### INSTRUCTIONS ON HOW TO USE BUFFING WHEELS AND COMPOUND

This manual outlines the essential procedures for using 8-inch diameter treated cloth buffing wheels and specific compounds to achieve a mirror finish on steel. By following these guidelines, users can ensure safe and effective polishing. Keep in mind that continuous practice and attention to detail are key to mastering the buffing process. Feel free to consult this manual as a reference, and happy buffing!

### **SAFTEY PRECAUTIONS**

**Use proper PPE:** Always wear appropriate safety gear such as gloves, eye protection, and a dust mask. Remove any loose clothing that may come into contact with buffer.

Flanges must be used with all buffing wheels. They are essential for:

- 1. Stability: Ensuring the buffing wheel stays centered and stable during operation.
- **2. Protection**: Preventing the buffing wheel from dismantling or coming off the shaft during high-speed rotations.

**How to use flanges:** Place one flange against the buffing wheel's backside. Slide the buffing wheel onto the shaft. Position the other flange against the front side of the buffing wheel. Tighten securely, ensuring that the wheel is centered and tightly sandwiched between the flanges.

## **BUFFING BASICS**

**Breaking in the Buffing Wheel with a Rake:** Before applying the compound, use a buff rake to break in and remove any loose fibers. Gently touch the rake to the spinning wheel to break it in.

# **Application of Buffing Compound**

- 1. Use 1 Compound per Wheel: Each wheel must be dedicated to one specific compound unless the previous compound is thoroughly raked out.
- **2. Applying Compound**: Gently press the compound to the spinning wheel's surface for a few seconds. Start with a small amount and add more as needed during the buffing process.

Periodic Raking: Regularly rake the wheel before and during use to ensure that old compounds are removed.

**Inspect and Clean:** Periodically inspect the buffed surface for desired finish quality. Clean the buffing wheel and knife blade between buffing stages to remove excess compound residue and prevent cross-contamination.

**Final Inspection:** Once buffing is complete, inspect the knife blade under natural light to evaluate the mirror finish quality. Address any remaining imperfections or scratches with additional buffing as needed.

### **COMPLETE FOUR STEP BUFFING PROCESS**

- Step 1: Ultra Heavy Cut Orange buff with Black Compound (after 150-180G finish on grinder)
- Step 2: Heavy Cut Pink Buff & Pink C104 Compound (after 400G finish on grinder)
- Step 3: Medium Cut Green Bluff with Blue VOLEX Compound
- Step 4: Final Mirror Finish White Buff with White MX5 COMPOUND

### **BUFFING TIPS**

- **1. Maintain a consistent direction of movement, moving the blade in one direction.** This helps ensure an even distribution of buffing action across the blade's surface, leading to a more uniform finish.
- **2. Start with Light Pressure to gauge effectiveness and the blade's response.** This initial step allows you to assess how the buffing compound interacts with the surface and how the blade reacts to the buffing action.
- **3. Gradually Increase pressure while maintaining consistency.** As you become more familiar with the buffing process, gradually ramp up the pressure to achieve the desired results, ensuring uniformity across the blade's surface.
- **4. Avoid Excess Pressure, prioritizing control over speed.** Applying excessive pressure can lead to overheating, material removal, and potential damage to the buffing wheel or blade. Maintain a balanced approach to achieve optimal results.
- 5. Adjust pressure based on feedback from the wheel and blade. Pay attention to the buffing action and any vibrations or signs of overheating and make necessary adjustments to the pressure to ensure a smooth and consistent buffing process.
- **6. Hold the knife firmly but not too tightly to avoid fatigue and maintain control.** A secure grip is essential for safe and effective buffing, providing stability and control throughout the process.
- 7. Keep the knife blade perpendicular to the buffing wheel to ensure even buffing. Proper positioning helps distribute the buffing action evenly across the blade's surface, resulting in a uniform finish.
- **8. Be aware of the blade's edge orientation to prevent accidental contact and injury.** Keeping the edge facing away from the buffing wheel helps avoid potential accidents and ensures a safe buffing process.
- **9. Periodically check the blade's surface and make necessary adjustments.** Regular inspection allows you to assess the finish quality and make any grip or technique adjustments to achieve optimal results.
- **10. Take your time to achieve the desired mirror finish, avoiding rushing.** Buffing requires patience and precision to achieve professional-quality results, so take your time and work methodically through each step of the process.
- **11. Apply gentle pressure for the final stages to achieve a flawless mirror finish.** As you approach the final stages of buffing, use finesse and light pressure to refine the finish and achieve a pristine mirror-like shine.