

## Holzmann WP20PLUS

# Holzmann WP20PLUS 20 Ton Hydraulic Workshop Press User Manual

Model: WP20PLUS

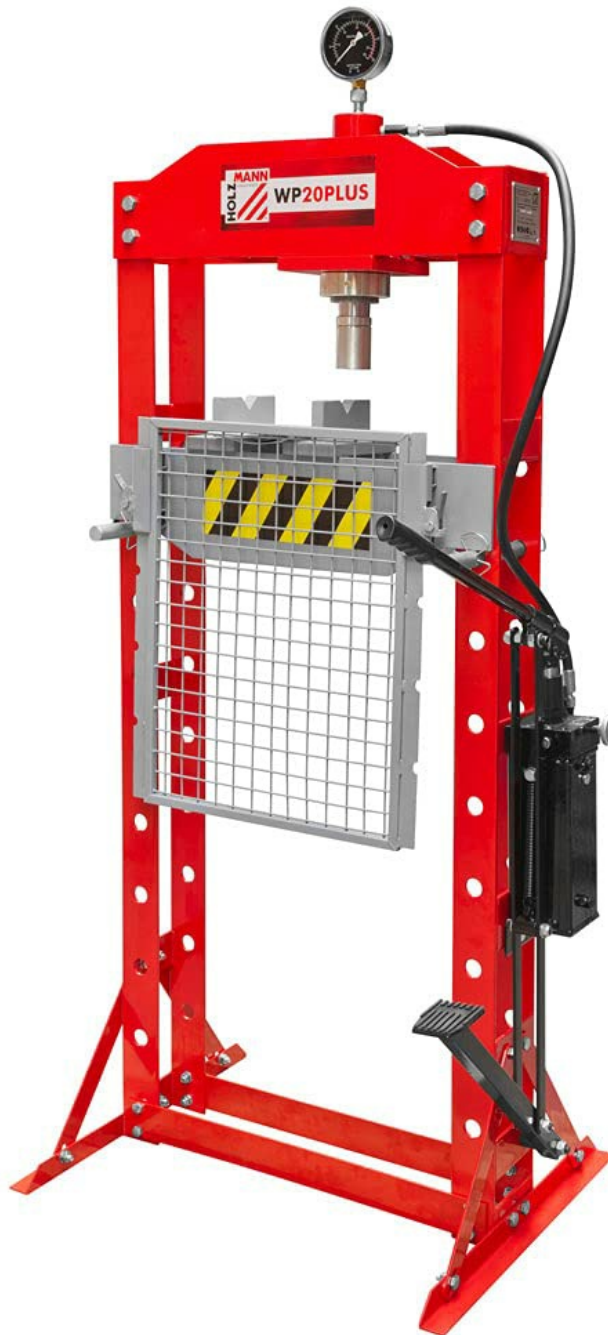
## 1. SAFETY INSTRUCTIONS

Read and understand all safety instructions before operating the Holzmann WP20PLUS hydraulic press. Failure to follow these instructions may result in serious injury or property damage.

- **Personal Protective Equipment (PPE):** Always wear safety glasses, gloves, and appropriate protective clothing when operating the press.
- **Work Area:** Ensure the work area is clean, well-lit, and free from obstructions. Keep bystanders at a safe distance.
- **Stable Surface:** Mount or place the press on a stable, level, and strong surface capable of supporting its weight and the maximum pressing force.
- **Authorized Personnel:** Only trained and authorized personnel should operate this equipment.
- **Overloading:** Never exceed the maximum rated capacity of 20 tons. Overloading can damage the press and cause injury.
- **Workpiece Stability:** Always ensure the workpiece is securely positioned and stable before applying pressure. Use appropriate fixtures or supports.
- **Hydraulic System:** Regularly inspect hydraulic hoses, fittings, and the cylinder for leaks or damage. Do not operate with a damaged hydraulic system.
- **Maintenance:** Perform regular maintenance as described in this manual. Disconnect power (if applicable) and relieve pressure before performing any maintenance or adjustments.
- **Emergency Stop:** Familiarize yourself with the procedure to quickly release pressure in an emergency.

## 2. PRODUCT OVERVIEW

The Holzmann WP20PLUS is a robust 20-ton hydraulic workshop press designed for various tasks such as pressing, bending, straightening, mounting, and dismounting bearings, shafts, and other components. Its durable frame and construction ensure reliable performance in workshop and garage environments.



**Figure 1:** Holzmann WP20PLUS 20 Ton Hydraulic Workshop Press. This image shows the complete assembly of the hydraulic press, including the frame, hydraulic cylinder, hand pump, and adjustable work table.

### Key Features:

- **20 Ton Capacity:** Provides ample force for demanding workshop applications.
- **Durable Construction:** Solid frame designed for long-term use.
- **Manometer:** Integrated pressure gauge to monitor applied force.
- **Manual Hand Pump:** For precise control over the pressing operation.
- **Adjustable Work Table:** Height can be adjusted to accommodate various workpiece sizes.
- **Automatic Piston Return:** Cylinder automatically retracts after pressure release.
- **Safety Grille:** Equipped with a safety grille, compliant with European Directive 2006/42/EG.

### 3. SETUP

Careful setup is essential for safe and efficient operation. Follow these steps for initial assembly and installation.

1. **Unpacking:** Carefully unpack all components and check against the packing list. Report any missing or damaged parts immediately.
2. **Frame Assembly:** Assemble the main frame components according to the included assembly diagrams. Ensure all bolts are securely tightened.
3. **Mounting:** Position the assembled press on a firm, level, and stable floor. For permanent installation, consider bolting the press to the floor using appropriate anchors (not included).
4. **Hydraulic Pump Installation:** Attach the hand pump to the designated location on the press frame. Connect the hydraulic hose from the pump to the cylinder inlet, ensuring all connections are tight and leak-free.
5. **Fill Hydraulic Fluid:** If the hydraulic system is not pre-filled, add the recommended hydraulic fluid to the reservoir. Refer to the fluid specifications for the correct type. Ensure the fluid level is within the specified range.
6. **Bleeding the System:** Before first use, operate the pump several times without a workpiece to bleed any air from the hydraulic system. The cylinder should extend and retract smoothly.
7. **Work Table Adjustment:** Adjust the height of the work table to a suitable position for your typical tasks. Ensure the locking pins are fully engaged.
8. **Safety Grille Installation:** Install the safety grille as per the instructions to ensure compliance and operator protection.

## 4. OPERATING INSTRUCTIONS

Follow these steps for safe and effective operation of your Holzmann WP20PLUS hydraulic press.

1. **Preparation:**
  - Ensure all safety instructions have been reviewed.
  - Wear appropriate PPE.
  - Check the hydraulic fluid level.
  - Verify all connections are secure.
2. **Adjust Work Table:** Adjust the work table height using the locking pins to position the workpiece at an optimal distance from the cylinder ram. Ensure both pins are fully inserted and secured.
3. **Position Workpiece:** Place the workpiece centrally on the work table or on appropriate V-blocks/supports. Ensure it is stable and will not shift during pressing.
4. **Apply Pressure:** Close the release valve (if applicable, typically by turning clockwise). Operate the hand pump handle to extend the hydraulic cylinder ram. Observe the manometer to monitor the applied pressure. Apply pressure gradually and evenly.
5. **Monitor Operation:** Continuously observe the workpiece and the press during operation. If any unusual sounds or movements occur, immediately release pressure.
6. **Release Pressure:** Once the pressing operation is complete, slowly open the release valve (typically by turning counter-clockwise) to retract the cylinder ram. The piston will return automatically.
7. **Remove Workpiece:** Once the ram is fully retracted, safely remove the workpiece.

## 5. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your hydraulic press.

- **Daily Checks:**

- Inspect for visible damage, leaks, or loose connections.
- Check the hydraulic fluid level.
- Ensure the work table locking pins are functioning correctly.

- **Monthly Checks:**

- Lubricate all moving parts, including the pump mechanism and cylinder rod, with appropriate grease or oil.
- Inspect the frame for any signs of stress, cracks, or deformation.
- Check the manometer for accurate readings.

- **Hydraulic Fluid Replacement:** Replace hydraulic fluid annually or as recommended by the fluid manufacturer, or if it appears contaminated. Use only the specified type of hydraulic fluid.

- **Seal Inspection:** Periodically inspect hydraulic seals for wear or damage. Replace worn seals promptly to prevent pressure loss.

- **Cleaning:** Keep the press clean and free from dirt, dust, and debris. Do not use harsh chemicals that could damage seals or painted surfaces.

## 6. TROUBLESHOOTING

This section provides solutions to common operational issues. For problems not listed here, contact customer support.

Problem	Possible Cause	Solution
Press does not build pressure.	<ul style="list-style-type: none"> <li>◦ Release valve is open.</li> <li>◦ Low hydraulic fluid level.</li> <li>◦ Air in the hydraulic system.</li> <li>◦ Damaged pump or seals.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Close the release valve.</li> <li>◦ Add hydraulic fluid to the correct level.</li> <li>◦ Bleed the hydraulic system.</li> <li>◦ Inspect and replace damaged components.</li> </ul>
Cylinder ram does not retract automatically.	<ul style="list-style-type: none"> <li>◦ Release valve not fully open.</li> <li>◦ Obstruction or friction on the ram.</li> <li>◦ Internal cylinder issue.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Ensure the release valve is fully open.</li> <li>◦ Check for any obstructions and clean the ram.</li> <li>◦ Contact customer support for internal repairs.</li> </ul>
Hydraulic fluid leaks.	<ul style="list-style-type: none"> <li>◦ Loose fittings.</li> <li>◦ Damaged seals or hoses.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Tighten all hydraulic fittings.</li> <li>◦ Replace damaged seals or hoses immediately.</li> </ul>

## 7. SPECIFICATIONS

Technical data for the Holzmann WP20PLUS Hydraulic Workshop Press.

- **Model:** WP20PLUS
- **Pressing Force:** 20 Tons
- **Cylinder Stroke:** 145 mm
- **Working Range (Height):** 58 mm to 1080 mm
- **Max. Working Width:** 540 mm

- **Cylinder Diameter:** 53.20 mm
- **Machine Dimensions (L x W x H):** 760 x 600 x 1663 mm
- **Net Weight:** 102 Kg
- **Gross Weight:** 129 Kg
- **Compliance:** European Directive 2006/42/EG

## 8. WARRANTY AND SUPPORT

The Holzmann WP20PLUS Hydraulic Workshop Press comes with a **2-year warranty**, excluding wear parts. This warranty covers manufacturing defects and material faults under normal use.

For technical assistance, spare parts, or warranty claims, please contact your authorized Holzmann dealer or Holzmann customer support. When contacting support, please provide your model number (WP20PLUS) and the date of purchase.

*Note: Information regarding spare parts availability is currently unavailable. Please contact Holzmann support for specific inquiries.*