONT DIE PLATE ARE IN PLACE AND PROPERLY SECURED**

**PRESS THE E-STOP BUTTON AT ANY TIME TO STOP ALL MOVING PARTS AND TURN OFF THE MACHINE**

## MACHINE START UP SEQUENCE

1. Ensure the front die plate is properly installed.
2. Ensure the e-stop is disengaged.
3. Press the start/chip button to turn on the machine and start the chipper (if equipped). When active, the start/chipper button will be illuminated.
4. Press the forward button to initiate forward roller direction (normal operating mode).
5. Turn the speed dial to the desired speed.
6. INSPECT WASTE CHUTE. A plugged waste chute can ultimately result in roller damage or stalling of the chipper motor that is not covered under warranty. Ensure chipped stems pass through the waste chute unobstructed.

## CLEARING OBSTRUCTIONS: REVERSE ROLLER DIRECTION

In the event a stem becomes caught in the machine, roller direction can be reversed to release it. The operator **MUST** reverse roller direction to release caught stems as prolonged operation with an obstruction will result in roller damage that is not covered under warranty. To release a caught stem while the machine is in operation:

1. Press the reverse button. Roller direction will reverse releasing the caught stem. It is not necessary to stop roller direction prior to pressing the reverse button.
2. Allow the machine to eject the stem. Use caution.
3. Once the stem is fully released and in hand, press the forward button to return roller direction to forward for normal operation.
4. Inspect ejected stem to determine if it is suitable to feed into the machine. If so, insert stem. If not, dispose.

## MACHINE STOP SEQUENCE

When the machine is in operation, press the stop button.

## MACHINE SHUTDOWN SEQUENCE

1. Press the stop button to stop roller motion.
2. Press the e-stop button to de-energize the machine.

## SET-UP & ADJUSTMENTS

### **ENSURE THE MBX BUCKER IS LOCKED OUT BEFORE PERFORMING ANY SETUP, MAINTENANCE, OR CLEANING TASKS**

The MBX BUCKER typically requires no set-up or adjustments under normal operating conditions.

## ROLLER TENSION ADJUSTMENT

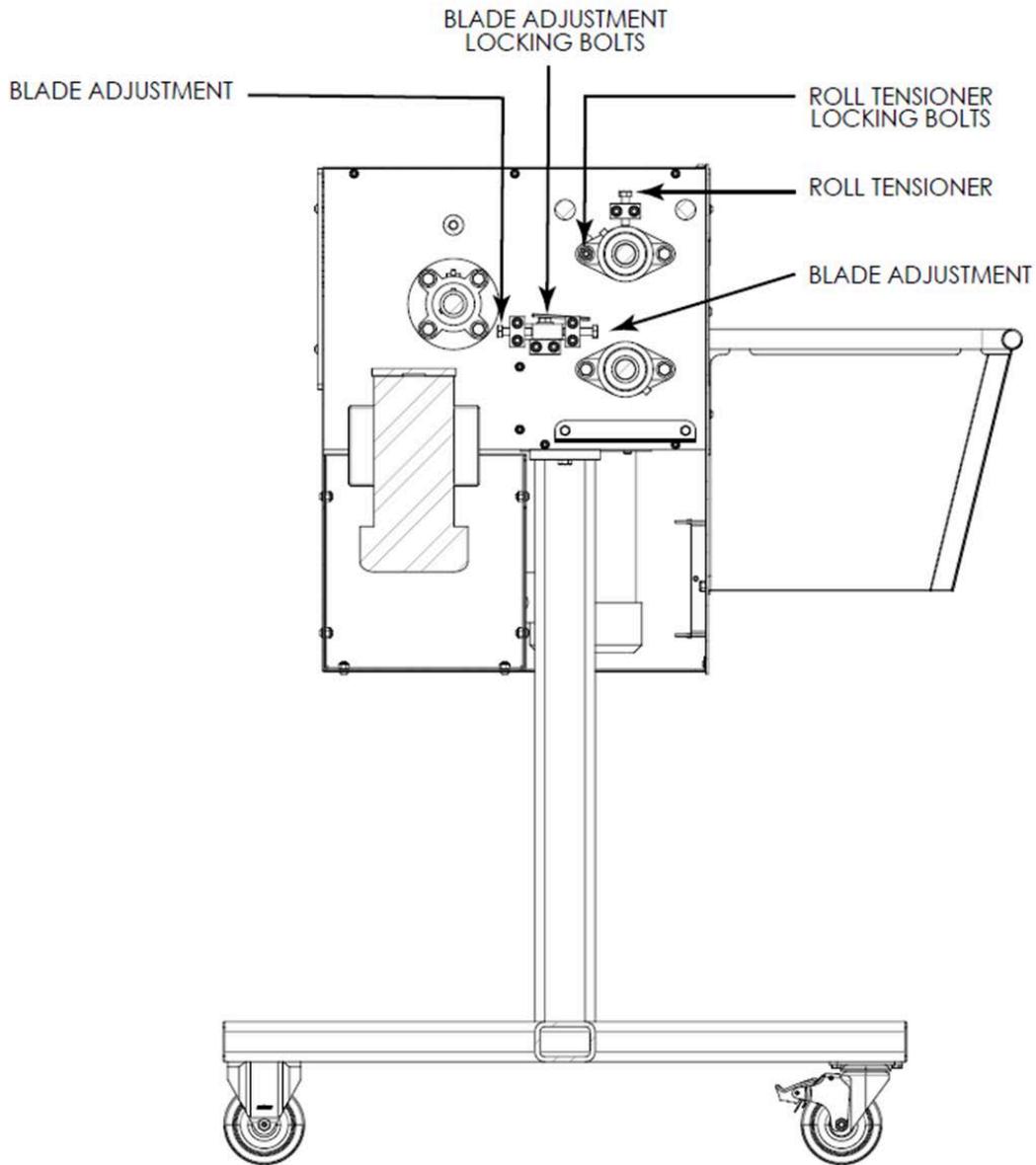
If the rollers do not draw stems into the machine, or if the machine has been rebuilt or the rollers have been replaced, the rollers must be tensioned to ensure proper preload.

1. Ensure the machine is de-energized and all power sources are disconnected
2. Remove the main sheet metal cover to access internal machinery
3. Loosen roller tensioner locking bolts
4. Loosely snug roller tensioner bolts and ensure rollers are level
5. Tighten roller tensioner bolts an additional four turns on each side
6. Tighten roller tensioner locking bolts
7. Replace all guards prior to testing operation

## CHIPPER SET-UP

In the event of poor chipper performance (stems are not fully sheared or are bent but not cut) a chipper blade adjustment may be required.

1. Ensure the machine is de-energized and all power sources are disconnected
2. Remove the rear guard
3. Loosen blade adjustment locking bolts
4. Using two blade adjustment bolts, adjust bed knife on each side until rotor knife and bed knife are as close as possible without interference
5. Tighten blade adjustment locking bolts
6. Replace all guards prior to testing operation



## LIFTING & MOVING

The machine is easy to move and rolls on level surfaces. The machine includes four locking swivel casters that are installed at the factory. The machine is designed to be operated on smooth and level floors.

If lifting is required, the Mobius MBX Bucker must be lifted using a forklift on the lower structural frame between the casters. Ensure that the forks are fully spread to avoid overturning or flipping off the forks.

# CLEANING

## **ENSURE THE MOBIUS MBX BUCKER IS LOCKED OUT BEFORE PERFORMING ANY SETUP, MAINTENANCE, OR CLEANING TASKS**

The MBX BUCKER can be washed, cleaned, and wiped down with normal detergents, degreasers, and disinfectants. The integrated stem chipper and die plates can be sprayed or pressure washed, however extra precaution must be used to ensure the motors, gearboxes, and electrical enclosure are not sprayed or pressure washed. These items may only be wiped down to prevent water ingress. ETEROS does not recommend using compressed air to clean the MBX BUCKER.

The front die plate and rear chipper cover should be removed to facilitate cleaning. The inside of the MBX BUCKER can be washed and wiped as needed.

Evidence of water near the motors, gearboxes, conduit, or electrical panel could void the machine warranty.

Always wear appropriate PPE and follow manufacturer safety precautions when using pressure washers and chemical cleaners.

The equipment should be cleaned daily after each use to prevent the buildup of material and foreign contaminants.

## STEP-BY-STEP INSTRUCTIONS

1. Push the Emergency Stop, turn off the disconnect switch, and unplug the power source. Always ensure the Bucker is de-energized when working within.
2. Remove the front bucking dieplate from the front of the machine by unscrewing the 4 screws at the corners, then sliding the plate up and off.



3. Remove the rear guard window covering the stem chipper on the back side of the machine in the same way.



4. Swap your front bucking plate and your rear guard window for the MBX cleaning plates. Once the cleaning die plates are secured, the machine can be plugged back in to start the cleaning process.

If you do not have a set of cleaning plates, clean the equipment without turning it on.

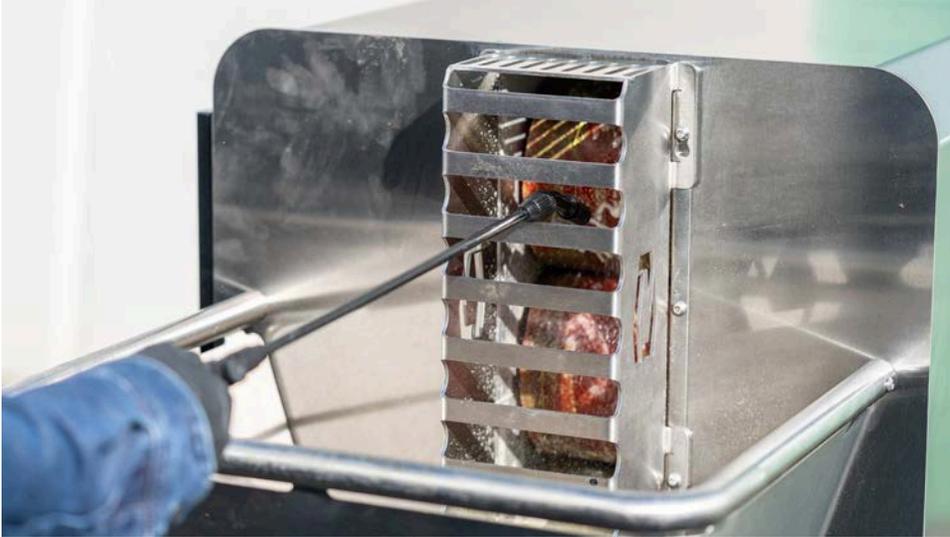
To obtain a set of cleaning plates, please contact ETEROS.



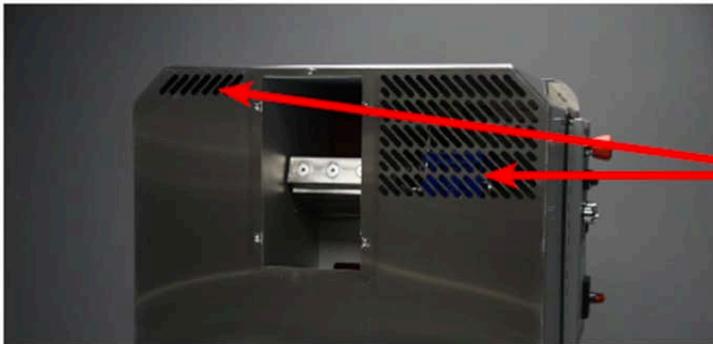
5. Release the e-stop, press start to fire up the chipper, and then turn the rolls on in reverse.



6. With the chipper rolls turning, spray your cleaning solution through the cleaning dieplate grates on the front and back of the machine. Leave that to soak for up to 15 minutes. ETEROS recommends GMP Solutions Step 1 Cleaner.



**NOTE:** The electrical panel and rear of the Bucker should never be hosed or sprayed directly. Use caution not to spray near the motors or into the vents in the rear of the Bucker.



DO NOT SPRAY

7. Now take the front bucking dieplate and the rear guard window and put them down onto a surface that won't damage them. Spray them with your cleaning solution. If the resin build up is light, you will be able to wipe them down and rinse them right away. If the build up is heavier, let the cleaning solution sit for a few minutes before wiping down



8. Use a hose or a pressure washer to spray through the front and rear dieplates to clean off the rolls and chipper. If the resin build up is heavy, you may need to apply a second round of cleaner and rinse again. You can also use a long handled brush to help remove resin build up on the rolls. Use caution not to pressure wash the rolls directly as the high-pressure jet may damage the rolls. Use hot water to improve the efficacy of the cleaning solution.



9. Once you're satisfied that the rolls and chipper are cleaned, the machine can be turned off.



10. You can now finish up by wiping and rinsing down the body of the machine. Be careful to NOT directly spray the electrical panel or into the rear vents.



11. Once you're done with cleaning, unplug the machine and remove the cleaning plates. If desired, all components can be sanitized with Shyield or ISO. Reinstall the front bucking die plate and rear guard window.



12. If possible, set the machine aside in a relatively warm and dry space to dry off.



# MAINTENANCE

The MBX BUCKER is largely maintenance-free.

## HOURLY INSPECTION

We recommend that the front die plate be removed regularly to confirm stems and resin are not building up inside the unit.

## DAILY INSPECTION

We recommend removing the front die plate and rear cover daily to ensure all debris is removed from the inside of the machine.

## WEEKLY INSPECTION

We recommend removing the front die plate and rear cover from the main machine to:

1. Ensure all debris are removed from the inside of the machine
2. Add 2-4 pumps of FDA-approved white lithium grease to each bearing.

This User Guide does not include instructions for machine repair. For your safety, repairs must be completed by ETEROS TECHNOLOGIES or an authorized agent (service technician).

Should repairs be required, please contact:

ETEROS TECHNOLOGIES  
502-130 INDUSTRIAL AVE.  
CARLETON PLACE, ONTARIO, CANADA  
K7C 3T2

Improper interfacing, improper repair, or unauthorized modification could result in void warranty claims.

# TROUBLESHOOTING

Problem	Resolution
MOBIUS MBX BUCKER WILL NOT START	<ul style="list-style-type: none"> <li>• Ensure the machine is plugged in</li> <li>• Ensure the Disconnect/Lockout switch is turned on</li> <li>• Ensure the Emergency Stop is disengaged (pulled out)</li> <li>• Ensure the start/chip button has been pressed and is illuminated</li> <li>• Ensure the chipper is not jammed or lodged</li> </ul>
GREEN START/CHIP BUTTON IS NOT ILLUMINATED	<ul style="list-style-type: none"> <li>• Ensure the machine is plugged in</li> <li>• Ensure the Disconnect/Lockout switch is turned on</li> <li>• Ensure the Emergency Stop is disengaged (pulled out)</li> <li>• Ensure the start/chip button has been pressed</li> </ul>
MBX BUCKER BECOMES ABNORMALLY NOISY/HEATING UP	<ul style="list-style-type: none"> <li>• Push the Emergency Stop to de-energize the machine</li> <li>• Remove rear guard and front die plate to inspect the chipper and rollers to ensure they are not plugged (Refer to <a href="#">Hourly Inspection</a>)</li> </ul>
MATERIAL EXITS THE CHIPPER UNDERPROCESSED OR THE CHIPPER IS FREQUENTLY PLUGGING UP	<ul style="list-style-type: none"> <li>• Refer to <a href="#">Chipper Setup</a></li> </ul>
MBX BUCKER IS NOT PULLING STOCKS OR BUCKING PROPERLY	<ul style="list-style-type: none"> <li>• Refer to <a href="#">Roller Tension Adjustment</a></li> </ul>

# SPECIFICATIONS

Wet / Dry Capable	Yes
Construction	304 Stainless Steel Body 6061-T6 Aluminum (Anodized) Inner Frame Cast Polyurethane Rollers 18-8 Stainless Steel Hardware
Speed Adjustments	1 - 11
Number of Feed Holes	7 (custom die plates available)
Hole Diameters	2X 5/16", 2X 3/8", 2X 7/16", 1X 1/2"
Integrated Chipper	Yes
Stem Puller Motor	1/2 HP
Chipper Motor	3/4 HP
Number of Chipping Blades	2
Disassembly Tools	5/32" Allen Key (included)
Fits Through a 32" Door	Yes
Dimensions: W x L x H	28" x 40" x 52"
Weight	275lbs
Warranty	1 year
Certifications	cETLus (NA), CE (INT)
Location	Indoor, Outdoor (dry locations only)
Altitude	0-2000 meters above sea level
Temperature (Ambient)	5°C - 40°C
Maximum Relative Humidity	80% at 31°C, decreasing linearly to 50% at 40°C
Voltage and Frequency	115V +/- 10% @ 60Hz - (NA) 230V +/- 5% @ 50Hz - (INT)
Current Draw	15 A (NA) 12A (INT)
Pollution Degree	2
Overvoltage Category	II