

Extremely Important...

TechTips

BLADE BREAK-IN

The extremely sharp tooth points and edges of new blades must be broken-in before applying full feed pressure to the blade.



A good analogy is that of writing with a freshly sharpened wooden pencil.

RECOMMENDED BREAK-IN PROCEDURE

- ▼ Maintain proper blade speed for the material to be cut.
- ▼ Reduce blade feed pressure or feed rate by 50% for the first 50 to 100 square inches of material cut.
- ▼ Gradually increase feed pressure or feed rate after break-in to full pressure or rate.

Bi-Metal

Production Cutting

M-42

- ▼ Used on medium to heavy production machines to cut solids and heavy-walled structures
- ▼ Variable pitch teeth can handle a wider range of cross sectional sizes
- ▼ High wear and heat resistance
- ▼ Use positive rake for solids, 0 degree rake for tubing or thin wall pipe

Specialty Structural

CHALLENGER™

- ▼ Specially designed for structural steel
- ▼ Increased beam strength for straighter interrupted and bundle cuts
- ▼ Reduces vibration and noise associated with interrupted cutting profiles
- ▼ Constant tooth height for even chip load and less tooth strippage

Heavy Production Cutting

INDEPENDENCE II®

- ▼ Small to medium solids
- ▼ Fewer blade changes in a wide range of materials resulting in less downtime
- ▼ Extreme fatigue resistance to eliminate pre-mature breakage
- ▼ Tougher and more wear resistant than M42

General Purpose

MATRIX II

- ▼ Good general purpose blade. Tough impact resistance high speed steel
- ▼ Good Value on light to medium production and maintenance applications
- ▼ Handles solids, bundles and stacked pieces
- ▼ Use positive rake for solids, 0 degree rake for tubing or thin wall pipe

Production Cutting

THE MORSE ACHIEVER™

- ▼ Production cutting of solids, layers, and bundle cuts
- ▼ Best overall performance in a wide range of materials
- ▼ Exceptional long fatigue life to eliminate pre-mature breakage
- ▼ Exceptional tooth durability in a wide range of mild to difficult materials

Heavy Production Cutting

INDEPENDENCE EXS®

- ▼ For exotics and large cross section solids
- ▼ Good with difficult to machine high temperature high strength material
- ▼ Extreme fatigue resistance to eliminate pre-mature breakage
- ▼ Tougher and more wear resistant than M42

Select Blade Based Upon Target Application

CARBON STEELS	STRUCTURAL STEELS	ALUMINUM & LT. ALLOY STEELS	ALLOY STEELS MOLD STEELS	TOOL STEELS	STAINLESS STEELS	NICKEL BASE ALLOYS	TITANIUM ALLOYS
MATRIX II					INDEPENDENCE EXS®		
M-42				THE MORSE ACHIEVER™			
CHALLENGER/STRUCTURAL			INDEPENDENCE II®				
INDEPENDENCE EXS®							

Optimal Applications



Possible Uses

CARBON	HARBACK	FLEXBACK	ETS FLEXBACK	WOOD MILL/RESAW	QUIKSILVER®
<i>Selection Based Upon Target Application</i>					
NON-FERROUS METALS	▼	▼			
WOOD	▼	▼	▼	▼	▼
LOW ALLOY, EASY-TO-MACHINE FERROUS	▼				
PLASTIC	▼	▼			
CORK	▼	▼			
COMPOSITION BOARD	▼	▼			
PLYWOOD	▼	▼	▼		▼
LOW ALLOY STEEL		▼			
CHIPBOARD			▼		
CARDBOARD			▼		

HARD BACK

- ▼ Stiffer than flexback due to hardened and tempered backer.
- ▼ Ideal for applications where straighter cuts or heavier feed pressure are required.
- ▼ Not recommended for blade speed exceeding 4,000 SFM
- ▼ Good on easy to machine metals and easy to cut materials

WOOD MILL / RESAW

- ▼ Available in both flex back and hard back
- ▼ Applications: Portable and stationary wood mills, Scragg mills, Single head and multi-head resaw systems.
- ▼ Hard back blades offer straighter cuts
- ▼ Can be resharpened for longer tooth life

FLEX BACK

- ▼ Flexible back makes them more fatigue resistant
- ▼ Can be run at speeds up to 15,000 SFM (surface feet per minute)

QUIKSILVER®

- ▼ Available in both flex back and hard back
- ▼ Applications: Wood cutting with increased fatigue resistance
- ▼ Can be resharpened for longer tooth life

ETS FLEX BACK

- ▼ The ETS (Every Tooth Set) set pattern and aggressive hook tooth design offers the precision and contour control required in furniture manufacturing.
- ▼ Aggressive tooth design cuts faster with longer tooth life
- ▼ Can be resharpened

CARBIDE TIPPED	CARBIDE GRIT		M-FACTOR - GP	M-FACTOR - FB	M-FACTOR - CH	M-FACTOR - EX
	CONTINUOUS	GULLETED				
<i>Selection Based Upon Target Application</i>						
CAST IRON & HARDENED STEEL	▼	▼				
CERAMICS & FORMED GLASS	▼	▼				
TIRES & WIRE REINFORCED RUBBER	▼	▼				
FIBERGLASS	▼	▼				
CABLE & WIRE ROPE	▼	▼				
CEMENT & CONCRETE	▼	▼				
GRAPHITE	▼	▼	▼	▼		
COMPOSITES	▼	▼	▼	▼		
ALUMINUM & LT. ALLOY STEELS			▼			
ALLOY STEELS MOLD STEELS			▼			▼
CARBON STEELS			▼			
STAINLESS STEELS			▼			▼
NICKEL BASE ALLOYS			▼			▼
TITANIUM ALLOYS			▼			▼
CASE HARDENED					▼	
ALUMINUM CASTINGS				▼		
ABRASIVE WOODS			▼	▼		
HASTELLOY / INCONEL						▼

CARBIDE TIPPED BLADES

M-FACTOR by Morse® – GP

- ▼ Alloy steels
- ▼ Stainless steels
- ▼ Typical users include: Steel service centers, Forging operations and General Manufacturing

M-FACTOR by Morse® – FB

- ▼ Aluminum castings: gates, risers, extrusions
- ▼ Abrasive wood & plywood
- ▼ Typical users include: Aluminum foundries, Graphite manufacturing, Composite wood (furniture)

M-FACTOR by Morse® – CH

- ▼ Work hardened, chrome plated hydraulic cylinder shafts
- ▼ Case hardened shafts & shapes
- ▼ Heat treated thick wall tubing
- ▼ Typical users include: Steel service centers, Automotive parts makers, Cylinder Manufacturers, Bearing Manufacturers

CARBIDE GRIT BLADES

CONTINUOUS / GULLETED

- ▼ Very smooth finish
- ▼ Reversible to extend service life
- ▼ Available in continuous and gulleated cutting edges
- ▼ Continuous grit for brittle materials, or materials thinner than 1/4" (6.4mm) with surfaces that chip
- ▼ Gulleated grit for 1/4" and larger wall thickness
- ▼ Available in medium to coarse grit
- ▼ Medium grit for thin materials or fine finishes
- ▼ Coarse grit for cutting thick materials

M-FACTOR by Morse® – EX

- ▼ Stainless Steels (all grades)
- ▼ Inconel
- ▼ Hastelloy
- ▼ Other difficult alloys
- ▼ Typical users include: Steel service centers, Forging operations and General Manufacturing