

Happybuy W01-1.0X320

Happybuy Slip Roll Machine W01-1.0X320 User Manual

Model: W01-1.0X320

1. SAFETY INSTRUCTIONS

Read all safety warnings and instructions carefully before operating this machine. Failure to follow these instructions may result in serious injury.

- **Always wear appropriate personal protective equipment (PPE)**, including safety glasses and gloves, when operating the slip roll machine.
- **Keep hands and fingers clear of the rollers** during operation to prevent pinching or crushing injuries.
- **Ensure the machine is securely mounted** to a workbench or stable surface before use.
- **Do not exceed the machine's maximum capacity** for material thickness or width. Refer to the Specifications section.
- **Inspect the machine for any damage** or loose parts before each use. Do not operate if damaged.
- **Keep the work area clean and well-lit**. Cluttered or dark areas invite accidents.
- **Do not allow untrained personnel** to operate the machine.
- **Ensure the gear guard is properly installed** and secured before operation.



Figure 1.1: Stainless Steel Gear Guard. This guard protects users from accidental contact with the gears and helps maintain the machine's durability.

2. PRODUCT OVERVIEW

The Happybuy Slip Roll Machine W01-1.0X320 is designed for rolling and bending sheet metal, including low carbon steel, copper, and aluminum alloy. It features a 12.6-inch forming width and a 20-gauge capacity, making it suitable for various metal fabrication tasks.



SILKY SMOOTH ROLLER SURFACE

Single-Pass Sheet Metal Rolling, Smooth and Uniform

Figure 2.1: Slip Roll Machine in Operation. Demonstrates the machine's capability for single-pass sheet metal rolling, producing smooth and uniform results.

Key Features:

- **Precision Roller Adjustment Knobs:** Allows for accurate adjustments to accommodate various sheet metal thicknesses.
- **Enhanced Roller Surface Technology:** Precision-ground rollers reduce friction and increase stability, minimizing scratches on the sheet metal.
- **Minimum Rolling Diameter of 1.25 Inches:** Capable of rolling sheet metal down to a small diameter, ideal for detailed work.
- **Integrated Stainless Steel Gear Guard:** Protects users from accidental gear contact and extends machine durability.
- **Easy-to-Remove Upper Roller:** Simplifies retrieval of processed workpieces.
- **Dual Rollers with Three Grooves:** Suitable for versatile wire forming tasks.



PROCESSING ROLLS AS SMALL AS 1.25"

Ideal for Precision Work, Meeting a Wide Range of Needs

Figure 2.2: Rolled Metal Pipes. Illustrates the machine's capacity to roll materials down to a minimum diameter of 1.25 inches, suitable for precision work.

3. COMPONENTS LIST

Verify that all components are present before beginning assembly or operation.

- 1 x Slip Roll Machine (Main Unit)
- 1 x Handle
- 1 x Planker
- 4 x Adjusting Bolts
- 1 x User Manual (This document)

4. SETUP

4.1 Unpacking

1. Carefully remove all components from the packaging.

2. Inspect all parts for any signs of damage during transit. Contact customer support if any damage is found.
3. Retain packaging materials for future storage or transport.

4.2 Assembly

1. Attach the handle to the designated shaft on the side of the machine. Secure it firmly.
2. Install the plunker (material guide) onto the machine using the provided adjusting bolts. Ensure it is level and secure.

4.3 Mounting the Machine

For stable and safe operation, the slip roll machine must be securely mounted to a sturdy workbench or surface. The machine supports bench vise installation.



Figure 4.1: Bench Vise Installation. Mounting the machine in a bench vise enhances strength and stability during rolling operations.

1. Position the machine on your workbench.
2. Secure the machine using a bench vise or by bolting it directly to the workbench through the mounting holes. Ensure it is tight and does not wobble.

5. OPERATING INSTRUCTIONS

5.1 Material Preparation

1. Ensure the sheet metal is clean and free of burrs or sharp edges that could damage the rollers or cause injury.
2. Cut the material to the desired width and length, ensuring it does not exceed the machine's maximum roll length of 320 mm (12.5 inches).

5.2 Roller Adjustment

The machine features precision adjustment knobs for controlling the gap between the rollers and the rolling radius.



Figure 5.1: Precision Adjustable Roller Knob. Use these knobs to precisely set the rolling radius and accommodate different sheet metal thicknesses.

1. Loosen the locking nuts on the adjustment knobs.
2. Turn the adjustment knobs to set the desired gap between the rollers. A smaller gap will result in a tighter bend or smaller diameter roll.

3. For initial passes, set a slightly larger gap and gradually decrease it with subsequent passes to achieve the desired curvature.
4. Once the desired setting is achieved, tighten the locking nuts to secure the rollers in place.

5.3 Rolling Process

1. Carefully feed the leading edge of the sheet metal between the upper and lower rollers.
2. Turn the handle clockwise to advance the material through the rollers. Maintain a steady, even pace.
3. For a complete cylindrical roll, continue feeding and turning until the entire sheet has passed through.
4. For partial bends, stop turning when the desired curvature is achieved.

5.4 Workpiece Removal

The upper roller can be easily detached to simplify the retrieval of processed workpieces.

1. Once rolling is complete, loosen the upper roller's securing mechanism.
2. Carefully lift or pivot the upper roller to create enough space to remove the formed workpiece.
3. Remove the workpiece and then secure the upper roller back into its operating position.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Happybuy Slip Roll Machine.

- **Cleaning:** After each use, clean the rollers and machine body to remove any metal shavings or debris. Use a dry cloth or soft brush.
- **Lubrication:** Periodically apply a light machine oil to the gears and moving parts to ensure smooth operation and prevent rust.
- **Inspection:** Regularly check all bolts and fasteners for tightness. Ensure the gear guard is securely in place. Inspect rollers for any signs of wear or damage.
- **Storage:** Store the machine in a dry, clean environment when not in use to prevent corrosion.

7. TROUBLESHOOTING

This section addresses common issues you might encounter during operation.

- **Problem: Material is not rolling smoothly or is slipping.**
Solution: Ensure the roller adjustment knobs are set correctly for the material thickness. The gap might be too wide. Also, check if the material is clean and free of obstructions.
- **Problem: Uneven bend or roll.**
Solution: Verify that the roller adjustment knobs are set evenly on both sides. Ensure the material is fed straight and consistently.
- **Problem: Machine is difficult to operate or handle is stiff.**
Solution: Check for any obstructions in the gears or rollers. Apply lubrication to moving parts as described in the Maintenance section. Ensure the machine is securely mounted and not flexing.
- **Problem: Scratches on the material.**
Solution: Ensure the rollers are clean and free of debris. Inspect rollers for any nicks or damage. The enhanced roller surface technology is designed to minimize scratching, but proper cleaning is essential.

8. SPECIFICATIONS

Detailed technical specifications for the Happybuy Slip Roll Machine W01-1.0X320.

Specification	Value
Model Number	W01-1.0X320
Net Weight	10.1 kg (22.2 lbs)
Product Dimensions (L x W x H)	420 x 80 x 170 mm (16.5 x 3.14 x 6.69 in)
Maximum Roll Length	320 mm \pm 5 mm (12.5 \pm 0.2 in)
Maximum Roll Width	320 mm (12.5 in)
Main Material	Q235 & 45# Steel
Upper Roller Diameter	30 mm (ϕ 1.18 in), 45#, 21 HRC
Lower Roller Diameter	30 mm (ϕ 1.18 in), 45#, 21 HRC
Color	Gray (Painted Surface Treatment)

Model: **W01-1.0X320**

Maximum Rolling Width: **12.5 in / 320 mm**

Roller Working Length:
12.5 + 0.2 in/ 320 mm ±5 mm

Upper Roller: Diameter: **1.18 in/ 30 mm**

Lower Roller: Diameter: **1.18 in / 30 mm**

Surface Treatment and Color:
Painted, Gray

Main Material: **Q235,45#**

Product Weight:
Net Weight: **22.2 lbs / 10.1 kg**

Product Dimensions: **16.5x3.14x6.69 in/420x80 x170 mm**

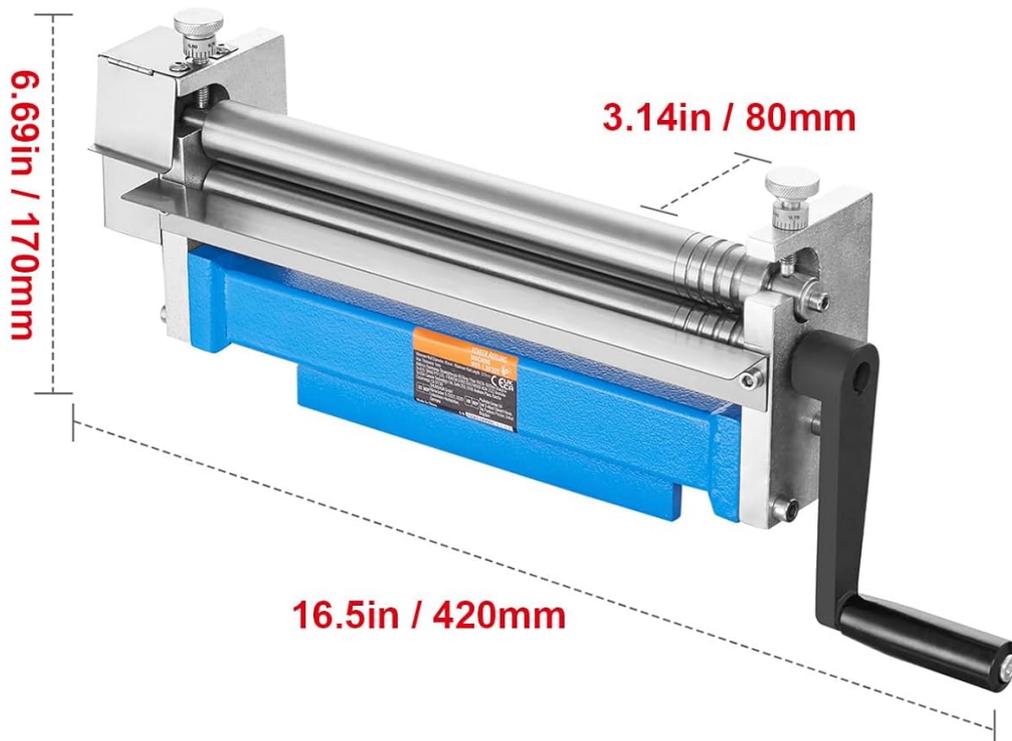


Figure 8.1: Product Dimensions. Visual representation of the machine's key measurements.

9. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the Happybuy official website or contact your retailer. Keep your purchase receipt as proof of purchase.

For further assistance, please contact Happybuy customer service with your product model number (W01-1.0X320) and a detailed description of the issue.