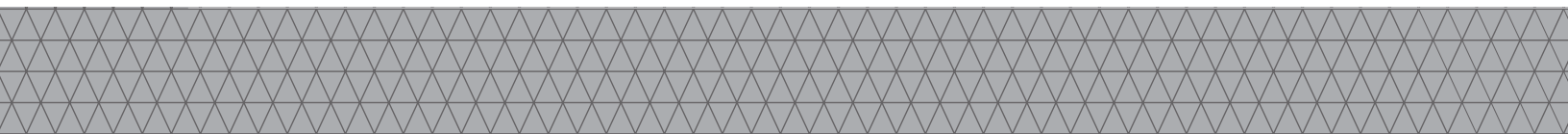




INDUSTRIAL BAND SAW BLADES





WHY MORSE

Optimal application solutions

We have a blade for any material you need to cut and offer a Guaranteed Trial Order program to give end users a commitment-free way to try our products.

Value Pricing

We are focused on the best cost per cut, not the overall blade cost. This delivers optimum value for our customers.

Product availability

We provide the best delivery in the business; order by 11 a.m., and the product will ship by the end of day, with very few exceptions.

In-person customer service

Whether you need assistance with ordering or technical information, our Canton, Ohio-based team is always just a phone call away.

Established leader, locally owned

Customers can feel good about purchasing from an American-owned company that has been servicing the industry since 1963.

Prioritizing the value of Family

At Morse, our humble beginning came from the sole desire to deliver on a promise to customers.

The ideals of delivering unmatched quality and service coveted by founders M. Kenneth and Marie Morse continue to drive the success of our business today, as they have been passed down and nurtured through multiple generations of family.

Today, Morse is led by their daughters, Nancy Morse Sonner and Sally Morse Dale, and the value of family is at the heart of every employee and customer relationship. The third generation of the Morse family, Meagan Sonner-Martino and Lisa Dale Holbrook, work side by side with their mothers and spouses to ensure the company's forward momentum.

It takes grit and drive to keep a multi-generational business positioned for continued growth. We've embraced these attributes to help our distributor partners succeed in delivering quality cutting solutions to end users.



M. K. Morse
Sally Morse Dale
Nancy Morse Sonner
Meagan Sonner-Martino
Nick Martino
Alan Holbrook
Lisa Dale Holbrook



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| Blade Selection | | Carbide Tipped | | | | | Bi-Metal | | | | | Carbide Grit | | | | | | | | | | | | | | |
|---------------------------------------|---|----------------|-----|----|----|-----|----------|-------------------|------------------|----------|---------------------|--------------|---------------|------------|---------|--------|------|---------------|---------|---------------------|--------|---------------|--------|--------|--------|--|
| | | M-Factor® | | | | | Premium | | | | | Gulleted | | Continuous | | | | | | | | | | | | |
| | | SParc | | | | | SParc | | | | | Medium | Medium Coarse | Coarse | Medium | Coarse | | | | | | | | | | |
| Category | Type | Jaw Breaker® | GES | GP | CH | FB+ | FBS | Independence® EXS | Independence® II | Maverick | The Morse Achiever® | Challenger® | Positive Rake | 6° Rake | 0° Rake | Raker | Hook | Positive Rake | 0° Rake | Raker / Wavy / Hook | Medium | Medium Coarse | Coarse | Medium | Coarse | |
| Non-Ferrous Alloys | Aluminum | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Brass | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Bronze | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Copper | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Nickel Aluminum Bronze | | | | | | | | | | | | | | | | | | | | | | | | | |
| Carbon Steel | General - i.e. 1018, 1045 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | A36 - Structural | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cast Iron | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Case Hardened | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrome Alloy Steels | i.e. 52100, 6150 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chrome Moly Steel | i.e. 4130, 4140 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duplex Alloys | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Free Machining Steel | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphite | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manganese Steel | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Molybdenum Steel | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nickel Steels, Alloys and Superalloys | Duranickel | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Nickel Alloys | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Rene | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Waspalloy | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Hastelloy | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Incoloy | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Inconel | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monel | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nickel Chrome Moly Steel | i.e. 4340, 8620 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nickel Moly Steel | i.e. 4608, 4640 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stainless Steel | General | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Austenitic | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Ferritic | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Martensitic | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tantalum | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Titanium Alloys | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tool steel | General | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Die Steels | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mold Steels | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Hot Work, Low Alloy and High Speed Steels | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Water Hardening Steels | | | | | | | | | | | | | | | | | | | | | | | | | |
| Plastics/Composites/Drywall/Laminates | Fiberglass | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Plexiglass | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Rubber | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PVC/ABS | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Composites | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Plastics | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Acoustic Ceiling Tile | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Drywall | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Computer flooring | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Countertops | | | | | | | | | | | | | | | | | | | | | | | | | |
| Laminate Flooring | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stone/Cement/Brick/Ceramics | Architectural Stone | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Asbestos Board | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Cinder Block | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Brick (masonry) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Cement Board | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Ceramics | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Porcelain tile | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Granite/Marble/Stone | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glass Block | | | | | | | | | | | | | | | | | | | | | | | | | | |

- 4
- HIGHLY RECOMMENDED
 - RECOMMENDED
 - ACCEPTABLE

SPARC is available as an option for identified products with 2/3 and coarser TPis

For further assistance in choosing the right blade for your application or to learn the operating parameters for your cutting solution, visit the BladeWizard here



BladeWizard.com

METAL CARBIDE TIPPED



LARGE BILLET PRODUCTION CUTTING

For large billet production cutting of super alloys and other hard-to-cut materials.

Features:

- Plyometric® Cutting Action for lower cost per cut
- KerfLock® Technology prevents pinching, providing extended blade life
- Higher feed rates and longer blade life allow more cutting without adding equipment or people



| Width x Thickness | | TPI | |
|-------------------|-----------|--------------------------------|-------|
| in | mm | .75/1 | 1.5/2 |
| | | Variable Pitch - Positive Rake | |
| 2 x .063 | 54 x 1.60 | ▼ | ▼ |
| 2 5/8 x .063 | 67 x 1.60 | ▼ | ▼ |
| 3 x .063 | 80 x 1.60 | ▼ | ▼ |

Users:

- Forging
- Steel mills
- Steel service centers
- Machine shops
- Test labs

Applications:

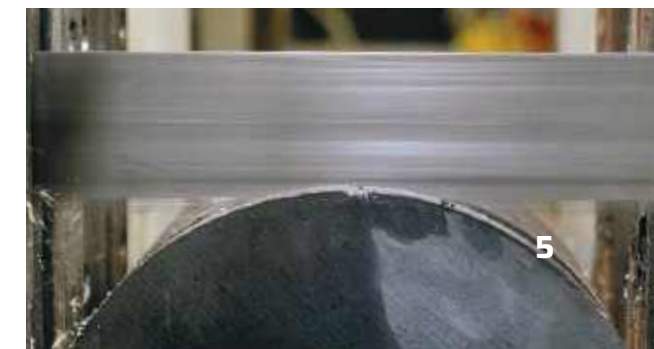
- Duplex alloys
- Nickel chrome moly steel
- Stainless steels
- Titanium alloys
- Carbon Steel
- Nickel Steels, Alloys and Superalloys
- Tool Steel
- Tantalum

Operating parameters:

- For optimal performance, Jawbreaker blades must be run at higher feed rates
- **DO NOT BREAK IN** Jawbreaker blades
- Please refer to the Morse BladeWizard for recommended feeds and speeds for materials being cut



BladeWizard.com



METAL CARBIDE TIPPED

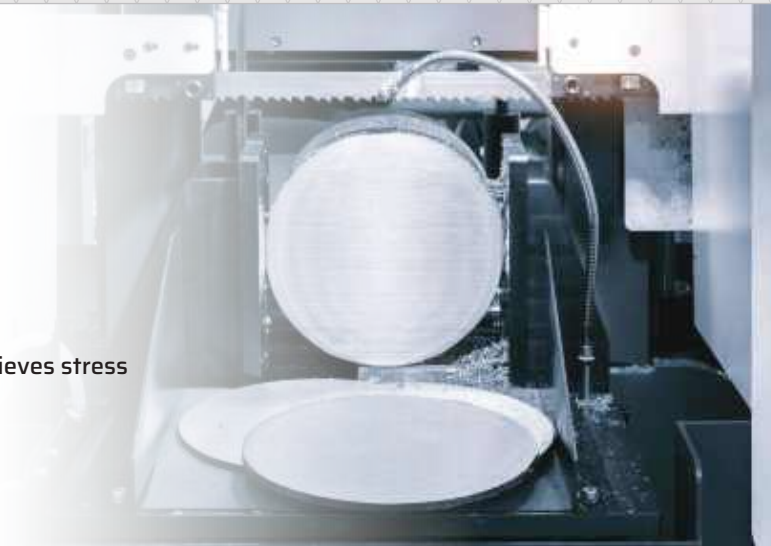


GENERAL EXOTIC SPECIALTY CUTTING

For exotic material and ferrous steel, with particular emphasis on thick wall and solid billet applications.

Features:

- Multi-chip tooth pattern reduces chip build up on tooth and relieves stress
- Kerflock® Technology prevents pinching, providing extended blade life
- Available with **SPARC** on 2/3 TPI and coarser



| Width x Thickness | | TPI | | | |
|-------------------|-----------|--------------------------------|-------|-----|-----|
| in | mm | .75/1 | 1.5/2 | 2/3 | 3/4 |
| | | Variable Pitch - Positive Rake | | | |
| 1¼ x .042 | 34 x 1.10 | | | ▼ | ▼ |
| 1½ x .050 | 41 x 1.30 | | ▼▼ | ▼ | ▼ |
| 2 x .063 | 54 x 1.60 | ▼ | ▼▼ | ▼▼ | ▼ |
| 2½ x .063 | 67 x 1.60 | ▼▼ | ▼▼ | ▼ | |
| 3 x .063 | 80 x 1.60 | ▼▼ | ▼ | | |

▼ Wide Kerf

Users:

- Steel service centers
- Forging operations
- Specialized manufacturing

Applications:

- Stainless Steel
- Tool steels
- Titanium
- Hastelloy, Inconel, Monel
- Non-Ferrous Alloys
- Carbon Steel
- Graphite



GENERAL PURPOSE CUTTING

For alloy steel and stainless steel applications.

Features:

- Longer blade life than bi-metal
- Available with **SPARC** on 2/3 TPI and coarser

| Width x Thickness | | TPI | | | |
|-------------------|-----------|--------------------------------|-------|-----|-----|
| in | mm | .75/1 | 1.5/2 | 2/3 | 3/4 |
| | | Variable Pitch - Positive Rake | | | |
| 1 x .035 | 27 x 0.90 | | | ▼ | ▼ |
| 1¼ x .042 | 34 x 1.10 | ▼ | ▼ | ▼ | ▼ |
| 1½ x .050 | 41 x 1.30 | | ▼ | ▼ | ▼ |
| 2 x .063 | 54 x 1.60 | ▼ | ▼ | ▼ | |
| 2½ x .063 | 67 x 1.60 | ▼ | ▼ | ▼ | |
| 3 x .063 | 80 x 1.60 | ▼ | ▼ | | |

Users:

- Steel service centers
- Forging operations
- General manufacturing

Applications:

- Stainless Steel
- Carbon Steel
- Non-Ferrous Alloys
- Tool Steel
- Nickel Moly Steel



CASE HARDENED

For long life and fast, smooth cutting of chrome plated, case hardened hydraulic shaft specifications.

Features:

- Impact-resistant carbide tipped tooth design
- High fatigue backer
- Ideal for materials <12", 30.5cm



| Width x Thickness | | TPI | | |
|-------------------|-----------|--------------------------------|-----|----------|
| in | mm | 2/3 | 3/4 | 3 |
| | | Variable Pitch - Positive Rake | | Straight |
| 1 x .035 | 27 x 0.90 | | ▼ | ▼ |
| 1¼ x .042 | 34 x 1.10 | | ▼ | ▼ |
| 1½ x .050 | 41 x 1.30 | ▼ | ▼ | |
| 2 x .063 | 54 x 1.60 | ▼ | | |

Users:

- Steel service centers
- Automotive parts manufacturers
- Cylinder and bearing manufacturers

Applications:

- Hydraulic shafts
- Case-hardened shafts and shapes
- Heat-treated thick wall tubing



FOUNDRY

Exceptional long life and fast cutting of abrasive and non-ferrous materials. Foundry blades available in triple chip (FB+) and set tooth (FBS).

Features:

- Set tooth design on FBS optimized for contour and radius cutting
- Triple chip tooth design on FB+ for long life
- Cuts non-ferrous and wood materials



| Width x Thickness | | TPI | |
|-------------------|-----------|----------|-------|
| in | mm | FB+ | FBS |
| | | 3 | 3 Set |
| | | Straight | |
| ½ x .025 | 13 x 0.64 | ▼ | |
| ¾ x .035 | 19 x 0.90 | ▼ | ▼ |
| 1 x .035 | 27 x 0.90 | ▼ | ▼ |
| 1¼ x .042 | 34 x 1.10 | ▼ | ▼ |

Users:

- Aluminum foundries
- Graphite manufacturers
- Furniture makers

Applications:

- Aluminum castings (gates, risers, extrusions)
- Abrasive woods, plywood
- Non-Ferrous Alloys
- Plastics
- Composites
- Laminates

METAL BI-METAL

Independence[®] EXS

HIGH PRODUCTION SOLIDS

For cutting high production solid applications.
Best bi-metal option for stainless steels and exotics.

Features:

- Can tackle a large variety of material size and width
- High positive rake reduces cutting forces, resulting in longer blade life
- Premium materials used for tooth edge and backer
- Available with **SPARC** on 2/3 TPI and coarser



| Width x Thickness | | TPI | | | | |
|-------------------|-----------|--------------------------------|-------|-----|-----|-----|
| in | mm | 1/1.5 | 1.5/2 | 2/3 | 3/4 | 4/6 |
| | | Variable Pitch - Positive Rake | | | | |
| 1 x .035 | 27 x 0.90 | | | ▼ | ▼ | ▼ |
| 1¼ x .042 | 34 x 1.10 | | | ▼ | ▼ | ▼ |
| 1½ x .050 | 41 x 1.30 | | ▼ | ▼ | ▼ | |
| 2 x .063 | 54 x 1.60 | ▼ | ▼ | ▼ | ▼ | |

Users:

- Steel service centers
- Production cutting fabrication shops
- General Manufacturing

Applications:

- High production cutting
- Large solids
- Stainless steels
- Exotics
- Plastics
- Composites
- Laminates

Independence[®] II

HIGH PRODUCTION CROSS SECTIONS

Precision cutting of small to medium cross sections.
Best option for a variety of material grades, dimensions, and shapes.

Features:

- Fatigue resistant, eliminating pre-mature breakage
- Maximum blade versatility
- Premium materials used for tooth edge and backer
- Available with **SPARC** on 2/3 TPI and coarser



| Width x Thickness | | TPI | | | |
|-------------------|-----------|--------------------------------|-----|-----|-----|
| in | mm | 2/3 | 3/4 | 4/6 | 5/7 |
| | | Variable Pitch - Positive Rake | | | |
| 1 x .035 | 27 x 0.90 | ▼ | ▼ | ▼ | ▼ |
| 1¼ x .042 | 34 x 1.10 | ▼ | ▼ | ▼ | ▼ |
| 1½ x .050 | 41 x 1.30 | ▼ | ▼ | ▼ | ▼ |
| 2 x .063 | 54 x 1.60 | ▼ | ▼ | ▼ | ▼ |

Users:

- Steel service centers
- Production cutting fabrication shops
- General Manufacturing

Applications:

- High production cutting
- Tool Steel solids
- Nickel-based Alloys
- All machinable metals in single pieces or bundles
- Stainless Steel
- Non-Ferrous Alloys
- Carbon Steel
- Nickel-Chrome Moly Steel

METAL BI-METAL

MAVERICK[®]

GENERAL PURPOSE PRODUCTION CUTTING

General purpose for production environments.
Good option for tool steels and stainless steels.

Features:

- For both production and job shops
- Designed to optimize blade longevity at targeted speeds
- Available with **SPARC** on 2/3 TPI and coarser



| Width x Thickness | | TPI | | | | | | | |
|-------------------|-----------|--------------------------------|---------|---------|-------|-----|-----|-----|-----|
| in | mm | .75/1.1 | 1.1/1.5 | 1.4/2.5 | 1.5/2 | 2/3 | 3/4 | 4/6 | 5/7 |
| | | Variable Pitch - Positive Rake | | | | | | | |
| 1 x .035 | 27 x 0.90 | | | | | ▼ | ▼ | ▼ | ▼ |
| 1¼ x .042 | 34 x 1.10 | | | | | ▼ | ▼ | ▼ | ▼ |
| 1½ x .050 | 41 x 1.30 | | | ▼ | | ▼ | ▼ | ▼ | |
| 2 x .063 | 54 x 1.60 | | | ▼ | | ▼ | ▼ | | |
| 2½ x .063 | 67 x 1.60 | ▼ | ▼ | | ▼ | ▼ | ▼ | | |
| 3 x .063 | 80 x 1.60 | ▼ | ▼ | | | | | | |

Users:

- Production facilities
- Job shops
- Fabrication
- Steel service centers

Applications:

- Mild steels
- Stainless steels
- Tool steels
- Occasional structural workpiece
- Carbon Steel
- Medium-to-heavy production machines

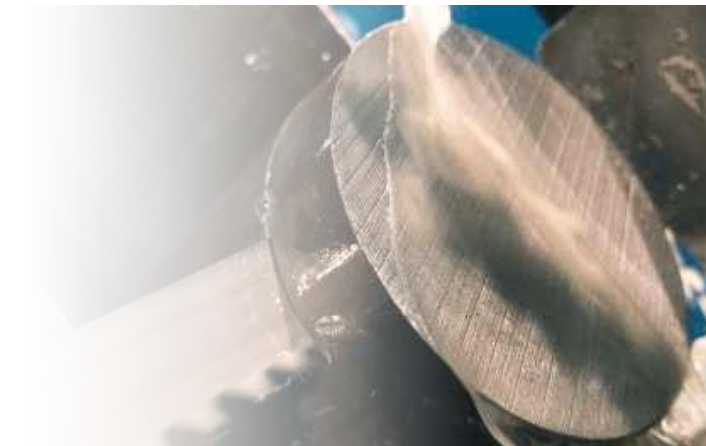
THE MORSE ACHIEVER[®]

PRODUCTION CUTTING

Reliable and durable when cutting mild to moderate materials,
including layer and bundle cuts and large profiles and solids.

Features:

- For production cutting of mild to difficult materials
- 0° rake offering for structural applications and thin pieces
- Finer tooth pitches cut smaller diameter and thin-walled materials
- Great for maintenance shops and low volume production



| Width x Thickness | | TPI | | | | |
|-------------------|-----------|--------------------------|-----|------|------|-------|
| in | mm | 4/6 | 5/8 | 6/10 | 8/12 | 10/14 |
| | | Variable Pitch - 0° Rake | | | | |
| 1 x .035 | 27 x 0.90 | ▼ | ▼ | ▼ | ▼ | ▼ |
| 1¼ x .042 | 34 x 1.10 | ▼ | | ▼ | | |

Users:

- Production facilities
- Tool shops
- Fabrication

Applications:

- Production cutting
- Materials ranging from carbon to stainless steel

METAL BI-METAL

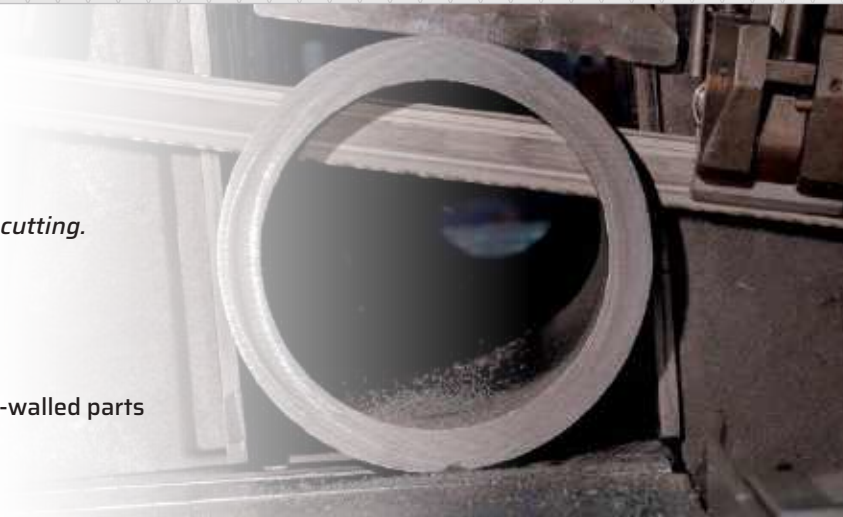


STRUCTURAL CUTTING

For general purpose structural, interrupted, and bundle cutting.

Features:

- Long life and straight cuts in structural material
- Designed to absorb repeated impact when cutting multi-walled parts
- Reduced noise and vibration
- Reduced chance of stripping teeth



| Width x Thickness | | TPI | | | | |
|---------------------------------------|-----------|-----|-----|-----|-----|------|
| in | mm | 2/3 | 3/4 | 4/6 | 5/7 | 8/11 |
| Variable Pitch - Positive Rake | | | | | | |
| ½ x .025 | 13 x 0.64 | | | | | ▼ |
| ¾ x .035 | 19 x 0.90 | | | | ▼ | ▼ |
| 1 x .035 | 27 x 0.90 | | ▼ | ▼ | ▼ | ▼ |
| 1¼ x .042 | 34 x 1.10 | | ▼▼ | ▼▼ | ▼ | ▼ |
| 1½ x .050 | 41 x 1.30 | ▼ | ▼▼ | ▼▼ | ▼ | ▼ |
| 2 x .063 | 54 x 1.60 | ▼▼ | ▼▼ | ▼▼ | | |
| 2½ x .063 | 67 x 1.60 | ▼▼ | ▼▼ | ▼ | | |

▼ Wide Kerf

Users:

- Production facilities
- Tool shops
- Metal service centers
- Steel structure fabricators
- Fabrication

Applications:

- Bundle cuts
- Interrupted cuts
- I-Beams
- Low alloy steels
- Carbon Steel (A36)
- Free Machining Steel
- Non-Ferrous Alloys



PRODUCTION & MRO

For general production in a variety of materials.

Features:

- Versatile to cut a variety of materials
- Reduced vibration and harmonics



- **Variable Pitch - Positive Rake:** General purpose blade for cutting solids.

| Width x Thickness | | TPI | | | |
|---------------------------------------|-----------|-----|-----|-----|-----|
| in | mm | 2/3 | 3/4 | 4/6 | 5/7 |
| Variable Pitch - Positive Rake | | | | | |
| ¾ x .035 | 19 x 0.90 | | | ▼ | |
| 1 x .035 | 27 x 0.90 | ▼ | ▼▼ | ▼▼ | ▼ |
| 1¼ x .042 | 34 x 1.10 | ▼ | ▼▼ | ▼▼ | ▼ |
| 1½ x .050 | 41 x 1.30 | ▼ | ▼▼ | ▼▼ | |
| 2 x .050 | 54 x 1.30 | | ▼ | | |
| 2 x .063 | 54 x 1.60 | ▼ | ▼ | | |

▼ Available with 6° rake angle

Users:

- Production facilities
- Tool shops
- Fabrication
- Maintenance shops
- Specialty shops

Applications:

- Solids
- Heavy walled structures
- Carbon steels
- Alloy steels
- Some stainless steels
- Light-to-medium production machines

- **Variable Pitch - 0° Rake:** For structural and occasional thin-walled material solids.

| Width x Thickness | | TPI | | | | | |
|---------------------------------|-----------|-----|-----|-----|------|------|-------|
| in | mm | 3/4 | 4/6 | 5/8 | 6/10 | 8/12 | 10/14 |
| Variable Pitch - 0° Rake | | | | | | | |
| ½ x .025 | 13 x 0.64 | | | | | ▼ | |
| ½ x .035 | 13 x 0.90 | | | | | | ▼ |
| ¾ x .035 | 19 x 0.90 | | ▼ | ▼ | ▼ | ▼ | ▼ |
| 1 x .035 | 27 x 0.90 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| 1¼ x .042 | 34 x 1.10 | ▼ | ▼ | ▼ | | ▼ | |
| 1½ x .050 | 41 x 1.30 | ▼ | ▼ | ▼ | | | |

Straight Pitch

- **Raker:** For hand-fed applications in wood.
- **Hook:** For aluminum applications.

| Width x Thickness | | TPI | | |
|-------------------|-----------|-----|---|---|
| in | mm | 14 | 2 | 4 |
| Hook | | | | |
| ¾ x .035 | 9 x 0.90 | | | ▼ |
| ½ x .035 | 13 x 0.90 | ▼ | | ▼ |
| 1 x .035 | 27 x 0.90 | | ▼ | |

METAL BI-METAL

MATRIX II

PRODUCTION & MRO

Economic blades for cutting materials with easy to moderate machinability.



Features:

- **Variable Pitch - Positive Rake:** General purpose blade for cutting solids.

| Width x Thickness | | TPI | |
|-------------------|-----------|--------------------------------|-----|
| in | mm | 3/4 | 4/6 |
| | | Variable Pitch - Positive Rake | |
| ¾ x .035 | 19 x 0.90 | ▼ | ▼ |
| 1 x .035 | 27 x 0.90 | ▼ | ▼ |
| 1¼ x .042 | 34 x 1.10 | | ▼ |

Users:

- Maintenance and fabricating shops

Applications:

- Carbon steels
- Structural steels - A36, single piece, bundles, stacked pieces, interrupted cuts (pipe, tubing, angle and channel, small and medium saw machines)

- **Variable Pitch - 0° Rake:** For structural and thin-walled material solids.

| Width x Thickness | | TPI | | | | | | | |
|-------------------|-----------|--------------------------|-----|------|------|------|-------|-------|-------|
| in | mm | 4/6 | 5/8 | 6/10 | 8/11 | 8/12 | 10/14 | 12/16 | 14/18 |
| | | Variable Pitch - 0° Rake | | | | | | | |
| ½ x .020 | 13 x 0.50 | | | | ▼ | | ▼ | ▼ | ▼ |
| ½ x .025 | 13 x 0.64 | | | ▼ | | ▼ | ▼ | | ▼ |
| ½ x .035 | 13 x 0.90 | | | | | | ▼ | | |
| ¾ x .035 | 19 x 0.90 | | | ▼ | | ▼ | ▼ | | |
| 1 x .035 | 27 x 0.90 | ▼ | ▼ | ▼ | | ▼ | ▼ | | |
| 1¼ x .042 | 34 x 1.10 | | ▼ | ▼ | | | | | |

Straight Pitch

- **Raker:** For interrupted cutting with better surface finish in aluminum and other non-ferrous materials.
- **Wavy:** For thin sections including sheets, tubes, pipes, and small shapes.
- **Hook:** For faster cutting in aluminum and other non-ferrous materials.

| Width x Thickness | | TPI | | | | | | | | | |
|-------------------|-----------|-------|---|----|----|----|------|----|----|------|---|
| in | mm | 6 | 8 | 10 | 14 | 18 | 14 | 18 | 24 | 3 | 4 |
| | | Raker | | | | | Wavy | | | Hook | |
| ½ x .020 | 13 x 0.50 | | | ▼ | | ▼ | ▼ | ▼ | ▼ | | |
| ½ x .025 | 13 x 0.64 | ▼ | | | ▼ | ▼ | | | | ▼ | ▼ |
| ¾ x .035 | 19 x 0.90 | | ▼ | ▼ | ▼ | | | | | ▼ | |
| 1 x .035 | 27 x 0.90 | | | | ▼ | | | | | | |

SPECIALTY BI-METAL



DIE BAND BLADES

For smaller cross sections of tool/die steels.



Features:

- **Variable:** For small cross sections of tool steels and die blocks.
- **Raker:** For hand-fed small cross sections of tool steels and die blocks.
- **Hook:** For large cross sections of tool steels and die blocks.

| Width x Thickness | | TPI | | | |
|-------------------|-----------|--------------------------------|-------|-------|------|
| in | mm | 8/12 | 10/14 | 14 | 4 |
| | | Variable Pitch - Positive Rake | | Raker | Hook |
| ¾ x .035 | 9 x 0.90 | | | | ▼ |
| ½ x .025 | 13 x 0.64 | ▼ | | | |
| ½ x .035 | 13 x 0.90 | | ▼ | ▼ | ▼ |

Users:

- Tool and Die shops
- Vertical band saw machines

Applications:

- Die blocks
- Tool steels
- "D" grade steels

MATRIX II

DIE BAND BLADES

For solids with low to moderate machinability.



Features:

- **Variable:** For small cross sections of tool steels and die blocks.
- **Raker:** For hand-fed small cross sections of tool steels and die blocks.
- **Hook:** For large cross sections of tool steels and die blocks.

| Width x Thickness | | TPI | | | | | |
|-------------------|-----------|--------------------------------|------|-------|-------|----|------|
| in | mm | 6/10 | 8/12 | 10/14 | 14 | 18 | 4 |
| | | Variable Pitch - Positive Rake | | | Raker | | Hook |
| ½ x .025 | 13 x 0.64 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |

Users:

- Tool and Die shops
- Vertical band saw machines

Applications:

- Die blocks
- Tool steels
- "D" grade steels

SPECIALTY GRIT

TUNGSTEN CARBIDE GRIT

TUNGSTEN CARBIDE GRIT

Designed for cutting materials too hard or abrasive for standard bi-metal blades.

Features:

- Very smooth finish
- Superior wear resistance
- Reversible, extending blade life
- Different Grit finishes



| Width x Thickness | | Gulleted | | | Continuous | |
|-------------------|-----------|-----------|---------------|--------|------------|--------|
| in | mm | Grit Type | | | Grit Type | |
| | | Medium | Medium/Coarse | Coarse | Medium | Coarse |
| ¼ x .020 | 6 x 0.50 | | | | ▼ | |
| ⅜ x .025 | 9 x 0.64 | ▼ | ▼ | | | |
| ½ x .025 | 13 x 0.64 | ▼ | ▼ | | ▼ | |
| ¾ x .032 | 19 x 0.80 | | ▼ | ▼ | | |
| 1 x .035 | 27 x 0.90 | | ▼ | ▼ | ▼ | ▼ |
| 1¼ x .042 | 34 x 1.10 | | | ▼ | | |

Users:

- Construction
- Glass and abrasive manufacturing
- Fabricators

Applications:

- Fiberglass
- Graphite
- Ceramics
- Tires and wire reinforced rubber
- Brittle materials or surfaces that chip
- Cast Iron
- Plexiglass
- Cable and wire rope

ACCESSORIES BAND SAW MACHINES

TENSION GAUGE

Quickly measures blade tension while the blade is on the machine, both under-tensioned and over-tensioned conditions. Proper tensioning of blades will provide optimal blade life and precise cutting results.

Features:

- Durable cast powder-coated body
- Calibrating gauge measures in lbs/in² and kgs/cm²
- Quality storage box with protective foam inserts

Users:

- All band saw users



| | | | |
|------|--------|-------|--------------|
| Part | 005005 | Model | TENSIONGAUGE |
|------|--------|-------|--------------|

TOOTH BRUSH

Ensure optimal cutting conditions when using industrial band saw blades. Fits virtually every saw on the market and efficiently clears chips from blade teeth gullets.

Features:

- 11 brush configurations to fit many saw models
- Made with Neodymium Magnets with a pull force rating of 75 lbs
- Long-lasting brass brushes
- Easy-to-install and change configuration

Users:

- All band saw users

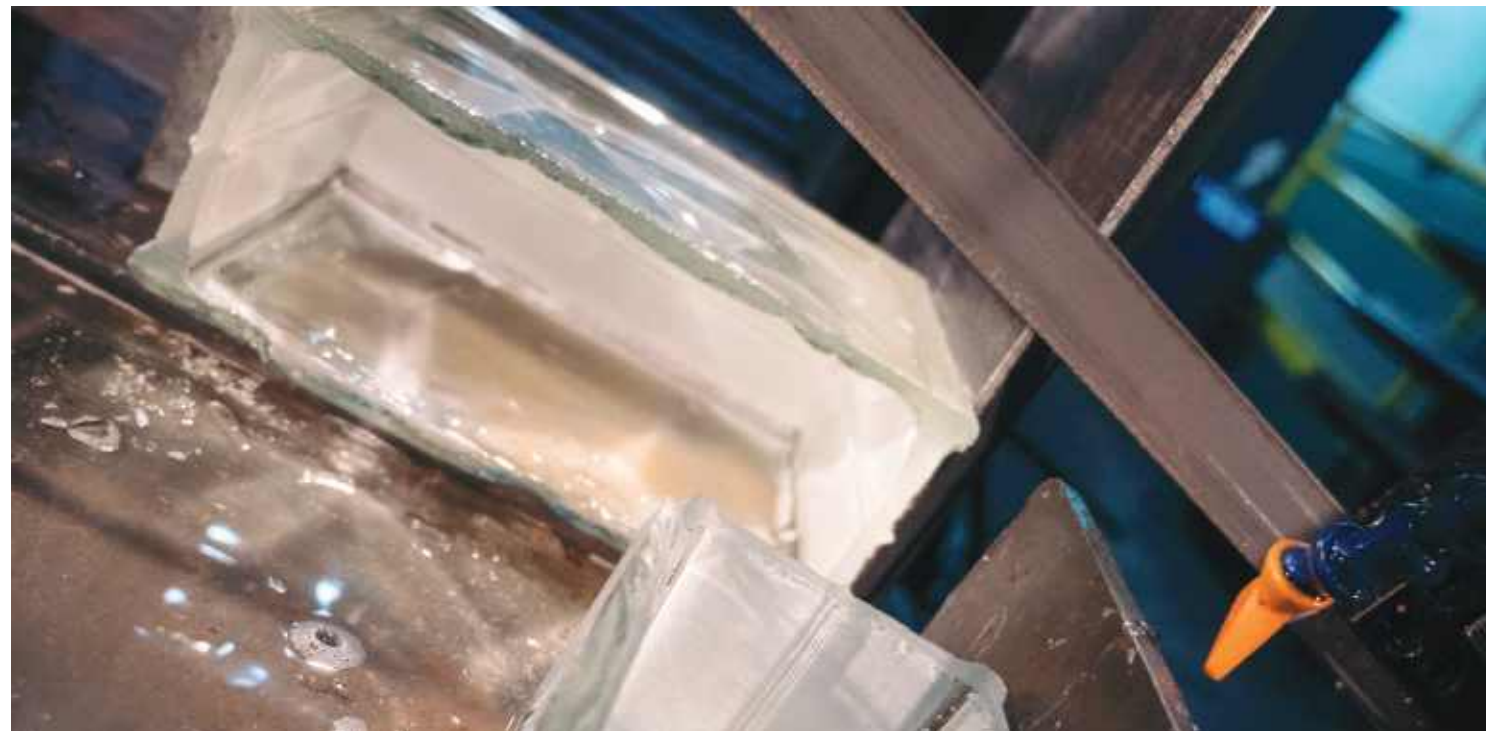


Assembly with brush

| | | | |
|------|--------|-------|-------------|
| Part | 183116 | Model | TOOTHBRUSHA |
|------|--------|-------|-------------|

Brush refills - 3/Pack

| | | | |
|------|--------|-------|--------------|
| Part | 183123 | Model | TOOTHBRUSH-3 |
|------|--------|-------|--------------|



The RadR Feed Rate Monitor uses radar - 200x more accurate than a draw wire option - to gauge feed rate speeds. Pair the feed rate monitor with any Morse band saw blade to guarantee maximized cutting results.

Features:

- Improved accuracy with precision radar measurement
- Can display readings in both imperial and metric
- Calculates run rates in real time to immediately guide correct machine settings
- Easy-to-read display screen in bright or low light
- Rechargeable battery has 20 hours of continuous life
- Full recharge in 11 hours, or 20-minute quick charge will deliver 2 hours of operation

Users:

- All band saw users



| | | | |
|------|--------|-------|-----------------|
| Part | 005029 | Model | FEEDRATEMONITOR |
|------|--------|-------|-----------------|

TOOTH PROTECTION

Protective plastic covering for band saw blade teeth to prevent chipping.



4000' .40 (1" - 1½")

| | | | |
|------|--------|-------|-------------|
| Part | 004008 | Model | BNDEDGPROTB |
|------|--------|-------|-------------|

2000' .45 (2" and larger)

| | | | |
|------|--------|-------|--------------|
| Part | 004015 | Model | BNDEDGPROT2B |
|------|--------|-------|--------------|

WOOD CARBIDE TIPPED

QUIKSILVER[®] CT

CARBIDE TIPPED WOOD CUTTING

Specially designed for fine-finish wood cutting applications.

* For optimal performance **DO NOT BREAK IN** QuikSilver CT blades

Features:

- Specially designed for wood cutting
- Carbide tipped teeth
- Cuts hard exotic woods



| Width x Thickness | | TPI | |
|-------------------|-----------|--------------------------------|---------|
| in | mm | .75/1 | 1.5/2.0 |
| | | Variable Pitch - Positive Rake | |
| 1½ x .050 | 41 x 1.30 | | ▼ |
| 2 x .042 | 54 x 1.10 | ▼ | |

Users:

- Flooring production
- Mills
- Construction
- Fabrication
- Specialty shops

Applications:

- Hardwood flooring
- Millwork
- Musical tonewoods
- MDF
- Specialty wood cutting

WOOD CARBON

QUIKSILVER[®] HEF/HB

HEF/HB WOOD MILL

Blades are manufactured from a single piece of high carbon steel with individually hardened tooth tips.

HEF Hard Edge Flex Back:

For wood applications on high-speed vertical band saws and for resaw applications where blade breakage is a concern.

HB Hard Edge Hard Back:

For straight cuts in woods and non-ferrous metals and for resaw applications.



| Width x Thickness | | TPI | | |
|-------------------|-----------|------|-----|---|
| in | mm | 1.14 | 1.3 | 2 |
| | | Hook | | |
| 1 x .035 | 25 x 0.90 | | ▼ | ▼ |
| 1¼ x .035 | 32 x 0.90 | | ▼ | |
| 1¼ x .042 | 32 x 1.10 | ▼▼ | ▼ | |
| 1½ x .045 | 38 x 1.14 | ▼ | | |
| 2 x .035 | 51 x 0.90 | | ▼ | |
| 2 x .042 | 51 x 1.10 | ▼ | | |

▼ Available with 6" rake angle

| Width x Thickness | | TPI |
|-------------------|-----------|------|
| in | mm | 1.3 |
| | | Hook |
| 1 x .035 | 27 x 0.90 | ▼ |
| 1¼ x .035 | 32 x 0.90 | ▼ |
| 1¼ x .042 | 32 x 1.10 | ▼ |

Users:

- Portable and stationary wood mills
- Single and multi-head resaw systems
- Scragg mills

Applications:

- Wood cutting

WOOD BI-METAL

QUIKSILVER[®] B1/B2

BI-METAL WOOD CUTTING

Designed for wood based material production cutting.

B1:

For softwood to semi-hard wood such as pine, ash, and poplar.

B2:

For hard woods like oak, walnut, cherry, and maple.



| Width x Thickness | | TPI | | |
|---|-----------|--------------------------------|---|------|
| in | mm | 5/8 | 1 | 1.14 |
| | | Variable Pitch - Positive Rake | | Hook |
| QuikSilver B1 Production/Wood Mill | | | | |
| 1¼ x .042 | 34 x 1.10 | ▼ | | ▼ |
| QuikSilver B2 Production/Wood Mill | | | | |
| 1¼ x .042 | 34 x 1.10 | | | ▼ |
| 2 x .050 | 54 x 1.30 | | ▼ | |

Users:

- Vertical and horizontal resaw machines
- Portable saw mills
- Contour cutting on vertical machines

Applications:

- Wood
- Low alloy ferrous and non-ferrous metals

QUIKSILVER[®] WMF/WMH

WMF/WMH WOOD MILL

One-piece design to minimize blade fatigue.

WMF Wood Mill Flex Back:

For wood applications and resaw use when fatigue resistance is needed.

WMH Wood Mill Hard Back:

For wood applications and resaw use when rigidity is needed.

| Width x Thickness | | TPI | | |
|-------------------|-----------|------|-----|---|
| in | mm | 1.14 | 1.3 | 2 |
| | | Hook | | |
| 1 x .035 | 25 x 0.90 | | ▼ | ▼ |
| 1¼ x .042 | 32 x 1.10 | ▼ | ▼ | |

| Width x Thickness | | TPI | | |
|-------------------|-----------|------|-----|---|
| in | mm | 1.14 | 1.3 | 2 |
| | | Hook | | |
| 1 x .035 | 25 x 0.90 | | ▼ | ▼ |
| 1¼ x .042 | 32 x 1.10 | ▼ | ▼ | |
| 1½ x .045 | 38 x 1.14 | ▼ | | |
| 2 x .042 | 51 x 1.10 | ▼ | | |

Users:

- Wood cutting with increased fatigue resistance

Applications:

- Wood cutting

WOOD CARBON



FURNITURE BLADES

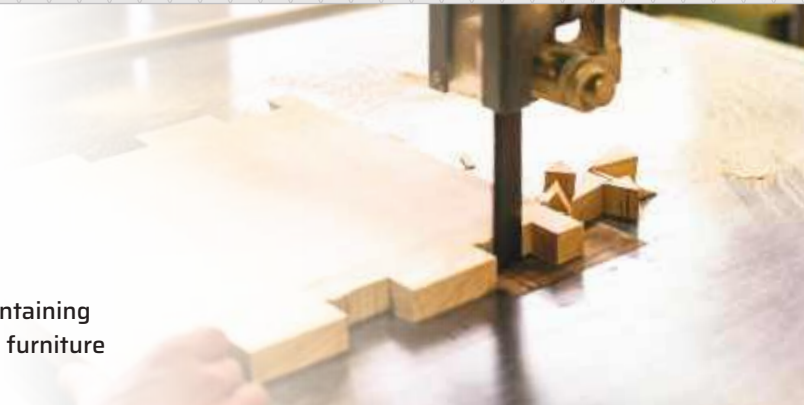
Designed for wood-based material production cutting.

HOOK ETS:

For easy contour cuts in wood and non-ferrous metals.

HOOK RAKER SET:

Faster cutting while maintaining precision required in the furniture industry.



| Width x Thickness | | TPI | | | | | |
|-------------------|-----------|----------|---|----------------|---|---|---|
| in | mm | 3 | 4 | 2 | 3 | 4 | 6 |
| | | Hook ETS | | Hook Raker Set | | | |
| ¼ x .025 | 6 x 0.64 | | | | | ▼ | ▼ |
| ⅜ x .025 | 9 x 0.64 | ▼ | | | ▼ | ▼ | ▼ |
| ⅜ x .032 | 9 x 0.80 | ▼ | ▼ | | | | |
| ½ x .025 | 13 x 0.64 | ▼ | | | ▼ | ▼ | ▼ |
| ½ x .032 | 13 x 0.80 | ▼ | ▼ | | | | |
| ¾ x .032 | 19 x 0.80 | ▼ | | ▼ | ▼ | ▼ | ▼ |

Users:

- Furniture industry
- High-speed vertical cutting band saw machines

Applications:

- Large, vertical, high-speed wood cutting machines
- Wood
- Chip board
- Plywood
- Cardboard

Minimum radius cut for a given blade width

| Blade Width | | Minimum Radius | | Material Thickness 1"/25mm |
|-------------|----|----------------|-----|----------------------------|
| in | mm | in | mm | |
| 1 | 25 | 7 ¼ | 184 | |
| ¾ | 19 | 5 ⅞ | 138 | |
| ⅝ | 16 | 3 ¾ | 95 | |
| ½ | 13 | 2 ½ | 63 | |
| ⅜ | 10 | 1 ¼ | 32 | |
| ¼ | 6 | ⅝ | 16 | |
| ⅜ | 5 | ⅜ | 10 | |
| ⅛ | 3 | ¼ | 6 | |



HARD BACK BLADES

Stiffer blades offer straighter cuts in wood and metal cutting.

* Can be resharpened

RAKER:

For hand-fed, straight wood cutting applications.

WAVY:

Stiffer blades ideal for cutting smaller wood contour applications.

HOOK:

For fast cuts in wood cutting applications.



Users:

- Wood cutting
- Maintenance
- Short metal production

Applications:

- Blade speeds <4,000 sfm
- Wood
- Plastic
- Cork
- Low Alloy
- Plywood
- Composition board
- Easy-to-machine ferrous metals
- Non-ferrous metals (brass/copper, bronze, aluminum, lead)

| Width x Thickness | | TPI | | | | | | | | | | |
|-------------------|-----------|-------|----|----|----|------|----|------|---|---|---|---|
| in | mm | 6 | 10 | 14 | 18 | 12 | 18 | 1.3 | 2 | 3 | 4 | 6 |
| | | Raker | | | | Wavy | | Hook | | | | |
| ¼ x .025 | 6 x 0.64 | | ▼ | ▼ | | | | | | | ▼ | ▼ |
| ⅜ x .025 | 9 x 0.64 | | | ▼ | | | | | | ▼ | ▼ | ▼ |
| ½ x .025 | 13 x 0.64 | ▼ | ▼ | ▼ | ▼ | | ▼ | | | ▼ | ▼ | ▼ |
| ⅝ x .032 | 16 x 0.80 | | | | | | | | | | ▼ | |
| ¾ x .032 | 19 x 0.80 | ▼ | ▼ | ▼ | | ▼ | | | | ▼ | ▼ | |
| 1 x .035 | 25 x 0.90 | ▼ | ▼ | ▼ | | | | ▼ | ▼ | ▼ | | |
| 1¼ x .035 | 32 x 0.90 | | | | | | | ▼ | | | | |
| 1½ x .042 | 32 x 1.10 | ▼ | | | | | | ▼ | | | | |

▼ Standard Set - Regular Offset ▼ Double Set Raker (DSR)

WOOD CARBON

QUIKSILVER[®] HEF

FLEXBACK BLADES

Designed to be more fatigue resistant and offer longer blade life than hard back blades.

RAKER:

For hand-fed wood cutting applications.

WAVY:

For cutting smaller wood contour applications.

HOOK:

For fast cuts in wood applications.

SKIP:

Best to prevent clogging from applications with stringy chips.



Users:

- Wood production
- Short metal production
- Maintenance
- General purpose cutting

Applications:

- Blade speeds up to 15,000 sfm
- Wood
- Plastic
- Cork
- Plywood
- Aluminum
- Non-ferrous metals
- Low alloy steel
- Composition board

| Width x Thickness | | TPI | | | | | | | | | | | | | | | |
|----------------------|-----------|-------|---|----|----|------|----|------|----|------|-----|------|---|---|---|---|---|
| in | mm | 6 | 8 | 10 | 14 | 18 | 24 | 18 | 32 | 1.14 | 1.3 | 2 | 3 | 4 | 6 | 4 | 6 |
| | | Raker | | | | Wavy | | Hook | | | | Skip | | | | | |
| 1/8 x .025 | 3 x 0.64 | | | | ▼ | ▼ | | | | | | | | | | | |
| 1/4 x .025 | 6 x 0.64 | | | ▼ | ▼ | ▼ | | | | | | | | ▼ | ▼ | ▼ | ▼ |
| 3/8 x .025 | 9 x 0.64 | | ▼ | ▼ | ▼ | ▼ | | | | | | | ▼ | ▼ | ▼ | ▼ | |
| 1/2 x .020 | 13 x 0.50 | | | ▼ | | | | | | | | | | | | | |
| 1/2 x .025 | 13 x 0.64 | ▼ | | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ | | | | ▼ | ▼ | ▼ | ▼ | |
| 5/8 x .032 | 16 x 0.80 | | | | | | | | | | | | ▼ | ▼ | | | |
| 3/4 x .032 | 19 x 0.80 | ▼ | | ▼ | ▼ | ▼ | | | | | | | ▼ | ▼ | ▼ | ▼ | |
| 3/4 x .050 | 19 x 1.30 | | | | | | | | | | | | ▼ | | | | |
| 1 x .035 | 25 x 0.90 | | | | ▼ | | | | | | | ▼ | ▼ | ▼ | | | |
| 1 1/4 x .035 | 32 x 0.90 | | | | | | | | | | | ▼ | | | | | |
| 1 1/4 x .042 | 32 x 1.10 | | | | | | | | | ▼ | ▼ | | | | | | |
| 1 1/4 x .042 *Bright | 32 x 1.10 | | | | | | | | | ▼ | | | | | | | |
| 1 1/2 x .045 | 38 x 1.14 | | | | | | | | | ▼ | | | | | | | |
| 2 x .035 | 51 x 0.90 | | | | | | | | | | ▼ | | | | | | |
| 2 x .042 | 51 x 1.10 | | | | | | | | | ▼ | | | | | | | |

▼ Standard Set ▼ Wide Kerf * "Bright" specifications have an unblued, silver surface finish.

SPECIALTY PALLET

QUIKSILVER[®]

PALLET DISMANTLING

Specially designed to withstand the rough service required on dismantling machines while cutting through pallet nails and staples.

Features:

- Bi-metal options
- Special grade carbon steel
- Straight or variable pitch options available



M42 - BI-METAL

Premium general purpose blades designed to withstand rough service required on dismantling machines.

MATRIX II - BI-METAL

Designed to withstand rough service required on pallet dismantling machines.

CARBON HARD BACK (HB) Special

The economical option for pallet dismantling.

| Variable Pitch - Positive Rake | | | | | | | | | |
|--------------------------------|-----------|-----|-------------------|-----------|-----|-------------------|-----------|-----|-----|
| Width x Thickness | | TPI | Width x Thickness | | TPI | Width x Thickness | | TPI | |
| in | mm | 5/8 | in | mm | 5/8 | in | mm | 5/7 | 5/8 |
| 1 1/4 x .042 | 34 x 1.10 | ▼ | 1 1/4 x .042 | 34 x 1.10 | ▼ | 1 1/4 x .042 | 32 x 1.10 | ▼ | ▼ |

BLADE PART NUMBERS

The M. K. Morse Company uses 10-digit band saw blade part numbers (with a "C" or "R" suffix for coils).

The first 6 digits of the part number identify the material and size specifications. The last 4 digits identify the length of the blade for both weld-to-length bands and coil stock.

The band saw blade part number reference chart below provides the same details we have in-house to configure the new part numbers. Customer Service at Morse will assist all band saw blade distributors with any cross referencing needed. If you have any questions, please contact your Morse Customer Service Representative.

| 1ST AND 2ND DIGITS | | MATERIAL/TOOTH SET STYLE | | 3RD and 4TH DIGITS | | BLADE WIDTH | | 5TH and 6TH DIGITS | | TOOTH COUNT | |
|--------------------|--------------------------------|--------------------------------------|--------|--------------------|--------|--------------|--|--------------------|--|-------------|--|
| Part # | Material Type | Set Style | Part # | Width x Thickness | Part # | TPI | | | | | |
| 11 | QS HEF Carbon | Hook - Heavy Set | 20 | .25 x .020 | 00 | Carbide Grit | | | | | |
| 14 | QS HEF Carbon | Wavy | 21 | .50 x .020 | 01 | 1 | | | | | |
| 15 | QS HEF Carbon | Skip | 30 | .125 x .025 | 02 | 2 | | | | | |
| 16 | QS HEF Carbon | Raker Or Variable Pitch | 32 | .25 x .025 | 03 | 3 | | | | | |
| 17 | QS HEF Carbon | QuikSilver WMF - Hook | 33 | .375 x .025 | 04 | 4 | | | | | |
| 18 | QS HEF Carbon | Hook | 34 | .50 x .025 | 06 | 6 | | | | | |
| 20 | QS HEF Carbon | Bright | 40 | .25 x .032 | 08 | 8 | | | | | |
| 30 | Matrix II | Positive Rake, 10° | 41 | .375 x .032 | 10 | 10 | | | | | |
| 31 | Matrix II | Positive Rake, 10° - Heavy Set | 42 | .50 x .032 | 12 | 12 | | | | | |
| 34 | Matrix II | Wavy | 43 | .625 x .032 | 13 | 10 / 14 | | | | | |
| 36 | Matrix II | Raker | 44 | .75 x .032 | 14 | 14 | | | | | |
| 38 | Matrix II | Hook | 50 | .25 x .035 | 15 | 12 / 16 | | | | | |
| 39 | Matrix II | Variable Pitch, 0° | 51 | .375 x .035 | 16 | 14 / 18 | | | | | |
| 00 | M42 | Positive Rake, 6° | 52 | .50 x .035 | 18 | 18 | | | | | |
| 40 | M42 | Positive Rake, 10° | 54 | .75 x .035 | 23 | 2 / 3 | | | | | |
| 42 | M42 | Variable Pitch, 0° | 55 | 1 x .035 | 24 | 24 | | | | | |
| 46 | M42 | Raker | 56 | 1.25 x .035 | 32 | 32 | | | | | |
| 48 | M42 | Hook | 57 | 2 x .035 | 34 | 3 / 4 | | | | | |
| 43 | The Morse Achiever | Variable Pitch, 0° | 60 | 1 x .042 | 46 | 4 / 6 | | | | | |
| 55 | Independence II | Positive Rake, 6° | 61 | 1.25 x .042 | 57 | 5 / 7 | | | | | |
| 57 | Independence EXS | Positive Rake, Various ° | 62 | 2 x .042 | 58 | 5 / 8 | | | | | |
| 63 | QS Hard Back Carbon | Hook - Double Set Raker | 63 | 1.5 x .042 | 68 | 6 / 10 | | | | | |
| 64 | QS Hard Back Carbon | Wavy | 70 | 1.25 x .045 | 80 | 8 / 11 | | | | | |
| 65 | QS Hard Back Carbon | Skip | 71 | 1.5 x .045 | 81 | 8 / 12 | | | | | |
| 66 | QS Hard Back Carbon | Raker Or Variable Pitch | 80 | .75 x .050 | 91 | .75 / 1.1 | | | | | |
| 67 | QS Hard Back Carbon | QuikSilver WMH - Hook | 81 | 1.5 x .050 | 92 | 1.4 / 2.5 | | | | | |
| 68 | QS Hard Back Carbon | Hook | 82 | 2 x .050 | 93 | 1.3 | | | | | |
| 70 | Tun. Carbide Grit - Continuous | Medium | 84 | 1.5 x .055 | 94 | 1.14 | | | | | |
| 72 | Tun. Carbide Grit - Continuous | Coarse | 88 | 2 x .055 | 96 | 1.1 / 1.5 | | | | | |
| 73 | Tun. Carbide Grit - Gulleted | Medium | 90 | 2 x .063 | 97 | 1 / 1.5 | | | | | |
| 74 | Tun. Carbide Grit - Gulleted | Medium Coarse | 91 | 2.625 x .063 | 98 | 1.5 / 2 | | | | | |
| 75 | Tun. Carbide Grit - Gulleted | Coarse | 92 | 3 x .063 | | | | | | | |
| 78 | Maverick | Positive Rake, 10° | | | | | | | | | |
| 80 | Mfactor - Carbide Tipped | Aluminum Foundry (FB+) | | | | | | | | | |
| 81 | Mfactor - Carbide Tipped | Case Hardened (CH) | | | | | | | | | |
| 82 | Mfactor - Carbide Tipped | General Purpose (GP) | | | | | | | | | |
| 84 | Mfactor - Carbide Tipped | GES | | | | | | | | | |
| 85 | Mfactor - Carbide Tipped | Foundry Set (FBS) | | | | | | | | | |
| 86 | Mfactor - Carbide Tipped | GES Wide Set | | | | | | | | | |
| 87 | Jawbreaker - Carbide Tipped | Variable Pitch | | | | | | | | | |
| 91 | Challenger | Positive Rake, Various ° | | | | | | | | | |
| 92 | Challenger | Positive Rake, Various ° - Heavy Set | | | | | | | | | |
| AA | QuikSilver B1 | Raker | | | | | | | | | |
| AC | QuikSilver B1 | Hook | | | | | | | | | |
| AD | QuikSilver B1 | Variable Pitch, 0° | | | | | | | | | |
| DA | QuikSilver B2 | Raker | | | | | | | | | |
| DC | QuikSilver B2 | Hook | | | | | | | | | |
| GA | QuikSilver Carbide Tipped | Wood Production | | | | | | | | | |

| 7TH, 8TH, and 9TH DIGITS | | BLADE LENGTH | |
|---|-------------|-----------------------------|-------------|
| Overall length in inches. (Unless using Coil Stock.) If a 100 FOOT coil - use 100C. If a RANDOM LENGTH coil - use 000R. | | | |
| 10TH DIGIT | | FRACTION OF INCH/MILLIMETER | |
| Part # | Inch Length | Part # | mm Length |
| 0 | Even Length | 0 | Even Length |
| 1 | 1/8" | 1 | 3 |
| 2 | 1/4" | 2 | 6.4 |
| 3 | 3/8" | 3 | 9.5 |
| 4 | 1/2" | 4 | 12.7 |
| 5 | 5/8" | 5 | 16 |
| 6 | 3/4" | 6 | 19 |
| 7 | 7/8" | 7 | 22 |
| C | Coil Stock | C | Coil Stock |

| EXAMPLE 1 | | PREVIOUS PART #ZCTNGE523 | |
|------------------------------|------------|--------------------------|--------------------|
| Therefore: M Factor GES | 1.5 x .050 | 2/3 | 125" "Random Coil" |
| Is shown as: 84 | 81 | 23 | 000R |
| NEW PART # 848123100C | | | |

| EXAMPLE 2 | | PREVIOUS PART #ZWED035H04M42 | |
|--|----------|------------------------------|---|
| Therefore: Independence II | 1 x .035 | 2/3 | 35' 8-1/2" (For 1/2" use 4/8", thus 4) *Last digit goes by 1/8" |
| Is shown as: 55 | 55 | 23 | 428 |
| NEW PART # 555234284 (If adding SParc, 555234284GS) | | | |

| SParc Technology | | | |
|--|--|--|--|
| SParc can be added to 1" and wider blades with a 2/3 TPI and coarser. It is available for the following bi-metal materials: Independence II, Independence EXS, Maverick, M-Factor GP, and M-Factor GES. (Add GS on to the end of the part #, see example on left). | | | |

BLADE OPTIMIZATION

USING METAL CHIPS TO TROUBLESHOOT

You can improve the productivity of your metal cutting operation by paying close attention to the chips made by the blade cutting through metal. This chart shows some of the common problems that can be discovered and solved by paying attention to chips in a large variety of materials.

| Chip Form | Chip Condition | Chip color | Blade Speed | Blade Feed Rate | Other |
|-----------|-------------------------|---------------|---------------|-----------------|-----------------------------|
| | Thick, Hard and Short | Blue or Brown | Decrease ↓ | Decrease ↓ | Check Cutting Fluid and Mix |
| | Thin and Curled | Silver | Suitable ✓ | Suitable ✓ | |
| | Powder | Silver | Decrease ↓ | Increase ↑ | |
| | Thin and Tightly Curled | Silver | Suitable ✓ | Decrease ↓ | Check Tooth Pitch |

BI-METAL BLADE BREAK-IN

THE IMPORTANCE OF PROPER BLADE BREAK-IN

Blade break-in is a "honing" process that will significantly influence the performance of these band saw blades. Done properly, the cutting edge is conditioned to remain sharper longer, extending the blades performance and cutting life. Done improperly, premature blade wear, tooth damage, and poor cutting performance are the result.

RULE OF THUMB FOR BLADE BREAK-IN

- ▼ Should always be started in a new cut
- ▼ Avoid starting break-in on sharp edges or corners
- ▼ Blade speed remains the same for material being cut
- ▼ Reduce feed rate for material by 50%
- ▼ Maintain feed rate for 20 minutes or 75 sq. inches, whichever comes first
- ▼ After that, gradually increase feed pressure until normal feed rate for material is achieved

BladeWizard®
bladewizard.com



Blade Break-in is not recommended for Morse Carbide Tip bands in many applications. Please consult your Morse sales professional for best practices.

CHOOSING THE CORRECT BLADE

TOOTH SELECTION

Cut costs with the right choice.

For maximum cutting efficiency and lowest cost per cut, it is important to select a blade with the right number of teeth per inch (TPI) for the material being cut. Material size and shape dictate tooth selection.

Consider this:

(1) The width of the cut:

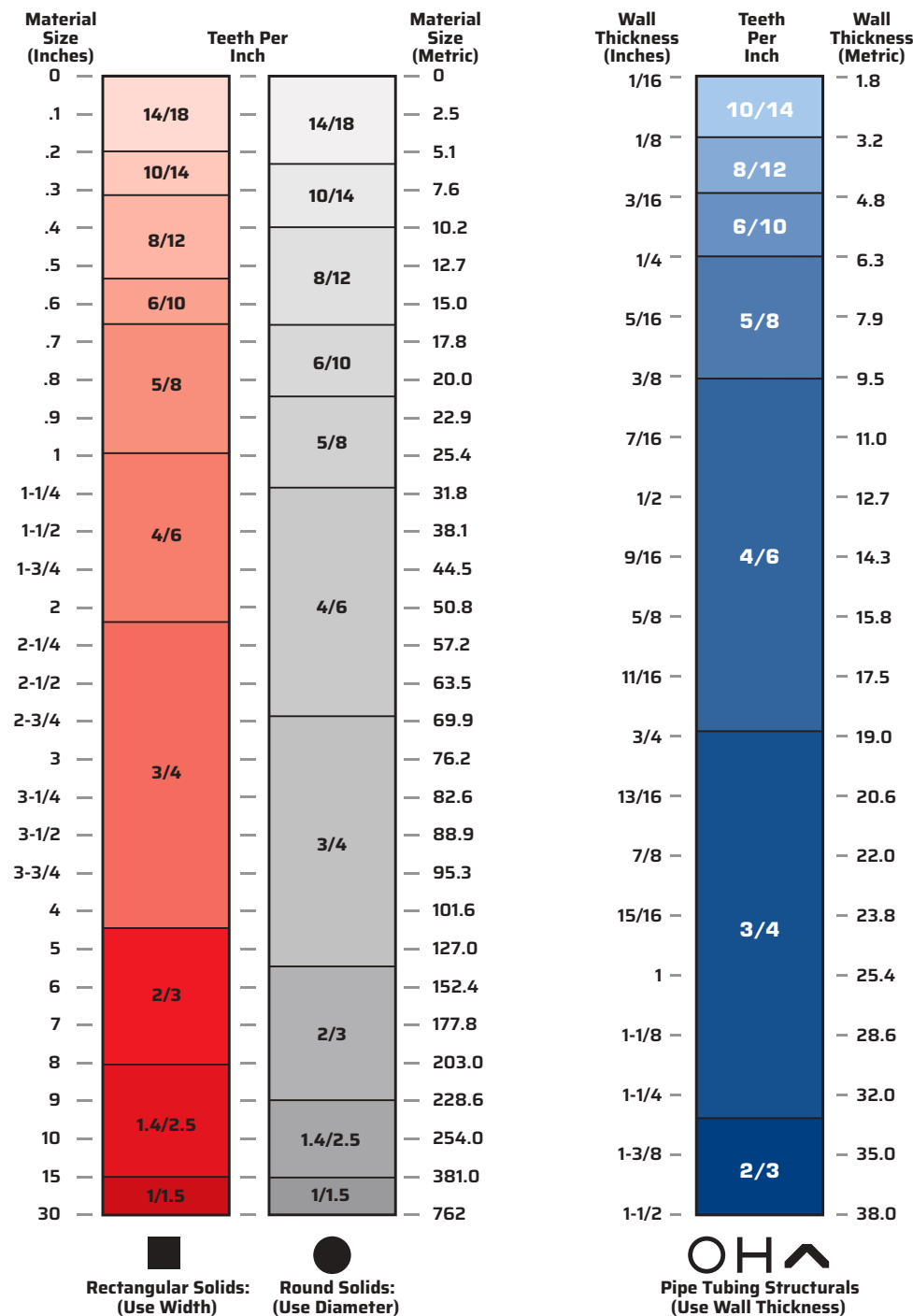
The distance in the cut that each tooth must travel from the point it enters and exits the work piece.

(2) The shape of the work piece

CHART USAGE

Select TPI using the chart below.

Find the colored chart for the type of material you wish to cut. Move up to the correct material size next to the chart. Follow across to the appropriate TPI for your blade.



BLADE RECOMMENDATION CHECKLIST

Completed by: _____

Date: _____

Contact Morse Technical Assistance

Complete and Fax to: 1(330) 453-1111
or call 1(330) 453-8187 or visit www.bladewizard.com

User Information

Company: _____

Address: _____

Contact: _____

Phone No.: _____

Current Blade Information

Manufacturer: _____

Length: _____

Width: _____

Blade Thickness: _____

Tooth Pitch: _____

Type: Carbide Tipped High Performance Bi-Metal M42
 Structural Carbon Matrix Other

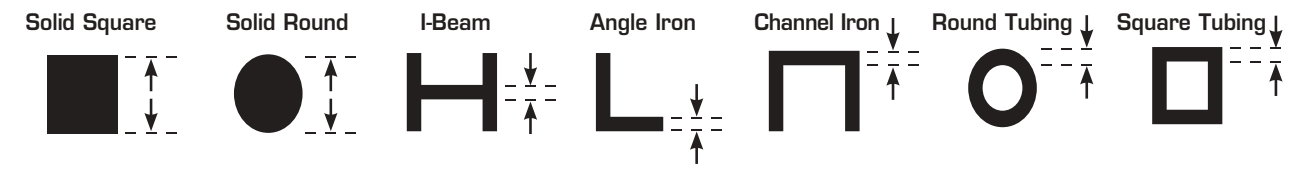
Monthly blade usage: _____

Current blade distributor: _____

Current blade cost: \$ _____

(Estimated Year Usage) _____

Application Information



On the lines provided below each icon, list material width and/or wall thickness (if applicable) for each material type being cut

Types of Cutting

(Check all that apply)

Single Piece Cut-off

Bundled Cut-off

1. Number of pieces: _____

2. Check each configuration that applies:



Materials Being Cut

(Check all that apply)

Type: Non-Ferrous Mild Carbon Steels Tool Steels Stainless Steels Super Alloys Other

Grade: _____

Production Usage (per day)

Light (2 hrs. or less)
 Medium (3-6 hrs.)
 Heavy (7 hrs. or more)

Problems with Present Blade

Breaking blades Premature dulling
 Tooth strippage Higher production required
 Cost

Blade Recommendation

CUT TIME CALCULATOR

TOOTH SET SPECIFICATIONS

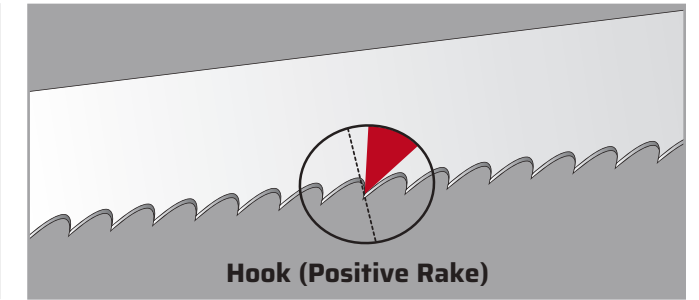
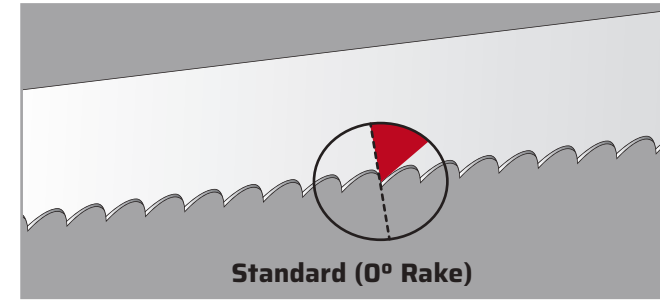
| Removal Rate - Square Inches Per Minute | | | | | | | | | | | | | | | | | | | |
|---|---------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Bar Dia. | Bar Area, In ² | 1 IN ² /MIN | 2 IN ² /MIN | 3 IN ² /MIN | 4 IN ² /MIN | 5 IN ² /MIN | 6 IN ² /MIN | 7 IN ² /MIN | 8 IN ² /MIN | 9 IN ² /MIN | 10 IN ² /MIN | 11 IN ² /MIN | 12 IN ² /MIN | 13 IN ² /MIN | 14 IN ² /MIN | 15 IN ² /MIN | 16 IN ² /MIN | 17 IN ² /MIN | 18 IN ² /MIN |
| 1.00 | 0.79 | .79 | .39 | .26 | .20 | .16 | .13 | .11 | .10 | .09 | .08 | .07 | .07 | .06 | .06 | .05 | .05 | .05 | .04 |
| 1.25 | 1.23 | 1.2 | .61 | .41 | .31 | .25 | .20 | .18 | .15 | .14 | .12 | .11 | .10 | .09 | .09 | .08 | .08 | .07 | .07 |
| 1.50 | 1.77 | 1.8 | .88 | .59 | .44 | .35 | .29 | .25 | .22 | .20 | .18 | .16 | .15 | .14 | .13 | .12 | .11 | .10 | .10 |
| 1.75 | 2.41 | 2.4 | 1.2 | .80 | .60 | .48 | .40 | .34 | .30 | .27 | .24 | .22 | .20 | .19 | .17 | .16 | .15 | .14 | .13 |
| 2.00 | 3.14 | 3.1 | 1.6 | 1.0 | .79 | .63 | .52 | .45 | .39 | .35 | .31 | .29 | .26 | .24 | .22 | .21 | .20 | .18 | .17 |
| 2.25 | 3.98 | 4.0 | 2.0 | 1.3 | 1.0 | .80 | .66 | .57 | .50 | .44 | .40 | .36 | .33 | .31 | .28 | .27 | .25 | .23 | .22 |
| 2.50 | 4.91 | 4.9 | 2.5 | 1.6 | 1.2 | 1.0 | .82 | .70 | .61 | .55 | .49 | .45 | .41 | .38 | .35 | .33 | .31 | .29 | .27 |
| 2.75 | 5.94 | 5.9 | 3.0 | 2.0 | 1.5 | 1.2 | 1.0 | .85 | .74 | .66 | .59 | .54 | .49 | .46 | .42 | .40 | .37 | .35 | .33 |
| 3.00 | 7.07 | 7.1 | 3.5 | 2.4 | 1.8 | 1.4 | 1.2 | 1.0 | .88 | .79 | .71 | .64 | .59 | .54 | .50 | .47 | .44 | .42 | .39 |
| 3.25 | 8.30 | 8.3 | 4.1 | 2.8 | 2.1 | 1.7 | 1.4 | 1.2 | 1.0 | .92 | .83 | .75 | .69 | .64 | .59 | .55 | .52 | .49 | .46 |
| 3.50 | 9.62 | 9.6 | 4.8 | 3.2 | 2.4 | 1.9 | 1.6 | 1.4 | 1.2 | 1.1 | 1.0 | .87 | .80 | .74 | .69 | .64 | .60 | .57 | .53 |
| 3.75 | 11.04 | 11.0 | 5.5 | 3.7 | 2.8 | 2.2 | 1.8 | 1.6 | 1.4 | 1.2 | 1.1 | 1.0 | .92 | .85 | .79 | .74 | .69 | .65 | .61 |
| 4.00 | 12.57 | 12.6 | 6.3 | 4.2 | 3.1 | 2.5 | 2.1 | 1.8 | 1.6 | 1.4 | 1.3 | 1.1 | 1.0 | .90 | .84 | .79 | .74 | .70 | .66 |
| 4.25 | 14.19 | 14.2 | 7.1 | 4.7 | 3.5 | 2.8 | 2.4 | 2.0 | 1.8 | 1.6 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | .95 | .89 | .83 | .79 |
| 4.50 | 15.90 | 15.9 | 8.0 | 5.3 | 4.0 | 3.2 | 2.7 | 2.3 | 2.0 | 1.8 | 1.6 | 1.4 | 1.3 | 1.2 | 1.1 | 1.1 | 1.0 | .94 | .88 |
| 4.75 | 17.72 | 17.7 | 8.9 | 5.9 | 4.4 | 3.5 | 3.0 | 2.5 | 2.2 | 2.0 | 1.8 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | 1.0 |
| 5.00 | 19.64 | 19.6 | 9.8 | 6.5 | 4.9 | 3.9 | 3.3 | 2.8 | 2.5 | 2.2 | 2.0 | 1.8 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.2 | 1.1 |
| 5.25 | 21.65 | 21.6 | 10.8 | 7.2 | 5.4 | 4.3 | 3.6 | 3.1 | 2.7 | 2.4 | 2.2 | 2.0 | 1.8 | 1.7 | 1.5 | 1.4 | 1.4 | 1.3 | 1.2 |
| 5.50 | 23.76 | 23.8 | 11.9 | 7.9 | 5.9 | 4.8 | 4.0 | 3.4 | 3.0 | 2.6 | 2.4 | 2.2 | 2.0 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 |
| 5.75 | 25.97 | 26.0 | 13.0 | 8.7 | 6.5 | 5.2 | 4.3 | 3.7 | 3.2 | 2.9 | 2.6 | 2.4 | 2.2 | 2.0 | 1.9 | 1.7 | 1.6 | 1.5 | 1.4 |
| 6.00 | 28.27 | 28.3 | 14.1 | 9.4 | 7.1 | 5.7 | 4.7 | 4.0 | 3.5 | 3.1 | 2.8 | 2.6 | 2.4 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 |
| 6.25 | 30.68 | 30.7 | 15.3 | 10.2 | 7.7 | 6.1 | 5.1 | 4.4 | 3.8 | 3.4 | 3.1 | 2.8 | 2.6 | 2.4 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 |
| 6.50 | 33.18 | 33.2 | 16.6 | 11.1 | 8.3 | 6.6 | 5.5 | 4.7 | 4.1 | 3.7 | 3.3 | 3.0 | 2.8 | 2.6 | 2.4 | 2.2 | 2.1 | 2.0 | 1.8 |
| 6.75 | 35.78 | 35.8 | 17.9 | 11.9 | 8.9 | 7.2 | 6.0 | 5.1 | 4.5 | 4.0 | 3.6 | 3.3 | 3.0 | 2.8 | 2.6 | 2.4 | 2.2 | 2.1 | 2.0 |
| 7.00 | 38.48 | 38.5 | 19.2 | 12.8 | 9.6 | 7.7 | 6.4 | 5.5 | 4.8 | 4.3 | 3.8 | 3.5 | 3.2 | 3.0 | 2.7 | 2.6 | 2.4 | 2.3 | 2.1 |
| 7.25 | 41.28 | 41.3 | 20.6 | 13.8 | 10.3 | 8.3 | 6.9 | 5.9 | 5.2 | 4.6 | 4.1 | 3.8 | 3.4 | 3.2 | 2.9 | 2.8 | 2.6 | 2.4 | 2.3 |
| 7.50 | 44.18 | 44.2 | 22.1 | 14.7 | 11.0 | 8.8 | 7.4 | 6.3 | 5.5 | 4.9 | 4.4 | 4.0 | 3.7 | 3.4 | 3.2 | 2.9 | 2.8 | 2.6 | 2.5 |
| 7.75 | 47.17 | 47.2 | 23.6 | 15.7 | 11.8 | 9.4 | 7.9 | 6.7 | 5.9 | 5.2 | 4.7 | 4.3 | 3.9 | 3.6 | 3.4 | 3.1 | 2.9 | 2.8 | 2.6 |
| 8.00 | 50.27 | 50.3 | 25.1 | 16.8 | 12.6 | 10.1 | 8.4 | 7.2 | 6.3 | 5.6 | 5.0 | 4.6 | 4.2 | 3.9 | 3.6 | 3.4 | 3.1 | 3.0 | 2.8 |
| 8.25 | 53.46 | 53.5 | 26.7 | 17.8 | 13.4 | 10.7 | 8.9 | 7.6 | 6.7 | 5.9 | 5.3 | 4.9 | 4.5 | 4.1 | 3.8 | 3.6 | 3.3 | 3.1 | 3.0 |
| 8.50 | 56.75 | 56.7 | 28.4 | 18.9 | 14.2 | 11.3 | 9.5 | 8.1 | 7.1 | 6.3 | 5.7 | 5.2 | 4.7 | 4.4 | 4.1 | 3.8 | 3.5 | 3.3 | 3.2 |
| 8.75 | 60.13 | 60.1 | 30.1 | 20.0 | 15.0 | 12.0 | 10.0 | 8.6 | 7.5 | 6.7 | 6.0 | 5.5 | 5.0 | 4.6 | 4.3 | 4.0 | 3.8 | 3.5 | 3.3 |
| 9.00 | 63.62 | 63.6 | 31.8 | 21.2 | 15.9 | 12.7 | 10.6 | 9.1 | 8.0 | 7.1 | 6.4 | 5.8 | 5.3 | 4.9 | 4.5 | 4.2 | 4.0 | 3.7 | 3.5 |
| 9.25 | 67.20 | 67.2 | 33.6 | 22.4 | 16.8 | 13.4 | 11.2 | 9.6 | 8.4 | 7.5 | 6.7 | 6.1 | 5.6 | 5.2 | 4.8 | 4.5 | 4.2 | 4.0 | 3.7 |
| 9.50 | 70.88 | 70.9 | 35.4 | 23.6 | 17.7 | 14.2 | 11.8 | 10.1 | 8.9 | 7.9 | 7.1 | 6.4 | 5.9 | 5.5 | 5.1 | 4.7 | 4.4 | 4.2 | 3.9 |
| 9.75 | 74.66 | 74.7 | 37.3 | 24.9 | 18.7 | 14.9 | 12.4 | 10.7 | 9.3 | 8.3 | 7.5 | 6.8 | 6.2 | 5.7 | 5.3 | 5.0 | 4.7 | 4.4 | 4.1 |
| 10.00 | 78.54 | 78.5 | 39.3 | 26.2 | 19.6 | 15.7 | 13.1 | 11.2 | 9.8 | 8.7 | 7.9 | 7.1 | 6.5 | 6.0 | 5.6 | 5.2 | 4.9 | 4.6 | 4.4 |

To find the area of bars larger than 10" diameter use the formula $\pi(3.14) \times \text{radius}^2$.
 Take half the diameter (radius) multiply it by itself.
 Then multiply that by 3.14. Example: 20" bar.
 Half the diameter is 10". $10 \times 10 = 100$. $100 \times 3.14 = 314$ square inches.

* Specific speed/feed rates and cut times for all applications and blades can be found on the Morse Blade Wizard

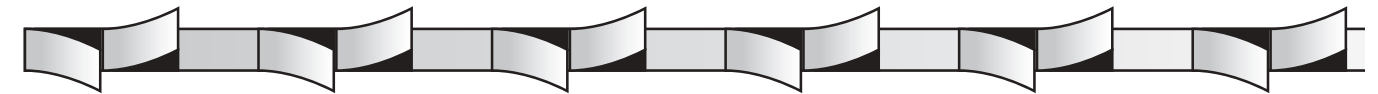


BladeWizard.com



Here's where the blade makes the cut. The tooth design variables include shape, position, set, type, and spacing. The combination of these variables will determine whether the blade can move easily through your material without binding or becoming clogged with chips.

Raker



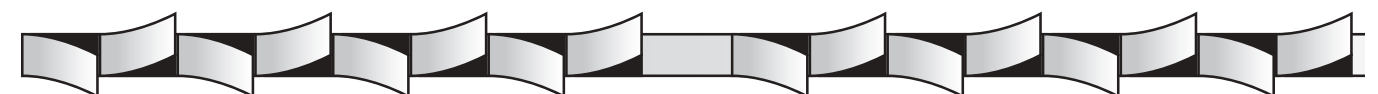
Recurring sequence of teeth - one set right, one set left, and one unset.

Modified Raker (double set raker)



Recurring sequence set left, right, left, right, straight tooth pattern.

Variable Pitch Modified Raker



Set sequence depends on the number of teeth in the variable pitch tooth pattern. Recurring sequence with more than two set teeth before an unset tooth.

Wavy



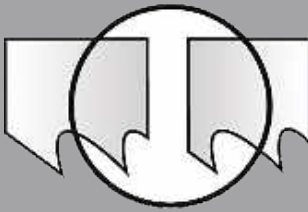
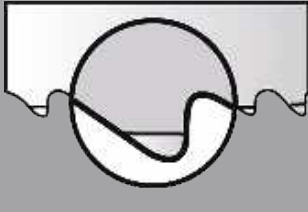
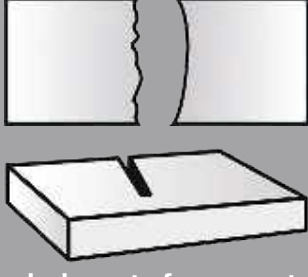



Groups of teeth, usually 3 or 4, set to each side in a controlled pattern with an unset tooth between groups.

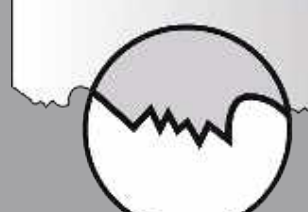
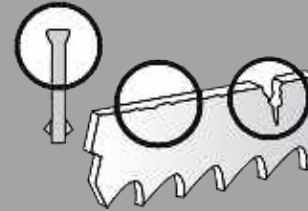




Alternate (ETS)



Every tooth set alternately to the left and right.

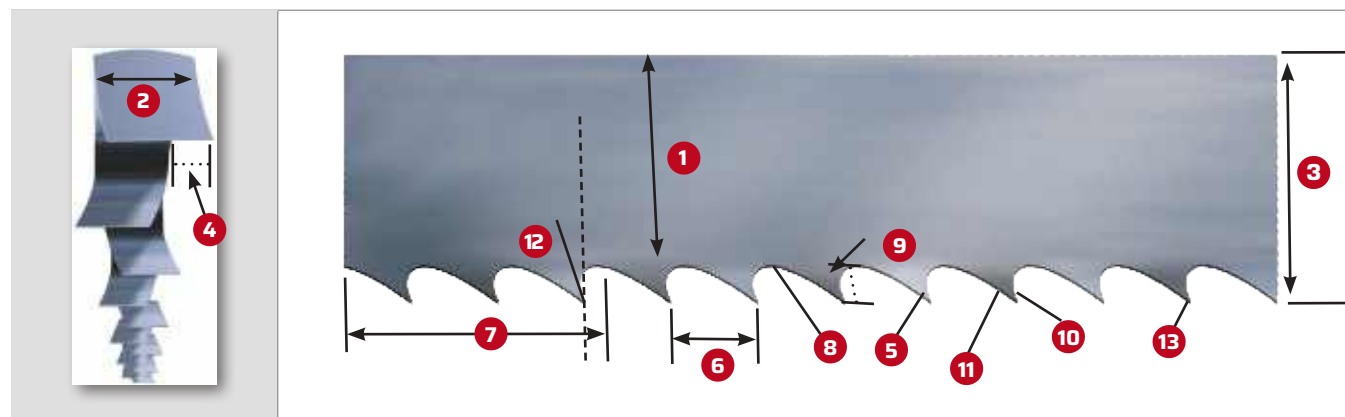
BLADE PROBLEM SOLVING

| Problem | Problem Cause | Solution |
|--|--|--|
|  <p>Premature blade breakage Straight break indicates fatigue</p> | <ul style="list-style-type: none"> ▼ Incorrect tooth pitch ▼ Blade tension incorrect ▼ Side guides too tight ▼ Damaged or misadjusted blade guides ▼ Excessive feed/force ▼ Incorrect cutting fluid ▼ Wrong blade size ▼ Blade rubbing on wheel flanges ▼ Teeth in contact with work before starting saw ▼ Incorrect blade speed | <ul style="list-style-type: none"> ✔ Use correct tooth pitch ✔ Check blade tension with Band Tension Gauge ✔ Check side guide clearance (see machine manual) ✔ Check all guides for alignment/damage ✔ Reduce feed pressure/force ✔ Check coolant/refract ✔ Use correct size blade ✔ Adjust wheel alignment ✔ Allow clearance before starting cut ✔ Increase or decrease blade speed |
|  <p>Premature dulling of teeth</p> | <ul style="list-style-type: none"> ▼ Teeth pointing in wrong direction / blade mounted backwards ▼ Improper or no blade break-in ▼ Hard spots in material ▼ Material work hardened ▼ Improper coolant ▼ Improper coolant concentration ▼ Speed too high ▼ Feed too light ▼ Improper tooth count | <ul style="list-style-type: none"> ✔ Install blade correctly. If teeth are facing the wrong direction, flip blade inside out ✔ Break in blade properly (Page 23) ✔ Check for hardness or hard spots like scale or flame cut areas ✔ Increase feed rate ✔ Check coolant type ✔ Check coolant/refract ✔ Check recommended blade speed ✔ Increase feed rate ✔ Select proper tooth size |
|  <p>Crooked or out-of-square cuts</p> | <ul style="list-style-type: none"> ▼ Tooth set damage ▼ Excessive feed pressure/force ▼ Improper tooth size ▼ Cutting fluid not applied evenly ▼ Guides worn or loose ▼ Insufficient blade tension ▼ Guide arms loose or set too far apart ▼ Chips not being cleaned from gullets | <ul style="list-style-type: none"> ✔ Check for worn set on one side of blade ✔ Reduce feed pressure/force ✔ Check tooth size chart (Page 24) ✔ Check coolant nozzles ✔ Tighten or replace guides, check for proper alignment ✔ Adjust to recommended tension ✔ Position arms as close to work as possible. Tighten arms. ✔ Check chip brush |
|  <p>Chip Welding</p> | <ul style="list-style-type: none"> ▼ Insufficient coolant flow ▼ Wrong coolant concentration ▼ Excessive speed and/or pressure ▼ Tooth size too small ▼ Chip brush not working | <ul style="list-style-type: none"> ✔ Check coolant level and flow ✔ Check coolant ratio/refract ✔ Reduce speed and/or pressure ✔ Use coarser tooth pitch ✔ Repair or replace chip brush |
|  <p>Teeth Fracture Back of tooth indicates work spinning in clamps</p> | <ul style="list-style-type: none"> ▼ Incorrect speed and/or feed ▼ Incorrect tooth pitch ▼ Saw guides not adjusted properly ▼ Chip brush not working ▼ Work spinning or moving in vise | <ul style="list-style-type: none"> ✔ Check cutting chart (Pages 26-27) ✔ Check tooth size chart (Page 24) ✔ Adjust or replace saw guides ✔ Repair or replace chip brush ✔ Check bundle configuration/adjust vise pressure |
|  <p>Irregular Break Indicates material movement</p> | <ul style="list-style-type: none"> ▼ Indexing out of sequence ▼ Material loose in vise | <ul style="list-style-type: none"> ✔ Check proper machine movement ✔ Check vise or clamp |

| Problem | Problem Cause | Solution |
|---|---|---|
|  <p>Teeth Stripping</p> | <ul style="list-style-type: none"> ▼ Feed pressure too high ▼ Tooth stuck in cut ▼ Improper or insufficient coolant ▼ Incorrect tooth size ▼ Hard spots in material ▼ Work spinning in vise - loose nest or bundle ▼ Blade speed too slow ▼ Blade teeth running backwards ▼ Chip brush not working | <ul style="list-style-type: none"> ✔ Reduce feed pressure ✔ Do not enter old cut with a new blade ✔ Check coolant flow and concentration/refract ✔ Check tooth size chart (Page 24) ✔ Check material for hard inclusions ✔ Check clamping pressure - be sure work is held firmly ✔ Increase blade speed ✔ Reverse blade (turn inside out) ✔ Repair or replace chip brush |
|  <p>Wear on Back of Blades</p> | <ul style="list-style-type: none"> ▼ Excessive feed pressure ▼ Insufficient blade tension ▼ Back-up guide frozen, damaged, or worn ▼ Blade rubbing on wheel flange | <ul style="list-style-type: none"> ✔ Decrease feed pressure ✔ Increase blade tension and readjust guides ✔ Repair or replace back-up guide ✔ Adjust wheel alignment |
|  <p>Rough Cut Washboard surface vibration and/or chatter</p> | <ul style="list-style-type: none"> ▼ Dull or damaged blade ▼ Incorrect speed or feed ▼ Insufficient blade support ▼ Incorrect tooth pitch ▼ Insufficient coolant | <ul style="list-style-type: none"> ✔ Replace with new blade ✔ Use correct speed and feed ✔ Move guide arms as close as possible to the work ✔ Use finer pitch blade ✔ Check coolant flow |
|  <p>Wear Lines, Loss of Set</p> | <ul style="list-style-type: none"> ▼ Saw guide inserts or wheel flange are riding on teeth ▼ Insufficient blade tension ▼ Hard spots in material ▼ Back-up guide worn | <ul style="list-style-type: none"> ✔ Check machine manual for correct blade width ✔ Tension blade properly ✔ Check material for inclusions ✔ Replace guide |
|  <p>Twisted Blade Profile sawing</p> | <ul style="list-style-type: none"> ▼ Blade binding in cut ▼ Side guides too tight ▼ Wrong size blade ▼ Work not firmly held ▼ Erratic coolant flow ▼ Incorrect blade tension | <ul style="list-style-type: none"> ✔ Decrease feed pressure/force ✔ Adjust side guide gap ✔ Use correct size blade ✔ Check clamping pressure ✔ Check coolant nozzles ✔ Check blade tension |
|  <p>Blade Wear Teeth blued</p> | <ul style="list-style-type: none"> ▼ Incorrect blade ▼ Incorrect feed or speed ▼ Improper or insufficient coolant ▼ "Blueing" caused by excessive heat | <ul style="list-style-type: none"> ✔ Use coarser tooth pitch ✔ Use correct feed and speed ✔ Check coolant flow ✔ Check coolant flow |

ANATOMY OF A SAW BLADE

Although it looks like a flat piece of metal with teeth, a quality industrial band saw blade is actually a sophisticated cutting tool. Its ability to efficiently cut through tough metals, composite materials, plastics, and woods depends on a variety of interrelated factors such as the design, spacing, and set of the teeth, the design and capacity of the gullets to make sure chips are efficiently removed, the composition of the backer strip, and the gauge of the metal. These considerations must be taken into account when selecting the right blade for your application.



- 1 **Blade Backer**..... The body of the blade not including tooth portion
- 2 **Gauge**..... The thickness of the blade
- 3 **Width**..... The tip of tooth to back of blade
- 4 **Set**..... The positioning of teeth right or left
- 5 **Tooth**..... The cutting portion of the saw blade
- 6 **Tooth Pitch**..... The distance from one tooth tip to the next
- 7 **T.P.I.**..... The number of teeth per inch measured gullet to gullet
- 8 **Gullet**..... The curved area between the tooth points
- 9 **Gullet Depth**..... The distance from the tooth tip to the bottom of the gullet
- 10 **Tooth Face**..... The surface of the tooth on which the chip is formed
- 11 **Tooth Flank**..... The angled back surface of the tooth opposite the tooth face
- 12 **Tooth Rake Angle**..... The angle of the tooth face measured with respect to a line perpendicular to the cutting direction of the saw
- 13 **Tooth Tip**..... The cutting edge of the saw tooth

WARNING about saw blade usage

Cutting tools can shatter and/or break under improper or severe use. Wear safety equipment, particularly goggles, gloves, and hearing protection, at all times in the vicinity of their use. Always follow band saw machine manufacturers' recommendations.

The M. K. Morse Company Warranty

The M. K. Morse Company warrants each new product manufactured and sold by it or one of its authorized distributors only against defects in workmanship and/or materials under normal service, proper installation, and use. THIS WARRANTY IS LIMITED TO REPAIR OR REPLACEMENT OF VERIFIED DEFECTIVE PRODUCTS AND EXCLUDES ANY AND ALL IMPLIED WARRANTY OF MERCHANTABILITY AND ALL RISK AND LIABILITY WHATSOEVER RESULTING FROM ANY USE OF SAID PRODUCTS, INCLUDING INCIDENTAL AND CONSEQUENTIAL DAMAGES. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE THEREOF. The provisions of this warranty and limitation of liability shall not be modified in any respect except by written document signed by an officer of The M. K. Morse Company.

WAREHOUSE INFORMATION

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ASIA

India

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