



# REVOLUTION 2.0

INDUSTRIAL GRINDING SOLUTION





**WARNING**  
**UNPLUG YOUR MACHINE BEFORE EVERY**  
**CLEANING AND WHEN YOU PERFORM**  
**MAINTENANCE**

**REVOLUTION 2.0™**  
**USER MANUAL V2.0**



5517 02112

Sales: (509) 204-3165  
 Web: [www.stmcanna.com](http://www.stmcanna.com)  
 Support: (509) 204-3164  
[support@stmcanna.com](mailto:support@stmcanna.com)

- Table of Contents 1
- Introduction 2
- Components 3-4
- Top Tray 5
- Cones/Preparation 6
- Operation 7-8
- Density Testing/Maintenance 9
- Terms of Business 10-11

<b>WEIGHT &amp; DIMENSIONS</b>	Approximately 220 lbs Machine Dimensions 30" L x 65" H x 22 1/4" W
<b>VOLUME CAPACITY</b>	Up to 50 lbs +/- hourly Up to 400 lbs +/- daily Varies with different material types
<b>POWER</b>	Standard 220v 17.1 Load Amps Single Phase 5 1/2 ft. cord Requires L6-30 Plug
<b>MATERIALS</b>	Encased in powder-coated aluminum 304/316 stainless steel Heavy Duty Caster Wheels (for transport)
<b>HOPPER</b>	Holds 21 liquid gallons (Four, 5-gallon buckets of material)
<b>POWER SUPPLY &amp; MOTORS</b>	3HP UL Listed
<b>SOFTWARE &amp; UPGRADES</b>	Revolution OS V1.2 Updates available as necessary
<b>TRAINING</b>	Video tutorials available
<b>COMPLIANCE</b>	OSHA Compliant 100% Food-Grade Emergency Stop System
<b>LIFE CYCLE &amp; WARRANTY</b>	1-year parts and labor warranty Motor: 10-year life cycle
<b>OPERATION</b>	Custom-made stainless steel serrated blades Chute with vibrating agitator

Thank you for being a valuable client of STM. Our goal is to bring our customers the very best in product quality and customer service. We value your feedback to help us improve.

The Revolution 2.0 is an incredibly reliable material grinder that produces a consistent product with every cycle. Through the use of its patented two-blade system, material is cut (not ripped or torn) after being loaded into the top hopper, then ejected from material chute.



## GETTING STARTED

Inside the crate, you'll find the Revolution 2.0 Industrial Grinder, complete with two blades, two material screens, and replacement fuses.

## TRAINING VIDEO

A video is available online at for this machine. It is recommended that this manual be used in conjunction with it. When looking for a specific operation, refer to the time index listed at the bottom of each section in this manual.

Link: [bit.ly/2mrR0sA](https://bit.ly/2mrR0sA)

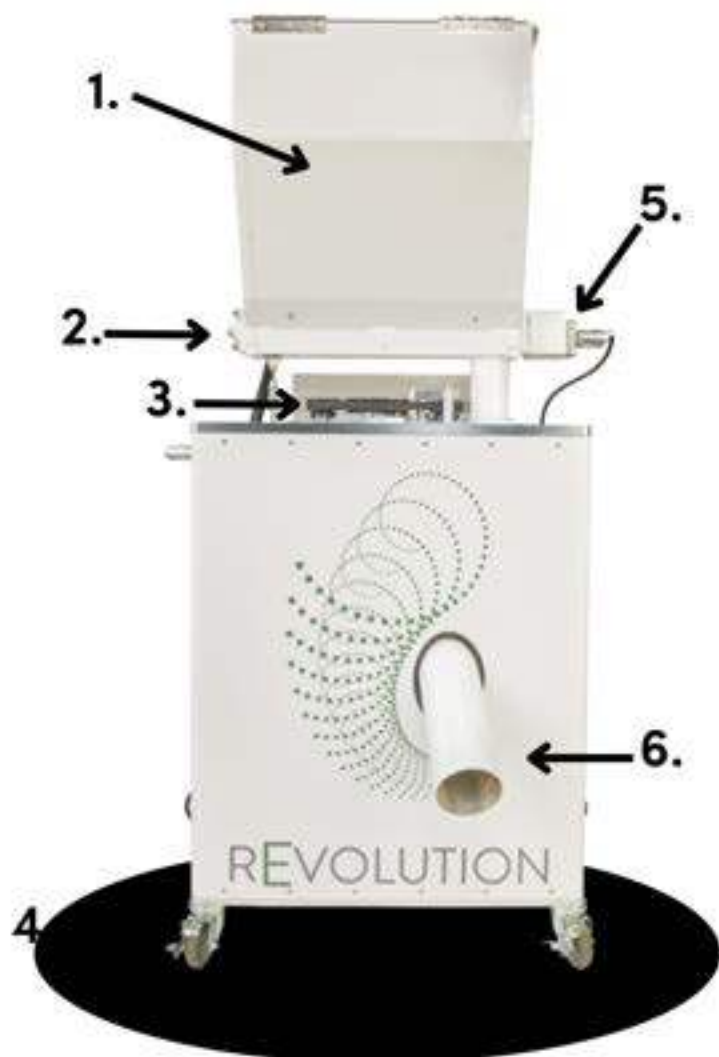


Scan to view  
training videos

## UNPACKING YOUR MACHINE

Carefully unpack your machine and inspect it to ensure it has not been damaged during shipping. Make sure all the correct parts are included and match your invoice. If damage is present or pieces are missing, STM Canna must be notified by the client within five (5) days of the machine's arrival. Please contact Client Services immediately if this occurs by calling (509) 204-3164.



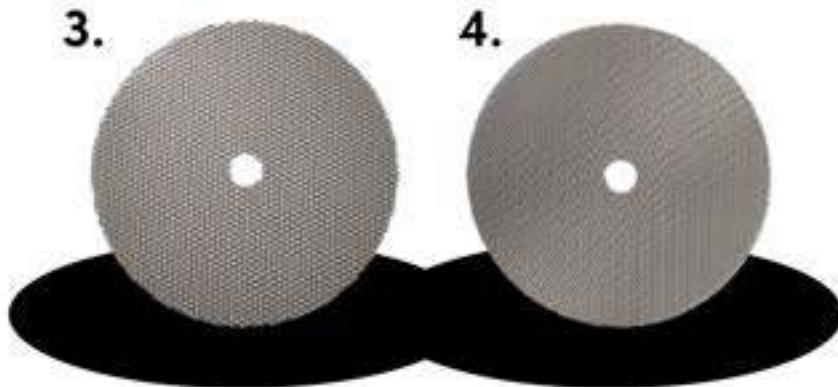
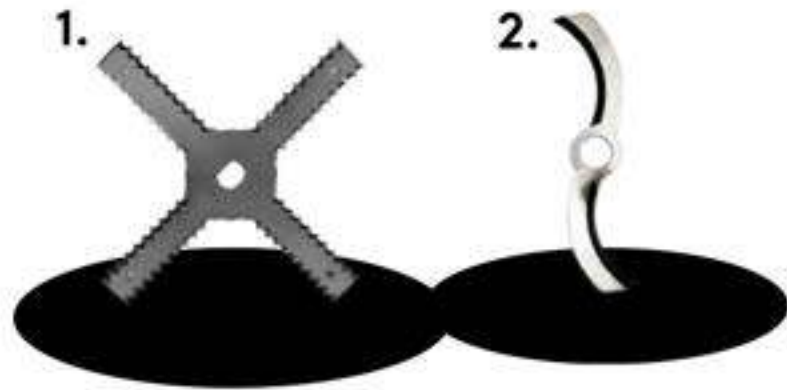


1. Hopper - Reservoir for material that is intended to be ground. Feeds downward into the auger.
2. Auger Bearing - Provides smooth rotation for the internal auger attached to the motor shaft. Allows the auger to efficiently feed material into the throat of the blade chamber below.
3. Belt Drive - Mechanism that transmits power from the motor to spin the blades.
4. Casters - 360° swiveling caster wheels for easy mobility.
5. Auger Motor - Powers the auger
6. Chute - Guides freshly ground product into desired container.

7. Lid - Prevents environmental contaminants and activates the safety relay switch when closed.
8. E-Stop Button - Turns the machine off in case of an emergency.
10. Top of Back Door Panel - Easy access to your blade chamber and chute. Equipped with a safety relay switch.
11. Lower Back Door Panel - Access to electrical components. DO NOT access without assistance, as it may VOID the warranty.
12. Touch Screen Control - Used for the operation of machine.
13. Power/Lockout Button - Turns on the power and locks machine.



1. Four Arm Blade - The first blade to make contact with the material (preinstalled).
2. S Blade - The second blade to make contact with the material that rotates the opposite direction as the four arm blade (preinstalled).
3. Coarse Screen - Used to produce 3/16" particles (preinstalled)
4. Fine Screen - Used to produce 5/32" particles.



### WARNING

Always wear cut-proof gloves when handling anything inside the blade chamber.

## EMERGENCY PROCEDURES



### E-STOP BUTTON

If there is a sudden emergency or need to shut off the machine quickly, press the E-STOP button.

All machines have an E-Stop Button located just to the left of the touch screen.

When pressed, "Emergency Stop" will display on the touch screen and all operation will cease.

To clear the "Emergency Stop", pull the E-STOP button upwards, ensuring the yellow ring on the shaft of the E-STOP button is exposed.

If the "Emergency Stop" message is still displayed and the E-STOP button is not depressed, it is likely a triggered limit safety switch.

### **IMPORTANT**

Do not alter limit switches in any way, as it can void your warranty.

### LIMIT SWITCHES

There are four safety limit switches located in the machine that will display the emergency stop when triggered. The screen will tell you which e-stop or limit switch is open/triggered. These switches will prevent the machine from running if not depressed properly.



### LOCATIONS

- Underneath the handle of the hopper lid.
- Behind the drop down chute in the back left corner.
- In the top right corner of the slide panel door
- In the top right corner of the components slide panel door.

**AUGER ON/OFF TIMES**

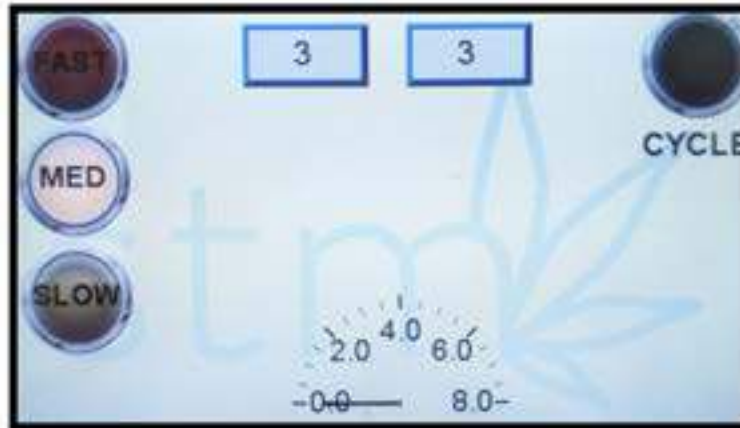
Located in the upper part of the screen, the Revolution shows its pre-set ON/OFF times (3 Seconds ON / 3 Seconds OFF).

These help prevent clogging and overfeeding the blade chamber. The auger settings may be changed, but STM does not recommend doing so without first contacting and consulting with our Client Services team.

**MOTOR SPEEDS**

Located on the left side of the screen, the Revolution has three speeds for operation:

1. **FAST:** 100% of motor speed (1750RPM)
2. **MEDIUM (recommended):** 50% of full power (875RPM)
3. **SLOW:** 10% of full power (175RPM)

**START/STOP**

Located in the upper-right corner of the screen, select the CYCLE button in the to start the Revolution and press it again to stop the operation of the grinder.

**AMP METER**

Located in the lower part of the screen, this meter displays when/if the machine is drawing an excessive amount of power (amps). If this occurs, the auger will be delayed to allow the blade chamber to clear before introducing more material. If the meter remains in the red, the screen will display "E-STOP - Blade Jam". This will indicate there is a clog in the Blade Chamber that must be cleared.

**PREPARATION**

Before operating your Revolution Grinder, it is important that the material being used meets STM Canna's recommended conditions to ensure proper function and quality. Material that does not meet standards can cause the machine to malfunction and not operate properly.



- Buck your buds completely off of the main stalks and stems.
- Remove all fan leaves, seeds, and stems that are not desired in pre-roll production.
- A moisture content of 10% or less (lab certified optimal moisture is 8.8%)
- Only use nuggets the size of a thumb or smaller.
- Load the hopper from the end opposite the throat of your grinder.
- Ensure that your blades are sharp and free of material.

**USING THE REVOLUTION 2.0**

1. Plug in your grinder and switch the power/lockout button to "ON."
  - If the machine does not turn on, check the power connection.
  - If "EMERGENCY STOP" is displayed on the screen, check the emergency procedures on the previous page.
2. Open the hopper lid and load material starting at the end opposite the throat. This allows the auger to pull the material into the throat and prevent clogging.
3. Select your desired speed setting and your auger ON/OFF times, then press "CYCLE" to start the machine.
4. The material will run from the throat of the hopper down into the blade chamber. Ground material will then continue to move through the selected micron screen and vibrate down and out of the chute.
  - Be sure to have a collection container below the chute at the time of operation to collect ground material.
5. Once all of your material has been processed, end the grind cycle by selecting the "CYCLE" icon on the screen.

**NOTE**

Never leave material in your Revolution for extended periods of time (overnight). When left in the hopper, excess material may fall into the blade chamber creating the potential for a clog or jam.

**SUGGESTED TOOLS**

- Collection bin and scoop for material
- Brush

**Helpful Tips**

- STM recommends running the Revolution on the "medium" speed for most materials.
- If your material is too dry, the auger "ON" time can run for longer. Adjust it by 1-second when setting times on the touchscreen.
- Do not overfill the hopper.



Scan to view  
training videos



**GETTING STARTED**

Thorough and regular cleaning will prevent material build up as the machine runs. Excessive buildup may possibly degrade your equipment over time and will cause operational issues.

**CLEANING CHECKLIST**

- Hopper & Auger
- Throat to blade chamber
- Blade chamber
- Internal funnel and chute
- Blades, screen, and other removable components.

**PREPERATION**

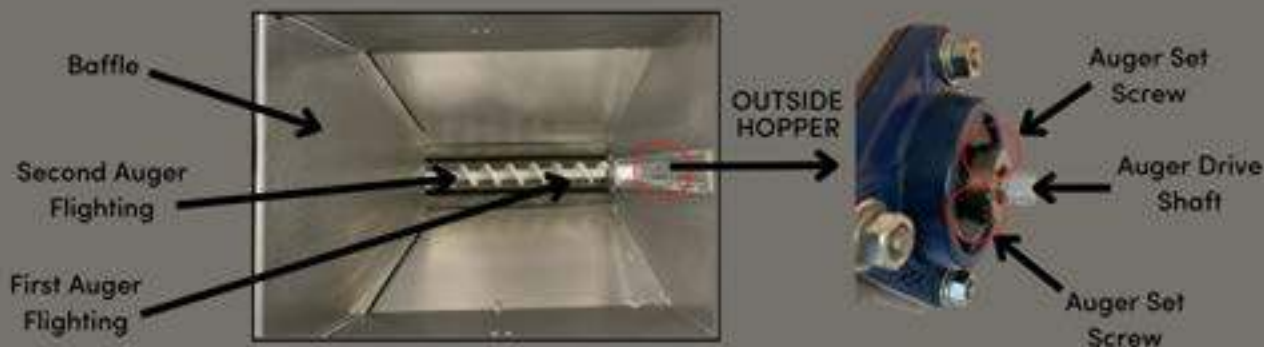
1. Ensure that all material has been ran through the Revolution to ensure it is empty.
2. Turn the red lockout power button to the "OFF" position.
3. Always work with cut-proof gloves when handling anything in the blade chamber.

**WARNING**

**UNPLUG YOUR MACHINE BEFORE EVERY CLEANING AND WHEN YOU PERFORM MAINTENANCE**

**HOPPER & AUGER - DISASSEMBLY AND CLEANING**

1. Remove the baffle by pulling it upwards.
2. Remove the auger by loosening the set screws with a 1/8 inch Allen Wrench. These screws are located on the outside of the hopper, opposite the baffle.
3. Slide out the auger drive shaft from the center of the bearing.
4. Remove both sections of the auger flighting. Start with the first section of flighting that is furthest from the baffle, then slide the second shorter flighting off of the drive shaft.





**AUGER REASSEMBLY**

1. Attach the second (short) piece of flighting with the open end on the motor drive shaft (Hex Rod).
2. Set the First (long) piece of flighting with the cut out onto the short piece of flighting.
3. Slide the 16" auger drive shaft back into the flighting through the bearing on the outside of the hopper.
4. Secure the two set screws located on the outside of the auger drive shaft bearing using an 1/8" Allen Wrench.
5. Replace the removable baffle above the hopper throat leading into the blade chamber.

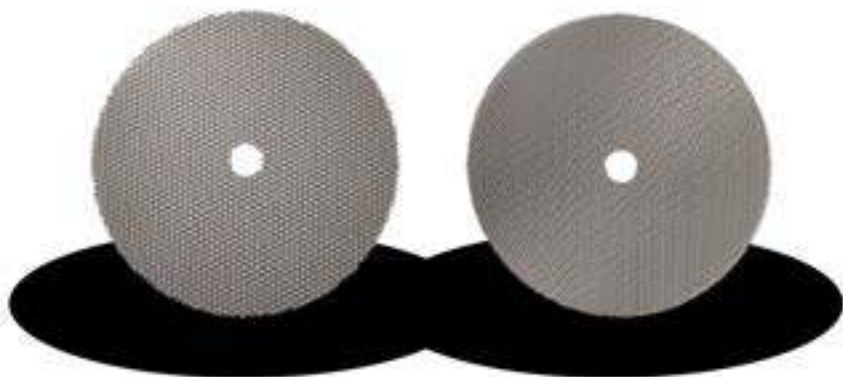
**WARNING**  
**UNPLUG YOUR MACHINE BEFORE**  
**EVERY CLEANING AND WHEN**  
**YOU PERFORM MAINTENANCE**



Second (short)  
Flighting

Flightings join here

First (long)  
Flighting

**PARTICLE SCREEN- DISASSEMBLY AND CLEANING**

1. Take off the upper back panel by removing the four Allen/hex bolts using a 3/16" Allen wrench.
2. Slide the back door straight up to expose the upper inside portion of the Revolution. This will open a limit switch, which will send your machine into "Emergency Stop" mode if turned on.
3. Remove the hitch pins from the buckle latches and then open the buckles to pull the chute out.
4. After the chute has been lowered, loosen the four tabs with a 5/16" Allen/hex key, then rotate the tabs away from the screen. This will allow the screen to drop.
5. Clean or replace the screen with the desired particle size. Wipe down the inside of the hopper and the particle screen thoroughly with isopropyl alcohol and a soft bristle brush, paper towel, or microfiber rag. Do not scrape, as this may cause damage.
6. Rotate and secure the tabs back to their original positions to secure the screen into place.

**DO NOT REMOVE THE BOTTOM PANEL WITHOUT**  
**STM APPROVAL AS IT MAY VOID YOUR WARRANTY**

## CHANGING THE BLADES

**ALWAYS UNPLUG MACHINE PRIOR TO ANY MAINTENANCE.  
USE CUT-PROOF GLOVES WHEN CHANGING THE BLADES.**

*Please watch our how-to video before attempting this crucial step in maintaining your grinder.*

📺 Video: Changing the Blades - [bit.ly/changing-blades](https://bit.ly/changing-blades)

**FIRST: Remove the back panel, drop the chute, and remove particle screen - See pg. 7**

### Replacing the Blades

1. Remove cotter pin from the bottom of the blade shaft. The cotter pin feeds through the blade shaft and the castle nut.
2. Insert screwdriver through hole in 4-arm blade and up into the throat of the hopper - this will prevent blades from spinning.
3. Using a 9/16 open-end wrench remove the castle nut. **CAUTION: BLADES WILL BE FREE TO FALL!**
4. **Note the configuration of the blades.** The S-Blade utilizes a hat spacer on the flush side of its bearing. This will ensure space and smooth rotation between the S-Blade and the 4-arm blade.
5. To reinstall blades, guide 4-arm blade onto blade shaft - the blade fits onto a "D" shaped shaft. Then guide S-Blade onto the shaft ensuring the hat spacer is between the blades.
6. Thread on castle nut securely until the cotter pin hole is visible between crenelations of the castle nut.
7. Insert cotter pin and bend around castle nut to secure in place
  - a. See images to right for reference.



All orders are required to electronically agree to our terms by clicking "I agree" during the checkout process in our online store. All completed orders, whether "Paid" or "Awaiting Payment" agree to and are held to our Terms of Business.

**All STM systems carry a limited one-year warranty against defects in workmanship and/or materials. Accessories are excluded from this warranty.**

#### **PURCHASING TERMS & CONDITIONS**

All products are first-come-first-serve and that receipt of payment is required in order to receive a confirmed shipping date in the queue. STM Canna & STM Supply reserve the right to specify collection by certified check, money order, or company check. Personal checks are not accepted. Due to high demands, certain items may have a lead time of 4-8 weeks or more from the payment date, unless otherwise stated. Following the receipt of an invoice, STM Canna must receive a payment within a maximum of 7 days before the invoice expires - leaving lead times, quoted prices, specials, and discounts on all items subject to change. If a deposit is applicable for any special reason, my deposit is non-refundable. Purchaser agrees to adhere to the Customer Awareness Program and Terms of Business herein.

#### **CUSTOMER AWARENESS PROGRAM (C.A.P.)**

STM takes pride in the products we make and the services we offer. To ensure our customers fully understand the services we provide, along with the capabilities and expectations of our products, we have executed and outlined the Customer Awareness Program contents below:

- A 12-month warranty on each product that is applicable with regards to manufacturer's defects, including parts and labor.
- STM Client Services department is dedicated to ensuring the success and satisfaction of all STM clients.
- STM Tech department provides our clients with all software updates, phone support, and virtual support, as needed.
- An easy-to-use client portal with tools such as product F.A.Q.'s and Best Practices, along with an extensive video library to help guide you towards success with your STM equipment.

#### **EXPECTATIONS AND CAPABILITIES OF YOUR STM EQUIPMENT: STM ROCKETBOX**

With our detailed manual and training videos, you can expect a complete and comprehensive training program to educate your team on best practices, as well as the cleaning and maintenance of your machine and accessories. By following the guidelines provided to you via the user manual and training videos, you will be able to produce a quality and consistent product that will be easily repeatable. The shaker box within the machine contains an area where material may escape during operation. With the 400 hour break-in period, STM advises against re-purposing this excess waste due to potential metal contaminants residing in the shaker box from regular usage. Results are not guaranteed and can greatly vary from operation to operation.

#### **WHO IS COVERED?**

This warranty covers the original purchasing company unless otherwise discussed prior to the sale and authorized in writing by STM Canna & STM Supply. Warranties do not transfer for resold machines regardless of the age of the model.

Please note that results with STM Canna & STM Supply products can yield varying results which depend on a myriad of factors, including but not limited to: correct grind size, age of the material, quality of material, moisture content, strain, temperature, correct sized cone usage, quality of cones used, the skill of the operator, and more. Our quoted weight ranges for flower and trim are all general averages that have been reported to us by our customers, however, your material may behave completely differently. We take no responsibility whatsoever for your results, only for the working functionality of our products. If you have any questions or concerns, please do not hesitate to talk to us about this very important disclaimer. There are no warranties on paper products. Machines come with a 1-year parts and labor warranty. See Returns & Voidable actions below.

#### **EXTENT OF WARRANTY**

There are no warranties on paper products. Machines come with 1-year parts and labor warranty. Accessories are excluded from this warranty. See Returns on Page 12.

#### **SHIPPING**

All orders must be paid in full before the order is shipped. Orders received will fall in line and be serviced accordingly where the shipment date may be sooner than originally quoted. We will ship by the most reasonable means based on the volume of the order unless otherwise specified. Since the ownership of product transfers at the FOB point, claims for damaged, lost, or short shipments must be made at the time of receipt.

#### **SPECIAL ORDERS**

All special order items must be paid in full before the order is placed. These items are non-returnable and no refund will be given. All special order items will also take a longer period of time for the customer to receive, which will be quoted at the time of payment.

## RETURNS

No Refunds/Exchanges: We do not accept returns or exchanges unless the item purchased is defective. No item will be accepted for return without prior approval. All approved returns must be accompanied with a return authorization (RA) number and must be in new and unused condition. All RA numbers must be clearly displayed on the outside of the box. All returns are subject to restocking fees, not to exceed 20% unless damaged. Refunds are issued in the form of like payment. All refused shipments are subject to a 20% restock fee and all applicable freight charges. All items that we ship are insured; if an item comes that is damaged from shipping, we will work closely with you to get you replacement parts as soon as possible. We may also request pictures or other identifying information to establish that damage was caused by the shipping carrier.

If you receive an item you believe is defective, please contact us with details of the product at 509-204-3164 or email us at [support@stmcanna.com](mailto:support@stmcanna.com).

We may ask you for pictures, video, descriptions, and other identifying information to make a determination. If you are unable to provide adequate documentation requested, your return request will be denied. If your item is deemed defective, which is solely at STM's discretion, we will issue you an RMA # which you will need to place in and on the package. After receiving your RMA #, you may send the item to:

**STM Canna**  
**5517 E. Trent Spokane, WA**  
**99212**

Upon receipt of the returned product, we will fully examine it and notify you via e-mail, within a reasonable period of time, whether you are entitled to replacement as a result of the defect. If you are entitled to a replacement, we will replace the product at no additional cost to you.

## SHIPPING

All orders must be paid in full before the order is shipped. Order quotes expire within 10 days. Orders received will fall in line and be serviced accordingly where the shipment date may be sooner than originally quoted. We will ship by the most reasonable means based on the volume of the order, unless otherwise specified.

## SPECIAL ORDERS

All special-order items must be paid in full before the order is placed. These items are non-returnable and no refund will be given. All special-order items will also take a longer period of time for the customer to receive, which will be quoted at the time of payment.

## LIABILITY

The purchaser of any products releases the manufacturer of those parts and STM Canna from all liabilities pertaining to use of the products.

## CLAIMS

Since ownership of product transfers at the FOB point, claims for damaged, lost, or short shipments must be made at the time of receipt.

## TECHNICAL QUESTIONS

For all questions related to product functionality or troubleshooting, contact STM Canna's Support Team at [support@stmcanna.com](mailto:support@stmcanna.com).



**Scan to view  
training videos**