

OVERVIEW

A polisher is a machine or tool used to enhance the appearance and smoothness of various surfaces, typically through the process of polishing. It is designed to remove imperfections, scratches, or other blemishes from surfaces and create a glossy or reflective finish.

The module will provide comprehensive guidance on how to convert a bench grinder into a polishing machine. Users will learn how to secure the grinder to the workbench, remove the outer guard, and detach the lock nut and washers. They will also be guided through the process of attaching spindle adapters and connecting the polishing pad. The module will cover the selection and application of various polishing compounds specific to different metals. Emphasis will be placed on the importance of thorough preparation and the use of polishing mops for different stages of the polishing process. Finally, users will be introduced to the final finishing step using a cloth to remove any remaining residue, fingerprints, or smudges, resulting in a polished surface with a mirror-like shine. By following the instructions presented in this module, users will acquire valuable knowledge and skills to effectively utilize a polisher machine and achieve impressive polishing results on a variety of surfaces.



Materials used for the polisher:

Metal is used as the work piece for the machine

Important parts of the band saw:

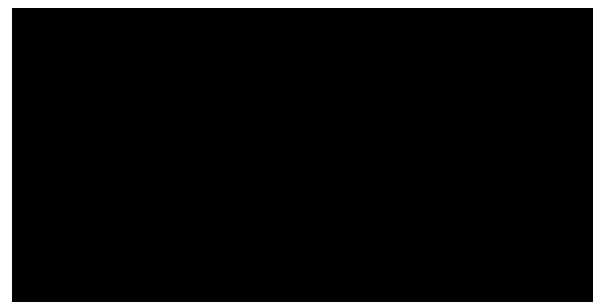
1. Motor: The motor provides the power needed to rotate the polishing pad or disc.

2. Polishing Pad or Disc: This is the part that comes into direct contact with the surface being polished. It can be made of various materials, such as foam, wool, or microfiber, depending on the application.

3. Spindle or Shaft: The spindle or shaft connects the motor to the polishing pad or disc. It transfers the rotational motion from the motor to the pad.

4. Handle or Grip: The handle or grip allows the user to hold and control the polisher machine during operation. It provides a comfortable and secure grip to ensure precise handling.

5. Power Switch: The power switch is used to turn the polisher machine on or off. It allows the user to control the machine's operation conveniently.



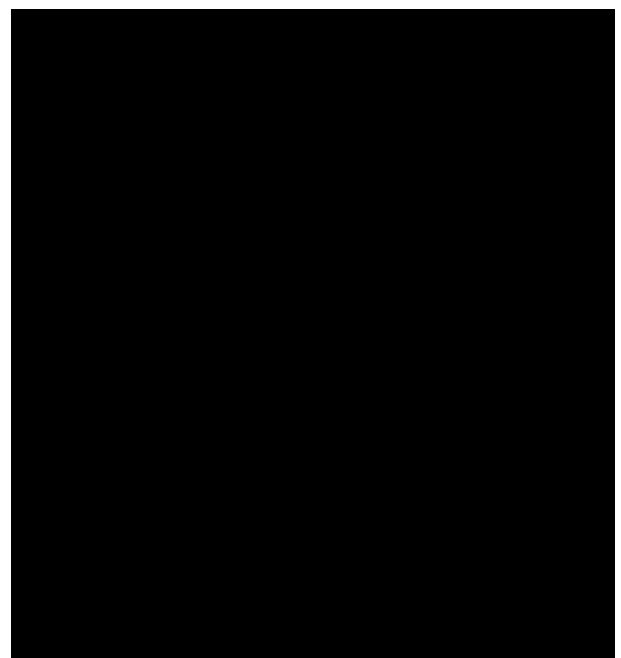
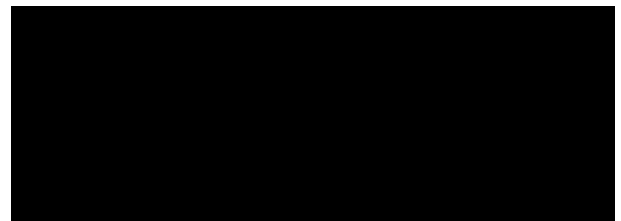
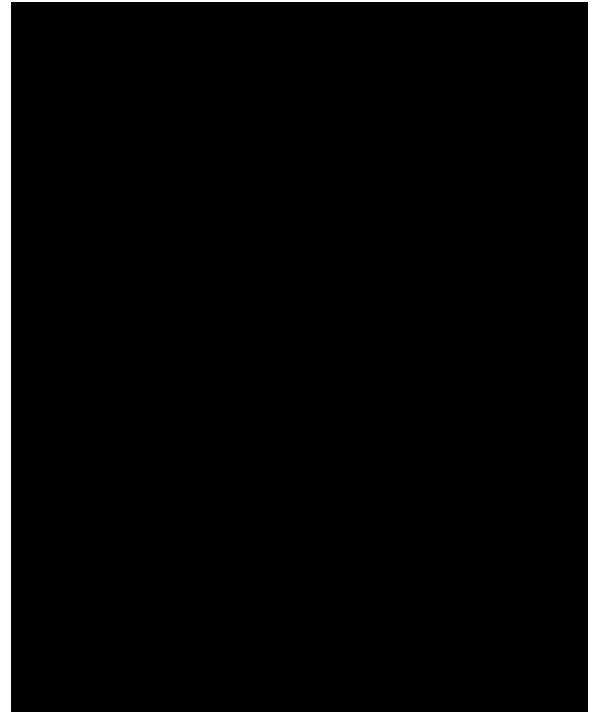
6. Speed Control: Many polisher machines come with speed control options that allow the user to adjust the rotational speed of the polishing pad. This feature is particularly useful when working on different materials or for specific polishing requirements.

7. Housing or Body: The housing or body of the polisher machine encloses the motor and other internal components, providing protection and stability. It is typically made of durable materials like plastic or metal.

8. Cord or Power Source: The cord connects the polisher machine to a power source, such as an electrical outlet. It supplies the necessary electricity to run the motor.

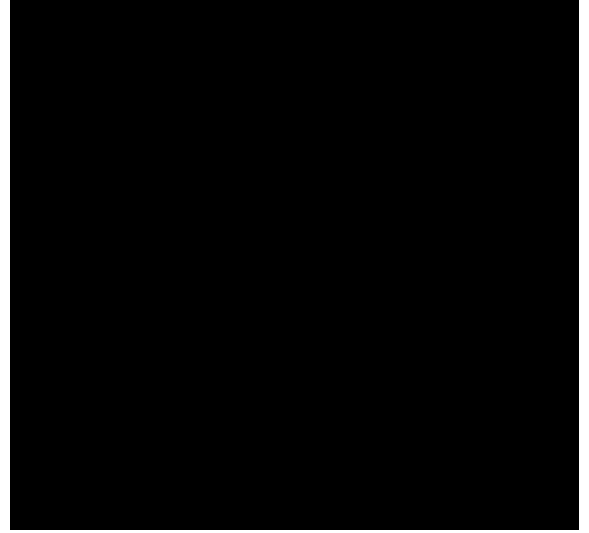
How to convert a bench grinder into a polishing machine

- Ensure that the bench grinder is securely fastened to your work bench, to prevent it from moving.
- Remove the outer guard of the bench grinder by unscrewing the screws
- Remove the lock nut and washers from the machine
- Then, take out the inner screws.
- Keep all the removed components (screws, outer guard, lock nut) together.
- Hold your spindle adapters and attach them to the bench grinder. Use a grub screw to secure the adapter to the shaft, preventing it from coming off.
- Connect your polisher to the spindle adapter.
- Make sure the faces of the polisher are correctly positioned; the back should have screws and nails while the heads are on the front, facing outward.
- Install the polisher mop onto the shaft, and you're ready to begin.



Basic range of polishing mops

- For polishing hard metals and initial cutting, use the appropriate-sized metal polishing mop.
- The color stitch mop is suitable for initial cutting with specific compounds and for finishing on soft metals.
- The G loose fold polishing mop is used for final finishing.
- An abrasive mop can be utilized before polishing.
- Note: Proper preparation is the key to successful polishing.
- There is also a range of compounds for aluminum, steel, and stainless steel. For aluminum, we have brown and blue compounds, with brown used for the initial cut and blue for the final finishing. For steel and stainless steel, we provide the black, green, and white compounds. Black is used for the first cut, green is for finishing on steel, and white is for the final finishing on stainless steel."
- There is also a piece of cloth used for the final polish, which removes grease and finger marks, giving the piece a finished look.

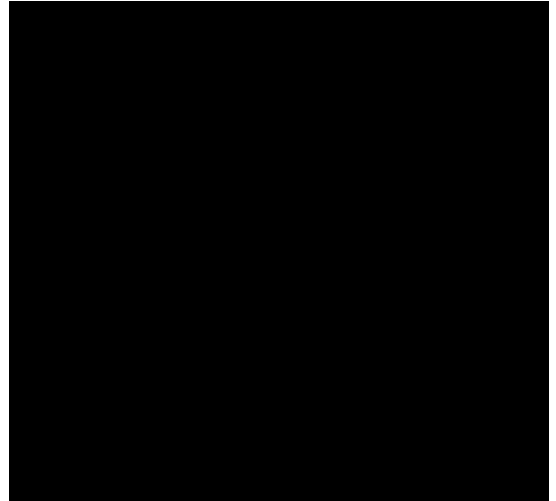


Procedures on how to use the polisher machine

Now that the polisher mop is set, follow these steps to polish:

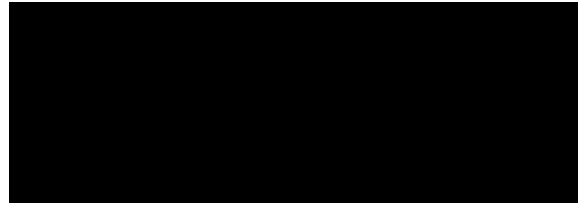
1. Apply compound to the mop.

- Remember not to overload the mop with compound; a small amount is sufficient.
- Turn on the machine and select the appropriate compound based on the material being polished.
- For aluminum, use the brown compound and position it at approximately the 4 o'clock position on the polishing mop while the machine is running.



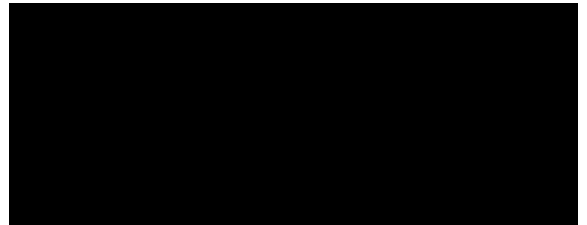
2. Prepare your workpiece.

- Place the metal piece on the rotating polisher and start polishing the desired surface.



3. Prepare the color stitch mop.

- Remove the polishing mop and replace it with the color stitch mop.
- Ensure that the mop is attached to the spindle adapter correctly, with the head facing outward.



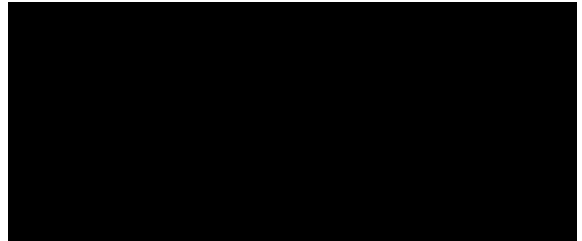
4. Apply compound to the mop.

- This time, use the blue compound for the aluminum material being polished.



5. Prepare your workpiece.

- Position the metal piece on the rotating mop for polishing.



6. Finishing.

- You may notice that the final polish gives a dull shine.
- Use a piece of cloth to remove any remaining chips or grease and continue wiping until you achieve a mirror-like finish.

