



Safety and Maintenance Guide for Industrial Bench Grinding wheel and Polishing machines – Stefani S.r.l.

This guide is a brief summary of the safety and maintenance operations essential for using your Stefani S.r.l industrial bench grinder or professional bench polisher: **always refer to the complete manual in your possession.** Correct operating procedures and regular maintenance are essential to ensure operator safety, machine efficiency and durability. Our **Stefani machine tools** are entirely made of cast iron for maximum strength and reliability, a symbol of **Italian quality** and a guarantee of precision.



Via Villorresi 71 - 20029 Turbigo MI
P.IVA e C.F. 11336420150
Tel. +39.0331.899144
Fax +39.0331.890178
info@stefanisrl.it - www.stefanisrl.it

QUICK REFERENCE

KEYNOTE: SECURITY IS YOUR PRIORITY. Before switching on or using the machine, it is IMPERATIVE that you carefully read the entire content of the use and maintenance manual provided by Stefani S.r.l.

This manual contains essential and irreplaceable information regarding the safety of installation, use and maintenance. It is an integral part of the machine and its careful storage for future consultation is mandatory. Incorrect installation, use or maintenance can cause serious damage to persons, animals or property, for which the manufacturer cannot be held responsible. **Your safety, and that of your employees, depends on this careful reading. The machine must be used by personnel who are trained and informed of all aspects of the permitted operations, as well as specifically trained.**

1. PERMITTED AND PROHIBITED USES

Permitted Uses

- **Double wheel bench grinder - combination bench grinder:** dedicated to material removal, professional grinding and tool sharpening on all types of metal, from steels to cast iron. Ideal for, deburring and metal finishing in mechanical workshops and metal craftsmen.
- **Professional bench polisher / bench brusher – combined grinding machine with wheel and brush:** Polishing and cleaning at various levels of any type of metal using brushes or fabric wheels. Used extensively in sectors such as mechanical workshops, craftsmen, eyewear (e.g. “polishing and buffing wheel passing” for manual finishing and polishing), musical instruments, design.

Prohibited Uses

- Connection to a non-compliant electrical supply line.
- Use in outdoor, damp places or in explosive atmospheres.
- Apply excessive pressure on the grinding wheel or brush/polishing wheel
- Use the side surfaces of the grinding wheels, which are not designed for such use.
- Use without or with improperly installed safety guards.
- Operate under hazardous or malfunctioning conditions.

WARNING: Only one operator is required to operate the machine during machining. The presence of other personnel is only possible during the loading/unloading, transport and installation phases.

2. BEFORE USE: Essential Pre-Operation Checks for Maximum Safety

A. Positioning of the Machine (Bench Grinder / Bench Polisher): The working area must be suitable in terms of both environmental and lighting conditions

- Choose the installation site carefully so that the machine is not in line with doors, entrances and transport routes and that any fragments or debris of the abrasive, in the event of breakage, are not thrown towards people.
- Allow space of at least 1 meter around the machine.
- Check that the ground/bench is stable.
- The work area should be well lit and clean.
- Fix the machine firmly to the bench / ground.
- **MANDATORY:** Install sign with type, quality, maximum speed of use (rpm) and maximum diameter of the abrasive wheel.

B. Visual Inspection and Connections

- Check the stability and integrity of the machine.
- Check that the guards and covers are in place and intact.
- Make sure that the spark guards / transparent splinter guard and workpiece rest (for grinders) are firmly fixed and adjusted (max. distance 2 mm from the grinding wheel).
- Check power cable and plug (no damage) and grounding system.



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C. Grinding Wheels and Brushes Control

Grinding Wheels (for Grinders / bench grinding wheel and combined bench grinders)

- **Pre-Assembly:** Visually inspect and perform the **Sound Test** (clear sound = healthy abrasive wheel). **Do not install damaged grinding wheels!**
- **Speed compatibility:** The speed of the shaft must not exceed that of the grinding wheel.
- **Correct Installation:** Grinding wheel correctly fitted and tightened.
- **Test Before Use:** Test the grinding wheel at the speed of use, clear area and guards in place.

Brushes, cotton discs, felt wheels and in general buffing and polishing discs (for bench polisher)

- Check collar diameter. **It is forbidden to fix the brushes with flanges gripping the filaments.**
- Check the general condition of the brush and the tightness of the filaments.

D. MANDATORY Personal Protective Equipment (PPE) for Industrial Grinders and Polishers

- **Gloves for mechanical hazards, safety glasses or face visor, safety footwear, earmuffs or earplugs** (if necessary)
- **Tight-fitting clothing. No rings, bracelets, jewelry. Hair containment caps.**

3. DURING USE: Operate with Safety, Precision and Concentration

- **Start:** Switch on the machine and wait for the grinding wheel/brush to reach full speed before starting any operation.
- **Workpiece Positioning:** Place the workpiece firmly on the workpiece rest or against the brush. Hold the workpiece with both hands, NEVER with one hand, you risk losing control of the workpiece.
- **Moderate pressure:** Press down gently, without forcing.
- **Constant Motion:** Move the workpiece for even wear and prevent overheating of the workpiece.
- **Cooling:** Cool down periodically (if necessary).
- **Concentration:** Work with maximum attention. Do not allow use by incompetents.
- **Anomalies/Emergencies:** Switch off immediately (atypical noises, malfunction, grinding wheel breakage / brush damage).
- **Grinding wheel breakage:** If an abrasive wheel breaks, check guards, flanges, shaft and nuts.

4. AFTER USE: Cleaning and Routine Maintenance to maximize service life

- **Power off:** Press stop button or emergency mushroom button. Wait for complete stop.
- **Disconnecting:** Disconnect the machine from the mains before cleaning/maintenance.
- **Cleaning:** Keep work area clean, remove dust with vacuum cleaner or brush. **AVOID compressed air jets.**
- **Component wear check and ordinary maintenance**
 - **No lubrication required**
 - **Wheel/Brush Wear check:** Check the integrity and wear of the **grinding wheel** and/or brush.
 - **Workpiece rest adjustment (for grinders):** Check and adjust the distance (max. 2 mm from the grinding wheel).
 - **Dressing and Changing Wheels/Brushes:** (See detailed procedures in the complete manual)
 - **Faults:** Do not attempt to eliminate faults yourself. Contact dealer/manufacturer.

5. EXTRAORDINARY MAINTENANCE AND ASSISTANCE FOR Stefani machine tools

- For qualified service, extraordinary maintenance or repairs of your **bench grinders** and **bench polisher**, contact the dealer or Stefani S.r.l. directly.

Safety is your responsibility. Work in a smart way, work safely!

