



## **Burstfire 2 in 1 Induction Case Annealer & Prep Center**

### **IMPORTANT**

**It is critical all users download and read the full operating instructions / safety manual before operating the Burstfire Case Annealer & Prep Center Combo**

- Improper use of this machine may lead to serious injuries or property damage. Such as injury/damages from burns, case failure, primer detonation, accidental fire, electrical shock, and etc.
- Burstfire Induction annealer is NOT self serviceable by the user. Under no circumstances should you, the user, open the unit and access the internal parts. The unit runs on high voltage, enough to cause serious injuries or DEATH.
- We are NOT medical professionals. Please consult with your medical team if your medical device is safe to use in the vicinity of this machine. We do not recommend it if it may potentially cause interference with it.
- Please visit our website for step-by-step instructional videos:  
<https://burstfireguns.com/pages/tutorial>
- In the case you transfer ownership of this unit, please ensure a copy of this safety notice, or a copy of the operating / safety manual is included with this unit.
- If you have any questions, or require technical support, reach out to us at:  
Email: [Info@Burstfireguns.com](mailto:Info@Burstfireguns.com)

## What's included

- Burstfire 2 in 1 Annealer & Prep Center
- Water Reservoir - Water cooling system (recommend using welding coolant).
- Red Anodized - Standard & Magnum Size Wheels

## IMPORTANT - SAFETY INSPECTION BEFORE USE– Please read this carefully.

Read and comply with the instructions and warnings in this manual and familiarize yourself with the machine before each use. Review instructions and warnings periodically to maintain awareness. Do not try to operate before reading instructions.

### !!! SAFETY WARNING!!!

- When using an induction annealer for brass cases, prioritize safety by annealing only empty / spent, and de-primed cases. Check all cases to ensure they do not have live primer, powder, and bullet, making it potentially hazardous / dangerous igniting and setting off the primer, powder, or the round.
- Do not use this machine to anneal anything besides empty brass cases. Ensure the unit is dry and not wet, and use proper PPE, such as heat-resistant gloves, safety glasses, and hearing protection. Especially when handling hot annealed brass.
- **Separate Area:** Anneal brass in a separate area, away from your reloading bench or where power, primer, live ammo, or any flammable products such as cleaning solvents, lube, etc, as the process can generate hot debris that could ignite powder, primer, live ammo, or any flammable and/or hazardous products.
- **De-primed Cases Only:** Never anneal primed cases, as the heat could cause the primer to detonate.
- **Dry Environment:** Keep the unit dry and unplug it immediately if it gets wet. Clean and dry up and wet spots inside and outside the machine, allowing it to thoroughly dry before use.
- **No Other Objects:** Do not heat anything other than empty and spent brass with the induction annealer, including primer cases (live or dead primer), screws, aerosol cans, air tanks, or any sealed containers.
- **Sensitive Electronics:** Handle the unit with care, as it contains sensitive electronics and is not designed for rough handling or excessive shock.
- **Ventilation:** Ensure the ventilation holes are clear and unobstructed. Always use the machine in a well ventilated area.
- Induction annealers may contain electromagnetic interference, which can affect other electrical devices. Use with caution especially around medical devices. We are NOT

medical professionals. We recommend that you consult with your medical team if your medical device is safe to use in the vicinity of this machine. We do not recommend it as it may potentially cause interference.

- Personal Protective Equipment (PPE): Heat-Resistant Gloves: Wear heat-resistant gloves when handling hot parts, as the brass and surrounding area will be hot after annealing.
- Protective Clothing: Wear appropriate protective clothing to prevent burns.
- Safety Glasses or Face Shields: Must wear Safety glasses or face shield for protection against any hazard.
- During Operation:
  - Check Equipment before using the annealer, check the equipment for any damage, water leak, or other issues.
- **Cooling:** Allow the brass to cool down naturally after annealing, and avoid quenching in water.
- **Remove stuck Case:** When removing a stuck case from the shell holder wheel, first turn off the machine by switching the power off. Ensure you have your safety gear on, give it a moment for the brass to cool down before attempting to unstuck the case, retrieve the brass and reset the machine.
- **\*\*\*Keep Metal Items Away:** Keep metal jewelry and other metal items away from the head/coil during operation. Metal near the coil (even outside of it or near it), will react to the heating coil and heat up very quickly, causing serious injuries, property damage, and potentially death.
- Follow Instructions: Always follow the manufacturer's instructions for safe operation and maintenance.
- Once the power and water pump to the annealing function is running, the heating coil is on a constant heating mode as long as metal is present.
- It is highly recommended to use a coolant for the water tank, or distilled water, and check the temperature periodically to ensure it is within acceptable temperature range. If overeating, turn off the machine and allow it to cool down before using the annealing function of the machine again.
- **\*\*\*Annealer Heating Coil will only heat up if the water pump is on and running. Please ensure water reservoir is full at all times**
- **CHECK POWER SETTING ON BACK OF MACHINE BEFORE PLUGGING IN!** - BY DEFAULT, the machine is set to 115V. If you plug a machine set to 115V to a 230V outlet, it will cause permanent damage to the machine and will NOT be covered under warranty. Check your voltage and set machine to proper settings **BEFORE PLUGGING IN** and powering up the machine!
- **\*\*\*The operator must be present and monitoring the machine at ALL TIMES to ensure reliable operation of the machine, and turn off the machine immediately if there is a malfunction. Clear the malfunction while ensuring all the above safety precautions are followed. Failure to do so may potentially cause serious injuries/death/property**

damage. Burstfire is not responsible for injuries / death / damages due to the misuse / failure to properly inspect the equipment prior to each use.

## **IMPORTANT - ELECTRICAL SHOCK WARNING**

KEEP IN MIND, Burstfire Annealer / Prep Center is an ALL STEEL unit, and will conduct electricity if other devices or electricals may be faulty.

**\*\*\*IF YOU FEEL A MINOR ELECTRICAL SHOCK THROUGH THE UNIT, AND SUSPECT ANY ELECTRICAL PROBLEMS, PLEASE CONSULT YOUR LOCAL ELECTRICIAN IMMEDIATELY! UNPLUG THE UNIT, AND ANYTHING PLUGGED IN NEAR IT!**

Burstfire units are built in with surge protectors, and meet the highest level of electrical safety standards and certifications. But electrical shock as a result of OTHER faulty units, or outlets may be possible. Again, because Burstfire is an all steel unit, it may conduct electricity, even if the bottom feet are rubberized.

Always wear proper footwear (ideally with rubberized soles) when operating electronics. Make sure there are no damaged wires, damaged outlets, and no potential hazard, such as water, is present in the area.

Below we will walk you through some possible scenarios, to help your electrician isolate where the issue may be coming from. BUT IT IS STILL HIGHLY RECOMMENDED TO CONSULT DIRECTLY WITH YOUR ELECTRICIAN.

### **Examples:**

When operating the unit, and you feel a tingly sensation, it is important to identify if it's just vibration from the case prep center, or it's an electrical shock.

UNPLUG AND CONSULT AN ELECTRICIAN IMMEDIATELY. IT IS LIKELY AN INDICATION OF FAULTY PLUGS OR OTHER UNITS NEAR IT.

### **Scenario 1 - Faulty BF Annealer:**

- If you suspect it is the machine, electrician and do testing, and isolate the issue by:
  - Testing the machine on different plugs, to eliminate the possibility of a faulty plug. Especially the outdated 2 prong outlets (2 prong outlets do not have a ground)
  - Make sure the machine is on a non-conductive surface. Wood, etc. Metal tables can potentially conduct electricity from other sources.
  - Once you are able to isolate the machine, your electrician can begin testing to determine if the unit is the issue.
  - \*\*\*Again, our unit meets the highest electrical safety standards and certifications. We have not had any confirmed reports of electrical issues with our unit. Will update if this status changes.

### **Scenario 2 - Faulty Outlets:**

- Older 2 prong outlets (2 prong outlets do not have a ground wire), and are often faulty given the time they have been around.
- Power Fluctuation is a possible indicator.
- Follow steps in Scenario 1 to test.

### **Scenario 3 - Other faulty units:**

- It may be conducting electricity through the table or other sources, and to your unit (if it's a conductive material)
- Unplug all appliances / electrical equipment from the working area, and begin isolating the potential cause / unit.

### SETTING UP THE UNIT:

- Before getting started on the next steps, please make sure you are following the below safety precautions. If unsure, reread the full safety instructions / warning above again:
  - You are wearing your safety glasses
  - Wear heat resistant gloves
  - No water is near you or the unit to avoid electrical shock when plugging the unit into the electrical outlet. **\*\*\*If you have a metal table that can conduct electricity from other sources, we recommend you unplug all the devices near it. Our unit is ALL STEEL, and will conduct electricity if the other units, or faulty plugs are bleeding electricity. Old 2 prong outlets are not grounded.**
  - \*\*\*And all safety precautions mentioned in the safety warning and also here in this section.

Once you've gone through the safety inspection steps to ensure your machine and its parts are safe to operate, and also taken the above safety wear and measure above...., follow the below instructions to set up your unit for use.

1. Burstfire Induction Annealer comes fully assembled minus the water reservoir.
2. An "IN" and "OUT" indicator can be located on the rear panel of the machine, and also on the water reservoir lid. Plug the hose as indicated into the reservoir lid.
3. Fill up the water reservoir with coolant for optimal performance, or distilled water.
4. Proper maintenance including keeping the coils from overheating is critical to the longevity of the induction coils.
5. Prior to each use, without any brass running through the machine, cycle the machine with annealer power ON, and "water pump" turned on, to allow the coolant to cycle through the machine for at least 30 seconds. This is a good time to check the function of the machine, ensuring proper function, correct brass disk setting, wheel size used, water leakage, etc. After cycling, check to ensure water level is maxed filled to the top at 90% full.
6. After completing all steps, turn **OFF** the water pump to deactivate the induction heating, and power down the machine by moving the power button to the center position.
7. Now with the machine completely powered off, select the correct wheel for the brass you are going to anneal.
  - a. Standard wheel will accommodate cases with base diameter <12.5mm
  - b. Magnum Wheel will accommodate cases with base diameter <15.5mm

8. **Multi-Caliber Disk:** The case holder disk will accommodate cases from 223 and up to 338. There are 4 slot dimensions on the disk, turned by hand. Select the slot that will best accommodate your brass case by hand feeding it down the center tube. It should NOT be a tight / close fit. It should have a little bit of room to prevent the heat from heated brass deforming the disk.
9. **Height Adjustment Knob:** Once the correct disk size is selected, you will now use the height adjustment knob to set the correct height according to the brass case used. The height adjustment knob is adjusted by hand by screwing clockwise and counterclockwise. Once the height is set, use the lock ring to lock in the height position. Please refer to the video guide on our tutorial page for the optimal case adjustment.
10. **Function Test:** At this point, we will test function of the machine without the heating function turned on by leaving the water pump in “**OFF**” position. As a safety feature, the heating coil will not activate unless the water pump is turned on and coolant is cycling through the machine.
  - a. Grab a handful of brass, and stack it onto the feed chute.
  - b. Turn the power to the “Annealer” position to power on the machine, and test cycle the brass through the machine to ensure it is feeding reliably, and ensure 100% function.
11. Once all testing is done, the final step will be power on the machine, turn on the water pump and begin annealing.
12. Water temperature of 20°C / 70°F is ideal, not exceeding 38°C / 100°F is generally recommended to ensure effective cooling without causing excessive heat buildup or damage to the annealer.
13. If the water temperature is too high, the annealer's components could overheat, potentially leading to damage or reduced lifespan. Allow the machine to cool before using it again.
14. **Room Temperature:** A cool ambient room temperature (around 70°F/20°C) is also beneficial for optimal annealer performance.
15. **Avoid Direct Sunlight:** Avoid using the annealer in direct sunlight or high-temperature conditions, as this can further increase the ambient temperature and potentially affect performance.

## OPERATION:

- \*\*\*To avoid any confusion, it is critical all users watch the instruction video on the tutorial page on our website regarding proper care and operations of our annealing / case prep machine. Take extra precaution when operating the machine. Improper use can lead to property damage, injuries, or death. **DO NOT LEAVE THE UNIT UNATTENDED AT ANY TIME.**

## Digital Speed Controller w/ Knob:

- Below we will walk through how to control the rotation speed of the motor / annealing wheels.
- The **ONLY** purpose of the digital speed control LCD is simply to display the speed. It can go from 0 to 100..
- Turning the knob Clockwise, will increase the speed
- Turning the knob Counterclockwise, will decrease the speed
- This will set your annealing time.

## ANNEALING OPERATION:

### TIPS:

- **Annealing should always be done BEFORE sizing your brass**
  - **Ensure brass is free of ANY chemicals or lube prior to annealing.**
    - **Chemical or lube on brass cases may potentially cause brass to go through the dezincification process when heated, and weaken the brass.**
1. Make sure the power switch is in the **Center / OFF** before plugging into the wall outlet.
  2. Visually and physically inspect all parts and attachments to ensure they are properly installed, and free of any defect or damages. If damaged, **STOP. DO NOT USE UNTIL DAMAGED UNIT IS REPAIRED / REPLACED.**
  3. Always perform a function test to ensure function, setting, and reliability before turning on the power and water pump to begin annealing.
  4. \*\*\*If this is the first time you are annealing this caliber, headstamp, etc of brass, we highly suggest following these steps before you begin annealing.
    - a. Insert 5 or more brass you will use for testing / verification purposes. Insert the brass you are using for testing purposes within the chute / funnel on top.
    - b. Once 100% reliability and function is verified, you can now stack the brass to set your annealing time / speed by turning the water pump to the **ON** position and begin the annealing process.
    - c. You do not need to "sacrifice" any brass. Start with a faster speed (setting 95), and slowly decrease the speed, thus increasing the annealing time until you find the correct

setting for a proper anneal (drop case as soon as the inside of the case neck turns orange). You can always anneal it again if under annealed, but you will ruin your case and if over annealed.

- d. **Warning:** Burstfire Induction Annealer is a powerful 1500W system, unlike any on the market. It will anneal 223 cases in 2 seconds, VS 8 seconds on other induction annealers. Take this into consideration when setting your annealing time / speed.
- e. \*\*\*Now that you're annealing, please be present and monitor the process. If malfunction happens (stuck case, double feed, etc), turn the water power and power off immediately and clear the malfunction once its safe to do so (allow brass to cool or use heat resistance gears).

### **CASE PREP CENTER OPERATION:**

1. Make sure the power switch is positioned **OFF** before plugging into the wall outlet.
2. To turn the case prep center on, simply turn the power to the on position marked "**Case Prep**"
3. Attach any 8-32 thread case prep attachments to each of the heads you are looking to use by screwing in clockwise. To remove, unscrew it counterclockwise.
  - a. If the prep tool is stuck, turn the bit counterclockwise by hand in ¼ turn burst. It will loosen up eventually.
  - b. A quicker, alternative option is to lock the bit onto a hand drill, and reverse it out with just a quick short press.
4. The case prep process can only be used upright with the attachments facing up. **DO NOT LAY THE MACHINE DOWN** with the tool bits facing you.
5. **ANSWERING A COMMON CONCERN:**
  - a. \*\*\*Brass shavings **WILL NOT** interfere with annealing wheels / operation. When standing upright, 95% of shavings will fall right below the attachment. Anything that falls outside of it is quite minimal, and most caught by the chute, which can be easily wiped off with a finger tip or a small brush.
  - b. Wheel design has space between, so anything shavings would fall right through. The steel rod attached to the wheel is a circular design, and shaving does **NOT** build up in this area.

## **Warranty on Burstfire Product Line:**

### **Q: IS THERE WARRANTY ON YOUR PRODUCTS?**

**Burstfire Induction Annealer / Case Prep Center:** Lifetime warranty on the hardware (case, screws, bolts, handle bar motor, etc) from defects in workmanship. Wear and tear, misuse / abuse of the item are not covered by the warranty.

1yr warranty from purchase date on electronic components (heating board, fan, power supply, etc).

Any attempt to tamper with the unit, modifications including disassembling any components will void the warranty.

**Burstfire Case Prep multi tool:** Lifetime warranty on the hardware (handle and heads) from defects in workmanship. Wear and tear, misuse / abuse of the item are not covered by the warranty.

For warranty info and questions, please email [info@burstfireguns.com](mailto:info@burstfireguns.com)