



# M210 MILL

USER GUIDE v1.3



INTRODUCTION.....	1
DISCLAIMER.....	2
SERVICE & REPAIRS.....	3
WARRANTY.....	4
WARNING LABELS.....	5
SAFETY INSTRUCTIONS.....	6
GENERAL SAFETY PRECAUTIONS.....	7
PREFACE.....	9
INTENDED USE OF EQUIPMENT.....	9
OPERATING CONDITIONS.....	9
SPECIFICATIONS.....	10
INITIAL SETUP.....	11
GET TO KNOW YOUR MOBIUS M210 MILL.....	11
WHAT'S IN THE BOX.....	11
DUST COLLECTION PORT.....	11
OPERATION.....	12
OPERATION PREP.....	12
CONTROL PANEL OVERVIEW.....	13
GENERAL OPERATION.....	13
SET-UP & ADJUSTMENTS.....	14
GENERAL.....	15
CLEANING.....	15
MAINTENANCE.....	15
LIFTING & MOVING.....	16
TROUBLESHOOTING.....	17
SPECIFICATIONS.....	18

# INTRODUCTION

This User Guide is a comprehensive manual covering the operation and maintenance of the Mobius M210 Mill processing machine 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 appropriate 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 manual should be located within easy access for periodic review.

## DISCLAIMER

ETEROS TECHNOLOGIES recognizes that the MOBIUS M210 MILL 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 MOBIUS M210 MILL. 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 may only be carried out by Eteros Technologies or a designated authorized agent (service technician).

Should the need arise, please notify:

ETEROS TECHNOLOGIES  
502-130 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 void warranty claims.

# WARRANTY

Thank you for purchasing Mobius M210 equipment from Eteros Technologies Inc.

The Mobius M210 Mill is covered by our manufacturer's warranty as follows:

- No warranty on consumable parts, including screens and door gaskets;
- 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.

Rotor damage is very rare on a MOBIUS M60 MILL and is typically the result of rocks, hard metallic objects, or poor setup. Rotor damage resulting from hard objects entering the milling chamber is not covered under warranty. In the event of rotor damage, please contact ETEROS TECHNOLOGIES for assessment. Repair and part replacements must be completed by ETEROS TECHNOLOGIES or an authorized agent. To avoid rotor damage, please take care to properly maintain the MOBIUS M210 MILL and do not let hard objects enter the milling 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 milling machine as the MOBIUS M210 Mill. Since this machine has a rotary milling 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 safe operation and use of the MOBIUS M210 MILL. 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 MOBIUS M210 MILL must be inspected regularly for damage, component failure, and wear. Results of inspection activity should be documented.

Eteros Technologies makes every effort to ensure the MOBIUS M210 MILL 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 MOBIUS M210 MILL.

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 MOBIUS M210 MILL 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.

## 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.

## 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.

## USE THE RIGHT TOOL

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

## WEAR PROPER APPAREL

Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry that may get caught in moving parts. Non-slip footwear is recommended. Wear a protective hair covering to contain long hair.



## **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.

## **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 servicing and when changing any accessories, consumables, or other components.

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

The equipment should be inspected 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.

## **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.

# PREFACE

## INTENDED USE OF EQUIPMENT

The M210 is designed and manufactured for the milling, grinding, blending and consistent particle size reduction for cannabis and hemp. It should be used in a laboratory, clean room or production-type environment.

To optimize the performance of your M210 please ensure that your product is:

- Cannabis or Hemp
- Flower, leaf, or trimmings
- Fully bucked or de-stemmed
- Dry to a moisture content of 8%-12%

## OPERATING CONDITIONS

Location	Indoor
Altitude	0 - 2000 meters above sea level
Temperature (ambient)	5°C - 25°C
Relative Humidity	25% - 75%
Voltage	115 V +/- 10% 230 V +/- 5%
Pollution Degree	2
Overvoltage Category	II

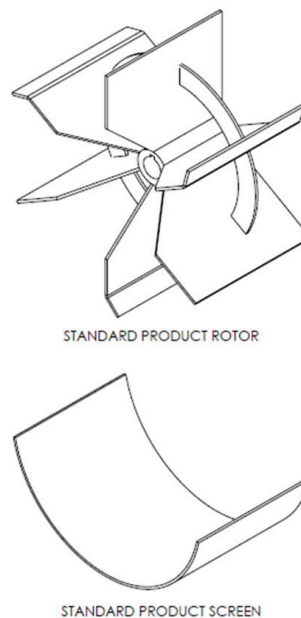
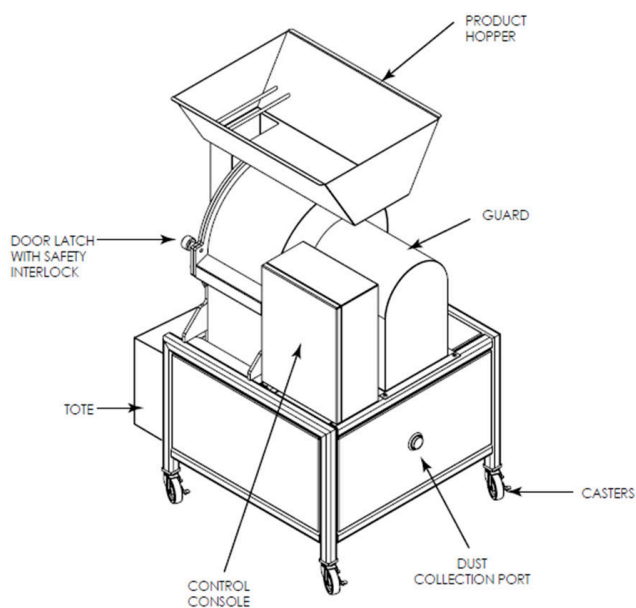
**NOTE: THIS DEVICE IS NOT TO BE OPERATED IN WET LOCATIONS.**

## SPECIFICATIONS

Construction	304 Stainless Steel
Speed Adjustments	1 - 10
Number of Screens	7
Feed Motor	1/2 HP
Number of Milling Blades	6
Power Requirements *** SEE USER GUIDE FOR INPUT VOLTAGE CONFIGURATION ***	115V, 60Hz, 6AMPS or 230V, 50Hz, 6AMPS
Collection Tote Capacity	43.9L / 11.6 US Gallons
Tool-less Disassembly	Yes
Fits Through a 32" Door	Yes
Width	28"
Length	28"
Height	52"
Weight	265lbs
Warranty	1 year
Certifications	CE and cLCus Certification
Accessories	<ul style="list-style-type: none"> <li>• Fine Screen</li> <li>• Coarse Screen</li> <li>• Custom Carts</li> <li>• Custom Feed Hopper</li> </ul>

# INITIAL SETUP

## GET TO KNOW YOUR MOBIUS M210 MILL



## WHAT'S IN THE BOX

Your MOBIUS M210 MILL comes fully assembled, tested, and ready for operation. When unpacking the device, please ensure the following items are included:

- MOBIUS M210 MILL MACHINE
- ROTOR
- MILLING SCREEN
- PRODUCT HOPPER
- PRODUCT TOTE

## DUST COLLECTION PORT

Your MOBIUS M210 MILL is equipped from the factory with a dust *collection port*. Connect a vacuum or dust collection system to your milling machine to minimize the airborne dust generated.

NOTE: The dust collection port does not affect the machine operation or throughput.

# OPERATION

## OPERATION PREP

Please take the following steps to confirm the MOBIUS M210 MILL is ready to operate:

- Ensure that your Mobius M210 MILL has been configured for the appropriate voltage (see p.12)
- Complete a thorough inspection of the equipment to ensure no damage occurred during shipment
- Confirm the power cord is in good condition
- Ensure the rotor is properly installed with the spring-pin latch in place
- Ensure the milling screen is properly installed and located in the retention grooves
- Ensure the door is properly shut and secured
- Ensure the upper hopper is installed and in good working condition
- Ensure all guarding is properly installed and is in good working condition
- Ensure that the equipment is in a clean and tidy workspace and that all controls are accessible and visible.

## CONTROL PANEL OVERVIEW



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

**START/RESET** – Energizes the electrical panel and safety circuit. Note: This button will be illuminated when in operation.

**FORWARD** – Initiates rotor in a clockwise direction.

**REVERSE** – Initiates rotor in a counterclockwise direction.

**STOP** – Stops rotor. Note: **The rotor MUST be stopped** prior to toggling between forward and reverse direction.

**SPEED** – Turn dial to adjust speed to desired rate.

## GENERAL OPERATION

**PRIOR TO DEVICE OPERATION, ENSURE ALL GUARDS AND THE UPPER HOPPER 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 rotor and screen are properly installed.
2. Ensure the access door is properly closed and latched.
3. Ensure e-stop is disengaged.
4. Press the start/reset button to turn on the machine. When active, the start/reset button will be illuminated.
5. Press the forward or reverse button to engage the rotor.

6. Turn speed dial to desired speed.

## TOGGLING ROTOR DIRECTION

While the machine is in operation:

1. Press the stop button to stop rotor motion. Note: The rotor must be stopped prior to toggling direction.
2. Press the forward or reverse button to engage the rotor in the desired direction.

## MACHINE STOP SEQUENCE

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

## MACHINE SHUTDOWN SEQUENCE

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

**ENSURE THE MOBIUS M210 MILL IS LOCKED OUT BEFORE PERFORMING ANY SETUP, MAINTENANCE, OR CLEANING TASKS**

## SET-UP & ADJUSTMENTS

The Mobius M210 Mill typically requires no set-up or adjustment under normal operating conditions. The particle size and final product consistency is dictated by the milling screen. Eteros Technologies has several screens available for milling and blending. Please consult with our team to determine the screen combination that best suits your needs.

# GENERAL

## CLEANING

With the exception of the motor, gearbox, and electrical enclosure, the MOBIUS M210 MILL can be washed, cleaned, and wiped down with normal detergents, degreasers, and disinfectants.

The access door, rotor, and screen can be removed to facilitate cleaning. The inside of the MOBIUS M210 MILL can be washed and wiped as needed.

The door gasket can also be removed easily for cleaning. This gasket is pressed by hand into the groove around the circumference of the door.

The exterior of the MOBIUS M210 MILL should never be hosed or sprayed. Evidence of water near the motor, conduit, electrical panel, or gearbox could void the machine warranty.

## MAINTENANCE

The MOBIUS M210 MILL is largely maintenance-free. The door gasket is the only wear component within the Mobius Mill. The condition of the door gasket should be inspected prior to each use. A faulty or worn door gasket will not affect the operation of the machine, however it is necessary for dust mitigation.

The M210 gearbox is a fully sealed unit and is 100% Maintenance free for life.

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

[www.eteros.com](http://www.eteros.com)

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



## LIFTING & MOVING

The machine is easily moved and rolled 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 M210 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.

# TROUBLESHOOTING

Problem	Resolution
MOBIUS M210 MILL WILL NOT START	<ul style="list-style-type: none"> <li>• Ensure the machine is plugged in</li> <li>• Ensure the e-stop is disengaged (pulled out)</li> <li>• Ensure the start/reset button has been pressed and is illuminated</li> <li>• Ensure the rotor is not jammed or lodged</li> </ul>
BLUE START/RESET BUTTON IS NOT ILLUMINATED	<ul style="list-style-type: none"> <li>• Ensure the machine is plugged in</li> <li>• Ensure the access door is properly closed and latched</li> <li>• Ensure the e-stop is disengaged (pulled out)</li> <li>• Ensure the start/reset button has been pressed</li> </ul>
DEVICE IS ABNORMALLY NOISY / ROTOR RUBBING	<ul style="list-style-type: none"> <li>• Ensure the rotor is properly seated and the spring pin is functioning</li> <li>• Inspect upper chamber for product/resin build-up, clean as required</li> </ul>
MILLED MATERIAL IS OVER/ UNDER-PROCESSED COMPARED TO DESIRED CONSISTENCY	Contact ETEROS TECHNOLOGIES to discuss different milling screen options
DEBRIS AND PRODUCT BUILDUP ON THE ROTOR AND/OR MILLING CHAMBER	Remove the rotor, wipe/wash down rotor and milling chamber

# SPECIFICATIONS

CONSTRUCTION	Stainless Steel
SPEED ADJUSTMENT	1-11
NUMBER OF SCREENS	7
MOTOR	1/2 HP
MILLING CHAMBER DIMENSIONS	18" Dia. x 10 3/8" Depth
TOOL-LESS DISASSEMBLY	YES
FITS THROUGH A 32" DOOR	YES
DIMENSIONS	28" W x 28" L x 52" H
WEIGHT	265 LBS (120 KG)
POWER REQUIREMENT	120 V, 6 AMPS
INTERNATIONAL POWER REQUIREMENT	240 V, 3 AMPS
RECOMMENDED PPE	EAR PROTECTION EYE PROTECTION DUST MASK
WARRANTY	1 Year or 1,000 Hours