

## POWERTEC 13200

# POWERTEC 13200 Bi-Metal Band Saw Blade

## Instruction Manual

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### 1. INTRODUCTION

This manual provides essential information for the safe and effective use of your POWERTEC 13200 Bi-Metal Band Saw Blade. This blade is designed for precision cutting of various materials, including non-ferrous metals, hard plastics, and wood. Adhering to these instructions will ensure optimal performance and extend the life of your blade.

The POWERTEC 13200 blade features a triple-tempered high-speed M42 cobalt steel construction for the teeth and an alloy steel backing strip for fatigue resistance. It is engineered for high precision and long-term durability.

### 2. SAFETY INFORMATION

Always prioritize safety when handling and operating band saw blades. Failure to follow safety precautions can result in serious injury.

- **Wear appropriate personal protective equipment (PPE):** Always wear safety glasses, gloves, and hearing protection when operating a band saw.
- **Unplug the saw:** Ensure the band saw is unplugged from the power source before installing, removing, or adjusting the blade.
- **Inspect the blade:** Before each use, inspect the blade for any signs of damage, cracks, or dullness. Do not use a damaged blade.
- **Proper blade tension:** Ensure the blade is correctly tensioned according to your band saw manufacturer's instructions. Incorrect tension can lead to blade breakage or inaccurate cuts.
- **Maintain blade guides:** Properly set and maintain blade guides to prevent blade deflection and ensure stable cutting.
- **Clear work area:** Keep the work area clean and free of obstructions.
- **Secure workpiece:** Always secure the material being cut to prevent movement during operation.

## WRAPPED IN BLUE-TRIM SHIELD TO PROTECT CUSTOMER WHEN OPENING



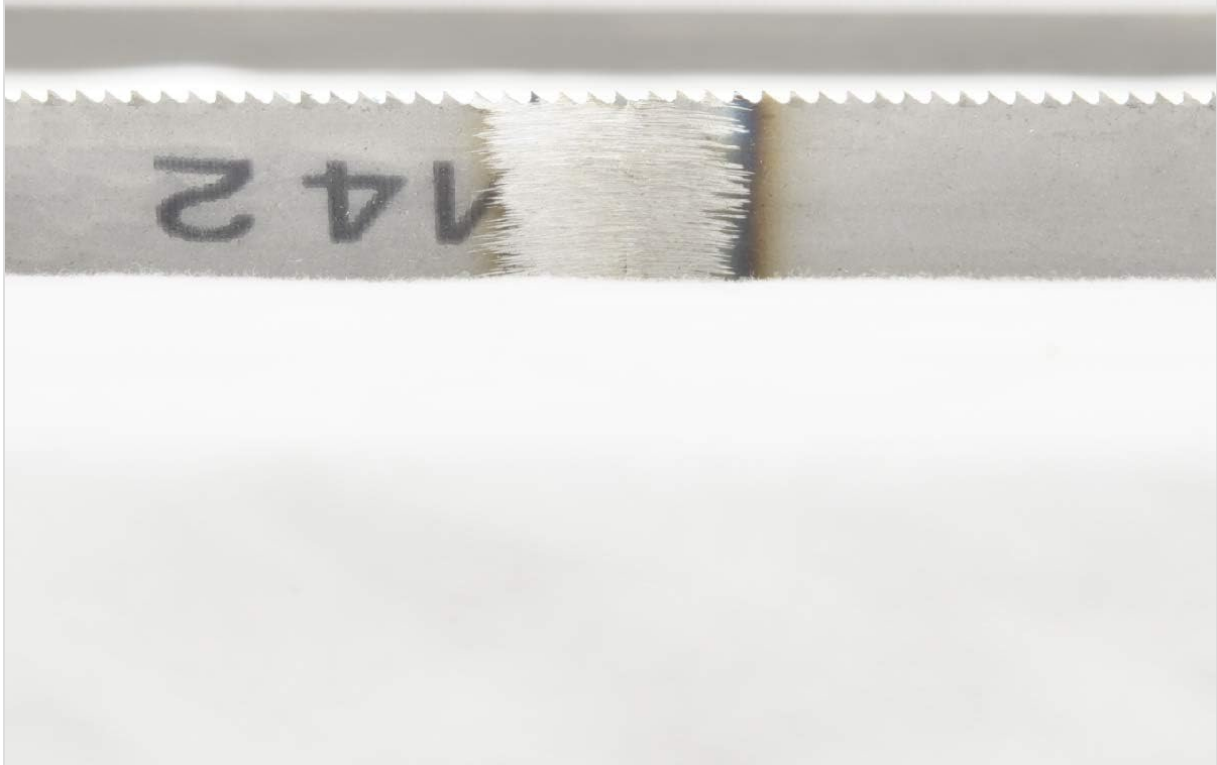
*Image: The band saw blade is wrapped in a blue protective trim to ensure safe handling during unpacking and installation.*

### 3. PRODUCT OVERVIEW

The POWERTEC 13200 Bi-Metal Band Saw Blade is designed for versatility and durability. Key features include:

- **Material:** Triple-tempered high-speed M42 cobalt steel teeth with an alloy steel backing strip.
- **Dimensions:** 56-7/8 inches long, 1/2 inch wide, with a 0.025 inch thickness.
- **Teeth Per Inch (TPI):** 14 TPI, featuring a Raker Set arrangement for efficient chip clearance and a smoother finish.
- **Welding:** Professionally engineered welding point for optimal cutting performance and blade integrity.
- **Compatibility:** Compatible with all band saws that use 56-7/8 x 1/2 inch blades, including Craftsman V.S. 24453 & Single Speed 24460, Shopcraft, and Duracraft VS312 & BBS412 models.

## SMOOTH WELDING JOINT



*Image: A close-up view of the smooth, professionally engineered welding joint on the band saw blade, indicating quality construction.*

### 4. SETUP AND INSTALLATION

Proper installation is crucial for safe operation and effective cutting. Refer to your band saw's owner's manual for specific instructions related to your machine.

1. **Power Disconnection:** Ensure the band saw is unplugged from the power source.
2. **Access Blade Area:** Open the band saw's wheel covers to access the blade area.
3. **Remove Old Blade (if applicable):** Release the blade tension and carefully remove the old blade.
4. **Install New Blade:** Carefully uncoil the new POWERTEC blade. Position the blade around the wheels, ensuring the teeth are pointing downwards towards the table.
5. **Tension the Blade:** Apply the correct tension to the blade according to your band saw manufacturer's guidelines. The blade should be taut but not overly stretched.
6. **Adjust Blade Guides:** Adjust the blade guides and thrust bearings so they are close to, but not touching, the blade. Ensure the guides are properly set to avoid damage to the teeth.
7. **Close Covers:** Close and secure all wheel covers before operating the saw.



# Bi-metal Bandsaw Blades

Premium Bi-Metal band saw blades constructed with triple-tempered cobalt high-speed steel offering precision cuts and long-term durability. Ideal for cutting soft non-ferrous metals on wood band saws at low-speed settings.

*Image: A band saw blade in operation, demonstrating proper setup for cutting a workpiece.*

## 5. OPERATING INSTRUCTIONS

This blade is suitable for cutting soft/non-ferrous metals (aluminum, copper, lead, zinc, tin), hard plastics, and most wood-based projects. Follow these guidelines for effective operation:

- **Material Selection:** The 14 TPI Raker Set is ideal for metal shaped items or tubes with a small diameter profile. It is also effective for general cutting of 3/4" wood.
- **Feed Rate:** Apply a consistent and moderate feed rate. For 14 TPI blades, a slower feed rate generally provides a smoother finish. Avoid forcing the material into the blade.
- **Blade Width:** For straight cuts, select the widest blade available for your saw. For contour or scroll work, choose a narrower blade that fits your minimum radius requirement.
- **Cutting Technique:** Allow the blade to reach full speed before beginning a cut. Guide the material smoothly through the blade, maintaining a steady pressure.
- **Coolant (for metal):** When cutting metals, consider using appropriate cutting fluid or coolant to reduce heat and extend blade life.



*Image: A detailed view of the 14 TPI Raker Set teeth, designed for efficient cutting and chip removal.*

## 6. MAINTENANCE

Regular maintenance ensures the longevity and performance of your band saw blade.

- **Cleaning:** Blades with 14 TPI or higher can accumulate saw dust or chips. Regularly clean the blade using a small brush to prevent clogging and maintain cutting efficiency. Ensure the saw is unplugged before cleaning.
- **Inspection:** Periodically inspect the blade for dullness, broken teeth, or cracks. A dull blade will require more force to cut and can lead to overheating or blade breakage. Replace dull or damaged blades immediately.
- **Storage:** When not in use, store the blade in a dry place to prevent rust. If removing the blade from the saw, coil it carefully and secure it to prevent injury.

## 7. TROUBLESHOOTING

This section addresses common issues you might encounter with your band saw blade.

Problem	Possible Cause	Solution
Blade not cutting efficiently or burning wood	Dull blade, incorrect feed rate, insufficient blade tension.	Replace blade, reduce feed rate, check and adjust blade tension.
Blade breaking frequently	Incorrect blade tension, worn blade guides, forcing the cut, wrong blade for material.	Adjust blade tension, replace worn guides, use appropriate feed rate, ensure blade is suitable for material.
Inaccurate or wandering cuts	Improperly set blade guides, dull blade, insufficient blade tension.	Adjust blade guides, replace blade, check and adjust blade tension.
Excessive vibration or noise	Loose components, incorrect blade tension, worn bearings.	Check all saw components for tightness, adjust blade tension, inspect and replace worn bearings if necessary.

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## 8. SPECIFICATIONS

<b>Model Number</b>	13200
<b>Blade Length</b>	56-7/8 inches
<b>Blade Width</b>	1/2 inch
<b>Blade Thickness</b>	0.025 inches
<b>Teeth Per Inch (TPI)</b>	14
<b>Tooth Set</b>	Raker Set
<b>Material</b>	Bi-Metal (M42 Cobalt Steel teeth, Alloy Steel backing)
<b>Compatible Materials</b>	Non-ferrous metals (aluminum, copper, lead, zinc, tin), hard plastics, wood
<b>Item Weight</b>	0.17 Kilograms
<b>UPC</b>	843441105640

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## 9. WARRANTY INFORMATION

Specific warranty details for the POWERTEC 13200 Bi-Metal Band Saw Blade are not provided in this manual. For information regarding warranty coverage, terms, and conditions, please refer to the product packaging or contact POWERTEC customer support directly.

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## 10. SUPPORT

For technical assistance, product inquiries, or to report any issues, please contact POWERTEC customer support. Contact information can typically be found on the product packaging, the official POWERTEC website, or through your retailer.

When contacting support, please have your product model number (13200) and any relevant purchase information available.