

Edwards PDM21

Edwards Manufacturing 21mm Metric Punch & Die Set (PDM21)

Model: PDM21

1. INTRODUCTION

This manual provides essential instructions for the safe and effective use, setup, operation, and maintenance of your Edwards Manufacturing 21mm Metric Punch & Die Set, model PDM21. Please read this manual thoroughly before using the product to ensure proper function and to prevent injury or damage.

2. PRODUCT OVERVIEW

The Edwards PDM21 is a standard metric round punch and die set designed for creating 21mm holes in various materials. It consists of two primary components: the punch and the die. This set is engineered to fit into a standard punch holder (not included).



Image 1: The Edwards 21mm Metric Punch and Die Set. The image displays two metal components: a punch (left) with a pointed tip and a cylindrical body, and a die (right) which is a thicker, flat cylinder with a central hole. The punch is marked

Components:

- **Punch:** A 21mm diameter component designed to cut through material. It features a pointed tip for accurate centering.
- **Die:** A 21.8mm diameter component that supports the material and allows the punch to pass through, ensuring a clean cut.

3. SETUP

Proper setup is crucial for safe operation and optimal performance. Always ensure the power to the punch machine is disconnected before installing or removing tooling.

1. **Safety First:** Wear appropriate personal protective equipment (PPE), including safety glasses and gloves. Ensure the punch machine is powered off and locked out according to safety procedures.
2. **Inspect Components:** Before installation, inspect both the punch and die for any signs of damage, wear, or debris. Clean if necessary.
3. **Install Die:** Place the 21.8mm die into the appropriate die holder on your punch machine. Ensure it is seated correctly and securely.
4. **Install Punch:** Insert the 21mm punch into the punch ram or punch holder. Secure it firmly according to your machine's instructions.
5. **Align Punch and Die:** Carefully align the punch with the die. The punch should enter the die cleanly without interference. Adjust alignment as needed, following your punch machine's manual.
6. **Test Fit:** Manually cycle the punch machine (if possible and safe) to verify the punch enters the die without binding.

4. OPERATING INSTRUCTIONS

Once the punch and die set is correctly installed and aligned, you can proceed with punching operations. Always prioritize safety.

1. **Material Preparation:** Ensure the material to be punched is clean, flat, and free of obstructions. Mark the desired punch location accurately.
2. **Position Material:** Place the material securely on the die, aligning the marked punch location directly over the die's opening.
3. **Engage Punch:** Activate the punch machine according to its operating instructions. The punch will descend, cut through the material, and retract.
4. **Remove Material:** Once the punch has fully retracted, carefully remove the punched material and the slug (the cut-out piece).
5. **Repeat:** Continue punching as needed, ensuring proper alignment and material handling for each operation.

Safety Precautions:

- Never operate the punch machine without proper guarding in place.
- Keep hands and fingers clear of the punch and die area during operation.
- Do not attempt to punch materials beyond the capacity of your machine or the punch and die set.
- Regularly inspect the punch and die for wear or damage. Replace worn components immediately.

5. MAINTENANCE

Regular maintenance extends the life of your punch and die set and ensures consistent performance.

- **Cleaning:** After each use, clean the punch and die to remove any material residue, burrs, or debris. A wire brush or compressed air can be used.
- **Lubrication:** Apply a light coat of machine oil or a suitable lubricant to the punch and die surfaces, especially the cutting edges, to prevent rust and reduce friction.
- **Inspection:** Periodically inspect for signs of wear, chipping, or dullness on the cutting edges. A dull punch or die can lead to poor cut quality and increased stress on the machine.
- **Storage:** Store the punch and die set in a clean, dry environment to prevent corrosion. Consider using a protective case or rack.

6. TROUBLESHOOTING

Refer to this section for common issues and their potential solutions.

Problem	Possible Cause	Solution
Rough or Burred Edges	Dull punch/die, improper alignment, incorrect material support.	Inspect and sharpen/replace punch/die. Re-align tooling. Ensure material is properly supported.
Punch Sticking in Material	Lack of lubrication, excessive material thickness, worn stripper plate (if applicable).	Apply lubricant. Verify material thickness is within capacity. Check and replace stripper plate if worn.
Punch Not Centering Accurately	Misalignment of punch and die, worn punch tip.	Re-align punch and die. Inspect punch tip for wear and replace if necessary.

7. SPECIFICATIONS

Key technical specifications for the Edwards Manufacturing 21mm Metric Punch & Die Set (PDM21).

- **Brand:** Edwards
- **Model Number:** PDM21
- **Punch Diameter:** 21 mm
- **Die Diameter:** 21.8 mm
- **Operation Mode:** Manual (requires compatible punch machine)
- **Material:** Metal
- **Item Weight:** Approximately 2 Pounds (0.91 kg)
- **Package Dimensions:** Approximately 9 x 5.75 x 0.38 inches (22.86 x 14.61 x 0.97 cm)
- **UPC:** 731325582154
- **Manufacturer:** JPW Industries

8. WARRANTY AND SUPPORT



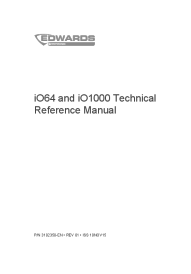
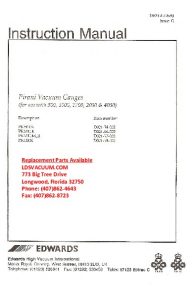
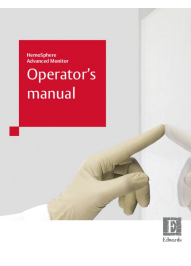
Specific warranty terms and detailed support contact information for the Edwards Manufacturing 21mm Metric Punch & Die Set (PDM21) are not provided within the available product data. For warranty claims,

technical assistance, or to purchase replacement parts, please refer to the documentation included with your punch machine or contact Edwards Manufacturing directly through their official website or authorized distributors.

You may also visit the [Edwards Store on Amazon](#) for more information.

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Related Documents - PDM21

 <p>Scroll Pumps XDS46i and XDS46iC Instruction Manual</p>	<p>Edwards XDS46i and XDS46iC Scroll Pump Instruction Manual</p> <p>Comprehensive instruction manual for Edwards XDS46i and XDS46iC dry scroll vacuum pumps, covering installation, operation, maintenance, technical specifications, safety, and troubleshooting.</p>
 <p>E2M0.7, E2M1 and E2M1.5 Rotary Vacuum Pumps Instruction Manual</p>	<p>Edwards E2M0.7, E2M1, E2M1.5 Rotary Vacuum Pumps Instruction Manual</p> <p>Comprehensive instruction manual for Edwards E2M0.7, E2M1, and E2M1.5 rotary vacuum pumps, covering installation, operation, maintenance, safety, technical data, and troubleshooting.</p>
 <p>iO64 and iO1000 Technical Reference Manual</p>	<p>Edwards iO64 and iO1000 Technical Reference Manual</p> <p>Detailed technical reference manual for Edwards iO64 and iO1000 fire alarm control panels, covering installation, wiring, programming, system operation, and reporting features.</p>
 <p>Instruction Manual</p> <p>Pirani Vacuum Gauges (PRH10K, PRL10K, PRM10K Series) Installation, Operation, and Maintenance Manual</p>	<p>Edwards Pirani Vacuum Gauges PRH10K, PRL10K, PRM10K Series: Installation, Operation, and Maintenance Manual</p> <p>Comprehensive manual for Edwards Pirani vacuum gauges, series PRH10K, PRL10K, and PRM10K. Covers installation, operation, and maintenance procedures for accurate vacuum measurement by Edwards.</p>
 <p>HemoSphere Advanced Monitor Operator's manual</p>	<p>Edwards HemoSphere Advanced Monitor Operator's Manual: Setup, Operation, and Troubleshooting</p> <p>Comprehensive operator's manual for the Edwards HemoSphere Advanced Monitor, detailing installation, system navigation, monitoring modules, advanced features, and troubleshooting for clinical use.</p>

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[SIGA-CR Control Relay Module Installation Guide | EDWARDS](#)

Official installation sheet for the EDWARDS SIGA-CR Control Relay Module. Learn about its features, wiring, specifications, and installation procedures for fire alarm systems.