

# **REVOLUTION 2.0** INDUSTRIAL GRINDING SOLUTION



**USER MANUAL V2.3** 

(509) 204-3148 (CALL OR TEXT) | STMCANNA.COM | SUPPORT@STMCANNA.COM

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REVOLUTION 2.0<sup>™</sup> USER MANUAL V2.3



Sesh Technologies Manufacturing, Inc. 2701 N Van Marter Rd, Spokane Valley, WA 99206 Sales: (509) 204-3165 Web: www.stmcanna.com Support: (509) 204-3164 support@stmcanna.com

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

WARNING: Unplug your Machine before every cleaning & MAINTENANCE and always use machine in a well ventillated area.

# INTRODUCTION

As a valued and loyal STM client, your feedback is essential to us. We strive to deliver the highest quality products and customer service, and your insights help us continually improve and innovate our offerings. Thank you for your continued support.

The RocketBox PRO efficiently fills your pre-rolls using a direct funneling airbag vibration system. By inserting the top tray funnels into the cones, you ensure that only the desired material from the top tray enters the cones in the bottom tray.

# **GETTING STARTED**

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

# **KEYS TO SUCCESS:**

- Always use good material.
- Always unplug machine before cleaning & maintenance.
- Keep machine clean.





VIDEO: http://bit.ly/2mrR0sA



# 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.

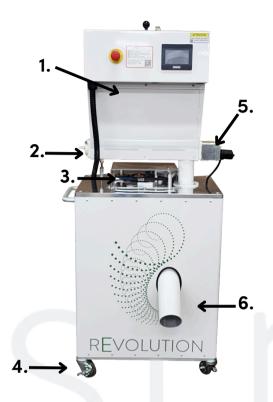
# **TRAINING VIDEO**

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







7. <u>Lid</u> - Prevents environmental contaminates for the air and activates the safety relay switch when closed.

8. <u>E-Stop Button</u> - Turns the machine off in case of an emergency.

9. <u>Top of Back Door Panel</u> - Easy access to your blade chamber and chute. Equipped with a safety relay switch.

10. <u>Lower Back Door Panel</u> - Access to electrical components. DO NOT access without assistance, as it may VOID the warranty.

11. Touch Screen Control - For machine operation.

12. <u>Power Switch</u> - Turns on power and locks machine.



1. <u>Hopper</u> - Holds material to be grounded. Make sure nugs are no larger than a thumb and destem first.

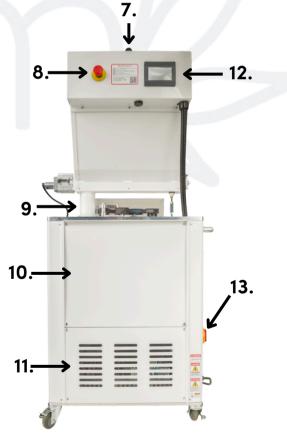
2. <u>Auger</u> - The auger efficiently feeds material into the blade chamber below.

3. <u>Belt Drive</u> - Transmits power from the motor to spin the blades.

4. <u>Casters</u> - 360° swiveling locking caster wheels for easy mobility.

5. <u>Auger Motor</u> - Powers the auger.

6. <u>Chute</u> - Guides freshly ground product into desired container.



VIDEO: http://bit.ly/2mrR0sA

# WARNING: Unplug your Machine before every cleaning & MAINTENANCE and always use machine in a well ventillated area.

The Revolution 2.0 uses a custom dual blade system for superior cuts.

1. Four Way Blade - first blade to make contact with the material (preinstalled).

2. S-Blade - second blade that rotates the opposite direction as the four arm blade (preinstalled).

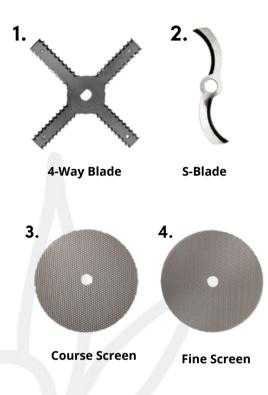
3. Coarse Screen - Used to produce 3/16" particles (preinstalled)

4. Fine Screen - Used to produce 5/32" particles.

5. Optional Super Fine Screen on request.

#### WARNING

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



# **EMERGENCY PROCEDURES**



# E-STOP BUTTON

To quickly shut off the machine, press the E-STOP button located to the left of the touch screen. When pressed, "Emergency Stop" will display on the screen, and all operations will cease. To clear this, pull the E-STOP button upwards until the yellow ring on its shaft is visible. If the message persists and the button is not engaged, a limit safety switch may have been triggered.

IMPORTANT: Do not alter limit switches, as this can void your warranty.

# LIMIT SWITCHES

There are four safety limit switches in the machine that trigger the emergency stop. The screen will indicate which switch is open/triggered, preventing the machine from running.

# LIMIT SWITCH 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.





# **TOUCH SCREEN**

### AUGER ON/OFF TIMES

The Revolution's preset ON/OFF times (3 seconds each) are displayed at the top of the screen to prevent clogging and overfeeding. Consult STM Client Services before adjusting auger settings.

### **MOTOR SPEEDS**

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

- FAST: 100% of motor speed (1750RPM)
- MEDIUM (recommended): 50% of full power (875RPM)
- SLOW: 10% of full power (175RPM)



VIDEO:

http://bit.ly/2mrR0sA

#### START/STOP

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

#### AMP METER

The lower screen meter shows if the machine is drawing excessive power. If so, the auger will pause to clear the blade chamber. If the meter stays in the red, "E-STOP - Blade Jam" will display, indicating a clog that must be cleared.

# MATERIAL PREPARATION

Before operating your Revolution Grinder, ensure the material meets STM Canna's recommended conditions. Using unsuitable material can cause malfunctions and improper operation.





- Completely remove buds from stalks and stems.
- Remove fan leaves, seeds, and unwanted stems for pre-roll production.
- Ensure moisture content is 10% or less (with optimal moisture of 8.8%).
- Use nuggets no larger than thumb-size. Load hopper from opposite end of grinder's throat.

# **OPERATION**

# **USING THE Revolution 2.0**

- 1. Plug in the grinder and switch the power/lockout button to "ON." Refer to the previous page for emergency procedures if "EMERGENCY STOP" is displayed.
- 2. Open the hopper lid and load material from the end opposite of the throat to prevent clogging.
- 3. Select your speed setting and auger ON/OFF times, then press "CYCLE" to start the machine.
- 4. The material will move from the hopper to the blade chamber then out of the front chute. Ensure a collection container is placed below the chute.
- 5. After processing, end the cycle by pressing the "CYCLE" icon on the screen.

**NOTE:** Do not leave material in the hopper overnight, as it may fall into the blade chamber and cause clogs or jams.

└─── Helpful Tips

- STM recommends using the "medium" speed setting for most materials when running the Revolution.
- If your material is too dry, you can extend the auger "ON" time. Adjust it by 1-second increments on the touchscreen.
- Avoid overfilling the hopper.







Scan to view training videos

WARNING: Unplug your Machine before every cleaning & MAINTENANCE and always use machine in a well ventillated area.

# CLEANING & MAINTENANCE



# **Getting Started**

Regular and thorough cleaning is essential to prevent material buildup during operation. Excessive buildup can degrade your equipment over time and lead to operational issues. Cleaning Checklist

- Hopper & Auger
- Throat to Blade Chamber
- Blade Chamber
- Internal Funnel and Chute
- Blades, Screen, and Other Removable Components

#### PREPARATION

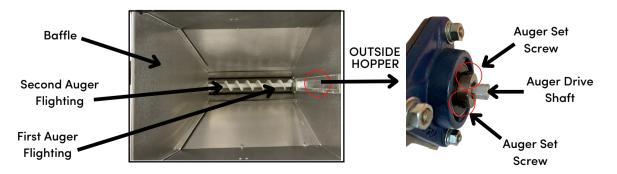
- 1. ENSURE HOPPER IS COMPLETELY EMPTY OF MATERIAL.
- 2. TURN THE RED POWER BUTTON TO THE "OFF" POSITION.
- 3. UNPLUG MACHINE FROM WALL.
- 4. ALWAYS WEAR CUT-PROOF GLOVES WHEN HANDLING ANYTHING IN THE BLADE **CHAMBER.**

#### WARNING: Unplug your Machine before every cleaning & MAINTENANCE and always use machine in a well ventillated area.



# HOPPER & AUGER - DISASSEMBLY AND CLEANING

- 1. Pull the baffle upwards to remove it.
- 2. Use a 1/8-inch Allen Wrench to loosen the set screws and remove the auger, located opposite the baffle on the hopper's outside.
- 3. Slide out the auger drive shaft from the bearing's center.
- 4. Remove both sections of the auger flighting, starting with the furthest section from the baffle, then sliding off the shorter section from the drive shaft.

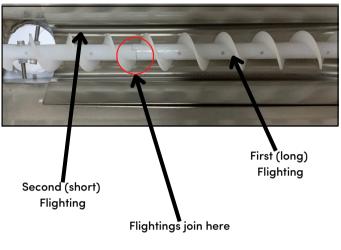


# CLEANING & MAINTENANCE

# AUGER REASSEMBLY

- 1. Attach the short flighting piece to the motor drive shaft.
- 2. Place the long flighting piece over the short one.
- 3. Slide the auger drive shaft back into the flighting through the hopper's outer bearing.
- 4. Secure both set screws on the bearing's outer side.
- 5. Replace the removable baffle above the hopper throat.

#### WARNING: Unplug your Machine before every cleaning & MAINTENANCE and always use machine in a well ventillated area.



VIDEO:



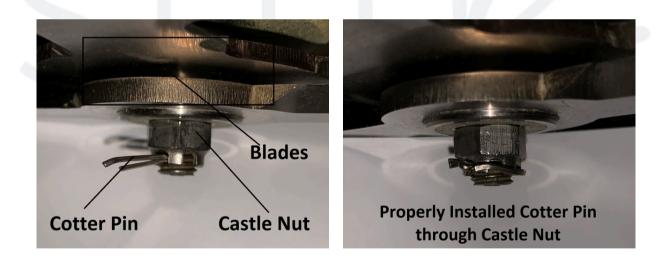
# PARTICLE SCREEN- DISASSEMBLY AND CLEANING

- 1. Remove the upper back panel by unscrewing the four Allen bolts with a 3/16" Allen wrench.
- 2. Slide the back door upward to reveal the upper inside portion of the Revolution, triggering a limit switch that activates "Emergency Stop" mode if the machine is on.
- 3. Release the hitch pins from the buckle latches and open the buckles to remove the chute.
- 4. Once the chute is lowered, use a 5/16" Allen key to loosen the four tabs and rotate them away from the screen, allowing the screen to drop.
- 5. Clean or replace the screen with the desired particle size. Thoroughly wipe down the inside of the hopper and the screen with isopropyl alcohol and a soft brush, paper towel, or microfiber rag. Avoid scraping to prevent damage.
- 6. Rotate and secure the tabs back to their original positions to secure the screen in place.

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

# **CHANGING THE BLADES**

- 1. **WARNING:** WEAR CUTPROOF GLOVES BEFORE PROCEEDINGWARNING: Unplug your Machine before every cleaning & MAINTENANCE and always use machine in a well ventillated area.
- 2. BLADES ARE EXTREMELY SHARP. DO NOT HANDLE WITH BARE HANDS. UNPLUG MACHINE BEFORE PROCEEDING.
- 3. Remove the back panel, lower the chute, and take out the particle screen.
- 4. Extract the cotter pin from the bottom of the blade shaft, passing through both the shaft and the castle nut.
- 5. Insert a screwdriver through the hole in the 4-arm blade up into the hopper's throat to halt blade rotation.
- 6. Loosen and remove the castle nut using a 9/16 open-ended wrench, as the blades will become free.
- 7. Note the blade configuration: the S-Blade uses a hat spacer on its flush side bearing for smooth rotation between blades.
- 8. To reinstall blades, slide the 4-arm blade onto the "D" shaped shaft, then place the S-Blade, ensuring the hat spacer is between them.
- 9. Securely tighten the castle nut until the cotter pin hole is visible between its crenelations.
- 10. Insert the cotter pin and bend it around the castle nut to secure it in place.





VIDEO: http://bit.ly/2mrR0sA



# SAFETY PRECAUTIONS

#### **General Safety:**

- Only trained and authorized personnel are permitted to operate STM Canna pre-roll machinery
- Never operate the machinery if you are feeling unwell, fatigued, or under the influence of drugs and alcohol
- Familiarize yourself with the machine's operating manual and emergency shutdown procedures before operation
- Keep the work area clean and free of debris
- Report any malfunctions or safety hazards immediately to the supervisor
- Do not attempt to repair or modify the machinery unless specifically authorized and trained

#### Ventilation:

- All STM Canna pre-roll machines must be operated in a well-ventilated area. Ensure adequate airflow to minimize the accumulation of dust, kief, and other airborne particles. This may require the use of a local exhaust ventilation (e.g., dust collection systems) in addition to general room ventilation
- Regularly inspect and maintain ventilation systems to ensure their effectiveness

#### Personal Protective Equipment (PPE):

- The following PPE must be worn at all times when operating or near the STM Canna pre-roll machinery
- 1. Safety glasses: ANSI Z87.1 approved safety glasses with side shields are required to protect against flying particles
- 2. Dust Mask/Respirator: A NIOSH-approved N95 or higher respirator or dust mask is required to protect against inhalation of dust and kief. (Specify the appropriate respirator type based on risk assessment and consultation with safety professionals. Higher levels of protection, such as powered air-purifying respirator (PAPR), may be required depending on the environment and materials being processed.)
- 3. Gloves: Appropriate gloves (e.g., nitrile, latex-free) should be worn to maintain hygiene and prevent contamination of the product
- 4. Hearing Protection: If noise levels exceed 85 dbA, hearing protection (e.g., earplugs or earmuffs) must be worn. Conduct a noise assessment to determine the required level of protection
- 5. Lab Coat/Smock: A lab coat or smock is recommended to protect clothing from contamination

#### Machine-Specific Safety:

- Include specific safety precautions for each model of STM Canna pre-roll machines. This should include information on emergency stops, pinch points, moving parts, electrical safety, etc. Consult the manufacturer's documentation for this information
- Never bypass or disable safety interlocks, sensors, or guards
- Ensure all guards and safety features are in place and functioning correctly before starting the machine
- Keep hands and other body parts away from moving parts
- Do not reach into the machine while it is operating
- Use caution when handling sharp objects or tools



WARNING: Unplug your Machine before every cleaning & MAINTENANCE and always use machine in a well ventillated area.

# SAFETY PRECAUTIONS CONTINUED

#### **Fire Safety:**

- Keep flammable materials away from the machinery
- Ensure fire extinguishers are readily available and personnel are trained in their use
- In case of fire, follow established emergency procedures

#### **Pre-Operation Checks:**

- Inspect the machine for any damage or missing parts
- Ensure all safety guards are in place and functioning correctly
- Verify that the area around the machine is clean and free of obstructions
- Check the material to be processed for any foreign objects
- Turn on the ventilation system
- Put on required PPE

#### **Operation:**

- Follow the manufacturer's operating instructions for the specific machine model
- Do not force any parts of the machine
- If the machine malfunctions, stop operating immediately and report the issue to the supervisor

#### **Post Operation:**

- Turn off the machine and disconnect it from the power source
- Clean the machine according to the manufacturer's instructions
- Remove and dispose of PPE properly
- Clean the work area
- Record any issues or maintenance performed in the machine's logbook

#### Maintenance:

- Regular maintenance is crucial for safe and efficient operation
- Only trained and authorized personnel should perform maintenance on the machinery
- Follow the manufacturer's maintenance schedule and procedures
- Lock out and tag out the machine before performing maintenance
- Keep maintenance records

#### **Emergency Procedures:**

- In case of emergency (e.g., fire, injury, machine malfunction), follow established emergency procedures
- Immediately stop operation of the machine
- Notify the supervisor and first responders
- Administer first aid if necessary
- Document the incident

#### **Training:**

• All personnel operation or maintaining STM Canna pre-roll machinery must receive thorough training on this SOP, machine operation, and safety procedures

### **Purchasing Terms & Conditions**

I hereby confirm that I have thoroughly reviewed and agreed to all terms and conditions herein:

- 1. I understand that 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. Due to high demands, certain items may have a lead time of 4-8 weeks or more from payment date, unless otherwise stated.
- 2. I understand and agree that following the receipt of my invoice, STM Canna must receive 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.
- 3. I understand that if a deposit is applicable for any special reason, my deposit is non-refundable.
- 4. I agree 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:

- 1. A 12-month warranty on each product that is applicable with regards to manufacturer's defects, including parts and labor.
- 2. STM Client Services department is dedicated to ensuring the success and satisfaction of all STM clients. As such, product on-boarding programs are provided to familiarize our clients with their new equipment.
- 3. STM Tech department provides our clients with all software updates, phone support and onsite support, as needed.
- 4. Training with our technicians to train your staff on best practices to accomplish your desired results for a quality finished product.
- 5. 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 & Capabilities of Equipment**

### STM RocketBox Pro, RocketBox 2.0 & STM Mini-RocketBox

With training from our on technical training staff, you can expect to receive 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.

Any and all RocketBox series machines must have liner bags in them during use or warranty will be voided. The RocketBox Pro and Mini use standard 10 gallon trash liners. The liners prevent material from getting inside the machine and for easy clean-up. The RocketBox 2.0, uses a 100 gallon liner. For more information, refer to the machines manual or reach out to Client Services.

By following the guidelines provided to you via the user manual and training, 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. Always use STM equipment in a well ventilated area and with proper PPE if needed. `

### STM Revolution 2.0 and Mini-Revolution

- With the STM Client Success Program, Pre-Grind Checklist and other guidelines provided, you will be able to achieve the highest quality and most consistent grind for your needs.
- For best results and ease of operation, humidity control is necessary. A 10% or lower moisture content is recommended. Although the Revolution may be able to operate at higher levels, it is not recommended and may cause clogs and overheating.
- Safety features are in place to ensure proper use of the machine and are meant to stop operation if handled/operated improperly. The display screen will notify the user if any features are not in the proper state.
- A regular cleaning routine should be in place to ensure proper function and longevity of the Revolution and its blades.
- A Pre-Grind Check List is conveniently located next to your display unit. (2.0. Version Only)
- Results are not guaranteed and can greatly vary from operation to operation.
- Always use STM equipment in a well ventilated area and with proper PPE if needed.

# STM LaunchPad

# Installation is to be performed by STM canna Technicians Only

Confirm the installation location meets the following criteria:

- The surface is stable, level, and vibration-free.
- Away from direct sunlight, heat sources, and drafts.
- Climate control to maintain 64° f 77° f operating temperature range with XX% humidity

- LaunchPad is accessible for routine maintenance and calibration.
- Be aware of the proximity to other equipment.
- Ensure the LaunchPad scale is positioned away from equipment that generates heat, vibration, or fumes.
- Confirm the shipping crate security seal is intact and that the LaunchPad scale has been in the final

#### Install location for 24 hours before the STM Canna technician's arrival

• Verify Power Quality:

The circuit is dedicated to the LaunchPad and has its own earth-ground probe. 110–120-volt AC at 15-20 amps. < 4VAC neutral to earth.

STM Canna supplied a UPS/Surge protector between the outlet and LaunchPad scale.

- Safety considerations: Prioritize safety during installation and operation: Follow proper lifting techniques when moving or installing the scale to avoid personal injury or damage to the equipment.
- Adhere to any safety protocols or guidelines specific to the lab environment, such as wearing appropriate personal protective equipment (PPE) when working with hazardous substances.

#### **Atomic Closer and Astro Infuser**

• Safety considerations: Prioritize safety during installation and operation: Follow proper lifting techniques when moving or installing the scale to avoid personal injury or damage to the equipment.

• Adhere to any safety protocols or guidelines specific to the lab environment, such as wearing appropriate personal protective equipment (PPE) when working with hazardous substances.

### **TERMS OF BUSINESS & WARRANTY**

Who is Covered: 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 material, quality of material, moisture content, strain, temperature, correct sized cone usage, quality of cones used, 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.

#### **Extent of Warranty:**

There are no warranties on paper products. Machines come with a 1-year parts and labor warranty. See Returns below.

#### **Troubleshooting:**

Reference your instruction sheet and double-check all instructions.

Always take time to examine problems in detail.

When all else fails, please call the STM technical support line at (509) 204-3164 or email us at clientservices@stmcanna.com.

The technical line is open 9:00am – 5:30pm Monday through Friday, Eastern Time. Please have the following information handy: Name of Company the purchase was made under, Date of Purchase, and Serial number.

#### Terms:

All orders must be paid in full before the order is placed. Order quotes expire within 7 days. STM Canna & STM Supply reserve the right to specify collection by certified check, money order, or company check. Personal checks are not accepted. 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. For international orders, border and customs-related costs are the responsibility of the purchaser.

### **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.

### **Returns:**

No Refunds/Exchanges: We do not accept returns or exchanges unless the item purchased is defective. 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.

In the event of an approved refund or exchange at STM Canna's discretion, there will be a minimum 25% restocking fee.

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 clientservices@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 2701 N Van Marter Rd Spokane Valley, WA 99206

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.

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:**

See your local dealer or contact us directly at (509) 204-3164 or email to clientservices@stmcanna.com.

