# User Manual for 45 Degree Plate Chamfering Machine

#### 1. Introduction

The 45 Degree Plate Chamfering Machine is designed to create chamfers on metal plates, typically at a 45° angle. It is ideal for preparing edges for welding or for aesthetic purposes in fabrication.

### 2. Features

- Adjustable cutting depth and angle (45°).
- Simple and intuitive control panel.
- Robust motor for efficient cutting.
- High precision for uniform chamfering.
- Safety features including emergency stop and safety guards.

#### 3. Safety Precautions

- Always wear appropriate personal protective equipment (PPE), including safety glasses, gloves, and hearing protection.
- Ensure that the machine is grounded and the power supply is stable.
- Do not bypass any safety guards or switches.
- Keep the work area clean and dry.
- Always turn off the machine and disconnect the power supply before performing maintenance or adjustments.

#### 4. Machine Setup

- 1. **Power Supply**: Connect the machine to the correct power source (check voltage requirements).
- 2. **Workpiece Placement**: Place the metal plate securely on the work table, ensuring it is aligned with the machine's cutting path.
- 3. Adjust the Chamfer Angle: Set the chamfer angle to 45° by adjusting the angle guide.
- 4. Set Cutting Depth: Adjust the cutting depth using the depth control knob to the desired level.
- 5. **Safety Guards**: Ensure that all safety covers and shields are in place before starting the machine.

## **5. Operation Instructions**

- 1. Turn On: Press the main power switch to turn on the machine.
- 2. **Start Cutting**: Engage the feed mechanism and the cutting tool by pressing the start button.
- 3. **Monitor Operation**: Ensure that the plate remains aligned and the machine operates smoothly.
- 4. **Stop the Machine**: Once the chamfering process is complete, press the stop button to turn off the machine.

## 6. Maintenance

- **Cleaning**: Regularly clean the machine after use, especially around the cutting area to prevent metal dust buildup.
- **Lubrication**: Lubricate moving parts according to the manufacturer's recommendations.
- **Blade Inspection**: Check the cutting blades for wear and tear. Replace them if they are dull or damaged.
- **Regular Checkups**: Perform routine checks on the motor, bearings, and electrical components to ensure proper operation.

# 7. Troubleshooting

- Machine Not Starting:
  - Check the power connection and ensure the emergency stop button is disengaged.
  - Check the fuses and circuit breakers.
- Inconsistent Chamfering:
  - Ensure the workpiece is properly aligned.
  - Check the cutting depth settings and adjust if necessary.
- Excessive Vibration:
  - Ensure that all parts are properly tightened.
  - Inspect the motor and bearings for damage.

### 8. Technical Specifications

- Motor Power: 1 hp
- Chamfering Angle: 15 to 45°
- Min Plate Thickness: 10 mm
- Max Plate Width: 500 mm
- **Voltage**: 440 v
- Weight: 50 kg

## 9. Contact Information

For further assistance, spare parts, or troubleshooting:

- Manufacturer Name: Shree tech SPM Industries •
- Phone Number: 9922901049
- Email Address: shreetechspm@gmail.com
  Website: www.shreetechspmindustries.com