











# TABLE OF CONTENTS

	The M. K. Morse Company Overview <b>Industrial Band Saw Blades</b> Anatomy of a Saw Blade Blade Part Numbers Tooth Set Specifications Blade Optimization Sparc Technology Carbide Tipped Saw Blades Bi-Metal Saw Blades Tungsten Carbide Grit Saw Blades QuikSilver Carbide Tipped Blades QuikSilver Bi-Metal Blades	4 7 8 9 10 11 12 14 23 24
L L L	QuikSilver Carbon Blades Feed Rate Monitor Band Saw Tension Gauge	25 30 31
	Band Saw Tooth Pitches Tooth Selection Guide Blade Speed/Removal Rates	32 33 34
	Cut Time Calculator Blade Optimization Blade Problem Solving	36 37 38
1	Thin Kerf Industrial Circular Saw Blades Thin Kerf Selection Guide	<b>40</b> 44
1	Thin Kerf Trouble Shooting Guide	44
	Power Tool Accessories	46
1	Bi-Metal Hole Saws	48
1	Bi-Metal Hole Saw Kits	54 56
1	Tungsten Carbide Grit Hole Saws Diamond Grit Hole Saws	57
1	Carbide Tipped Hole Saws	58
1	Recessed Lighting Hole Saw	59
	Arbors	60
1	Carbide Tipped Hole Cutters	62 64
1	Self Feeding Wood Bits Step Drills	65
7	Double Cut Auger Bits	66
1	Reciprocating Saw Blades	68
1	Carbide Tipped Recip	69
1	Sparc Recip Saw Blades	70
1	Master Cobalt Wood Recip	71
7	Master Cobalt Metal Recip	72 74
7	Master Cobalt Hybrid Wood Metal Recip Advanced Edge Bolt Recip	74
7	Advanced Edge Power Recip	78
7	Havoc Recip	79
7	Renovator Recip	80
7	Auto Salvage Recip	81
7	Air Saw Recip	82 83
7	Pipe Boss Recip Fire + Rescue Recip	84
7	Plaster Recip	85
7	U-Shank Recip	85
7 7	Diamond Grit Recip	86
7 7	Carbide Grit Recip	87
7	Pallet Dismantler Recip Carbide Tipped Recip	87 88
7	Jab Saws	89
7	Metal Cutting Circular Saw Blades	90
2	Metal Cutting Accessories	95
7	Diamond Edge	96
7	Portable Band Saw Blades	98
7	811 and 1216 Portable Band Master Cobalt Portable Band	99 100
7	Straight Pitch Bi-Metal Portable Band	100
7	Jig Saw Blades	104
1	Bi-Metal Hack Saw Blades	108
7	Hack Saw Frames	110
7	Specialty Hack Saws	111

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# THE M. K. MORSE COMPANY



#### WHEN YOU NEED SAW BLADES, YOU NEED MORSE

For more than 50 years, we've been selling, innovating and manufacturing an array of material separation solutions. And while our product's design, workmanship and performance are unparalleled, it's our exceptional service levels that make us your best source for saw blades.

Regardless of machine, material or application, Morse has the right saw blade for the job. Our team of experienced, highly trained field technicians help you get the most performance out of your operator, your equipment, and your saw blade. Whether your primary cost driver is speed or cut quantity, we deliver solutions to fit your saw, your budget, and your business.

Virtually all Morse product is manufactured in Canton, Ohio, USA. And with Morse product sold in more than 70 countries, our global distribution network and weld centers ensure that our customers get the right product, right when they need it.

As a second-generation family-owned business, we take pride in serving customers at the highest levels. We've embraced lean manufacturing, and each of our workers are cross-trained in several departments to help insure consistency, reliability and quality in everything we produce.

All we make are saw blades. And we make them exceptionally well.

# NOT ALL MATERIALS ARE CREATED EQUAL

Our in-house team of material scientists and engineers is the best in the industry. They continually test, improve and refine all facets of our products -- from raw materials and tooth design to proprietary treatments and coatings. Our manufacturing processes continually improve to exceed the rigorous demands of our customers.

We proudly support customers from small machine shops and steel service centers to large defense contractors and government agencies. No task is too big or too small for us to tackle. Best yet, we haven't found a material yet our team can't cut.

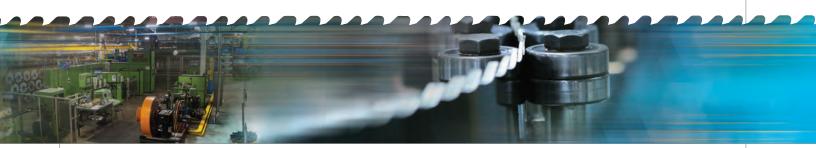
# EXPERIENCE THE MORSE DIFFERENCE

In addition to our innovative products and world-class service levels, we've established a unique training curriculum at our factory that further supports and educates our customers on how to optimize their material separation processes. We regularly host people from across the globe at two and a half day, immersive sessions to bring better understanding to the ever-evolving world of saw blade technology.

If you've been an M. K. Morse customer for some time, thank you for your business. And if you're considering us now, we encourage you to take a moment to understand how the right saw blade can make or break your productivity, operational efficiency, and your budget.

Thank you for the opportunity to serve you.

Happy sawing!



#### 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 WHICH 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.

#### **GUARANTEED TRIAL BAND SAW BLADES**

The M. K. Morse Company will provide carbide tipped, bi-metal and carbon weld-to-length blades as a "Guaranteed Trial Order" (GTO) for the purpose of user evaluation of performance. If the blade recommended by Morse or approved by Morse for the particular application fails to perform satisfactorily for the user, Morse will issue full credit for the invoice value of the blade upon the return of the blade to Morse.

In all instances where Morse provides carbide tipped, bi-metal and carbon weld-to-length band saw blades for trial and evaluation, the Morse sales representative will provide follow-up.

Morse is confident in the ability of our blades to meet the end users expectations for performance.





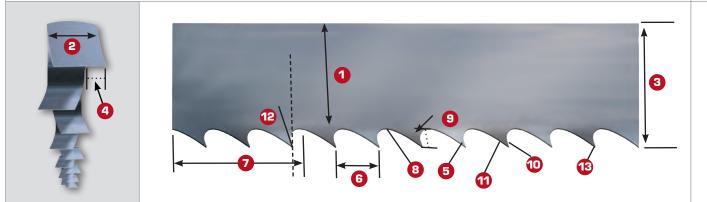
# BAND SAW BLADES

# **BLADE TYPE APPLICATION** Carbide Tipped Band Saw Blades for Metal Specially designed for alloy steel and stainless steel applications for exceptional long life. Highly fatigue resistant to eliminate premature breakage. Excellent in solid tool steels and small to medium stainless and nickel based alloys. Bi-Metal Band Saw Blades Ideal for cutting ceramics and other materials that are too hard or abrasive for standard bi-metal Carbide Grit Band Saw Blades blades, tungsten carbide grit blades provide superior wear resistance. Specially designed for fine-finish wood cutting in applications such as hardwood flooring, millwork and Carbide Tipped Band Saw Blades for Wood musical tonewoods. Ideal for wood production cutting and short production/maintenance/ general purpose applications using low alloy steel and non-ferrous Carbon Band Saw Blade

metals

# 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 gage of the metal. These considerations must be taken into account when selecting the right blade for your application. The following Technical Pages will help you arrive at the perfect Morse solution to your particular cutting problem.



- **1** Blade Back ...... The body of the blade not including tooth portion
- **2 Gage** ...... The thickness of the blade
- **3 Width** ...... The tip of tooth to back of blade
- **5 Tooth** ...... The cutting portion of the saw blade
- **5 Tooth Pitch......** The distance from one tooth tip to the next
- **B Gullet**......The curved area between the tooth points
- 0 **Tooth Face......** The surface of the tooth on which the chip is formed
- **10 Tooth Flank.....** The angled back surface of the tooth opposite the tooth face
- **Tooth Tip**......The cutting edge of the saw tooth

# **BLADE PART NUMBERS**

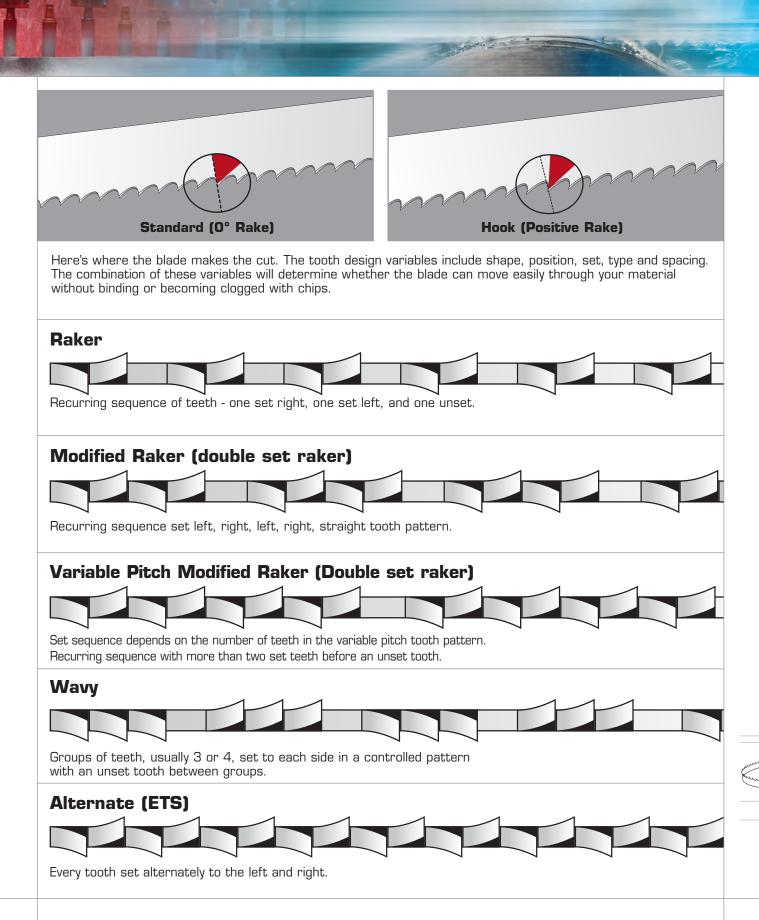
The M. K. Morse Company has begun using 10-digit numeric band saw blade part numbers rather than alphanumeric part numbers.

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 M. K. Morse will assist all band saw blade distributors with any cross referencing needed. If you have any questions, please contact your M. K. Morse Customer Service Representative.

	1 <sup>st</sup> and 2 <sup>nd</sup> DIGITS	MATERIAL/TOOTH SET STYLE	3 <sup>rd</sup> and 4 <sup>th</sup> DIGITS	BLADE WIDTH	5 <sup>th</sup> and 6 <sup>th</sup> DIGITS	TOOTH COUNT
Part #	Material Type	Set Style	Part #	Width x Thickness	Part #	TPI
00	M42	Positive, 6° Rake	10	.25 x .014	00	Carbide Grit
10	QS HEF Carbon	Hook Raker – Special Extra Heavy Set	11	.375 x .014	01	1
11	QS HEF Carbon	Hook – Heavy Set	20	.25 x .020	02	2
13	QS HEF Carbon	Hook - Double Set Raker	21	.50 x .020	03	3
14	QS HEF Carbon	Wavy	30	.125 x .025	04	4
15	QS HEF Carbon	Skip	31	.1875 x .025	06	6
16	QS HEF Carbon	Raker Or Variable Pitch	32	.25 x .025	08	8
17	QS HEF Carbon	QuikSilver WMF - Hook	33	.375 x .025	10	10
18	QS HEF Carbon	Hook	34	.50 x .025	12	12
19	QS HEF Carbon	Hook ETS	40	.25 x .032	13	10 / 14
20	QS HEF Carbon	Bright	41	.375 x .032	14	14
26	QS HEF Carbon	Hook – Light Set	42	.50 x .032	16	14 / 18
30	Matrix II	Positive Rake	43	.625 x .032	18	18
31	Matrix II	Positive Rake – Heavy Set	44	.75 x .032	22	20 / 24
33	Matrix II	O° Rake - Heavy Set	50	.25 x .035	23	2/3
34	Matrix II	Wavy	51	.375 x .035	24	24
36	Matrix II	Raker	52	.50 x .035	32	32
38	Matrix II	Hook	53	.625 x .035	34	3/4
39	Matrix II	O° Rake	54	.75 x .035	46	4/6
40	M42	Positive Rake	55	1 x .035	57	5/7
41	The Morse Achiever	10° Positive Rake	56	1.25 x .035	58	5/8
42	M42	O° Rake	57	2 x .035	68	6 / 10
42	The Morse Achiever	O° Rake	60	1 x .042	80	8 / 11
43	M42	Wavy	61	1.25 x .042	81	8 / 12
44	M42				91	
		Straight Pitch – Heavy Set	62	2 x .042		.75 / 1.1
46	M42	Raker	70	1.25 x .045	92	1.4 / 2.5
47	The Morse Achiever	Variable – 6° Positive Rake	71	1.5 x .045	93	1.3
48	M42	Hook	80	.75 x .050	94	1.14
49	The Morse Achiever	Heavy Set	81	1.5 x .050	95	1.15
55	Independence II	Heavy Set	82	2 x .050	96	1.1 / 1.5
	Independence II	Variable Pitch	90	2 x .063	97	1 / 1.5
57	Independence EXS	Variable Pitch	91	2.625 x .063	98	1.5 / 2
60	QS Hard Back Carbon	Hook Raker – Special Extra Heavy Set	l <u>a</u> pe	3 x .063		
61	QS Hard Back Carbon	Hook – Heavy Set		/		
63	QS Hard Back Carbon	Hook - Double Set Raker		/		
64	QS Hard Back Carbon	Wavy		/		
65	QS Hard Back Carbon	Skip		/		
66	QS Hard Back Carbon	Raker Or Variable Pitch				
67	QS Hard Back Carbon	QuikSilver WMH - Hook	1	/	7 <sup>th</sup> , 8 <sup>th</sup> and 9 <sup>th</sup> DIGITS	BLADE LENGTH
68	QS Hard Back Carbon	Hook				
70	Tun. Carbide Grit - Continuous	Medium		/	Number of feet multiplie	
71	Tun. Carbide Grit - Continuous	Medium Coarse		/	additional inches. (Unles	
72	Tun. Carbide Grit - Continuous	Coarse		/	Coil Length (in feet) + C	
73	Tun, Carbide Grit - Gulleted	Medium		/	LENGTH coil - use 000	R.
74	Tun. Carbide Grit - Gulleted	Medium Coarse				FRACTION OF INCH/
75	Tun. Carbide Grit - Gulleted	Coarse			10 <sup>th</sup> DIGIT	MILLIMETER
	A-Factor By Morse - Carbide Tipped	Auminum Foundry			Part # Inch Length	
	A-Factor By Morse - Carbide Tipped	Case Hardened				
					O Even Length	
	A-Factor By Morse - Carbide Tipped	General Purpose			1 1/8"	
	И-Factor By Morse - Carbide Tipped	Exotic			2 1/4"	2 6.4
91	Challenger	Positive Rake			3 3/8″	3 9.5
92	Challenger	Heavy Set			4 1/2″	4 12.7
GA N	A-Factor By Morse - Carbide Tipped	Wood Production			5 5/8″	5 16
					6 3/4″	6 19
EX4	MPLE 1 PREVIOUS PART #Z	WEN635C23HPI			7 7/8″	7 22
			$\setminus$		C Coil Stock	C Coil Stock
Therefor	e: Independence II 2.625 x .063	3 2/3 100' Coil				
ls shown	ias: <b>51 91</b>	23 100C	(91)(51)(	23 ( 100C )		
	ART #519123100C				7 <sup>th</sup> , 8 <sup>th</sup> and 9 <sup>th</sup> DIGITS	METRIC BAND LENGTH
			<u> </u>	<u> </u>	Number of millimeters m	ultiplied by 02927
EXA	MPLE 2 PREVIOUS PART #2				equals total number of in	
Therefor	e: M42 Straight Pitch Heav	ry Set 3/4 x .035 2 35' 8-1	/2"For 1/2" aka 4/8",	thus 4	Coil Stock. Coil Length (	
Inereinr						
	as: 45	54 02 425	3 4			
Is shown		<b>54 02 428</b> (35 x 12 (420 + 8	<b>4 4 4</b>		RANDOM LENGTH coil	

# TOOTH SET SPECIFICATIONS



# **BLADE OPTIMIZATION**

#### **BLADE BREAK-IN: EXTREMELY IMPORTANT**

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 target pressure or rate.

# MORSE BI-METAL BAND SAW BLADE APPLICATION OVERVIEW

SELECTION BASED UPON TARGET APPLICATION

	CARBO		ICTURAL TEELS L	Aluminum & T. Alloy Steels	ALLOY STE MOLD STE		ool Eels	STAINLE STEELS		IICKEL BASE ALLOYS		NIUM LOYS
AISI	1010, 10 1045		436	6061, 2011 2024, 5052	4140, Pa	יון ווי	113, S7 RIES, D2	316, 30 17-4 PH, 15	-	ONEL, MONE WASPALLOY	ΈL, Τ1-6	6al-4v
JIS	S2OC, S	4SC		6061, 2011, 2024, 5052	SCM 440( SCM 445		, SHD12, 1, SKS41	SUS316 SUS304		NCuP-0		650, 600
DIN	Ск45, С′	16.8	4	AICUPB, AICUMG2, AIMGMNO.3	41CrMo	4	CaVMoV51 DCaMoV51	X5CaNiMo18 X5CaNi18		NiCr19NbMo, Cr19Co14Mo4T	Гі,	
		MATRIX II										
	M42 THE MORSE ACHIEVER®											
		СНАЦ	.ENGER®	THE	MORSE A	ACHIEVER		EPENDI		100		
		CHALL	ENGER								E EXS®	
			SELEC	TION BA	SED UP	ON TARC	GET AF	PPLICA	ΓΙΟΝ			
2	CARBON	ALUMINUM & LT. ALLOY STEELS	ALLOY STEELS		SED UP	ON TARC	SET AF	PPLICA CASE HARDENED	ALUMINUM CASTINGS	ABRASIVE	COMPOSITES	GRAPH
			ALLOY STEELS		STAINLESS	NICKEL BASE	TITANIUM		ALUMINUM		COMPOSITES	GRAPH
	<b>STEELS</b> 1010, 1020,	LT. ALLOY STEELS 6061, 2011	ALLOY STEELS MOLD STEELS	TOOL STEELS A2, H13, S7	STAINLESS STEELS 316, 304	NICKEL BASE ALLOYS INCONEL, MONEL,			ALUMINUM		COMPOSITES	GRAPH
JIS	<b>STEELS</b> 1010, 1020, 1045	LT. ALLOY STEELS 6061, 2011 2024, 5052 6061, 2011,	ALLOY STEELS MOLD STEELS 4140, P20 SCM 440(H),	TOOL STEELS A2, H13, S7 M-SERIES SHD11, SHD12, SKD61, SKS41	<b>STAINLESS</b> <b>STEELS</b> 316, 304 17-4 PH, 15-5 PH SUS316,	NICKEL BASE ALLOYS INCONEL, MONEL, WASPALLOY	TITANIUM ALLOYS           T1-6AI-4V           H4650,		ALUMINUM		COMPOSITES	GRAPH
AISI JIS DIN	STEELS           1010, 1020, 1045           s20C, \$4\$C	LT. ALLOY STEELS 6061, 2011 2024, 5052 6061, 2011, 2024, 5052 AlCuPe, AlCuMe2, AlMeMh0.3	ALLOY STEELS MOLD STEELS 4140, P20 SCM 440(H), SCM 445(H) 41CaMo4	TOOL STEELS A2, H13, S7 M-SERIES SHD11, SHD12, SKD61, SKS41 X1550-VM-V51	STAINLESS STEELS           316, 304           17-4 PH, 15-5 PH           SUS316, SUS304           X5C=NM=18 10, X5C=NM=18 10	NICKEL BASE ALLOYS INCONEL, MONEL, WASPALLOY NCuP-O NCa19N=M0, NCa19Ca14Mo4TI,	TITANIUM ALLOYS           T1-6AI-4V           H4650,	CASE HARDENED	ALUMINUM CASTINGS	WOODS	COMPOSITES	
JIS	STEELS           1010, 1020, 1045           s20C, \$4\$C	LT. ALLOY STEELS 6061, 2011 2024, 5052 6061, 2011, 2024, 5052 AlCuPe, AlCuMe2, AlMeMh0.3	ALLOY STEELS MOLD STEELS 4140, P20 SCM 440(H), SCM 445(H) 41CaMo4	TOOL           STEELS           A2, H13, S7           M-SERIES           SHD11, SHD12,           SKD61, SKS41           X155C-WMoV51           (G)X40C+MoV51	STAINLESS STEELS 316, 304 17-4 PH, 15-5 PH SUS316, SUS304 X50:NM018 10, X50:NM18 10 RSE <sup>®</sup> – GP	NICKEL BASE ALLOYS INCONEL, MONEL, WASPALLOY NCuP-O NCa19N=M0, NCa19Ca14Mo4TI,	ТІТАЛІЦИМ ALLOYS T1-6АІ-4V H4650, H4600	CASE HARDENED	ALUMINUM CASTINGS	WOODS		
JIS	STEELS           1010, 1020, 1045           S20C, S4SC           Ck45, C16.8	LT. ALLOY STEELS 6061, 2011 2024, 5052 6061, 2011, 2024, 5052 AICuPe, AICuMe2, AIMaMNO.3	ALLOY STEELS MOLD STEELS 4140, P20 SCM 440(H), SCM 445(H) 41CaMo4	TOOL           STEELS           A2, H13, S7           M-SERIES           SHD11, SHD12,           SKD61, SKS41           X1550-WM•V51           (G)X400-M•V51           R BY MOI	STAINLESS STEELS 316, 304 17-4 PH, 15-5 PH SUS316, SUS304 X5C=NM=18 10, X5C=NM=18 10 RSE <sup>®</sup> – GF M-FA	NICKEL BASE ALLOYS INCONEL, MONEL, WASPALLOY NC#19N=M0, NC#10, NC#19N=M0, NC#1	тталиим alloys т1-6АІ-4V н4650, н4600	CASE HARDENED	ALUMINUM CASTINGS M-F	ACTOR	2 – FB/F	
JIS	STEELS           1010, 1020, 1045           S20C, S4SC           Ck45, C16.8	LT. ALLOY STEELS 6061, 2011 2024, 5052 6061, 2011, 2024, 5052 AlCuPe, AlCuMe2, AlMeMh0.3	ALLOY STEELS MOLD STEELS 4140, P20 SCM 440(H), SCM 445(H) 41CRM04 7-FACTO	TOOL           STEELS           A2, H13, S7           M-SERIES           SHD11, SHD12,           SKD61, SKS41           X1550-WMeV51           (G)X400-M-V51           R BY MOO	STAINLESS STEELS 316, 304 17-4 PH, 15-5 PH SUS316, SUS304 X5C=NM018 10, X5C=NM018 10 X5C=NM018 10 RSE <sup>®</sup> – GF M-FA	NICKEL BASE ALLOYS INCONEL, MONEL, WASPALLOY NC#190-0 NC#10	тталици аLLOYS 11-6АI-4V Н4650, Н4600	M-FACTOR CH	ALUMINUM CASTINGS M-F	ACTOR	2 – FB/F	
JIS	STEELS           1010, 1020, 1045           S20C, S4SC           Ck45, C16.8	LT. ALLOY STEELS 6061, 2011 2024, 5052 6061, 2011, 2024, 5052 AICuPe, AICuMe2, AIMaMNO.3	ALLOY STEELS MOLD STEELS 4140, P20 SCM 440(H), SCM 445(H) 41CRM04 7-FACTO	TOOL           STEELS           A2, H13, S7           M-SERIES           SHD11, SHD12,           SKD61, SKS41           X1550-WMeV51           (G)X400-M-V51           R BY MOO	STAINLESS STEELS 316, 304 17-4 PH, 15-5 PH SUS316, SUS304 X5C=NM018 10, X5C=NM018 10 X5C=NM018 10 RSE <sup>®</sup> – GF M-FA	NICKEL BASE ALLOYS INCONEL, MONEL, WASPALLOY NC#19N=M0, NC#10, NC#19N=M0, NC#1	тталици аLLOYS 11-6АI-4V Н4650, Н4600	M-FACTOR CH	ALUMINUM CASTINGS M-F	ACTOR	2 – FB/F	
	STEELS           1010, 1020, 1045           S20C, S4SC           Ck45, C16.8	LT. ALLOY STEELS 6061, 2011 2024, 5052 6061, 2011, 2024, 5052 AICuPe, AICuMe2, AIMaMNO.3	ALLOY STEELS MOLD STEELS 4140, P20 SCM 440(H), SCM 445(H) 41CaMo4 A-FACTOI	TOOL           STEELS           A2, H13, S7           M-SERIES           SHD11, SHD12,           SKD61, SKS41           X1550-WMeV51           (G)X400-M-V51           R BY MOO	STAINLESS STEELS 316, 304 17-4 PH, 15-5 PH SUS316, SUS304 X5C=NM018 10, X5C=NM018 10 X5C=NM018 10 RSE <sup>®</sup> – GF M-FA	NICKEL BASE ALLOYS INCONEL, MONEL, WASPALLOY NC#190-0 NC#10	ТТАЛІЦМ ALLOYS T1-6АІ-4V Н4650, H4600 EES	M-FACTOR CH	ALUMINUM CASTINGS M-F PPLIC	ACTOR	P – FB/F DNS	

# SPARC TECHNOLOGY



Sparc<sup>®</sup> technology is an arc that is ground into the back edge of the blade. The arched profile effectively boosts tooth penetration and chip formation without having to increase machine pressure.

The patent pending profile design is already optimized to work on any size cut, so there is no need to order based upon a particular type of cutting such as light, medium or aggressive – all three cutting actions are achieved with one saw blade

#### **APPLICATIONS**

- ▼ High alloy materials
- ▼ Case-hardened materials
- Stainless steel
- ▼ Work-hardening applications
- Production cutting tool steels
- ▼ D2

# ADVANTAGES TO USERS

#### Up to 40% FASTER CUTTING

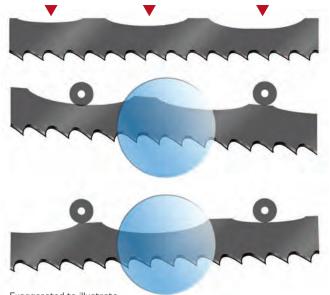
Sparc<sup>®</sup> alternately reduces the number of teeth in the cut via an arching motion on the saw blade and with less teeth in the cut at the same feed pressure means greater penetration into the workpiece.

Up to **50% LONGER LIFE** is possible when compared to stock Carbide Tip Blades.

Up to **40% LONGER LIFE** is possible when compared to stock Bi-Metal Blades. While some teeth have increased penetration other teeth have less, or no pressure in the workpiece enabling longer "insquare" cutting.

# THE BEST MORSE BLADES USED WITH MORSE SPARC

- ▼ M-Factor by Morse<sup>®</sup> CT
- ▼ The Morse Achiever®
- ▼ Independence<sup>®</sup> II
- ▼ Independence® EXS
- M42



While cutting, the alternating pattern of straight and arched profiles on the back edge of the blade produces a

This arching motion is the same as adjusting the angle

of a handheld hacksaw that is alternately angled up and

rocking motion on the cutting edge of the saw.

down to produce a quicker cutting action.

Exaggerated to illustrate blade feature and cutting action.





# CARBIDE TIPPED SAW BLADES

# Constant of the system of the s

WIDTH X 1	HICKNESS	TEETH	TEETH PER INCH				
INCHES	MM	.75/1	1.5/2	2/3	3/4		
nn	m	m	$\sim$	nn	mm		
1 x .035	27 x 0.90			•	•		
1¼ x .042	34 x 1.07	•	•	•	•		
1 ½ x .050	41 x 1.30		▼	▼	▼		
2 x .063	54 x 1.60	•	▼	▼			
2 ⁵⁄≋ x .063	67 x 1.60	<b>•</b>	•	▼			
3 x .063	80 x 1.60	<b>•</b>	▼				



# M-FACTOR BY MORSE® CH (CASE HARDENED)

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

APPLICATIONS
--------------

E

ACTOR

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

#### USERS

- ▼ Steel service centers
- ▼ Automotive parts makers
- ▼ Cylinder manufacturers
- ▼ Bearing manufacturers

		I			
WIDTH X 1	THICKNESS		TEETH	PER INCH	
INCHES	MM	1.5/2	2/3	3	3/4
h	$\sim$	m	$\sim$	m	m
1 x .035	27 x 0.90			▼	▼
1 ¼ x .042	34 x 1.07			▼	▼
1 ½ x .050	41 x 1.30	▼	▼		▼
2 x .063	54 x 1.60		•		



- ▼ All stainless steels
- Difficult to cut alloy steels
- Tool steels

ACTOR

B

ACTOR

- Titanium
- Nickel based alloys
- Hastelloy
- Inconel
- Monel

- ▼ Steel service centers
- ▼ Forging operations
- ▼ Specialized manufacturing

L								
	WIDTH X T	HICKNESS	TEETH	TEETH PER INCH				
	INCHES	MM	.75/1	1.5/2	2/3	3/4		
	m	$\sim$	m	m	m	m		
	1 ¼ x .042	34 x 1.10				▼		
	1 ½ x .050	41 x 1.30			•			
	2 x .063	54 x 1.60		▼	•			
	2 ⁵⁄≋ x .063	67 x 1.60	▼	▼				
	3 x .063	80 x 1.60	•					



# M-FACTOR BY MORSE® FB+ AND FBS (FOUNDRY BAND)

Exceptional long life and fast cutting of abrasive and non-ferrous materials. Foundry blades available in Triple Chip and Set Tooth (FBS).

**APPLICATIONS** 

▼ Aluminum castings: gates, risers, extrusions Abrasive woods plywood

# USERS

- ▼ Aluminum foundries
- ▼ Graphite manufacturers
- ▼ Furniture makers

WIDTH X T	HICKNESS	TEETH PER INCH				
INCHES	MM	3	3 SET			
nn	m	m	$\sim$			
½ x .025	12.7 x 0.60	▼				
<sup>3</sup> ⁄4 x .035	19 x 0.90	•	▼			
1 x .035	27 x 0.90	▼	▼			
1 ¼ x .042	34 x 1.07	•	•			
	1	1	1			



# **BI-METAL SAW BLADES**



# INDEPENDENCE EXS<sup>®</sup> HIGH PRODUCTION BI-METAL BLADES

Longer lasting than competitive blades and more wear resistant than The Morse Achiever®, and M42, these blades are the best choice for cutting exotics, stainless steels and large solids.

#### **APPLICATIONS**

- ▼ High production cutting
- ▼ Large solids
- Stainless steels
- Exotics

vendence EXS

# **BLADE FEATURES**

- ▼ Special high speed steel tooth edges
- ▼ High fatigue steel backer
- ▼ Unique tooth geometry
- ▼ Superior wear, heat and shock resistance
- ▼ Fewer blade changes in a wide range of materials equals less downtime

WIDTH X 1	THICKNESS					
INCHES MM		1/1.5	1.5/2	2/3	3/4	4/6
$\sim$	$\sim$	m	vnv	vnv	vvv	vvv
1 x .035	27 x 0.90			•	•	•
1¼ x .042	34 x 1.07			•	•	•
1½ x .050	41 x 1.30	•	•	•	•	
2 x .063	54 x 1.60	•	•	•	•	



**INDEPENDENCE II® HIGH PRODUCTION** Independence II **BI-METAL BLADES** Highly fatigue resistant to eliminate premature breakage. Excellent in solid tool steels and small to medium stainless and nickel based alloys.

Independence EX

#### **APPLICATIONS**

Independence II

- High production cutting Solids of tool steel (A2, D2, S7, etc.)
- Small to medium solids of stainless ▼
  - (304, 316, 17-4) Nickel based alloys Inconel, Monel
- All machinable metals in single pieces ▼ or bundles

# **BLADE FEATURES**

- Special high speed steel tooth edges ▼
- High fatigue steel backer ▼
- Unique tooth geometry ▼
- ▼
- Superior wear, heat and shock resistance Fewer blade changes in a wide range of ▼ materials equals less downtime

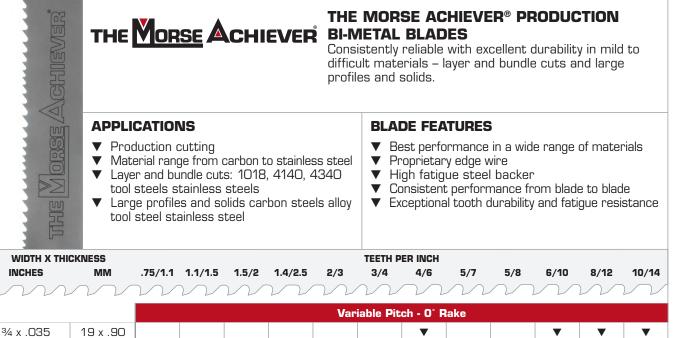
WIDTH X T	HICKNESS	TEETH P	TEETH PER INCH				
INCHES	MM	2/3	3/4	4/6	5/7		
pm	$\sim$	vvv	$\sim$	m	mm		
1 x .035	27 x 0.90	▼	•	▼	▼		
1¼ x .042	34 x 1.07	▼	▼	▼	▼		
1 ½ x .050	41 x 1.27	▼	▼	▼	▼		
2 x .063	54 x 1.60	•	•	•	•		







# **BI-METAL SAW BLADES**



1 x .035	27 x .90							▼		▼	▼	▼	▼
1¼ x .042	34 x 1.07						•	▼			▼		
1½ x .050	41 x 1.27					•	▼						
						Variat	ole Pitch	- Positiv	e Rake				
1 x .035	27 x .90					•	••	••	▼				
1¼ x .042	34 x 1.07				▼	•	••	••	▼				
1½ x .050	41 x 1.27				•	••	<b>•••</b>	<b>••</b>					
2 x .063	54 x 1.60				▼	•	•						
2 ⁵⁄≋ x .063	67 x 1.60	▼	•	•		•	•						
3 x .063	80 x 1.60	▼	▼	▼									
			Degitive	Delve									



Available in 6° Positive Rake







# **CHALLENGER® BI-METAL STRUCTURAL BLADES**

Long life and straight cuts in structural material cutting applications while reducing noise and vibration.

# APPLICATIONS

- ▼ Specially designed for structural applications
- ▼ Bundle cuts
- ▼ Interrupted cuts
- ▼ I-beams
- ▼ Low alloy steels
- ▼ Carbon steels A36

#### **BLADE FEATURES**

▼ Special tooth profile for cutting structural materials

17

- ▼ Increased beam strength
- ▼ Less noise and vibration
- ▼ Less tooth strippage
- ▼ Longer life in interrupted cuts
- ▼ Straighter interrupted and bundle cuts

WIDTH X THIC	CKNESS MM		TEETH P	ER INCH				
	MM			TEETH PER INCH				
INCHES		2/3	3/4	4/6	5/7	8/11		
nnn	$\sim$	nn	vnn	$\sim$	nn	vvv		
½ x .025	12.7 x .64					•		
³∕4 x .035	19 x .90				▼	•		
1 x .035	27 x .90		▼	▼	▼	•		
1¼ x .042	34 x 1.1	▼ ▼	▼ ▼	▼ ▼	▼	▼		
1½ x .050	41 x 1.3	▼ ▼	▼ ▼	▼ ▼	▼	•		
2 x .063	54 x 1.6	▼ ▼	▼ ▼	▼ ▼				
2 ⁵⁄≋ x .063	67 x 1.6	▼ ▼	▼ ▼	▼ ▼				

▼ Heavy Set



# **BI-METAL SAW BLADES**



# **M42 BI-METAL BLADES**

Durability for higher production speeds on difficult to machine solids and heavy walled structures

#### APPLICATIONS

- ▼ Solids
- ▼ Heavy walled structures
- ▼ Carbon steels
- ▼ Alloy steels
- ▼ Some stainless steels
- ▼ Medium to heavy
  - production machines

#### **BLADE FEATURES**

- ▼ Durability for higher production cutting
- ▼ Variable and straight pitch teeth
- ▼ Heat and wear resistance

		VARIABLE I	PITCH - POS	<b>SITIVE RAKE</b>			
WIDTH X	THICKNESS		TEETH I	PER INCH			
INCHES	MM	1.4/2.5	2/3	3/4	4/6	5/7	8/11
pm	$\mathcal{N}\mathcal{N}\mathcal{N}$	vnv	$\sim$	$\mathcal{N}$	$\gamma\gamma\gamma\gamma$	$\gamma\gamma\gamma$	$\sim$
½ x .025	12.7 x .64						▼
<sup>3</sup> ⁄4 x .035	19 x .90				•	▼	
1 x .035	27 x .90		▼	▼ ▼	▼ ▼	▼	
1¼ x .042	34 x 1.07		▼	▼ ▼	▼ ▼	▼	
1½ x .050	41 x 1.27	•	▼	▼ ▼	▼ ▼		
2 x .050	54 x 1.27			▼			
2 x .063	54 x 1.6	•	▼	▼			

▼ Available with 6° rake angle

		VARIA	BLE PITCH	- O° RAKE				
	HICKNESS				TEETH PER INC	4		
INCHES	MM	2/3	3/4	4/6	5/8	6/10	8/12	10/14
pm	vvv	m	vv	$\sim$	$\mathcal{N}\mathcal{N}$	M	VVV	VVV
1⁄4 x .025	6.4 x .64							▼
1⁄4 x .035	6.4 x .90							▼
³∕≋ x .035	9.5 x .90							▼
½ x .025	12.7 x .64						▼	
½ x .035	12.7 x .90							▼
<sup>3</sup> ⁄4 x .035	19 x .90			▼	▼	▼	▼	▼
1 x .035	27 x .90	▼	▼	▼	▼	▼	▼	▼
1¼ x .042	34 x 1.07	▼	▼	▼	▼		▼	
1½ x .050	41 x 1.27	▼	▼	▼	▼			
		•			*			



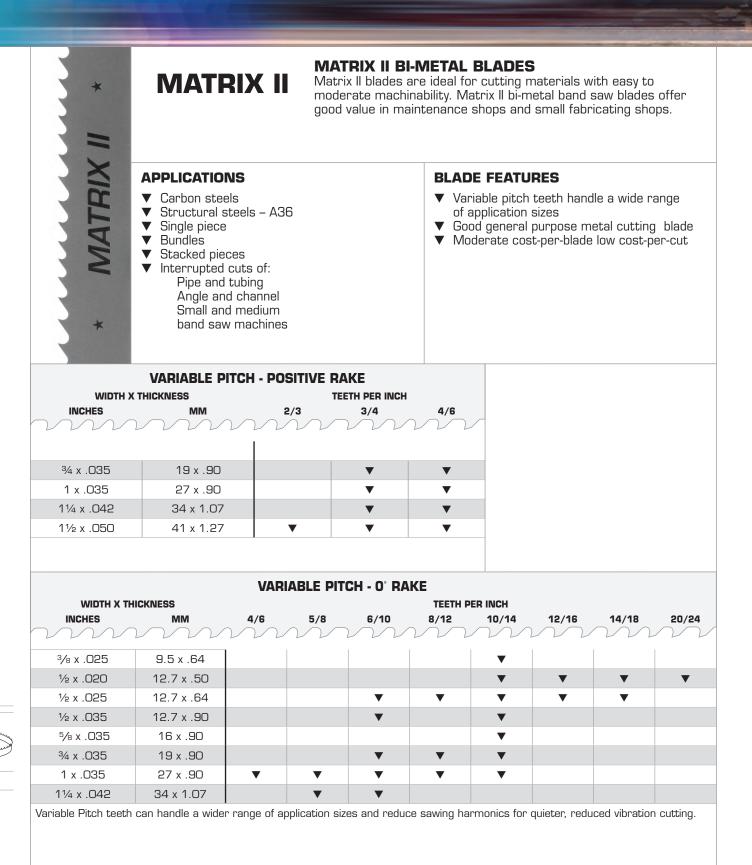
#### **STRAIGHT PITCH** WIDTH X THICKNESS **TEETH PER INCH** INCHES 8 10 14 10 1 1.14 ММ 4 6 2 6 3 Raker Wavy Hook 1⁄4 x .025 6.4 x .64 ▼ ▼ 1⁄4 x .035 6.4 x .90 ▼ ▼ ³∕8 x .035 9.5 x .90 V V ½ x .025 12.7 x .64 V 12.7 x .90 ½ x .035 ▼ V V V 1 x .035 27 x .90 ▼ ▼ ▼ ▼ V V 1¼ x .042 34 x 1.07 ▼ T ▼ 2 x .050 54 x 1.27 ▼ 2 x .063 54 x 1.60 ▼

Straight Pitch teeth are most often used when the cross sectional size range is consistent.

MAD M42 BI-METAL DIE BAND BLADES Designed for cutting solids with very low machinability including the toughest machinable materials. Production cutting with fewer blade changes for tool and die shops. × **APPLICATIONS BLADE FEATURES** Tool and die shops ▼ Low cost-per-cut ▼ Die blocks ▼ High heat and wear resistance Tool steels ▼ Wide selection of blade type and tooth sizes ▼ "D" grade steels ▼ Available in either straight pitch or variable pitch teeth ▼ "Super" alloys ▼ M42 die bands offer high wear and heat resistance and ▼ Inconel are best suited for cutting difficult-to-machine tool steel ▼ ▼ Waspalloy and die blocks Hastelloy ▼ Tough materials Typically used on vertical machines

WIDTH X T	HICKNESS			т	eeth per inch	4		
INCHES	MM	10	14	4	6	8/11	8/12	10/14
$\gamma \gamma \gamma \gamma$	m	$\mathcal{M}$	VVV	$\sim$		m	$\mathcal{N}\mathcal{N}$	VVV
		Ra	ker	Hoo	ok		Variable	
1⁄4 x .025	6.4 x .64		•		▼			▼
1⁄4 x .035	6.4 x .90	▼	▼					▼
³∕≋ x .035	9.5 x .90	•		▼				▼
½ x .025	12.7 x .64				▼	▼	▼	
½ x .035	12.7 x .90	•	•	▼	▼	▼		•
		•		•				

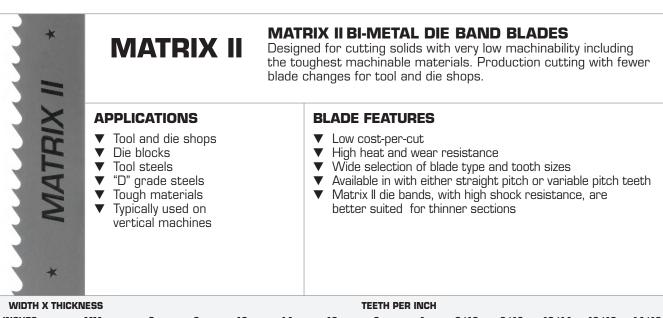
# **BI-METAL SAW BLADES**



#### STRAIGHT PITCH

			-									
THICKNESS						TEETH P	<b>ER INCH</b>					
MM	6	8	10	14	18	24	14	18	24	1.14	3	4
M	$\mathcal{N}$	$\mathcal{N}$	$\sim$	$\sim$			$\sim$	$\mathcal{N}$	$\sim$		$\sim$	$\sim$
			Ra	ker				Wavy			Hook	
9.5 x .64		▼	▼	▼								▼
12.7 x .50			•	▼	▼	▼	•	▼	▼			
12.7 x .64	▼		•	▼	▼						•	▼
19 x .90	▼	▼	•	▼							▼	
27 x .90	▼	▼	•	▼							•	
34 x 1.07	•									▼		
	MM 9.5 x .64 12.7 x .50 12.7 x .64 19 x .90 27 x .90	MM     6       9.5 x .64	MM     6     8       9.5 x .64     ▼       12.7 x .50     ✓       12.7 x .64     ▼       19 x .90     ▼       27 x .90     ▼	MM     6     8     10       9.5 x .64     ▼     ▼       12.7 x .50     ✓     ▼       12.7 x .64     ▼     ▼       19 x .90     ▼     ▼       27 x .90     ▼     ▼	MM     6     8     10     14       9.5 x .64     ▼     ▼     ▼       12.7 x .50     ✓     ▼     ▼       12.7 x .64     ▼     ▼     ▼       19 x .90     ▼     ▼     ▼       27 x .90     ▼     ▼     ▼	MM     6     8     10     14     18       Raker       9.5 x .64     ▼     ▼     ▼       12.7 x .50     ▼     ▼     ▼       12.7 x .64     ▼     ▼     ▼       19 x .90     ▼     ▼     ▼       27 x .90     ▼     ▼     ▼	MM     6     8     10     14     18     24       Raker       9.5 x .64     V     V     V     Image: Colspan="4">Image: Colspan="4"           III         III         IIII         IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	MM     6     8     10     14     18     24     14       9.5 x .64     V     V     V     Image: Constraint of the second sec	MM     6     8     10     14     18     24     14     18       P.5 x .64     Vary     Raker     Vary       9.5 x .64     V     V     V     V     V       12.7 x .50     V     V     V     V     V       12.7 x .64     V     V     V     V     V       19 x .90     V     V     V     V     I       27 x .90     V     V     V     I     I	MM     6     8     10     14     18     24     14     18     24       MM     6     8     10     14     18     24     14     18     24       MM     6     8     10     14     18     24     14     18     24       MM     6     8     10     14     18     24     14     18     24       Participation     Raker     Raker     Wavy     Wavy     Maximum     10     10       9.5 x .64     V     V     V     V     V     V     V     V       12.7 x .64     V     V     V     V     V     V     V     V       12.7 x .64     V     V     V     V     V     I     I     I       19 x .90     V     V     V     V     I     I     I     I       27 x .90     V     V     V     V     I     I     I     I	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Straight Pitch teeth are most often used when the cross sectional size range is consistent.



	HICKNESS						TEELU P						
INCHES	MM	6	8	10	14	18	3	4	6/10	8/12	10/14	12/16	14/18
nn	n	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$\mathcal{N}$	$ \frown  $	$   \sum $	$\sim$	$\mathcal{N}$	$\mathcal{M}$	$\sum$
				Raker			Ho	ook			Variable		
³∕≋ x .025	9.5 x .64		▼	•	•			▼			•		
½ x .025	12.7 x .64	•		•	•	•	•	▼	•	▼	•	•	
½ x .035	12.7 x .90								•				
							-		-				

# **CARBIDE GRIT SAW BLADES**



#### **TUNGSTEN CARBIDE GRIT BAND SAW BLADES**

Ideal for cutting ceramics and other materials that are too hard or abrasive for standard bi-metal blades. Tungsten carbide grit blades provide superior wear resistance.

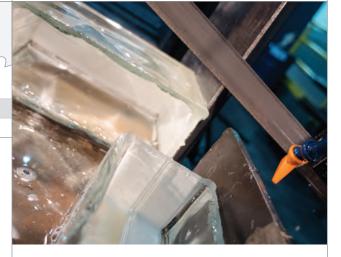
- ▼ Fiberglass
- ▼ Ceramics
- ▼ Cast iron
- Graphite ▼
- ▼ Tires and wire
- reinforced rubber  $\mathbf{T}$ Cable and wire rope
- ▼ Brittle materials or surfaces that chip

#### **BLADE FEATURES**

- ▼ Very smooth finish
- Reversible to extend service life
- ▼ Available in continuous and gulleted cutting edges
- ▼ Continuous grit for brittle materials, or materials thinner than  $1/4^{"}$  (6.4mm) with surfaces that chip Gulleted 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

#### **CARBIDE GRIT (CONTINUOUS)**

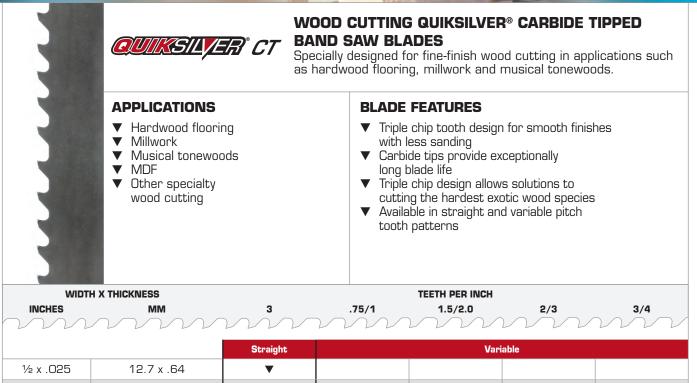
WIDTH X TH	IICKNESS	GRIT	SIZE
INCHES	MM	MEDIUM	COARSE
$\gamma\gamma\gamma\gamma$	VVV	nn	
1⁄4 x .020	6.4 x 50	▼	
½ x .025	12.7 x .64	▼	
1 x .035	27 x .90	▼	▼



	CARBIDE	GRIT (GULLE	TED)	
WIDTH X T	HICKNESS		GRIT SIZE	
INCHES	MM	Medium	Medium Coarse	Coarse
pm	n	n	$\gamma \gamma \gamma \gamma$	vnn
³∕≋ x .025	9.5 x .64	▼	•	
½ x .025	12.7 x .64	•	•	
<sup>3</sup> ⁄4 x .032	19 x .80		•	▼
1 x .035	27 x .90		•	•
1¼ x .042	34 x 1.07			•



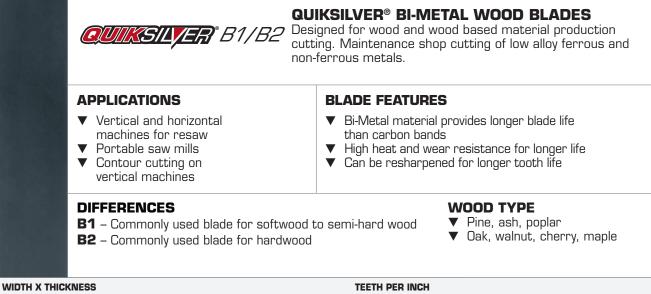
# **QUIKSILVER CARBIDE TIPPED BLADES**



72 X .UEJ	12.7 X.04	•				
³∕4 x .035	19 x .90	▼				
1 x .035	27 x .90	▼			•	•
1¼ x .042	34 x 1.07	▼		•		
1½ x .050	41 x 1.30			•		
2 x .042	54 x 1.07		•			
		·	·			



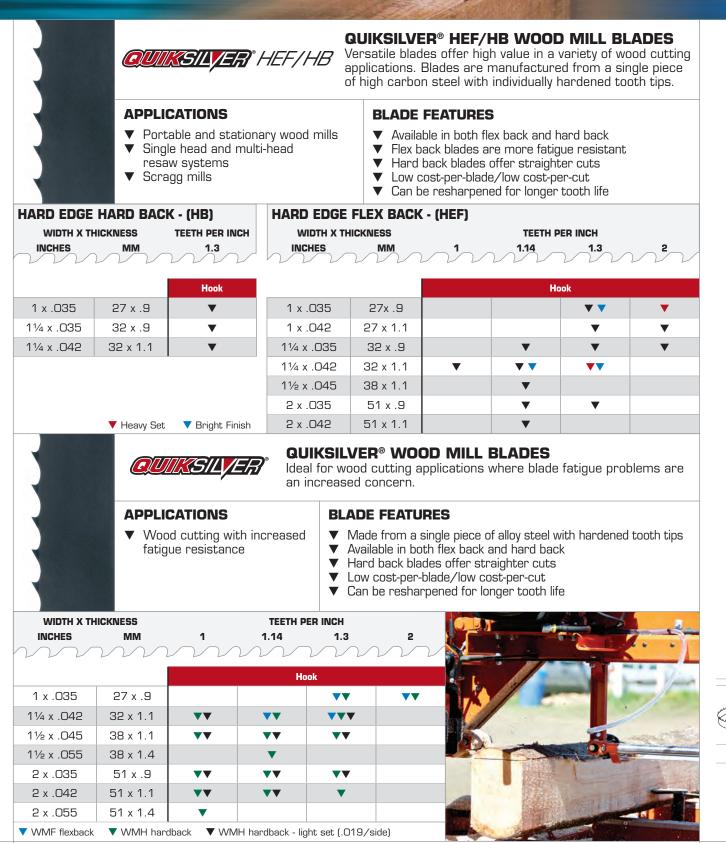
# **QUIKSILVER BI-METAL BLADES**



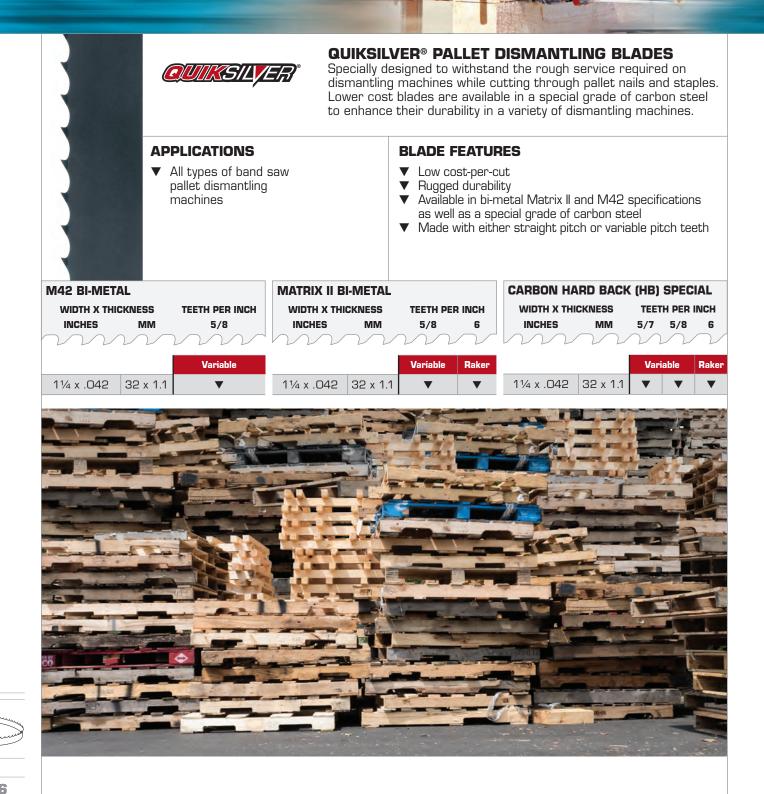
		.75/1	1.4/2.5	5/8	6/10	6		1.14	1.3 \\\	2	3	4	6
			Var	iable		Raker				Hook			
QuikSilver B1	Production / W	lood Mil											
1⁄4 x .025	6.4 x .64												
³∕≋ x .025	9.5 x .64											▼	
½ x .025	12.7 x .64					▼					▼	▼	
½ x .035	12.7 x .64											▼	
³∕4 x .035	19 x .90										▼		
1 x .035	27 x .90					▼					▼		
1¼ x .042	34 x 1.07				▼			-					
1½ x .050	41 x 1.27			▼									
QuikSilver B2	Production / W	lood Mil											
1 x .035	27 x .90								▼	▼			
1¼ x .035	34 x .90										▼		
1¼ x .042	34 x 1.07							•					
1½ x .05	41 x 1.27		▼										
2 x .050	54 x 1.27						▼						
2 x .050	54 x 1.27	•											

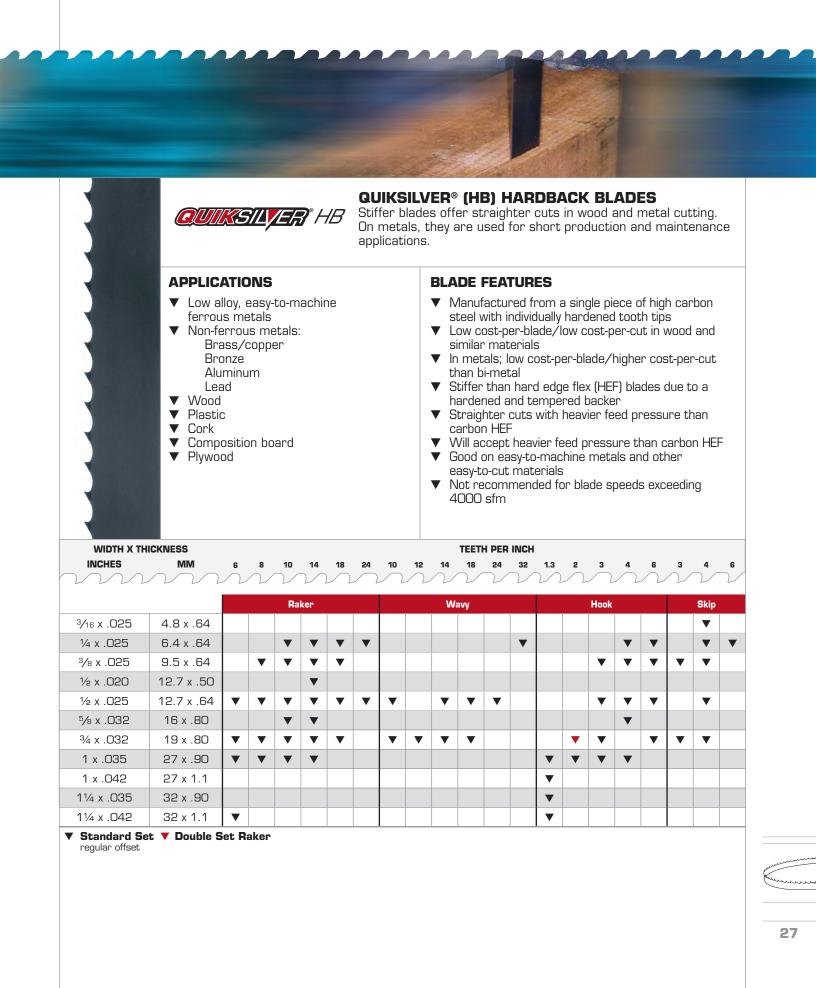
▼ Heavy Set ▼ 1.14 Hook = 7/8 Tooth Spacing

# **QUIKSILVER CARBON BLADES**



# **QUIKSILVER CARBON BLADES**





# **QUIKSILVER CARBON BLADES**

	QUIKE	<b>57</b> 2	E	<b>?</b> */	HE	F	lde ma	al fo ainte	r wo nano	od p ce/g	orodi	uctio al p	on ci urpc	uttin Ise a	ig ar	nd sh	nort	<b>.AD</b> proc using	ducti	on/ / allo	У	
	APPLICAT	ION	IS							В	LAD	)E F	EAT	UR	ES							
	<ul> <li>Wood</li> <li>Plastic</li> <li>Cork</li> <li>Composi</li> <li>Plywood</li> <li>Aluminur</li> <li>Non-ferr</li> <li>Low alloy</li> </ul>	n ous	meta							•	ste Mc Lov Lov tou	el w ore f v co v co ighe	vith ir atigu ist-pe ist-pe r ma	ndivio e re er-bla er-bla teria	dually sista ade/ ade/ als	/ har int th low ( high	rdene nan o cost er co	piece ed to carbo -per- ost-p 15,00	oth t on ha cut ii er-ci	ips ard b n wo ut in	ack	in
	KNESS										TEE	TH P	ER II	NCH								
INCHES	ММ	4	6	8	10	14	18	24	14	18	24	32	_1	1.14	1.3	2	3	_4	6	3	4	6
pm			$ \wedge $	$ \wedge $	$\mathcal{A}$	$\mathcal{N}$	$\sim$	$ \wedge $	$\mathcal{A}$	$\mathcal{N}$	$\mathcal{N}$	$\mathcal{D}$	$\gamma$	$\mathcal{N}$	$\mathcal{N}$	$\mathcal{N}$	$\mathcal{D}$	$\sim$	$\mathcal{N}$	$\mathcal{N}$		2
	1				Rake	r				Wa	avy			1	1	Hook	C				Skip	
1⁄8 x .025	3 x .64					▼	▼															
³∕16 x .025	4.8 x .64				▼	▼															▼	
1⁄4 x .014	6.4 x .30					▼	▼				▼											▼
1⁄4 x .020	6.4 x .50																					▼
1⁄4 x .025	6.4 x .64			▼	▼	▼	▼	▼				▼						▼	▼		▼	▼
³∕≋ x .014	9.5 x .30					▼																▼
³∕≋ x .025	9.5 x .64			▼	▼	▼	▼	▼									▼	▼	▼	▼	▼	
³∕≋ x .032	9.5 x .80															▼▼						
½ x .020	12.7 x .50		▼		▼				▼	▼	▼						▼					
½ x .025	12.7 x .64	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼					▼	▼▼	••	▼	▼	
⁵⁄в x .032	16 x .80				▼				▼								▼	▼	▼			
<sup>3</sup> ⁄4 x .032	19 x .80		▼	▼	▼	▼	▼		▼							▼	▼	▼	▼	▼	▼	
<sup>3</sup> ⁄4 x .050	19 x 1.30															▼	▼					
1 x .035	27 x .90		▼	▼	▼	▼									▼	▼	▼	▼	▼	▼		
1 x .035 *Bright	27 x .90														▼							
1 x .042	27 x 1.07														▼							
1¼ x .035	32 x .90													▼	▼	▼						
1¼ x .042	32 x 1.07												▼	▼	▼							
1¼ x .042 *Bright	32 x 1.07													▼	▼							
1½x .045	38 x 1.14													▼								
2 x .035	51 x .90													▼	▼							
2 x .042	51 x 1.07												▼	▼								

28

▼ Standard Set ▼ Heavy Set ▼ Double Set Raker \* "Bright" specifications have an unblued, silver surface finish.



**QUIKSILVER® CARBON FURNITURE BLADES** Ideal for use on large, high-speed vertical cutting band machines **QUIKSILVER** used in the furniture industry. Blades offer faster cutting while maintaining precision required in the furniture industry. APPLICATIONS **BLADE FEATURES** ▼ Wood ▼ Special ETS (every tooth set) pattern and aggressive Chip board 10° hook tooth design for faster cutting with longer T ▼ Plywood tooth tip life ▼ Cardboard ▼ Flexible backer resists fatigue but allows contour ▼ Used on large, vertical, control required in furniture manufacturing high-speed wood Manufactured from a single piece of high carbon steel  $\mathbf{T}$ cutting machines with individually hardened tooth tips ▼ Thicker blade is stiffer for more control ▼ Low cost-per-blade/low cost-per-cut WIDTH X THICKNESS **TEETH PER INCH** INCHES MM 2 3 4 3 6 Hook ETS Hook Raker Set 1⁄4 x .025 6.4 x .64 ▼ ▼ ▼ 1⁄4 x .032 6.4 x .80 ▼ ³∕8 x .025 9.5 x .64 V ▼ ▼ ▼ ³∕≋ x .032 9.5 x .80 T ½ x .025 12.7 x .64 T T ▼  $\mathbf{v}\mathbf{v}$  $\mathbf{\nabla}\mathbf{\nabla}$ ½ x .032 12.7 x .80 V ⁵⁄8 x .032 16.0 x .80 ▼ T V 3⁄4 x .032 19.0 x .80 ▼ ▼ ▼ ▼ ▼ D-Double Set Raker ▼ Standard Set ▼ ETS Set ▼ Heavy Set

**MINIMUM RADIUS CUT FOR A GIVEN BLADE WIDTH** 

Blade Width	Minimum Radius
1"/25mm	7-1/4"/184mm
<sup>3</sup> ⁄4"/19mm	5-7/16"/138mm
⁵⁄8"/16mm	3-3/4"/95mm
½"∕13mm	2-1/2"/63mm
⁵⁄8"∕10mm	1-1/4"/32mm
1⁄4"/6mm	5/8"/16mm
<sup>3</sup> /16"/5mm	3/8"/10mm
¹⁄ፄ"/3mm	7/32"/5.5mm

# FEED RATE MONITOR





# FEED RATE MONITOR FEATURES

Provides real time, accurate feed rate of the band saw blade through the material being cut. Shows irregular or erratic machine feed which can indicate mechanical / hydraulic problems with the machine.

Model: FEEDRATEMONITOR Part number: 005012

#### BENEFITS

- ▼ Optimal blade operation to produce:
- ▼ Increased production rate ▼ Maximize blade life
- ▼ Assist in machine problem diagnosis

#### **FEATURES**

- ▼ Compact design
- Professionally calibrated Internal magnets for ease of attachment to machine head
- Displays accurate machine feed rates on LCD display
- ▼ Feed Rate shown in both inches / minute and millimeters / minute
- Heavy duty protective storage case fitted to secure monitor
- ▼ AC or battery operation
- ▼ Made in U.S.Á.



# BAND SAW TENSION GAUGE



# **BAND SAW TOOTH PITCHES**

Variable Pitch	
<ul> <li>✓ Varying gullet depth</li> <li>✓ O° Rake angle</li> <li>✓ Variable tooth spacing</li> </ul>	
ADVANTAGES ▼ Excellent chip carrying capacity ▼ Reduces harmonic vibration	BENEFITS ▼ Improves blade life ▼ Reduces noise ▼ Cuts smoother and more efficiently
Variable Pitch Positive Rake	
▼ Varying gullet depth ▼ Variable tooth spacing ▼ Positive rake angle	
ADVANTAGES ▼ Better chip formation ▼ Excellent chip carrying capacity ▼ Reduces harmonic vibration ▼ More aggressive cutting	<ul> <li>BENEFITS</li> <li>▼ Cuts smoother, cuts faster</li> <li>▼ Wide range of applications</li> <li>▼ Reduces noise</li> <li>▼ Easier chip generation</li> </ul>
Standard Raker	
▼ Equally spaced teeth ▼ O° Rake angle	
ADVANTAGES ▼ Excellent chip carrying capacity	BENEFITS ▼ General purpose
Skip ▼ Wide flat gullets ▼ O° Rake angle ▼ Equally spaced teeth	
ADVANTAGES ▼ Excellent chip carrying capacity ▼ Provide coarse pitch on narrow bands ▼ Flat gullets	<ul> <li>BENEFITS</li> <li>▼ Excellent cutting for non-metallic and non-ferrous applications, (wood, plastic, brass, copper, bronze and aluminum)</li> <li>▼ Help break "stringy" chips</li> </ul>
Hook ▼ Wide rounded gullets ▼ Equally spaced teeth ▼ Positive rake angle	
<ul> <li>ADVANTAGES</li> <li>▼ Excellent chip carrying in non-metallic applications</li> <li>▼ Positive rake provides better tip penetration with less feed pressure</li> </ul>	<ul> <li>BENEFITS</li> <li>▼ Good cutting performance in discontinuous chip forming materials</li> <li>▼ Fast cutting with good surface finish</li> </ul>

# **TOOTH SELECTION GUIDE**

Band saw tooth size (Teeth Per Inch) is determined by the size and type of material to be cut and the desired finish. To select T.P.I. using this chart, 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 chart for the appropriate T.P.I. for your blade.

Material Size (Inches)	Те	eth F Inch		Material Size (Metric)	Wall Thickness (Inches)	Teeth Per Inch	Wall Thickness (Metric)
0 —		1-1		ס — ך	1/16 -		<sup>_</sup> 1.8
.1 —	14/18	-	14/18	- 2.5	4 (2)	10/14	
.2 —	40/44			5.1	1/8 -	8/12	- 3.2
.3 —	10/14	-	10/14	- 7.6	3/16 -	.,	- 4.8
.4 —	8/12	-		- 10.2		6/10	
.5 —		-	8/12	- 12.7	1/4 -		- 6.3
.6 —	6/10	-	-,	- 15.0	5/16 -	5/8	- 7.9
.7 —		-		- 17.8	2, 12	0,0	
.8 —	5/8	-	6/10	_ 20.0	3/8 -		- 9.5
.9 —		-		- 22.9	7/40 -		- 11.0
1 —		-	5/8	- 25.4	7/16 -		- 11.0
1-1/4 —		-		- 31.8 1/2 -		- 12.7	
1-1/2 —	4/6	-		- 38.1			
1-3/4 —		-		- 44.5	9/16 -	4/6	- 14.3
2 —		-	4/6	- 50.8	5/8 -		- 15.8
2-1/4 —		-		- 57.2	-, -		
2-1/2 —		-		- 63.5	11/16 -		- 17.5
2-3/4 —		-		- 69.9	2.4		10.0
з —		-		- 76.2	3/4 -		- 19.0
3-1/4 —	3/4	-		- 82.6	13/16 -		- 20.6
3-1/2 -		_	3/4	- 88.9			
3-3/4 -		-	3/4	- 95.3	7/8 -		- 22.0
4 —		-		- 101.6	15/16 -		- 23.8
5 —		-		- 127.0	ŗ	3/4	
6 —	2/3	_		- 152.4	1 –		- 25.4
7 —	2/3	_	2/2	- 177.8	1-1/8 –		- 28.6
8 —		_	2/3	- 203.0	1-1/0 -		- 20.0
9 —		_		- 228.6	1-1/4 –		- 32.0
10 —	1.4/2.5	_	1.4/2.5	- 254.0			
15 —		_		- 381.0	1-3/8 –	2/3	- 35.0
30 -	1/1.5	_	1/1.5		1-1/2 -		- 38.0
					(		
Re	ectangular Sc (Use Width)	olids: )	Round Solid (Use Diameto	s: er)	Pip (U	e Tubing Stru se Wall Thick	icturals (ness)

**CUTTING SPEED** 

Structurals Rule Of Thumb: When cutting structurals use a cutting speed of 250-325 S.F.M. (wet) 200-250 S.F.M. (dry)

# **BLADE SPEED/REMOVAL RATES**

For use with Bi-Metal Blades\*

0. 1. 5: .										-ivieta		01 40	NII.	-	4.01 4	01		01 001			
Stock Dimensions Tooth Pitch	Up to 2" 5/7, 5/8, 4/6, 3/4			, 4/6, 3/4 4/6,			From 4" - 6" 3/4, 2/3			From 6 1.4/2.5			From 10" - 12" 1.4/2.5, 1.5/2				12" - 1 .1/1.5,		From 1 1.0/1.5, 1.1	6" - 20" /1.5, .75	5/1.0
Material (Annealed)	Blade Speed (SFPM)	Cutting (SIF		Blade Speed (SFPM)		g Rate PM)	Blade Speed (SFPM)	Cutting (SIP		Blade Speed (SFPM)		g Rate PM)	Blade Speed (SFPM)		ng Rate IPM)	Blade Spee (SFPM)		ng Rate IPM)	Blade Speed (SFPM)	Cutting (SIPI	
Aluminum Alloys:		(On									(Gi										
2024 - 5052 6061 - 7075	300	10 -	15	300	10	- 15	300	10 -	15	300	10	- 15	300	10	- 15	300	10	- 15	300	10 -	15
Copper Alloys					_																
CDA 220 CDA 360	250 325	8 -		230 300		- 11 - 15	220 290	7 -		210 275	-	- 10 - 12	200 250	5	- 9 - 11	180 225		- 8 - 10	150 200	4 -	8 10
Copper Nickel (30%)	230	7 -	11	220	7	- 11	200	6 -	10	180	5	- 9	160	5	- 9	140	4	- 8	120	4 -	8
Beryllium Copper	180	5 -	9	170	5	- 9	160	4 -	8	140	4	- 8	130	3	- 7	120	3	- 7	110	3 -	7
Bronze Alloys AMPCO 18	200	5 -	0	180		- 9	170	4 -		150		- 8	140		- 8	130		- 8	120	3 -	
AMPCO 21 AMPCO 25	170 120	4 -		160 110		- 8 - 6	150 100	4 - 2 -	8	140 100		- 8 - 5	130 90	3	- 7 - 5	120 80	3	- 7 - 5	110 70	2 -	-
Leaded Tin Bronze Aluminum	320	10 -		300		- 15	280	10 -		260		- 11	220		- 9	200		- 8	180	4 -	
Bronze 865	160 230	6 -	10 11	150 220	0	- 10 - 11	140 210	5 -	9 10	130 190		- 8 - 10	120 170	3	- 7 - 9	110 150	2	- 6 - 8	100 140	2 -	6 7
Manganese Bronze 932	300	10 -	14	290	10	- 14	270	9 -	13	250	6	- 10	220	5	- 9	200	5	- 9	160	4 -	8
937 Brass Alloys	270	8 -	12	250	8	12	240	7 -	11	210	6	- 10	200	5	- 9	180	5	- 9	160	4 -	8
Cartridge / Red Brass (85%)	240	9 -	13	220	8	- 12	210	8 -	12	200	7	- 11	180	6	- 10	160	4	- 10	140	4 -	10
Naval Brass	220	6 -	10	200	6	- 10	190	6 -	10	170	4	- 8	160	4	- 8	140	4	- 8	130	4 -	8
Carbon Steels 1008, 1013,	300	11 -	15	280	10	- 14	260	10 -	14	240	8	- 12	220	6	- 10	200	6	- 10	180	4 -	8
1015, 1018 1030	270	8 -		250		- 12	240	7 -	11	210		- 10	200	5	- 9	180		- 9	160	4 -	
1035 1045, 1048	300 300	11 -	15	280 280	10	- 14 - 14	260 260	10 - 10 -		240 240	8	- 12 - 12	220	6	- 10 - 10	200	6	- 10 - 10	180 180	4 -	8
1060, 1065	230	7 -	11	220	7	- 11	210	6 -	10	190	6	- 10	170	5	- 9	150	4	- 8	140	3 -	7
1080 1095	220 220	7 -		210 210		- 10 - 10	200 200	6 - 6 -		180 180		- 9 - 9	160 160	5	- 9 - 9	140 140	4	- 10 - 10	130 130	4 -	
Free Machining St 1108, 1111	teels 300	11 -	15	280	10	- 14	260	10 -	14	240	8	- 12	220	6	- 10	200	6	- 10	180	4 -	8
1112, 1113 1115, 1137,	300	11 -	15	280	10	- 14	260	10 -		240		- 12	220	6	- 10	200	6	- 10	180	4 -	
1145, 1151	300	11 -	10	280	10	- 14	260	10 -	14	240	0	- 12	220	6	- 10			- 10	180	4 -	8
1212, 1213 1215	300 350	11 -	16	280 330	12	- 14 - 16	260 310	10 - 12 -	10	240 290	1.0	- 12 - 14	220 280	6	- 10 - 12	260	6	- 10 - 12	180 240	4 -	
12L14 Structural Steel	380	12 -		360		- 14	340	12 -		320	10		300	8	- 12			- 12	230	6 -	
A36 Manganese Steels		10 -		260	10	- 14	240	10 -	14	220	8		200	8	- 12	180	6	- 10	160	6 -	10
1320, 1330, 1345 1513, 1524, 1536	270 250	8 -		250 240	-	- 12 - 9	240 230	7 -		210 210	-	- 10 - 8	200 200	5	- 9 - 8	180 180	-	- 9 - 7	160 160	4 - 3 -	8 7
1541, 1572 1524	220 200	7 -	11	210 190	6	- 10 - 10	200 180	6 - 5 -	10	180 160	5	- 9 - 8	160 140	5	- 9 - 8	140 120	4	- 10 - 8	130 100	4 - 3 -	10
Molybdenum Stee	ls		10			10									0						
4017, 4024 4032, 4042	270 270	8 -	12	250 250	8	- 12 - 12	240 240	7 -	11	210 210	6	- 10 - 10	200 200	5	- 9 - 9	180 180		- 9 - 9	160 160	4 -	8
4047, 4066 Chrome Moly Stee	220 els	7 -	11	210	6	- 10	200	6 -	10	180	5	- 9	160	5	- 9	140	4	- 10	130	4 -	10
4130, 4140 4142, 4150	250 200	5 -	-	240 190	5	- 9 - 10	230 180	5 - 5 -		210 160	4	- 8 - 8	200 140	4	- 8 - 8	180 120	-	- 7 - 8	160 100	3 -	
41L50 4150H	250 250	5 -	9	240 240	5	- 9 - 9	230	5 -	8	210	4	- 8 - 8	200	4	- 8	180	3	- 7 - 7	160 160	3 -	7
Chrome Alloy Stee			5	240	J	3	230		0	210	4	- 0	200	4	- 0	180	0	- /	100		
5045, 5046 5120, 5135	250 250	5 -	-	240 240	-	- 9 - 9	230 230	5 -		210 210		- 8 - 8	200 200	4	- 8 - 8	180 180		- 7 - 7	160 160	3 -	7 7
5140, 5160 50100, 52100	220 180	7 -	11	210 170	6	- 10 - 9	200 160	6 - 5 -	10	180 150	5	- 9 - 8	160 130		- 9 - 8	140 120	4	- 10 - 7	130 100	4 - 3 -	
6117, 6120	220	7 -	11	210	6	- 10	200	6 -	10	180	5	- 9 - 8	160	5	- 9	140	4	- 10	130 100		10
6150 Nickel Chrome-Mo		6 -	10	190	6	- 10	180	- 0	9	160	4	- 8	140	4	- 8	120	4	- 8	100	3 -	7
4317, 4320 4337, 4340	230 210	7 -	11 9	220 200		- 11 - 9	210 190	6 - 5 -	10 9	190 170	-	- 10 - 8	170 160	5	- 9 - 8	150 140	4	- 8 - 7	140 130	3 -	7 7
8615, 8620, 8627 8630, 8640, 8645	230 200		11	220 190	7	- 11 - 10	210 180	6 - 5 -	10	190 160	6	- 10 - 8	170 140	5	- 9 - 8	150 120	4	- 8 - 8	140 100		7
8647, 8660	200	6 -	10	190	6	- 10	180	5 -	9	160	4	- 8	140	4	- 8	120	4	- 8	100	3 -	7
8715, 8750 9310, 9317	200 170	6 -	6	190 160	2	- 10 - 6	180 150	5 -	5	160 130	1	- 8 - 5	140 120	4	- 8 - 5	120 110	4	- 8 - 5	100 100	1 -	-
9437, 9445 9747, 9763	200 230	7 -		190 220	7	- 10 - 11	180 210	5 - 6 -		160 190		- 8 - 10	140 170		- 8 - 9	120 150		- 8 - 8	100 140	3 -	7 7
9840, 9850 E9310	220 180	7 -	11 9	210 170		- 10 - 9	200 160	6 - 5 -	10 9	180 150		- 9 - 8	160 130	5	- 9 - 8	140 120		- 10 - 7	130 100		10 7
Nickel-Moly Steels 4608, 4621	· · · · · · · · · · · · · · · · · · ·	7 -		210		- 10	200	6 -		180	5	- 9	160	5	- 9	140		- 10	130		10
4640 4812, 4820	200	6 -	10	190 170	6	- 10 - 9	180 160	5 -	9	160 150	4	- 8 - 8	140 130	4	- 8 - 8	120 120	4	- 8 - 7	100	3 -	7
Silicon Steels 9255, 9260	180	5 -		170		- 9	160	5 -		150	4		130		- 8	120		- 7	100	3 -	
9261, 9262	170	2 -		160		- 6	150	1 -		130		- 5	120		- 5	110		- 5	100	1 -	

\* Reduce speeds by 50% for carbon blades. For carbide tipped blades, ask your Morse sales contact.

						For	' use	wit	h Bi	-Met	al E	Blad	es*								
ock Dimensions oth Pitch aterial	Up 5/7, 5/8 Blade Speed		3/4 ing Rate									n 6" - 10" 2.5, 1.5/2 d Cutting Rate Blade Speed Cutting Rate					From 12" - 16" From 16" - 20" 1.0/1.5, 1.1/1.5, .75/1.0 1.0/1.5, 1.1/1.5, .75/1.0 e Blade Speed Cutting Rate Blade Speed Cutting Rate				
nnealed) ww Alloy Tool Stee	(SFPM)		SIPM)	(SFPM)		(SIPM)	(SFPM)		SIPM)	(SFPM)		SIPM)	(SFPM)	SIP		(SFPM)		PM)	(SFPM)		IPM)
	180 180	0	- 9 - 9	170 170	5	- 9 - 9	160 160	5 5	- 9 - 9	150 150	4	- 8 - 8	130 130	4 - 4 -	0	120 120	0	- 7 - 7	100 100	0	- 7 - 7
ater-Hardening T 1	Tool Steels 200		- 10	190	6	- 10	180	5	- 9	160	4	- 8	140	4 -	8	120	4	- 8	100	3	- 7
e Steels 2, D-3	100 80	1	- 5 - 5	90 70	1	- 5 - 5	90 60	1	- 5 - 5	80 50	1	- 5 - 5	70 50	1 -	0	70 50		- 5 - 5	60 50	1	- 5 - 5
7 2 6	180 140	4	- 8	170 130	4	- 8	160 130	4	- 8 - 6	150 120	4	- 8 - 5	130 110	3 -	7	110 100	3	- 7 - 5	100 90		- 6 - 5
10	110 250	2	- 6	100	2	- 6 - 9	100	2	- 6	90 210	2	- 6	80 200	2 -	6	70	2	- 6 - 7	60 160	2	- 6 - 7
6 Dt Work Tool Stee	250	5	- 9	240	5	- 9	230	5	- 8	210	4	- 8	200	4 -		180		- 7	160		- 7
11, H12, H-13, 13 Mod, H21	150	-	- 6	140	2	- 6	130	-	- 6	120	1.	- 5	110	1 -	-	100	1	-	90		- 5
22, H-24 H-25 igh Speed Tool St		1		90		- 5	90	1		80		- 5	70	1 -	0	60		- 5	50		- 5
I-1 I-2, M-3 I-10	140 110 110	2	- 6 - 6 - 6	130 100 100	2	- 6 - 6 - 6	130 100 100	2	- 6 - 6	120 90 90	1 2 2	- 5 - 6 - 6	110 80 80	1 - 2 - 2 -	6	100 70 70	2	- 5 - 6 - 6	90 60 60	2	- 5 - 6 - 6
-4, M-42	100 100	1	- 5	90 90	1	- 5	90 90	1	- 5	80 80	1	- 5	70 70	1 -	5	60 60	1	- 5 - 5	50 50	1	- 5 - 5
15 Iold Steels	80	1	- 5	70	1	- 5	60	1	- 5	50	1	- 5	50	1 -	0	50	1	- 5	50		- 5
3 20 nock Resistant To	190 180	0	- 9 - 8	180 170	5	- 9 - 8	170 160	5	- 9 - 8	150 150	4	- 8 - 7	140 140	4 -	0	130 130	-	- 8 - 7	120 110	0	- 7 - 6
1, S-7 2, S-5	180 150	4	- 8 - 6	170 140	4	- 8 - 6	160 130	4	- 8 - 6	150 120	4	- 8 - 5	130 110	3 -		110 100		- 7 - 5	100 90	-	- 6 - 5
tainless Steels:	110		- 6	100	2	- 6	100	2	- 6	90	2	- 6	80	2 -		70	2	- 6	60		- 6
03,303F 08, 309, 310, 330	120 80	2	- 6 - 5	110 70	2	- 6 - 5	100 60	2	- 6 - 5	100 50	1	- 5 - 5	90 50	1 -	5	80 50	1	- 5 - 5	70 50		- 5 - 5
4, 316, 317 21, 347 0, 420, 420F	100 110 140	1 2 2	- 5 - 6 - 6	90 100 130	1 2 2	- 5 - 6 - 6	90 100 130	1 2 2	- 5 - 6 - 6	80 90 120	1 2 1	- 5 - 6 - 5	70 80 110	1 - 2 - 1 -	0	60 70 100	1	- 5 - 6 - 5	50 60 90	1 2 1	- 5 - 6 - 5
6, 430F	140 180 80	4	- 8 - 5	170 70	4	- 8	160 60	4	- 8 - 5	150 50	3	- 5 - 7	140 50	3 -	- 7	130 50	3	- 5 - 7 - 5	90 110 50	2	- 5 - 6 - 5
IO A, 440 B, IO C	100	1	- 5	90	1	- 5	90	1	- 5	80	1	- 5	70	1 -	_	60		- 5	50	1	- 5
10 F, 443 7-4 PH	140 100		- 6 - 5	130 90	2	- 6 - 5	130 90	2	- 6 - 5	120 80	1	- 5 - 5	110 70	1 -	5	100 60	1	- 5 - 5	90 50		- 5 - 5
ickel Alloys	100		- 5	90	1	- 5	90	1	- 5	80	1	- 5	70	1 -		60		- 5	50		- 5
317 330, 2345 512, 2517	190 170 140	5 2 2	- 9 - 6 - 6	180 160 130	5 2 2	- 9 - 6 - 6	170 150 130	5 1 2	- 9 - 5 - 6	150 130 120	4	- 8 - 5 - 5	140 120 110	4 -	5	130 110 100	1	- 8 - 5 - 5	120 100 90	1	- 7 - 5 - 5
onel onel R	100 140	1	- 5 - 6	90 130	1	- 5	90 130	1	- 5 - 6	80	1	- 5 - 5	70 110	1 -	5	60 100	1	- 5 - 5	50 90	1	- 5 - 5
onel K-500 onel KR	80 80	1	- 5 - 5	70 70	1	- 5 - 5	60 60	1	- 5 - 5	50 50	1	- 5 - 5	50 50	1 -	0	50 50	1	- 5 - 5	50 50	1 1	- 5 - 5
conel 600	60 80		- 5 - 5	50 70	1	- 5 - 5	50 60	1	- 5 - 5	50 50	1	- 5 - 5	50 50	1 -	5	50 50	1	- 5 - 5	50 50	1	- 5 - 5
conel 625 conel 718 istelloy B,	100 100	1	- 5 - 5	90 90	1	- 5 - 5	90 90	1	- 5 - 5	80 80	1	- 5 - 5	70 70	1 -	5	60 60		- 5 - 5	50 50		- 5 - 5
aspalloy monic 90	80 100		- 5 - 5	70 90	1	- 5 - 5	60 90	1	- 5 - 5	50 80	1	- 5 - 5	50 70	1 -	0	50 60		- 5 - 5	50 50		- 5 - 5
nonic 75 SPAN-C 962,	80 100	1	- 5 - 5	70 90	1	- 5 - 5	60 90	1	- 5 - 5	50 80	1	- 5 - 5	50 70	1 -	5	50 60		- 5 - 5	50 50	1	- 5 - 5
ne 41 ne 88	80		- 5	70	1	- 5	60	1	- 5	50	1	- 5	50		5	50		- 5	50		- 5
tanium Alloys 4 AL-4 MO	80		- 5	70	1	- 5	60	1	- 5	50	1	- 5	50	1 -	0	50		- 5	50		- 5
140 A 2CR-2M0 150 A Titanium	80 80 100	1	- 5 - 5 - 5	70 70 90	1	- 5 - 5 - 5	60 60 90	1	- 5 - 5 - 5	50 50 80	1	- 5 - 5 - 5	50 50 70	1 -	5	50 50 60	1	- 5 - 5 - 5	50 50 50	1	- 5 - 5 - 5
ST-GAL 4V 6AI-4V	80 100	1	- 5	70	1	- 5	60 90	1	- 5	50 80	1	- 5	50 70	1 -	5	50 60	1	- 5 - 5	50 50	1	- 5 - 5
% PURE ANIUM	100	1	- 5	90	1		90	1	- 5	80	1	- 5	70	1 -		60		- 5	50		- 5
ast Iron 36	250	5	- 9	240	5	- 9	230	5	- 8	210	4	- 8	200	4 -	8	180	3	- 7	160	3	- 7
)-40-18)	200		- 10			- 10	180		- 9	160		- 8	140	4 -		120		- 8	100		- 7
20-90-02) 8 ass 20-20ksi)	250	5	- 9	240	5	- 9	230	5	- 8	210	4	- 8	200	4 -		180		- 7	160		- 7
ass 20-20ksij 8 ass 40-40ksij	250		- 9	240		- 9	230	5	- 8	210	4	- 8	200	4 -	8	180		- 7	160		- 7
18 18 18 10-40ksi)	250	5	- 9	240	5	- 9	230	5	- 8	210	4	- 8	200	4 -	8	180	3	- 7	160	3	- 7

# **CUT TIME CALCULATOR**

Bar Dia.	Bar Area, In²	1 IN <sup>2</sup> /MIN	2 IN² /MIN	3 IN² /MIN	4 IN² /MIN	5 IN² /MIN	6 IN² ⁄MIN	7 IN² /MIN	8 IN <sup>2</sup> /MIN	9 IN² /MIN	10 IN² ⁄MIN	11 IN <sup>2</sup> /MIN	12 IN² ⁄MIN	13 IN² ⁄MIN	14 IN <sup>2</sup> /MIN	15 IN² ⁄MIN	16 IN² ⁄MIN	17 IN <sup>2</sup> /MIN	18 IN <sup>2</sup> /MIN
					/ 101111	/ 10111 0	7 IVIII (		Minut				7 IVIII (	/ 10111 0	/ 10111 1			/ 10111 1	
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	1.0	.90	.84	.79	.74	.70
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
	78.54		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	d the ar	ea of b	ars lar <u>(</u>	ger tha	n <b>10</b> ″ d	iamete	<b>r</b> use th	e formu	la "π(3.	14) x ra	dius²". <sup>-</sup>	Take ha	lf the dia	meter (	radius)	multiply	it		

#### **Removal Rate - Square Inches Per Minute**

36

To find the area of bars larger than 10<sup>°</sup> diameter use the formula " $\pi$ (3.14) x radius<sup>2</sup>". Take half the diameter (radius) multiply it by itself. Then multiply that by 3.14. **Example:** 20<sup>°</sup> bar. Half the diameter is 10<sup>°</sup>. 10 x 10 = 100. 100 x 3.14 = 314 square inches.

**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.

CHIP FORM	CHIP CONDITION	CHIP COLOR	BLADE SPEED	BLADE FEED RATE	OTHER
	$\sim$	m	Decrease	Decrease	m
	Thick, Hard and Short	Blue or Brown			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



### **BLADE PROBLEM SOLVING**

Problem	Problem Cause	Solution
Premature         Blade Breakage         Straight Break indicates fatigue	<ul> <li>Incorrect blade - teeth too coarse</li> <li>Blade tension too high</li> <li>Side guides too tight</li> <li>Damaged or misadjusted blade guides</li> <li>Excessive feed</li> <li>Incorrect cutting fluid</li> <li>Wheel diameter too small for blade</li> <li>Blade rubbing on wheel flanges</li> <li>Teeth in contact with work before starting saw</li> <li>Incorrect blade speed</li> </ul>	<ul> <li>Use finer tooth pitch</li> <li>Reduce blade tension (see machine manual)</li> <li>Check side guide clearance (see machine manual)</li> <li>Check all guides for alignment/damage</li> <li>Reduce feed pressure</li> <li>Check coolant</li> <li>Use thinner blade</li> <li>Adjust wheel alignment</li> <li>Allow 1/2" clearance before starting cut</li> <li>Increase or decrease blade speed</li> </ul>
Premature Dulling of Teeth	<ul> <li>Teeth pointing in wrong direction / blade mounted backwards</li> <li>Improper or no blade break-in</li> <li>Hard spots in material</li> <li>Material work hardened</li> <li>Improper coolant</li> <li>Improper coolant concentration</li> <li>Speed too high</li> <li>Feed too light</li> <li>Teeth too small</li> </ul>	<ul> <li>Install blade correctly. If teeth are facing the wrong direction, flip blade inside out</li> <li>Break in blade properly (Page 10)</li> <li>Check for hardness or hard spots like scale or flame cut areas</li> <li>Increase feed pressure</li> <li>Check coolant type</li> <li>Check coolant mixture</li> <li>Check recommended blade speed (Page 34-35)</li> <li>Increase feed pressure</li> <li>Increase tooth size</li> </ul>
Inaccurate Cut	<ul> <li>Tooth set damage</li> <li>Excessive feed pressure</li> <li>Improper tooth size</li> <li>Cutting fluid not applied evenly</li> <li>Guides worn or loose</li> <li>Insufficient blade tension</li> </ul>	<ul> <li>Check for worn set on one side of blade</li> <li>Reduce feed pressure</li> <li>Check tooth size chart (Page 33)</li> <li>Check coolant nozzles</li> <li>Tighten or replace guides, check for proper alignment</li> <li>Adjust to recommended tension</li> </ul>
Band Leading in Cut	<ul> <li>Over-feed</li> <li>Pushed material too hard, too fast</li> <li>Insufficient blade tension</li> <li>Tooth set damage</li> <li>Guide arms loose or set too far apart</li> <li>Chips not being cleaned from gullets</li> <li>Teeth too small</li> </ul>	<ul> <li>Reduce feed force</li> <li>Adjust recommended tension</li> <li>Check material for hard inclusions</li> <li>Position arms as close to work as possible. Tighten arms.</li> <li>Check chip brush</li> <li>Increase tooth size</li> </ul>
Chip Welding	<ul> <li>Insufficient coolant flow</li> <li>Wrong coolant concentration</li> <li>Excessive speed and/or pressure</li> <li>Tooth size too small</li> <li>Chip brush not working</li> </ul>	<ul> <li>Check coolant level and flow</li> <li>Check coolant ratio</li> <li>Reduce speed and/or pressure</li> <li>Use coarser tooth pitch</li> <li>Repair or replace chip brush</li> </ul>
Teeth Fracture Back of tooth indicates work spinning in clamps	<ul> <li>Incorrect speed and/or feed</li> <li>Incorrect blade pitch</li> <li>Saw guides not adjusted properly</li> <li>Chip brush not working</li> <li>Work spinning or moving in vise</li> </ul>	<ul> <li>Check cutting chart (Page 34-35)</li> <li>Check tooth size chart (Page 33)</li> <li>Adjust or replace saw guides</li> <li>Repair or replace chip brush</li> <li>Check bundle configuration/adjust vise pressure</li> </ul>
Irregular Break Indicates material movement	<ul> <li>▼ Indexing out of sequence</li> <li>▼ Material loose in vise</li> </ul>	<ul> <li>▼ Check proper machine movement</li> <li>▼ Check vise or clamp</li> </ul>

Teeth Stripping	<ul> <li>Feed pressure too high</li> <li>Tooth stuck in cut</li> <li>Improper or insufficient coolant</li> <li>Incorrect tooth size</li> <li>Hard spots in material</li> <li>Work spinning in vise - loose nest or bundle</li> <li>Blade speed too slow</li> <li>Blade teeth running backwards</li> <li>Chip brush not working</li> </ul>	<ul> <li>Reduce feed pressure</li> <li>Do not enter old cut with a new blade</li> <li>Check coolant flow and concentration</li> <li>Check tooth size chart (Page 33)</li> <li>Check material for hard inclusions</li> <li>Check clamping pressure - be sure work is held firmly</li> <li>Increase blade speed - see cutting chart (Page 34-35)</li> <li>Reverse blade (turn inside out)</li> <li>Repair or replace chip brush</li> </ul>	
Wear on Back of Blades	<ul> <li>Excessive feed pressure</li> <li>Insufficient blade tension</li> <li>Back-up guide roll frozen, damaged, or worn</li> <li>Blade rubbing on wheel flange</li> </ul>	<ul> <li>Decrease feed pressure</li> <li>Increase blade tension and readjust guides</li> <li>Repair or replace back-up roll or guide</li> <li>Adjust wheel cant</li> </ul>	
Rough Cut         Washboard surface vibration and or chatter	<ul> <li>Dull or damaged blade</li> <li>Incorrect speed or feed</li> <li>Insufficient blade support</li> <li>Incorrect tooth pitch</li> <li>Insufficient coolant</li> </ul>	<ul> <li>Replace with new blade</li> <li>Increase speed or decrease feed</li> <li>Move guide arms as close as possible to the work</li> <li>Use finer pitch blade</li> <li>Check coolant flow</li> </ul>	
Wear Lines, Loss of Set	<ul> <li>Saw guide inserts or wheel flange are riding on teeth</li> <li>Insufficient blade tension</li> <li>Hard spots in material</li> <li>Back-up guide worn</li> </ul>	<ul> <li>Check machine manual for correct blade width</li> <li>Tension blade properly</li> <li>Check material for inclusions</li> <li>Replace guide</li> </ul>	
Twisted Blade Profile sawing	<ul> <li>Blade binding in cut</li> <li>Side guides too tight</li> <li>Radius too small for blade width</li> <li>Work not firmly held</li> <li>Erratic coolant flow</li> <li>Excessive blade tension</li> </ul>	<ul> <li>Decrease feed pressure</li> <li>Adjust side guide gap</li> <li>Use narrower blade</li> <li>Check clamping pressure</li> <li>Check coolant nozzles</li> <li>Decrease blade tension</li> </ul>	
<b>Blade Wear</b> Teeth blued	<ul> <li>Incorrect blade</li> <li>Incorrect feed or speed</li> <li>Improper or insufficient coolant</li> <li>"Blueing" caused by excessive heat</li> </ul>	<ul> <li>Use coarser tooth pitch</li> <li>Increase feed or decrease speed</li> <li>Check coolant flow</li> </ul>	39



# M. K. MORSE REVOLUTION THIN KERF CIRCULAR SAW BLADES

Marken Marke

#### **BLADE TYPE**

Thin Kerf Cermet Tipped Industrial Circular Saw Blades

Thin Kerf Carbide Tipped Industrial Circular Saw Blades

#### **APPLICATION**

Cermet tipped blades are optimized for carbon and high alloy steels.

Carbide tipped blades are optimized for stainless steel, high alloy steel, and aluminum.

# **INDUSTRIAL THIN KERF CIRCULAR**



Cut through steel, carbon, stainess, aluminum, and high alloy steel faster than ever. Unique combinations of metallurgy and blade configurations are tailored for peak performance in specific applications.

#### **FEATURES & BENEFITS**

<u>U.S.A.</u>

DES

STEEL CUTTING m / 60T / 120 MAX RPM 200295 MADE IN USA

<ul> <li>Ferrous and non-ferrous metal cutting</li> <li>Efficient cutting for 1/2" to 6" diameter</li> <li>Most effective in solids</li> </ul>	THIN KERF CERMET TIP CIRCULAR SAW BLADES PROVIDE THE
E = • MULTIPLE PIN HOLES	PERFORMANCE IN CUTTING SOLUTIONS FOR HIGH VOLUME CUTTING
FOR USE ON MORE THAN ONE MACHINE	27
	A BLADE DIAMETER B ARBOR DIAMETER C PIN HOLE D PIN HOLE DIAMETER E KERF WIDTH F PLATE THICKNESS
-G.	

# INDUSTRIAL THIN KERF CIRCULAR





#### **APPLICATIONS**

- ▼ Carbon steels
- ▼ High alloy steels

#### THIN KERF CERMET TIPPED S TYPE

Morse Revolution blades are high performance industrial circular saw blades specifically engineered for use with thin kerf metal cutting industrial circular saw machines. Cermet tipped blades are optimized for carbon and high alloy steels. Made for cutting solids from 1/2 to 6 inches depending on machine model and blade diameter.

#### BENEFITS

- ▼ Less material waste
- ▼ Consistent quality
- ▼ No resharpening
- ▼ Long life
- ▼ Fast cutting
- ▼ Superior finish

Model #	Part #	Diameter	Inner Diameter	Kerf	Teeth Count	Pin Hole	Machine Example
$\sim$	$\sim$		$\sim$	$\sim$		$\sim$	vnn
ICTNK25072SB	201346	250mm	32mm	2.0mm	72	4/11/63	Tsune Nishijimax Katso ( <i>Wagner</i> )
ICTNK25080SB	201360	250mm	32mm	2.0mm	80	and	
ICTNK250100SB	201544	250mm	32mm	2.0mm	100	4/9/50	Exact Cut
ICTNK28560SB	201384	285mm	32mm	2.0mm	60		Evenieing
ICTNK28572SB	201551	285mm	32mm	2.0mm	72	4/11/63	Everising Tsune
ICTNK28580SB	201407	285mm	32mm	2.0mm	80	and 4/9/50	Nishijimax
ICTNK285100SB	201568	285mm	32mm	2.0mm	100		Katso
ICTS360100SB	200332	285mm	50mm	2.74mm	100	4/14/80	Tsune Kaltenbach Katso
ICAM36060SB	200356	360mm	40mm	2.74mm	60	4/11/90	Amada Everising
ICAM36080SB	200370	360mm	40mm	2.74mm	80		Mega Missler
ICAM360100SB	200394	360mm	40mm	2.74mm	100		Daito / Delta Behringer
ICNT36060SB	201506	360mm	50mm	2.74mm	60	4/14/80	Tsune Nishijimax
ICNT36080SB	201513	360mm	50mm	2.74mm	80	and 4/16/80	Kaltenbach Katso
ICNT360100SB	201520	360mm	50mm	2.74mm	100	4/10/00	Endo
ICTS42060SB	200349	420mm	50mm	2.74mm	60	4/16/80	Tsune
ICTS42080SB	200363	420mm	50mm	2.74mm	80	4/10/00	Endo
ICNI46060SB	202015	460mm	50mm	2.74mm	60	4/16/80	Nishijimax
ICNI46080SB	202022	460mm	50mm	2.74mm	80	and	Amada
ICNI460100SB	202039	460mm	50mm	2.74mm	100	4/21/90	Everising







#### **APPLICATIONS**

- ▼ Stainless steels
- ▼ High alloy steels
- ▼ Aluminum

#### THIN KERF CARBIDE TIPPED C TYPE

Morse Revolution blades are high performance circular saw blades specifically engineered for use with thin kerf metal cutting industrial circular saw machines. Carbide tipped blades are optimized for stainless steel, high alloy steel, and aluminum. Made for cutting solids from 1/2 to 6 inches depending on machine model and blade diameter.

#### BENEFITS

- ▼ Less material waste
- ▼ Consistent quality
- ▼ No resharpening
- ▼ Long life
- ▼ Fast cutting
- ▼ Superior finish

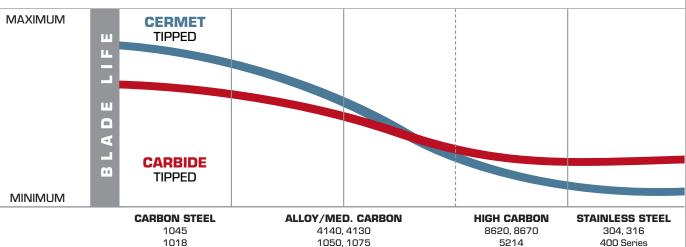
Model #	Part #	Diameter	Inner Diameter	Kerf	Teeth Count	Pin Hole	Machine Example
nnn	$   \sum $	m	$\sim$	$\sim$	$\sim$	n	mm
ICTNK25080CB	203067	250mm	32mm	2.03mm	80	4/11/63 and 4/9/50	Tsune Nishijimax Katso ( <i>Wagner</i> ) Exact Cut
ICTNK28580CB	203005	285mm	32mm	2.03mm	80	4/11/63 and 4/9/50	Everising Tsune Nishijimax Katso
ICNT36060CB	203012	360mm	50mm	2.74mm	60	4/14/80 and	Tsune Kaltenback Katso
ICNT36080CB	203036	360mm	50mm	2.74mm	80		
ICNT360100CB	203074	360mm	50mm	2.74mm	100	4/16/80	
ICAM36060CB	203081	360mm	40mm	2.74mm	60	4/11/90	Amada Everising Mega
ICAM36080CB	203029	360mm	40mm	2.74mm	80		Daito / Delta Behringer
ICTS42060CB	203043	420mm	50mm	2.74mm	60	4/16/80	Tsune Endo
ICNI46060CB	203050	460mm	50mm	2.74mm	60	4/16/80 and 4/21/90	Nishijimax Amada Everising



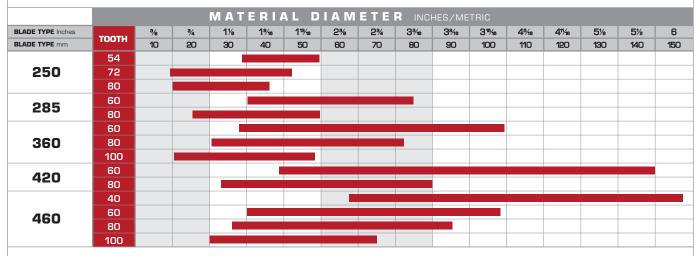


# THIN KERF INDUSTRIAL CIRCULAR

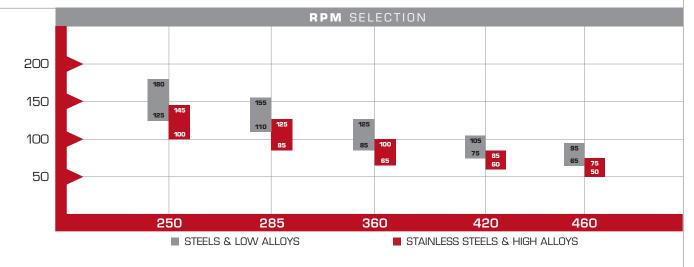
#### **BLADE TYPE SELECTION GUIDE**



#### **BLADE TOOTH SELECTION GUIDE**

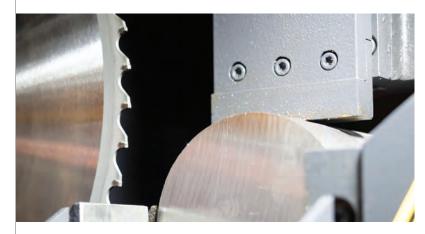


**RPM SELECTION GUIDE** 



44

PROBLEM	PROBLEM CAUSE	SOLUTION		
Teeth stripping	Incorrect blade selection	Select a blade with larger gullet space Select a blade with less number of tips		
	Excessive cutting speed	Refer to the cutting conditions chart		
	Excessive chip load	Refer to the cutting conditions chart		
	Excessive wear at the cutting edge	Check for the integrity of the chip groove Direct mist on to the cutting edge		
	Low clamp/vise pressure	Increase hydraulic pressure up to specified level		
Gullet clogging	Incorrect blade selection	Select a blade with larger gullet space Select a blade with less number of tips		
	Insufficient coolant	Increase coolant rate until cut surface is wet		
	See chip welding			
Chip welding	Incorrect cutting conditions	Check RPM Increase RPM if it is below the recommended Check chip load Increase chip load if it is below recommended		
	Insufficient coolant	Check coolant rate Increase coolant rate Check orientation of outlet nozzle Check chip brush Adjust or replace chip brush if necessary		
	Damaged tip	Check the tip for physical damages Run if necessary at reduced chip load		
	Excessive wear at the cutting edge	Increase coolant and air flow Run at low RPM		
Dut of square cuts	High or low plate tension	Remove the blade		
	Chamfer imbalance	Remove the blade		
Billet weight not holding	Machine malfunction	Check/clean the feed sensors		
Ripples on the cut surface	Low or high plate tension	Remove the blade		
	Insufficient coolant	Check coolant flow		
	Out of square machine	Check cleanliness of jaws Check squareness of jaws Check feeding mechanism and sensors		







# POWER TOOL ACCESSORIES

BLADE TYPE	APPLICATION
Bi-Metal Hole Saws	Engineered for optimized cutting performance and life. Exceptional durability yields cost- per-cut savings over other saws when cutting stainless steel, steel, machinable metals, nail- embedded woods and plastics.
Carbide Tipped Hole Cutters	Precision ground for clean, fast cuts. Cuts stainless steel, sheet metal, pipe and conduit, aluminum, plastics.
Spade Bits	Wood, plastic, plywood, formica. Fast, deep cutting at any angle.
Step Drills	Step drills are ideal for drilling repetitive holes by electrical contractors, sheet metal workers, and auto mechanics.
Double Cut Auger Bits	Premium double fluted auger bits provide excellent deep boring in wood and nail-embedded wood applications. Precision ground, heat- treated and tempered cutting edges cut through nails.
Arbors	Durable, heavy-duty, carbon steel arbors come complete with pilot drills. Adapt Morse hole saws to any power drill used by professionals.
Reciprocating Saw Blades	Offering the longest lasting reciprocating blades available, M. K. Morse reciprocating blades cut more smoothly, more accurately and deliver greater cost savings per cut.
Metal Cutting Circular Saw Blades	Cut through steel and other tough metals faster than ever. Unique combinations of metallurgy and blade configurations are tailored for peak performance in specific applications.
Portable Band Saw Blades	Long lasting premium blades offer fast cutting with reduced wear and breakage.
Jig Saw Blades	These safe, smooth-cutting blades cut quickly through a wide variety of materials. All are available in different shank configurations to fit various saw models
Hack Saw Blades And Frames	Used to cut pipe, tubing, solids, wood, plastic or any machinable metal. Increased heat and wear resistance for long life. Flexible to prevent shattering during use.

# **POWER TOOL ACCESSORIES**



#### WE HELP POWER TOOLS DO THEIR JOB BETTER

Our whole business is making saw blades for professionals. We make blades that last longer, cut smoother and do every conceivable cutting job. We make them for plumbers, electricians, carpenters, roofers, sheet metal workers, and anyone who uses power tools.

We make it our job to never, ever, let these people down. Toward this end we've continually invested in better research and development, better manufacturing processes, better raw materials and better warehousing facilities. The result is a wide-ranging product line that offers professionals blades that work better and last longer.





# M. K. MORSE HOLE CUTTING & BORING TOOLS

BLADE TYPE	APPLICATION
Bi-Metal MHS and MHSA Hole Saws	Engineered for optimized cutting performance and life. Exceptional durability yields cost-per-cut savings over other saws when cutting stainless steel, steel, machinable metals, nail-embedded woods and plastics.
Tungsten Carbide Tipped MHST Hole Saws	Nail free wood, plastic, fiberglass, drywall, fiberboard, plaster, acoustic tile, countertops. Coarser tooth pitch than bimetal hole saws for very fast cutting in soft abrasive material. Not recommended for pipe.
Tungsten Carbide Grit Edge MHSG Hole Saws	For use in hard or abrasive material. Cement, brick, cinder block, cement board, plaster with lath, unglazed ceramics, fiberglass, composites, computer flooring, acoustic tile.
Diamond Grit Edge Hole Saws	Extremely hard or brittle materials where cut finish is important. Use with granite (stone), ceramic tile, glass block, architectural stone, brick (masonry), cast iron, laminate flooring.
Carbide Tipped Hole Cutters	Precision ground for clean cuts. Cuts stainless steel, sheet metal, pipe and conduit, aluminum, plastics.
Spade Bits	Wood, plastic, plywood, formica. Fast, deep cutting at any angle.
Step Drills	Sheet metal, plastic/plexiglass, PVC, composition board. Use to drill new holes or enlarge existing holes. Commonly used in electrical and automotive applications. Also use to deburr in auto rust proofing.
Double Cut Auger Bits	Excellent for deep boring in wood and nail embedded wood. Applications include landscaping timbers, plumbing and electrical installation, log and timber frame construction.

#### **INTRODUCING...**

The ALL-NEW Advanced Bi-Metal Hole Saw by Morse our latest sawing innovation replaces all current Morse bi-metal hole saw solutions into one, simple optimized powerhouse.

#### FEATURES AND BENEFITS

#### PATENT PENDING TOOTH SET DESIGN

▼ Optimized to Remove Material Faster

#### NEW CAP

▼ Reduces Runout and Vibration

#### PREMIUM M42 HIGH SPEED STEEL CUTTING EDGE, 8% COBALT

▼ Over 2X the Life of Our AV Model

#### CUTTING DEPTH

▼ Increased 18% Over Our AV Model

#### HEAVY DUTY .050 SIDE WALL

▼ For Greater Stability

#### NEW SIDE SLOT

▼ Increased Leverage for Faster, Easier Slug Removal

#### NEW EXTERIOR RED COATING

▼ Reduces Side Wall Friction for Efficient Cutting



<image>





#### **MORSE HOLE SAWS**

The ALL-NEW Advanced Bi-Metal Hole Saw by Morse. Our latest sawing innovation replaces all current Morse bi-metal hole saw solutions into one, simple optimized powerhouse. Arbor required.

BENEFITS

#### APPLICATIONS

- ▼ Wood
- ▼ Plastic
- ▼ Machinable metals
- ▼ Stainless steel alloys
- ▼ Nail-embedded wood
- ▼ 1<sup>15</sup>⁄1<sup>6</sup>" (49.2 mm) cutting depth
   ▼ New side slot for increased leverage for faster, easier slug removal

▼ Optimized to remove material faster

▼ Premium M42 high speed steel

▼ New cap reduces runout and vibration

DIAMETER SIZE MM		BOX MORSE HOL Model		CLAM MORSE HOLE SAW Part Model Part		
$\sim$		mm	$\sim$			
<sup>9</sup> / <sub>16</sub> "	14	MHS09	177092	MHSO9C	178099	
5/8"	16	MHS10	177108	MHS10C	178105	
	16	MHS105	177511	MHS105C	178518	
11/16"	17	MHS11	177115	MHS11C	178112	
3⁄4"	19	MHS12	177122	MHS12C	178129	
	20	MHS125	177559	MHS125C	178556	
<sup>13</sup> /16"	21	MHS13	177139	MHS13C	178136	
7/8"	22	MHS14	177146	MHS14C	178143	
<sup>15</sup> /16"	24	MHS15	177153	MHS15C	178150	
	25	MHS155	177573	MHS155C	178570	
1"	25	MHS16	177160	MHS16C	178167	
<b>1</b> <sup>1</sup> / <sub>16</sub> "	27	MHS17	177177	MHS17C	178174	
1 <sup>1</sup> /8"	29	MHS18	177184	MHS18C	178181	
	30	MHS185	177597	MHS185C	178594	
1 <sup>3</sup> /16"	30	MHS19	177191	MHS19C	178198	
11⁄4"	32	MHS20	177207	MHS2OC	178204	
	32	MHS205	177658	MHS205C	178655	
1 <sup>5</sup> /16"	33	MHS21	177214	MHS21C	178211	
1³/8"	35	MHS22	177221	MHS22C	178228	
	35	MHS225	177696	MHS225C	178693	
17/16"	37	MHS23	177238	MHS23C	178235	
11⁄2"	38	MHS24	177245	MHS24C	178242	
1 <sup>3</sup> /8"	40	MHS25	177252	MHS25C	178259	
	40	MHS255	177733	MHS255C	178730	
15⁄8"	41	MHS26	177269	MHS26C	178266	
1 <sup>11</sup> /16"	43	MHS27	177276	MHS27C	178273	
1¾"	44	MHS28	177283	MHS28C	178280	
	45	MHS285	177740	MHS285C	178747	
1 <sup>13</sup> /16"	46	MHS29	177290	MHS29C	178297	





DIAMETER SIZE MM			DX IOLE SAW Part	CLAM MORSE HOLE SAW Model Part		
nn	$\sim$	$\sim$	mm	m	m	
17⁄8"	48	MHS30	177306	MHS30C	178303	
	50	MHS315	177313	MHS315C	178310	
2"	51	MHS32	177320	MHS32C	178327	
2 1⁄16"	52	MHS33	177337	MHS33C	178334	
2 1⁄8"	54	MHS34	177344	MHS34C	178341	
	55	MHS345	177351	MHS345C	178358	
2 1/4"	57	MHS36	177368	MHS36C	178365	
2 5/16"	59	MHS37	177375	MHS37C	178372	
2 ³⁄8"	60	MHS38	177382	MHS38C	178389	
	62	MHS385	177399	MHS385C	178396	
2 1/2"	64	MHS40	177405	MHS40C	178402	
2 9⁄16"	65	MHS41	177412	MHS41C	178419	
2 5⁄8"	67	MHS42	177429	MHS42C	178426	
	68	MHS425	177436	MHS425C	178433	
2 3⁄4"	70	MHS44	177443	MHS44C	178440	
2 7⁄8"	73	MHS46	177467	MHS46C	178464	
	75	MHS475	177474	MHS475C	178471	
3"	76	MHS48	177481	MHS48C	178488	
3 1⁄8"	79	MHS50	177504	MHS50C	178501	
3 1/4"	83	MHS52	177528	MHS52C	178525	
3 3⁄8"	86	MHS54	177542	MHS54C	178549	
3 1/2"	89	MHS56	177566	MHS56C	178563	
3 5⁄8"	92	MHS58	177580	MHS58C	178587	
3 3⁄4"	95	MHS60	177603	MHS60C	178600	
3 7⁄8"	98	MHS62	177627	MHS62C	178624	
	100	MHS63	177634	MHS63C	178631	
4"	102	MHS64	177641	MHS64C	178648	
4 <sup>1</sup> /8"	105	MHS66	177665			
4 1/4"	108	MHS68	177689			
4 <sup>3</sup> /8"	111	MHS70	177702			
4 1/2"	114	MHS72	177726			
4 <sup>3</sup> /4"	121	MHS76	177764			
5"	127	MHS80	177801			
5 <sup>1</sup> /4"	133	MHS84	177849			
5 <sup>1</sup> /2"	140	MHS88	177887			
5 <sup>3</sup> /4"	146	MHS92	177924			
6"	152	MHS96	177962			
6 <sup>3</sup> /8"	162	MHS104	177498			
6 5⁄8"	168	MHS106	177535			

**S** 



#### **MORSE HOLE SAWS WITH ARBOR**

The ALL-NEW Advanced Bi-Metal Hole Saw by Morse. Our latest sawing innovation replaces all current Morse bi-metal hole saw solutions into one, simple optimized powerhouse.

BENEFITS

#### APPLICATIONS

- ▼ Wood
- Plastic
- ▼ Machinable metals
- ▼ Stainless steel alloys
- ▼ Nail-embedded wood

#### Optimized to remove material faster New cap reduces runout and vibration

- ▼ Premium M42 high speed steel
- ▼ 1<sup>15</sup>⁄<sub>16</sub>" (49.2 mm) cutting depth
- New side slot for increased leverage for faster, easier slug removal

DIAM	ETER	CLAM MORSE HOLE SAW				
SIZE	MM	Model	Part			
produce	mm	mmm	m			
9/16"	14	MHSA09C	116091			
5/8"	16	MHSA10C	116107			
	16	MHSA105C	116671			
<sup>11</sup> ⁄16"	17	MHSA11C	116114			
3⁄4"	19	MHSA12C	116121			
	20	MHSA125C	116688			
<sup>13</sup> /16"	21	MHSA13C	116138			
7/8"	22	MHSA14C	116145			
<sup>15</sup> /16"	24	MHSA15C	116152			
	25	MHSA155C	116695			
1"	25	MHSA16C	116169			
<b>1</b> 1⁄16"	27	MHSA17C	116176			
1 <sup>1</sup> /8"	29	MHSA18C	116183			
	30	MHSA185C	116701			
1 <sup>3</sup> / <sub>16</sub> "	30	MHSA19C	116190			
11⁄4"	32	MHSA2OC	116206			
	32	MHSA205C	116725			
1 <sup>5</sup> / <sub>16</sub> "	33	MHSA21C	116213			
13⁄8"	35	MHSA22C	116220			
	35	MHSA225C	116749			
17/16"	37	MHSA23C	116237			
11⁄2"	38	MHSA24C	116244			
1 <sup>9</sup> /16"	40	MHSA25C	116251			
	40	MHSA255C	116763			
15⁄8"	41	MHSA26C	116268			
1 <sup>11</sup> /16"	43	MHSA27C	116275			
13⁄4"	44	MHSA28C	116282			
	45	MHSA285C	116770			
1 <sup>13</sup> /16"	46	MHSA29C	116299			





DIAM	FTFR	CLAM MORSE HOLE SAW				
SIZE	MM	Model	Part			
mm	mm	mm	mm			
17⁄8"	48	MHSA3OC	116305			
	50	MHSA315C	116787			
2"	51	MHSA32C	116329			
2 1/16"	52	MHSA33C	116336			
2 1⁄8"	54	MHSA34C	116343			
	55	MHSA345C	116794			
2 1/4"	57	MHSA36C	116367			
2 5⁄16"	59	MHSA37C	116374			
2 <sup>3</sup> /8"	60	MHSA38C	116381			
2 1/2"	64	MHSA40C	116404			
2 <sup>9</sup> /16"	65	MHSA41C	116411			
2 5⁄8"	67	MHSA42C	116428			
	68	MHSA425C	116817			
2 <sup>3</sup> /4"	70	MHSA44C	116442			
2 7⁄8"	73	MHSA46C	116466			
	75	MHSA475C	116831			
3"	76	MHSA48C	116480			
3 1⁄8"	79	MHSA50C	116503			
3 <sup>1</sup> /4"	83	MHSA52C	116527			
3 3⁄8"	86	MHSA54C	116541			
3 1/2"	89	MHSA56C	116565			
3 5⁄8"	92	MHSA58C	116589			
3 <sup>3</sup> /4"	95	MHSA60C	116602			
3 7⁄8""	98	MHSA62C	116626			
	100	MHSA63C	116633			
4"	102	MHSA64C	116640			



#### MORSE BI-METAL HOLE SAWS KITS BENEFITS

- ▼ Cutting depth: 1<sup>15</sup>⁄<sub>16</sub>" (49.2mm)
- ▼ Arbors included

Grouped in most commonly used sizes
 Standard shipping Pack: 1





#### **8 PC. ELECTRICIAN HOLE SAW KIT**

MHSO2E / 177771 Entrance sizes to 2" Saws: <sup>7</sup>/<sub>8</sub>", 1 <sup>1</sup>/<sub>8</sub>", 1 <sup>3</sup>/<sub>8</sub>", 1 <sup>3</sup>/<sub>4</sub>", 2", 2 <sup>1</sup>/<sub>2</sub>" Arbors: MA34, MA45PS



#### **13 PC. MASTER ELECTRICIAN HOLE SAW KIT**

MHSO8E / 177757 Entrance sizes to 4" Saws: <sup>7</sup>/<sub>8</sub>", 1 <sup>1</sup>/<sub>8</sub>", 1 <sup>3</sup>/<sub>8</sub>", 1 <sup>3</sup>/<sub>4</sub>", 2", 2 <sup>1</sup>/<sub>2</sub>", 3", 3 <sup>5</sup>/<sub>8</sub>", 4 <sup>1</sup>/<sub>8</sub>", 4 <sup>1</sup>/<sub>2</sub>" Arbors: MA24, MA34, MA45PS



#### 29 PC. ELECTRICIANS COMBINATION HOLE SAW KIT

MHSELEO1 / 177894 16 bi-metal and 9 carbide tipped hole saws in a broad range of sizes used by electricians. Bi-Metal: <sup>3</sup>/4", <sup>7</sup>/8", 1", 1 <sup>1</sup>/8", 1 <sup>1</sup>/4", 1 <sup>3</sup>/8", 1 <sup>1</sup>/2", 1 <sup>3</sup>/4", 2", 2 <sup>1</sup>/2", 2 <sup>5</sup>/8", 3", 3 <sup>5</sup>/8", 4 <sup>1</sup>/8", 4 <sup>1</sup>/2", 4 <sup>3</sup>/4" Carbide Tip: <sup>3</sup>/4", <sup>7</sup>/8", 1 <sup>1</sup>/8", 1 <sup>3</sup>/8", 1 <sup>1</sup>/2", 1 <sup>3</sup>/4", 2", 2 <sup>1</sup>/4", 2 <sup>1</sup>/2" Arbors: MA34, MA35PS / Pilot Drill: (2) MAPD301



#### 8 PC. PLUMBER HOLE SAW KIT

MHSO4P / 177795 Pipe tap sizes for pipe through 2" Saws: <sup>3</sup>/4", <sup>7</sup>/8", 1 <sup>1</sup>/8", 1 <sup>1</sup>/2", 1 <sup>3</sup>/4", 2 <sup>1</sup>/4" Arbors: MA34, MA45PS



#### **15 PC. MASTER PLUMBER HOLE SAW KIT**

MHS16P / 177818 Common industrial plumbing and electrical jobs on pipe and conduit through 4 1/2". Saws: 3/4", 7/8", 1 1/8", 1 1/2", 1 3/4", 2 1/4", 2 9/16", 3", 3 1/2", 4", 4 1/4", 4 1/2" Arbors: MA34, MA45PS Pilot Drill: (2) MAPD301



#### 26 PC. PLUMBING COMBINATION HOLE SAW KIT

 $\begin{array}{l} \mbox{MHSPLUO1} \ / \ 177900 \\ \mbox{13 bi-metal and 9 carbide grit hole saws in a broad range of sizes used by plumbers.} \\ \mbox{Bi-Metal: } \ 3/4", \ 7/8", \ 1 \ 1/8", \ 1 \ 1/2", \ 1 \ 3/4", \ 2 \ 1/4", \ 2 \ 9/16", \ 3", \ 3 \ 1/2", \ 4", \ 4 \ 1/4", \ 4 \ 1/2" \\ \mbox{Carbide Grit: } \ 3/4", \ 7/8", \ 1 \ 1/8", \ 1 \ 3/8", \ 1 \ 1/2", \ 1 \ 3/4", \ 2", \ 2 \ 1/4", \ 2 \ 1/4", \ 2 \ 1/2" \\ \mbox{Carbide Grit: } \ 3/4", \ 7/8", \ 1 \ 1/8", \ 1 \ 3/8", \ 1 \ 1/2", \ 1 \ 3/4", \ 2", \ 2 \ 1/4", \ 2 \ 1/4", \ 2 \ 1/2" \\ \mbox{Arbors: MA24, MA45PS / Pilot Drill: (2) MAPD301CT (2) MAPD301 \\ \end{array}$ 



#### 8 PC. UTILITY HOLE SAW KIT

MHSO3U / 177832 6 Commonly used hole saws for general purpose use. Saws:  $^{3}/_{4}$ ",  $^{7}/_{8}$ ", 1  $^{1}/_{8}$ ", 1  $^{1}/_{2}$ ", 1  $^{3}/_{4}$ ", 2  $^{1}/_{2}$ " Arbors: MA34, MA45PS





#### 7 PC. MECHANIC HOLE SAW KIT

<code>MHSO5M / 116916</code> Most popular hole saw sizes for construction, industrial and automotive jobs. Saws: 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 1/2", Arbors: MA34 Adapter Nut



#### **11 PC. MAINTENANCE HOLE SAW KIT**

MHS100 / 177825 Common industrial plumbing and electrical jobs on pipe and conduit through 2". 3/4", 7/8", 1 1/8", 1 3/8", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2" Arbors: MA34, MA45PS



#### **14 PC. INDUSTRIAL HOLE SAW KIT**

MHS08I / 177863 Common industrial plumbing and electrical applications Saws: 3/4", 7/6", 1", 1 1/4", 1 3/6", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2", 3" Arbors: MA34, MA45PS Extension: ME12



#### **19 PC. INDUSTRIAL HOLE SAW KIT**

MHSO6I / 177870 Common industrial plumbing and electrical jobs on pipe and conduit through 4". Saws: 3/4", 7/6", 1 1/6", 1 3/6", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2", 3", 3 1/4", 3 5/6", 3 3/4", 4 1/4", 4 1/2" Arbors: MA24, MA34, MA45PS / Extension: ME12



#### 24 PC. PROFESSIONAL TRADESMAN HOLE SAW KIT

MHS23M / 177788 Common industrial plumbing and electrical jobs on pipe and conduit through 4-1/2". Saws: <sup>3</sup>/4", <sup>7</sup>/8", 1", 1 <sup>1</sup>/8", 1 <sup>3</sup>/8", 1 <sup>1</sup>/2", 1 <sup>3</sup>/4", 2", 2 <sup>1</sup>/8", 2 <sup>1</sup>/4", 2 <sup>1</sup>/2", 2 <sup>5</sup>/8", 3", 3 <sup>1</sup>/4", 3 <sup>3</sup>/8", 3 <sup>5</sup>/6", 3 <sup>3</sup>/4", 4 <sup>1</sup>/8", 4 <sup>1</sup>/2", 4 <sup>3</sup>/4" Arbors: MA34, MA45PS Pilot Drill: (2) MAPD301 Extension: ME12



#### **8 PC. LOCKSMITH HOLE SAW KIT**

MHSO2L / 177856 Sizes for installation of popular locks, deadbolts, etc. Saws: 7/8", 1", 1 1/4", 1 1/2", 1 3/4", 2 1/8" Arbors: MA34, MA45PS



#### **4 PC. LOCK INSTALL HOLE SAW KIT** MHSALKIT1 / 116909

MHSALKIT1 / 116909 The 2 most popular sizes for lock installation to assure accurate installation in wood or metal doors. Saws: 1", 2 1/s" Arbors: MA34 Adapter Nut: M44N01 Adjustable Resin Template Packed: 1 Kit per card, 2 per standard pack







#### **TUNGSTEN CARBIDE GRIT HOLE SAWS**

Long-lasting choice for very hard abrasive materials. These hole saws create clean holes in materials too hard or abrasive for standard bi-metal saws, or so thin they would strip bi-metal or chip carbide teeth. Cutting depth of  $1^{15}/_{6"}$  (49.2 mm). Arbor required.

#### APPLICATIONS

- ▼ Acoustic tile
- ▼ Brick
  ▼ Cast iron
- Cast iron
   Cement box
- Cement board
- ▼ Ceramics
- Cinderblock
- Composites
- Hardened steel
   Particleboard

Fiberglass

▼

▼ Computer flooring

- Asbestos board
   Earmina
- ▼ Formica

#### BENEFITS

- ▼ Super resistance to heat, wear and abrasion with shock resistant back
- Tungsten carbide grains are bonded to alloy backs with a gulleted snag resistant edge
- CT pilot drill recommended for masonry type materials

DIAMETE INCHES	R MM	MODEL #	COMP #	PIPE TAP SIZE INCHES	PIPE ENT. SIZE INCHES	DIAMETEI	R MM	MODEL #	COMP #	PIPE TAP SIZE INCHES	PIPE ENT. SIZE INCHES
$\sim$	$\mathcal{N}$	$\sim$	$\sim$	$\mathcal{N}$	$\sim$	nn	$\sim$	m		$\mathcal{N}$	$\sim$
3/4"	19	MHSG12	216128	1/2"	3/8"	2 <sup>9</sup> /16"	65	MHSG41	216418		
<sup>3</sup> /16"	21	MHSG13	216135			2 5⁄8"	67	MHSG42	216425	2 1/2"	
7/8"	22	MHSG14	216142	3/4"	1/2"	2 3⁄4"	70	MHSG44	216449		
<sup>15</sup> / <sub>16</sub> "	24	MHSG15	216159			2 7⁄8"	73	MHSG46	216463		
1"	25	MHSG16	216166			3"	76	MHSG48	216487		2 1/2"
1 <sup>1</sup> ⁄16"	27	MHSG17	216173			3 1⁄8"	79	MHSG50	216500		
1 1/8"	29	MHSG18	216180	1	3⁄4"	3 1⁄4"	83	MHSG52	216524	З	
1 <sup>3</sup> /16"	30	MHSG19	216197			3 3⁄8"	86	MHSG54	216548		
<b>1</b> <sup>1</sup> /4"	32	MHSG2O	216203			3 1⁄2"	89	MHSG56	216562		
1 <sup>5</sup> /16"	33	MHSG21	216210			3 5⁄8"	92	MHSG58	216586		3
1 <sup>3</sup> /8"	35	MHSG22	216227		1	3 3⁄4"	95	MHSG60	216609	3 1/2"	
1 <sup>7</sup> /16"	37	MHSG23	216234			3 7⁄8"	98	MHSG62	216623		
1 1/2"	38	MHSG24	216241			4"	102	MHSG64	216647		
1 <sup>9</sup> /16"	40	MHSG25	216258			4 1⁄8"	105	MHSG66	216661		3 1⁄2"
1 5/8"	41	MHSG26	216265			4 1⁄4"	108	MHSG68	216685	4	
<b>1</b> <sup>11</sup> / <sub>16</sub> "	43	MHSG27	216272			4 <sup>3</sup> /8"	111	MHSG70	216708		
1 <sup>3</sup> ⁄4"	44	MHSG28	216289	1 1/2"	1 1⁄4"	4 1/2"	114	MHSG72	216722		4
1 <sup>13</sup> /16"	46	MHSG29	216296			4 3⁄4"	121	MHSG76	216760	4 <sup>1</sup> /2"	
1 7/8"	48	MHSG30	216302			5"	127	MHSG80	216807		
2	51	MHSG32	216326		1 1⁄2"	5 1⁄2"	140	MHSG88	216883		
2 <sup>1</sup> /16"	52	MHSG33	216333			5 <sup>3</sup> ⁄4"	146	MHSG92	216920		
2 1⁄8"	54	MHSG34	216340			6"	152	MHSG96	216968		
2 1/4"	57	MHSG36	216364	2		6 3⁄8"	162	MHSG104	216975		
2 <sup>5</sup> ⁄16"	59	MHSG37	216371			6 5⁄8"	168	MHSG106	216982		
2 3/8"	60	MHSG38	216388			6 7/8"	174	MHSG110	216999		
2 <sup>1</sup> /2"	64	MHSG40	216401		2						





		DIAM	IONDGRIT. Prov mat	MOND GRIT HOLE SAWS vides longer life and faster cutting in these erials than the conventional carbide grit saws and reciprocating saw blades.				
•	Monsé	▼ Ceran ▼ Glass ▼ Brick ▼ Cast I	ze (stone) nic Tile Block (masonry)	<ul> <li>BENEFITS</li> <li>✓ Industrial Diamond G and tempered alloy b</li> <li>✓ Fast and easy cutting</li> <li>✓ Finish cut edges are</li> <li>✓ Hollow core center k</li> <li>✓ Side slots allow for factors</li> </ul>	ody. g of abrasive materials.			
DIAM INCHES	IETER MM	MODEL #	COMPUTER #	Pipe Tap Size Inches	Pipe Ent. Size Inches			
n	$\sim$	nnn	mm	mm	mm			
3⁄16"	4.8	DGM03C	129152					
1⁄4"	6	DGMO4C	129169					
<sup>5</sup> ⁄16"	8	DGM05C	129176					
3/8"	9.5	DGM06C	129183					
1/2"	12.7	DGM08C	129190					
5/8"	16	DGM10C	129206					
3/4"	19	DGM12C	129213	1⁄2" (13mm)	³∕₃" (9.5mm)			
1"	25	DGM16C	129220					
1 <sup>3</sup> /8"	35	DGM22C	129237					
Diamond Gri	it Hole Saws a	and Quick Start™ Auto Pil	ot (Arbor Required)					
7/8"	22	DG14C	129008	<sup>3</sup> ⁄4" (19mm)	1/2" (13mm)			
1 <sup>1</sup> /8"	29	DG18C	129015	1 (25mm)	<sup>3</sup> /4" (19mm)			
1 <sup>1</sup> /4"	32	DG2OC	129022					
2"	51	DG32C	129039		11/2" (38mm)			

PACKAGING: 1 per card

64

DG40C

DGAPC

2 1/2"

Auto Pilot



129046

129503



2 (51mm)





#### **APPLICATIONS**

- T Acoustic tile
- Countertops
- ▼
- Drywall Fiberboard ▼
- ▼ Fiberglass
- ▼ Plaster
- Plastic ▼
- ▼ Nail-free wood

#### **CARBIDE TIPPED HOLE SAWS**

Tungsten carbide tooth tips offer the highest wear resistance possible for fast holes and longer life cutting abrasive materials. Cutting depth of 1 <sup>15</sup>/<sub>16</sub>" (49.2 mm). Arbor required.

#### BENEFITS

- ▼ Special tooth design for very fast hole saw cutting
- ▼ Ground and set teeth help to cut materials that bi-metal saws will not cut
- ▼ 3 teeth per inch creates a wider gullet for better chip clearance and faster cutting

חעום	IETER			DIAMETER					
INCHES	MM	MODEL #	COMP #	INCHES	MM	MODEL #	COMP #		
$\sim$	nn	nn	$\sim$	nn	m	$\sim$	n		
<sup>9</sup> /16"	14	MHST09	157094	2 5⁄16"	59	MHST37	157377		
	16	MHST105	157971	2 3⁄8"	60	MHST38	157384		
<sup>11</sup> / <sub>16</sub> "	17	MHST11	157117	2 1/2"	64	MHST40	157407		
3⁄4"	19	MHST12	157124	2 <sup>9</sup> /16"	65	MHST41	157414		
	20	MHST125	157988	2 5⁄8"	67	MHST42	157421		
<sup>13</sup> / <sub>16</sub> "	21	MHST13	157131	2 3⁄4"	70	MHST44	157445		
7/8"	22	MHST14	157148	2 7⁄8"	73	MHST46	157469		
<sup>15</sup> / <sub>16</sub> "	24	MHST15	157155	3"	76	MHST48	157483		
1"	25	MHST16	157162	3 1⁄8"	79	MHST50	157506		
<b>1</b> 1⁄16"	27	MHST17	157179	3 1⁄4"	83	MHST52	157520		
1 <sup>1</sup> /8"	29	MHST18	157186	3 3⁄8"	86	MHST54	157544		
<b>1</b> <sup>3</sup> /16"	30	MHST19	157193	<b>3</b> 1⁄2"	89	MHST56	157568		
<b>1</b> 1/4"	32	MHST20	157209	3 5⁄8"	92	MHST58	157582		
1 <sup>5</sup> /16"	33	MHST21	157216	3 <sup>3</sup> /4"	95	MHST60	157605		
1 3/8"	35	MHST22	157223	3 7⁄8"	98	MHST62	157629		
1 7/16"	37	MHST23	157230	4"	102	MHST64	157643		
1 <sup>1</sup> /2"	38	MHST24	157247	4 <sup>1</sup> /8"	105	MHST66	157667		
1 <sup>9</sup> /16"	40	MHST25	157254	4 1/4"	108	MHST68	157681		
1 5/8"	41	MHST26	157261	4 ³⁄8"	111	MHST70	157704		
<b>1</b> <sup>11</sup> /16"	43	MHST27	157278	4 1/2"	114	MHST72	157728		
1 3/4"	44	MHST28	157285	4 <sup>3</sup> /4"	121	MHST76	157766		
1 <sup>13</sup> /16"	46	MHST29	157292	5"	127	MHST80	157803		
1 7/8"	48	MHST30	157308	5 1⁄4"	133	MHST84	157841		
2	51	MHST32	157322	5 <sup>1</sup> /2"	140	MHST88	157889		
2 1⁄16"	52	MHST33	157339	5 <sup>3</sup> ⁄4"	146	MHST92	157926		
2 1/8"	54	MHST34	157346	6"	152	MHST96	157964		
2 1⁄4"	57	MHST36	157360						









#### **8 PC. CARBIDE TIPPED ELECTRICIANS KIT** MHSTO2E / 157940 Carbide Tipped pipe and conduit entrance sizes to 2" through abrasive materials. Saws: <sup>7</sup>/<sub>8</sub>", 1<sup>1</sup>/<sub>8</sub>", 1<sup>3</sup>/<sub>4</sub>", 2", 2 1/<sub>2</sub>" Arbors (1 ea.): MA34CT, MA45PCT

#### **11 PC. CARBIDE TIPPED MAINTENANCE KIT**

MHST100 / 157933 Contains popular carbide tipped sizes used in installation of 1/2" - 2" pipe and conduit through abrasive materials. Saws: 3/4", 7/8", 1 1/8", 1 3/8", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2"

Arbors (1 ea.): MA34CT, MA45PCT

#### **11 PC. TUNGSTEN CARBIDE GRIT HOLE SAW KIT**

MHSG100 / 162005 Popular Carbide Grit sizes for plumbing, electrical, and industrial maintenance jobs Saws:  $\frac{3}{4}$ ",  $\frac{7}{6}$ ",  $1\frac{1}{8}$ ",  $1\frac{3}{8}$ ",  $1\frac{1}{2}$ ",  $1\frac{3}{4}$ ", 2",  $2\frac{1}{4}$ ",  $2\frac{1}{2}$ "

Arbors (1 ea.): MA34CT, MA45PCT





#### **RECESSED LIGHTING HOLE SAW**

Cleanly cuts abrasive materials such as lath, plaster and ceiling tile. Carbide grit cutting edge.

#### **APPLICATIONS**

- ▼ Lath
- ▼ Plaster
- Ceiling tile

#### BENEFITS

▼ For installing lighting fixtures from Mini Juno, Capri, Marco, Halo, Progress, Lithonla, Ligholier, Preacolite and others.

DIAM	ETER MM	MODEL #	COMPUTER #	FOR INSTALLING THESE LIGHTING FIXTURES
nn	$\sim$	mm	$\sim$	mmmm
4 <sup>3</sup> /8"*	111	MHSG70	216708	Mini Juno, Capri, Marco, Halo
6 ³⁄8"	162	MHSG104	216975	Halo, Capri
6 5⁄8"	168	MHSG106	216982	Juno, Progress
6 7⁄8"	174	MHSG110	216999	Lithonla, Marco, Lightolier, Progress, Capri, Preacolite
BIMETAL HC	ILE SAWS			
6 ³⁄8"	162	MHS104	177498	Halo, Capri
6 5⁄8"	168	MHS106	177535	Juno, Progress
PACKAGING	: 1 per box	*Gulleted carbide grit cutt	ing edge	





#### ARBORS

Durable, heavy-duty, carbon steel arbors come complete with pilot drills. Adapt Morse hole saws to any power drill used by professionals.



SDS arbors are used in tools having SDS chucks, to drive

hole saws in rotary hammers or hammer drills having a

#### **ARBORS COMPLETE WITH PILOT DRILLS**

		-	-					
Model Number	Computer Number	Shank Size	Thread Size	Drill Number	Computer Number	Chuck Size	Fits Saws	Follow Through
$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$		m	m
MA24	139007	1/4 Hex	1/2 - 20	01	139113	1/4	<sup>9</sup> /16" - 1 <sup>3</sup> /16"	<sup>3</sup> /4" - 1 <sup>1</sup> /2"
MA34	139014	3/8 Hex	1/2 - 20	MAPD301	139113	3/8	<sup>9</sup> /16" - 1 <sup>3</sup> /16"	<sup>3</sup> /4" - 1 <sup>1</sup> /2"
MA34CT* *	139809	3/8 Hex	1/2 - 20	MAPD3CT	139229	3/8	<sup>9</sup> /16" - 1 <sup>3</sup> /16"	<sup>3</sup> /4" - 1 <sup>1</sup> /2"
MA35	139045	<sup>3</sup> /8 Hex	<sup>5</sup> ⁄8 - 18	MAPD301	139113	3/8	1 1⁄4" - 6"	1 1/2" - 6"
MA35PS	139021	³∕8 Hex	⁵∕≋ - 18	MAPD301	139113	3/8	1 1⁄4" - 6"	1 1⁄2" - 6"
MA35PSCT**	139823	<sup>3</sup> /8 Hex	<sup>5</sup> ⁄8 - 18	MAPD3CT	139229	3/8	1 1⁄4" - 6"	1 1/2" - 6"
MA45PS	139038	7/16 Hex	⁵∕≋ - 18	MAPD301	139113	1/2	1 1⁄4" - 6"	1 1⁄2" - 6"
MA45PSCT**	139816	7/16 Hex	<sup>5</sup> ⁄8 - 18	MAPD3CT	139229	1/2	11⁄4" - 6"	1 1/2" - 6"
SDS1/2QC	140928	SDS	1/2 - 20	MAPD301	139113	SDS	<sup>9</sup> /16" - 1 <sup>3</sup> /16"	<sup>3</sup> /4" - 1 <sup>1</sup> /2"
SDS5/8QC	140911	SDS	⁵∕≋ - 18	MAPD301	139113	SDS	1 1⁄4" - 6"	1 ½" - 6"
<b>Carded Arbors</b>								
MA24C	139618	<sup>1</sup> / <sub>4</sub> Hex	1/2 <b>- 20</b>	MAPD301	139113	1/4"	<sup>9</sup> /16" - 1 <sup>3</sup> /16"	<sup>3</sup> /4" - 1 <sup>1</sup> /2"
MA34C	139625	³∕8 Hex	1/2 - 20	MAPD301	139113	3/8	<sup>9</sup> /16" - 1 <sup>3</sup> /16"	<sup>3</sup> /4" - 1 <sup>1</sup> /2"
MA35C	139632	<sup>3</sup> /8 Hex	⁵∕≋ - 18	MAPD301	139113	<sup>3</sup> /8	1 1⁄4" - 6"	1 1⁄2"- 6"
MA35PSC	139649	<sup>3</sup> /8 Hex	⁵∕≋ - 18	MAPD301	139113	3/8	1 1⁄4" - 6"	1 ½" - 6"
MA45PSC	139656	7/16 Hex	<sup>5</sup> ⁄8 - 18	MAPD301	139113	1/2"	1 1⁄4" - 6"	1 ½" - 6"

\*\*Comes with carbide tipped pilot drill for use with carbide tipped and carbide grit hole saws.





Model Number	Computer Number	Description
$\sim$	M	mmmmmm
For use with MHS	, MHSA, MHSG	MHST hole saws
MAPD301	139113	3 <sup>3</sup> /32" X <sup>1</sup> /4" (78.6mm X 6.5mm) Pilot Drill - 1-Pk
MAPD3C	139212	3 <sup>3</sup> /32" X <sup>1</sup> /4" (78.6mm X 6.5mm) Pilot Drill - 1-Pk, Crd
MAPD310	139120	3 <sup>3</sup> /32" X <sup>1</sup> /4" (78.6mm X 6.5mm) Pilot Drill - 10-Pk
MAPD325	139137	3 <sup>3</sup> /32" X <sup>1</sup> /4" (78.6mm X 6.5mm) Pilot Drill - 25-Pk
MAPD3100	139144	3 <sup>3</sup> /32" X <sup>1</sup> /4" (78.6mm X 6.5mm) Pilot Drill - 100-Pk
MAPD3CT	139229	3 <sup>3</sup> / <sub>32</sub> " X <sup>1</sup> / <sub>4</sub> " (78.6mm X 6.5mm) Carbide Tipped Pilot Drill - 1 pack
MQC14	140386	Fast-Adapt Chuck fits $3/8$ " and larger chucks. Use with $1/4$ " shanks
MQC38	140393	Fast-Adapt Chuck fits $3/8$ " and larger chucks. Use with $3/8$ " and $7/16$ " shanks
MES101	140805	Ejector Spring, fits all 1/4" pilot drills
ME381	140409	12" (305mm) Extension for shank of 3/8" (9.5mm) arbors for 3/8" or larger drill chuck
WSFEXT5	123990	5-1/2" (140mm) Extension for shank of 7/16" (10.5mm) arbors for 1/2" drill chuck
ME121	141123	12" (305mm) Extension for shank of 7/16" (10.5mm) arbors for 1/2" drill chuck
M44N01	140751	Adapts arbors with $1/2$ - 20 threads to fit hole saws with $5/8$ - 18 threads (Nut)
M44NHO1	140744	Hex Adapter Nut
For use with AV, N	MK, TA, TAD, AD	hole saws
TACPD4S*	122047	3 1/16" X 1/4" (78mm X 6.5mm ) Pilot Drill - 1-Pk, Card
MPD4SO1	140799	3 <sup>1</sup> /16" X <sup>1</sup> /4" (78mm X 6.5mm) Pilot Drill - 1-Pk
MPD4S10	140683	3 1/16" X 1/4" (78mm X 6.5mm) Pilot Drill - 10-Pk
MPD4S25	140720	3 <sup>1</sup> /16" X <sup>1</sup> /4" (78mm X 6.5mm) Pilot Drill - 25-Pk
MPD4S100	140690	3 1/16" X 1/4" (78mm X 6.5mm) Pilot Drill - 100-Pk
TACPD4*	120043	4 <sup>5</sup> /16" X <sup>1</sup> /4" (110mm X 6.5mm) Pilot Drill - 1-Pk, Card
MPD401	140775	4 <sup>5</sup> /16" X <sup>1</sup> /4" (110mm X 6.5mm) Pilot Drill - 1-Pk
MPD410	140478	4 <sup>5</sup> /16" X <sup>1</sup> /4" (110mm X 6.5mm) Pilot Drill - 10-Pk
MPD425	140522	4 <sup>5</sup> /16" X <sup>1</sup> /4" (110mm X 6.5mm) Pilot Drill - 25-Pk
MPD4100	140492	4 <sup>5</sup> /16" X <sup>1</sup> /4" (110mm X 6.5mm) Pilot Drill - 100-Pk
TACPD4SCT*	120012	2 <sup>3</sup> / <sub>4</sub> " X <sup>1</sup> / <sub>4</sub> " (73mm X 6.5mm) Carbide Tipped Pilot Drill - 1-Pk, Card
MPD4SCT01	140874	2 <sup>3</sup> / <sub>4</sub> " X <sup>1</sup> / <sub>4</sub> " (73mm X 6.5mm) Carbide Tipped Pilot Drill - 1-Pk
MPD4SCT05	140881	2 <sup>7</sup> /8" X <sup>1</sup> /4" (73mm X 6.5mm) Carbide Tipped Pilot Drill - Tip 5-Pk
TACPD4CT*	120029	3" X <sup>7</sup> ⁄a" (102MM X 6.5mm) Carbide Tipped Pilot Drill - 1-Pk, Card
MPD4CTO1	140850	4" X 1⁄4" (102mm X 6.5mm) Carbide Tipped Pilot Drill - 1-Pk
MPD4CT05	140867	4" X 1⁄4" (102mm X 6.5mm) Carbide Tipped Pilot Drill - 5-Pk

ltem	Model Number	Computer Number	Description		
proven	nn	$\sim$	mmmmm		
Universal Arbor	MQRAC	143042	Works with adapters MQR58C and MQR12C		
Pilot Drill	MQRPDC	143035	Works with MQRAC - Fast Adapt Arbor		
<sup>5</sup> /8 – 18 Thread	MQR58C	143011	Fits Hole Saw sizes 1 1/4" (32mm) and larger		
1/2 - 20 Thread MQR12C 143028 Fits		143028	Fits Hole Saw sizes <sup>9</sup> /16" (14mm) to 1 <sup>3</sup> /16" (30mm)		
Combo Pack	MQR5812C	143004	Includes: (3) MQR58 Adapters and (2) MQR12 Adapters		



#### SHALLOW CARBIDE TIPPED HOLE CUTTERS

Designed for quick, clean precise cuts in metals and plastics while offering excellent usage life.

#### **APPLICATIONS** ▼ Sheet metal

Aluminum PVC/ABS

▼ Plastic

▼ ▼ Pipe

▼

▼

Stainless steel

#### BENEFITS

- Precision ground triple chip tooth for smooth cutting
   Two cutting depths offered: 1" (25mm) for pipe and conduit <sup>3</sup>/<sub>16</sub>" (4.5mm) for sheet metal
   Ejector spring for slug removal
   Step-center pilot bit reduces "break through" impact
   Grooved gullet directs chips away from the cut
   Flat shank fits <sup>3</sup>/<sub>8</sub>" and larger drill chucks

SHALLOW INCHES		RS DEPTH 3/16 MODEL #	" (4.5 MM) PART #	SHALLOW INCHES		S DEPTH 3/16 MODEL #	" (4.5 MM) <b>PART #</b>	SHALLOW	/ CUTTEF MM	RS DEPTH 3/16 MODEL #	" (4.5 MM) <b>PART #</b>
									$\mathcal{N}$		
9/16"	14	CTSO9	166034	1 1/2"	38	CTS24	166195	2 3⁄4"	70	CTS44	166386
5/8"	16	CTS10	166041	1 <sup>9</sup> /16"	40	CTS25	166201	2 <sup>13</sup> /16"	71.5	CTS45	166393
11/16"	17	CTS11	166058	1 5/8"	41	CTS26	166218	2 7/8"	73	CTS46	166409
3/4"	19	CTS12	166065	<b>1</b> <sup>1</sup> <b>1</b> / <sub>16</sub> "	43	CTS27	166225	2 15/16"	74.5	CTS47	166416
	20	CTS125	166577	1 <sup>3</sup> /4"	44	CTS28	166232	3"	76	CTS48	166423
13/16"	21	CTS13	166072	<b>1</b> <sup>13</sup> /16"	46	CTS29	166249	3 <sup>1</sup> /8"	79	CTS50	166430
7/8"	22	CTS14	166089	1 7/8"	48	CTS30	166256	3 1⁄4"	83	CTS52	166447
<sup>15</sup> /16"	24	CTS15	166096	<b>1</b> <sup>15</sup> /16"	49	CTS31	166263	3 <sup>3</sup> /8"	86	CTS54	166454
	25	CTS155	166584		50	CTS315	166614	3 1/2"	89	CTS56	166461
1"	25	CTS16	166102	2"	51	CTS32	166270	3 5⁄8"	92	CTS58	166478
1 <sup>1</sup> /16"	27	CTS17	166119	2 1/8"	54	CTS34	166287	3 <sup>3</sup> ⁄4"	95	CTS60	166485
1 <sup>1</sup> /8"	29	CTS18	166126	2 <sup>3</sup> /16"	55.5	CTS35	166294	3 7⁄8"	98	CTS62	166492
1 <sup>3</sup> /16"	30	CTS19	166133	2 1/4"	57	CTS36	166300	4"	102	CTS64	166508
1 <sup>7</sup> /32"	31	CTS195	166140	2 <sup>15</sup> /16"	59	CTS37	166317	4 1⁄8"	105	CTS66	166515
1 1⁄4"	32	CTS2O	166157	2 3/8"	60	CTS38	166324	4 1⁄4"	108	CTS68	166522
	32	CTS2O5	166591	2 7/16"	62	CTS39	166331	4 <sup>3</sup> /8"	111	CTS70	166539
<b>1</b> <sup>15</sup> / <sub>16</sub> "	33	CTS21	166164	2 1/2"	64	CTS40	166348	4 1/2"	114	CTS72	166546
1 <sup>3</sup> /8"	35	CTS22	166171	2 <sup>9</sup> /16"	65	CTS41	166355	4 <sup>3</sup> /4"	121	CTS76	166553
1 7/16"	37	CTS23	166188	2 5/8"	67	CTS42	166362	5"	127	CTS80	166560
	38	CTS235	166607	2 11/16"	68.5	CTS435	166379				





#### **DEEP CARBIDE TIPPED HOLE CUTTERS**

Designed for quick, clean precise cuts in metals and plastics while offering excellent usage life.

#### **APPLICATIONS**

#### BENEFITS

- ▼ Sheet metal Stainless steel
- ▼ Pipe ▼
- ▼ Aluminum
- PVC/ABS ▼
- ▼ Plastic

- Precision ground triple chip tooth for smooth cutting
   Two cutting depths offered: 1" (25mm) for pipe and conduit <sup>3</sup>/<sub>16</sub>" (4.5mm) for sheet metal
   Ejector spring for slug removal
   Step-center pilot bit reduces "break through" impact
   Grooved gullet directs chips away from the cut
   Flat shank fits <sup>3</sup>/<sub>8</sub>" and larger drill chucks

DEEP CUTI INCHES	DEEP CUTTERS DEPTH 1" (25 MM) INCHES MM MODEL # PART #			DEEP CUTT INCHES	ERS DE MM	PTH 1" (25 M MODEL #	M) <b>Part #</b>	DEEP CUT	TERS DE MM	EPTH 1" (25 M <b>MODEL #</b>	M) PART #
$\gamma$	N	$\sim$	$\sim$	hn	N	$\sim$	$\sim$	n	$\mathcal{N}$	$\sim$	$\sim$
<sup>9</sup> /16"	14	CTDO9	167024	1 <sup>9</sup> /16"	40	CTD25	167185	3 5⁄8"	92	CTD58	167376
5/8"	16	CTD10	167031	1 5/8"	41	CTD26	167192	3 <sup>3</sup> ⁄4"	95	CTD60	167383
<sup>11</sup> / <sub>16</sub> "	17	CTD11	167048	<b>1</b> <sup>1</sup> 1/ <sub>16</sub> "	43	CTD27	167208	4"	102	CTD64	167390
3/4"	19	CTD12	167055	1 <sup>3</sup> ⁄4"	44	CTD28	167215	4 <sup>1</sup> /8"	105	CTD66	167406
	20	CTD125	167437	<b>1</b> <sup>13</sup> / <sub>16</sub> "	46	CTD29	167222	4 1/4"	108	CTD68	167413
<sup>13</sup> / <sub>16</sub> "	21	CTD13	167062	1 7/8"	48	CTD30	167239	4 1/2"	114	CTD72	167420
7/8"	22	CTD14	167079	<b>1</b> <sup>15</sup> / <sub>16</sub> "	49	CTD31	167246				
<sup>15</sup> /16"	24	CTD15	167086		50	CTD315	167475	SHALLOW CUTTER ACCESSORIES			
	25	CTD155	167444	2"	51	CTD32	167253	Descript	Description Model Part No		Part No.
1"	25	CTD16	167093	2 1/8"	54	CTD34	167260	Set Scr	ew	CTSW01	166003
<b>1</b> 1⁄16"	27	CTD17	167109	2 1/4"	57	CTD36	167277	Stepped Pil	ot Drill	CTSP	166010
1 <sup>1</sup> /8"	29	CTD18	167116	2 3/8"	60	CTD38	167284	Ejector S	pring	CTSS	166027
1 <sup>3</sup> /16"	30	CTD19	167123	2 <sup>1</sup> /2"	64	CTD40	167291				
1 <sup>1</sup> /4"	32	CTD2O	167130	2 <sup>9</sup> /16"	65	CTD41	167307	DEE		ER ACCESSO	RIES
	32	CTD2O5	167451	2 5/8"	67	CTD42	167314	Descript	tion	Model No.	Part No.
1 <sup>5</sup> /16"	33	CTD21	167147	2 <sup>3</sup> ⁄4"	70	CTD44	167321	Set Scr	ew	CTSW01	166003
1 <sup>3</sup> /8"	35	CTD22	167154	2 7/8"	73	CTD46	167338	Stepped Pil	ot Drill	CTDP	167000
1 7/16"	37	CTD23	167161	3"	76	CTD48	167345	Ejector S	pring	CTDS	167017
	38	CTD235	167468	3 1⁄4"	83	CTD52	167352				
1 ½"	38	CTD24	167178	3 1/2"	89	CTD56	167369				





#### **6 PC CARBIDE TIPPED SHALLOW CUT ELECTRICIAN**

CTSO1 / 166720

Kit provides clearance for the most common electrical conduit diameters used by professional electricians (from ½" up to 1")

#### Kit contains:

- 1 CTSP Pilot drill
- 1 CTS14 7/8" (22mm) 1 CTS18 1-1/8" (29mm) 1 - CTSS Ejector spring
- 1 CTS22 1-3/8" (35mm) 1 - Hex key

#### **9 PC CARBIDE TIPPED SHALLOW CUT MASTER ELECTRICIAN** CTSO2 / 166737

Kit provides clearance for the most common electrical conduit diameters used by professional electricians (from ½" up to 2")

#### Kit contains:

- 1 CTS14 7/8" (22mm)

- 1 CTS18 1-1/8" (29mm) 1 CTS22 1-3/8" (35mm) 

   1 - CTS28
   1-3/4" (44mm)
   1 - CTS32
   2" (51mm)
   1 - CTS40
   2-1/2" (64mm)

   1 - CTSP Pilot drill
   1 - CTSS Ejector spring
   1 - Hex key



#### **7 PC DEEP CUT BOLT CLEARANCE**

CTDO1 / 167543 Kit provides clearance diameters for the most popular bolt sizes used by professional mechanical

and general contractors

- Kit contains: 1 - CTD11 11/16" (17mm) 1 - CTD13 13/16" (21mm) 1 - CTD15 15/16" (24mm) 1 - CTD17 1-1/16" (27mm) 1 - CTDP Pilot drill 1 - CTDS Ejector spring 1 - Hex Key



#### STEP DRILLS

Step drills are ideal for drilling repetitive holes by electrical contractors, sheet metal workers, and auto mechanics. HSS drills are made of high speed steel with double fluted ground cutting edge for long life. Morse also carries TiN coated drills to reduce friction, allowing the bits to last up to six times longer than HSS drills. One per box.

#### APPLICATIONS

Steel

▼ PVC

▼ Plasterboard

▼ Hole enlarging

▼ Copper ▼

V

- Brass
- ▼ Aluminum
- ▼ Plexiglass
- Sheet metal ▼

#### **BENEFITS**

- ▼ Reduce secondary operations with trailing flute that automatically deburs holes
- ▼ Increase accuracy when drilling with 3 flats on shank for secure fastening in drill
- ▼ Faster penetration than standard points with split point tip for self starting drills
- ▼ Re-sharpenable cutting edges allows for longer tool life

DESCRIPTION	MODEL #	COMPUTER #	SHANK INCHES	POINT TYPE
mm	nn	m	m	mmm
1⁄8" - 1⁄2" by 32nds	ESD01	124003	1/4"	Self-Starting
<sup>3</sup> /16" - <sup>1</sup> /2" by 16ths	ESDO2	124010	1/4"	Self-Starting
<sup>3</sup> /16" - <sup>7</sup> /8" by 16ths	ESD03	124027	3/8"	Self-Starting
<sup>1</sup> /4" - <sup>3</sup> /4" by 16ths	ESDO4	124034	3/8"	Self-Starting
<sup>1</sup> /4" - 1 <sup>1</sup> /8" by 16ths	ESD05	124041	3/8"	Self-Starting
<sup>1</sup> /8" - <sup>3</sup> /8" by 16ths	ESD06	124058	1⁄4"	Self-Starting
<sup>1</sup> /8" - <sup>1</sup> /2" by 16ths	ESD07	124065	1/4"	Self-Starting
<sup>9</sup> /16" - 1" by 16ths	ESD08	124072	3/8"	Hole Enlarging ½" or larger Pilot Holes
<sup>3</sup> /4" - 1 <sup>3</sup> /8" by 16ths	ESD09	124089	1/2"	Hole Enlarging <sup>3</sup> /4" or larger Pilot Holes
<sup>1</sup> /4" - <sup>7</sup> /8" by 16ths	ESD10	124096	3/8"	Self-Starting
<sup>1</sup> /4" - 1 <sup>3</sup> /8" by 8ths	ESD11	124102	3/8"	Self-Starting
TiN Coated Step Drills			^	
1⁄4" - 1⁄2" by 32nds	ESD01TIN	124119	1/4"	Self-Starting
<sup>3</sup> /16" - <sup>1</sup> /2" by 16ths	ESD02TIN	124126	1⁄4"	Self-Starting
<sup>3</sup> /16" - <sup>7</sup> /8" by 16ths	ESD03TIN	124133	3/8"	Self-Starting
<sup>1</sup> /4" - <sup>3</sup> /4" by 16ths	ESDO4TIN	124140	3/8"	Self-Starting



#### **STEP DRILL KIT** ESDKIT01 / 124201

This kit offers 4 of the most popular step drill sizes for electrical, automotive and sheet metal applications.

Kit contains: ESD01, ESD03, ESD04, ESD05



#### **DOUBLE CUT AUGER BITS**

Premium double fluted auger bits provide excellent deep boring in wood and nail-embedded wood applications. Precision ground, heat-treated and tempered cutting edges cut through nails. (1) per tube

#### BENEFITS

- ▼ Self-feed screw point for effortless boring
- ▼ Double flute design for fast chip removal and less clearing of bit
- ▼ The ability to resharpen edge allows for quick touch ups to maintain edge and life of bit
- ▼ 7/Ĭ6" quick change shank allows for use with quick change chuck

BORE DIAMETER		SHANK SIZE*	MODEL NUMBER	COMPUTER NUMBER		
$\nu \nu \nu$						
36" LENGTH						
<sup>9</sup> /16"	14	7/16"	WSAB360562	125178		
5/8"	16	7/16"	WSAB360625	125185		
<sup>11</sup> / <sub>16</sub> "	17	7/16"	WSAB360687	125192		
3/4"	19	7/16"	WSAB360750	125239		
<sup>13</sup> / <sub>16</sub> "	21	7/16"	WSAB360812	125246		
7/8"	22	7/16"	WSAB360875	125253		
<sup>15</sup> / <sub>16</sub> "	24	7/16"	WSAB360937	125260		
1"	25	7/16"	WSAB361000	125277		
<b>1</b> 1⁄16"	27	7/16"	WSAB361062	125284		
<b>1</b> 1/8"	29	7/16"	WSAB361125	125291		
18" LENGTH						
<sup>3</sup> /8"	9.5	3/8"	WSAB180375	125505		
7/16"	11	7/16"	WSAB180437	125512		
1/2"	13	7/16"	WSAB180500	125529		
<sup>9</sup> /16"	14	7/16"	WSAB180562	125536		
5/8"	16	7/16"	WSAB180625	125543		
<sup>11</sup> /16"	17	7/16"	WSAB180687	125550		
3/4"	19	7/16"	WSAB180750	125567		
<sup>13</sup> /16"	21	7/16"	WSAB180812	125574		
7/8"	22	7/16"	WSAB180875	125581		
<sup>15</sup> / <sub>16</sub> "	24	7/16"	WSAB180937	125598		
1"	25	7/16"	WSAB181000	125604		
<b>1</b> 1⁄16"	27	7/16"	WSAB181062	125611		
1 <sup>1</sup> /8"	29	7/16"	WSAB181125	125628		
1 1/4"	32	7/16"	WSAB181250	125635		
1 <sup>3</sup> /8"	35	7/16"	WSAB181375	125642		
1 <sup>1</sup> /2"	38	7/16"	WSAB181500	125659		



**BORE DIAMETER** INCHES MM SHANK SIZE \* MODEL NUMBER COMPUTER NUMBER 7-1/2" LENGTH 1/4" 6 1/4" WSAB750250 125772 8 5/16" 5/16" WSAB750312 125789 3/8" 10 <sup>3</sup>/8" WSAB750375 125796 7/16" 11 7/16" 124973 WSAB750437 1/2" 13 7/16" WSAB750500 124980 <sup>9</sup>/16" 14 WSAB750562 124997 7/16" 5/8" 16 7/16" WSAB750625 125666 11/16" 17 7/16" WSAB750687 125673 7/16" WSAB750750 125680 3/4" 19 13/16" 21 7/16" WSAB750812 125697 7/8" 22 7/16" WSAB750875 125703 15/16" 24 7/16" WSAB750937 125710 1" 25 7/16" WSAB751000 125727 1 <sup>1</sup>/8" 7/16" 29 WSAB751125 125734 1 <sup>1</sup>/4" 32 7/16" WSAB751250 125741 1 3/8" 35 7/16" WSAB751375 125758 38 WSAB751500 1 1/2" 7/16" 125765

\* Shanks are designed to work in Fast-Adapt® MQC38 quick change chucks (pg 28) and standard chucks.



#### **AUGER/WOOD BIT FILE**

WSAB6STFILE / 125499 These files are designed for sharpening and extending the life of Morse auger and wood bits. Six inch slim taper file with attached wooden handle.

PACKAGING: 1 per tube



#### SPADE BITS

Wood

V

Plastic

Plywood

Formica

A popular item for boring small holes through wood. Stem works with 1/4" Fast-Adapt®

#### **APPLICATIONS**

Wood composites

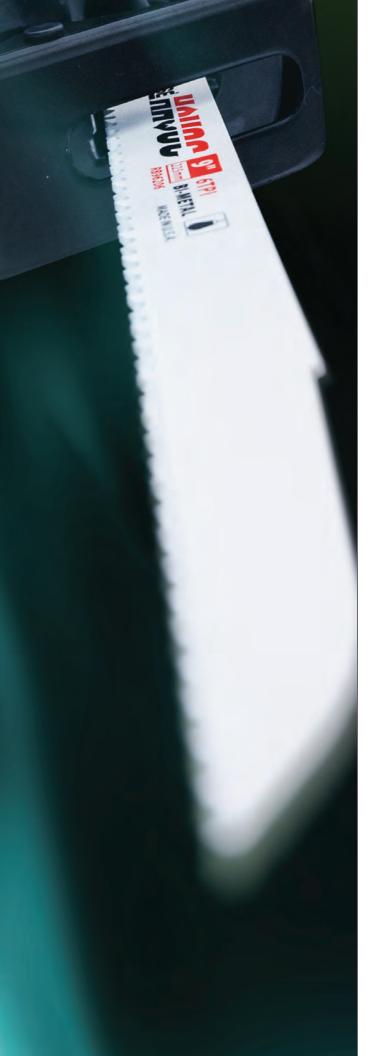
- ▼ Produce a cleaner hole with less vibration with the angled spur
- Uses bit to pull lead wire back through the drilled hole
- ▼ 1/4" (6.4mm) quick change shank size fits all power drills

DESCRIPTION		10/BOX		1/CA	1/CARD		DESCRIPTION		10/BOX		1/CARD	
INCHES	MM	MODEL #	COMP #	MODEL #	COMP #		INCHES	MM	MODEL #	COMP #	MODEL #	COMP #
$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$		$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$
1/4"	6mm	WSB250	125000	WSB250C	125307		<sup>13</sup> / <sub>16</sub> "	21mm	WSB812	125093	WSB812C	125390
<sup>5</sup> /16"	8mm	WSB312	125017	WSB312C	125314		7/8"	22mm	WSB875	125109	WSB875C	125406
<sup>3</sup> /8"	10mm	WSB375	125024	WSB375C	125321		<sup>15</sup> / <sub>16</sub> "	24mm	WSB937	125116	WSB937C	125413
<sup>7</sup> /16"	11mm	WSB437	125031	WSB437C	125338		1"	25mm	WSB1000	125123	WSB1000C	125420
1/2"	13mm	WSB500	125048	WSB500C	125345		1 <sup>1</sup> /8"	29mm	WSB1125	125130	WSB1125C	125437
<sup>9</sup> /16"	14mm	WSB562	125055	WSB562C	125352		1 <sup>1</sup> /4"	32mm	WSB1250	125147	WSB1250C	125444
5/8"	16mm	WSB625	125062	WSB625C	125369		1 <sup>3</sup> /8"	35mm	WSB1375	125154	WSB1375C	125451
<sup>11</sup> /16"	17mm	WSB687	125079	WSB687C	125376		1 1/2"	38mm	WSB1500	125161	WSB1500C	125468
3/4"	19mm	WSB750	125086	WSB750C	125383							

**BENEFITS** 



PACKAGING: 1 per card, 5 per standard pack





<b>BLADE TYPE</b>	APPLICATION
Metal Cutting	Best choice for applications cutting any machinable metal up to 1/4" in thickness.
Wood Cutting	Specifically designed for cutting all types of wood, wood composites, and nail-embedded wood.
Wood/Metal Cutting	Best choice for applications involving a variety of materials ranging from wood and plastic, to ferrous and non-ferrous metals.
Demolition Cutting	Specifically designed for rough-in cutting all types of wood, wood composites, and nail-embedded wood.
Automotive Cutting	Optimized for Automotive reclamation/recycling, as well as other automotive modifications requiring metal cutting.
Fire + Rescue Cutting	Preferred by professional firefighters. Specifically designed for automotive extrication.
Plaster Cutting	Designed for cutting drywall, plasterboard, and plaster with wood or metal lath.
Air Saw Blades	Specifically designed for use in pneumatic saws for thin sheet metal applications.
U-Shank	Made for use with pipe clamp recip saws for cutting pipe and metal sections.
Pallet Dismantling	Specifically designed for pallet recycling.
Carbide Grit	The best design for cutting materials too thin, hard, or abrasive for conventional carbide tipped or bi-metal blades.
Diamond Grit	Specifically designed for the commercial or residential cutting of ceramics, granites, and stone.
Carbide Tipped	Best for abrasive material applications that still require the cutting action and chip clearing capacity of gullets for speed of cut.
Jab Saws	Heavy duty, ergonomic handle to use with either a reciprocating or a hack saw blade.

### **RECIPROCATING SAW BLADES**



#### **CARBIDE TIPPED RECIPROCATING SAW BLADES** The ALL NEW Morse CTR Recip is the best choice for thick metal cutting applications between 3/16" and 1/2". This high performance

#### APPLICATIONS

- ▼ Cast Iron
- Threaded Rod ▼
- ▼ Emt Conduit
- ▼ Stainless Steel
- ▼ Steel Plate
- ▼ Non-Ferrous Metal

#### blade provides longer cutting life over traditional bi-metal blades.

CARBIDE

IR6

**BENEFITS** 

- ▼ Rubber
- Steel Studs ▼
- ▼ Rebar
- Black Iron Pipe
- ▼ Angle Iron
  - ▼ Metal Alloys
- other tough metals Precision ground carbide teeth
- Maximum cutting performance in thick metal applications

▼ More cost effective than bi-metal blades when

cutting stainless steel, high strength alloys and

- 1 in x .050" blade body for straighter cuts and ▼ less vibration
- Available in 4", 6" and 9" lengths ▼

ТРІ	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	QUANTITY PER PKG.	PACKAGE TYPE
n	$\mathcal{N}$	$\sim$	m	$\sim$	$\mathcal{N}$	m	$\sim$	M	$\sim$	$\sim$
8	4"	1"	0.050	102	25	1.3	CTR408MC1	405201	1	Card
8	6"	1"	0.050	152	25	1.3	CTR608MC1	405218	1	Card
8	9"	1"	0.050	229	25	1.3	CTR908MC1	405225	1	Card







# **RECIPROCATING SAW BLADES**

BI-METAL





#### SPARC® RECIPROCATING SAW BLADES

The tooth angle is increased along the arc without sacrificing tooth size. This maintains the TOOTH STRENGTH while lowering cut temperatures and increasing the cutting speed.

#### FEATURES

- ▼ Increased tooth angle along the arc
- ▼ Arc preserves tooth life
- Sparc's arched shape creates a shifting effect on each cutting stroke

#### BENEFITS

- ▼ Faster cutting than traditional blades
- Eliminates tooth drag on the backstroke which provides a longer blade life
- ▼ Teeth stay sharper/longer

TPI	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	quantity Per PKG.	PACKAGE TYPE
h	$\sim$	$\sim$	m	$\sim$	$\sim$	m	nnn	m	n	$\sim$
10	6"	3/4"	0.035	152mm	20	0.9	RBAC610T05	405409	5	Card
14	6"	3/4"	0.035	152mm	20	0.9	RBAC614T05	405416	5	Card
18	6"	3/4"	0.035	152mm	20	0.9	RBAC618T05	405423	5	Card
10	9"	3/4"	0.035	229mm	20	0.9	RBAC910T05	405430	5	Card
14	9"	3/4"	0.035	229mm	20	0.9	RBAC914T05	405447	5	Card
18	9"	3/4"	0.035	229mm	20	0.9	RBAC918T05	405454	5	Card
10	12"	3/4"	0.035	305mm	20	0.9	RBAC1210T05	405461	5	Card
14	12"	3/4"	0.035	305mm	20	0.9	RBAC1214T05	405478	5	Card
18	12"	3/4"	0.035	305mm	20	0.9	RBAC1218TO5	405485	5	Card
									I.	









#### Morse MASTER COBALT.

#### **MASTER COBALT® WOOD RECIPROCATING SAW BLADES**

The Morse Master Cobalt Wood reciprocating blade is specifically designed for cutting all types of wood, wood composites, and nail embedded wood.

#### **FEATURES**

- Available in .035" and .050" thickness
- ▼ Tapered blade body
- ▼ Straight and variable tooth pitch
- Reinforced tooth design with compound relief
   Positive rake on .050 (1.30mm) x 6 TPI blades
- ▼ Bi-metal construction

- BENEFITS
- ▼ .035 blades for flexibility in tight spaces
- ▼ .050 blades for increased rigidity
- ▼ Best for plunge cutting
- ▼ Easier feed in wood
- ▼ High impact resistance
- ▼ More aggressive cutting
- ▼ Long cutting life
- ▼ Heat and wear resistant

ТРІ	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	quantity Per PKG.	PACKAGE TYPE
m	M	$\sim$	$\sim$	$\sim$	$\sim$	nn	$\sim$	m	$\sim$	$\sim$
6	6"	3/4"	0.035	152	20	0.9	RB63506T05	400190	5	Card
6	6"	3/4"	0.035	152	20	0.9	RB63506T15	398404	15	Tube
6	6"	3/4"	0.035	152	20	0.9	RB63506T25	398718	25	Tube
6	6"	3/4"	0.035	152	20	0.9	RB63506T50	400183	50	Tube
6	6"	3/4"	0.050	152	20	1.3	RB65006C2	397339	2	Card
6	6"	3/4"	0.050	152	20	1.3	RB65006T05	402040	5	Card
6	6"	3/4"	0.050	152	20	1.3	RB65006T25	398732	25	Tube
6	6"	3/4"	0.050	152	20	1.3	RB65006T50	402057	50	Tube
6	6"	7/16"	0.050	152	12	1.3	RB65006CT05	399517	5	Card
6	6"	7/16"	0.050	152	12	1.3	RB65006CT50	399500	50	Tube
6	9"	3/4"	0.035	229	20	0.9	RB93506T05	400176	5	Card
6	9"	3/4"	0.035	229	20	0.9	RB93506T50	400169	50	Tube
6	9"	3/4"	0.050	229	20	1.3	RB95006C2	397391	2	Card
6	9"	3/4"	0.050	229	20	1.3	RB95006T05	402026	5	Card
6	9"	3/4"	0.050	229	20	1.3	RB95006T25	398794	25	Tube
6	9"	3/4"	0.050	229	20	1.3	RB95006T50	402033	50	Tube
6	12"	3/4"	0.035	305	20	0.9	RB123506T50	400145	50	Tube
6	12"	3/4"	0.035	305	20	0.9	RB123506T05	400152	5	Card
6	12"	3/4"	0.050	305	20	1.3	RB125006C	402286	1	Card
6	12"	3/4"	0.050	305	20	1.3	RB125006T05	402156	5	Card
6	12"	3/4"	0.050	305	20	1.3	RB125006T25	398633	25	Tube
6	12"	3/4"	0.050	305	20	1.3	RB125006T50	402149	50	Tube
2/3	12"	3/4"	0.050	305	20	1.3	RB125023T05	401593	5	Card
2/3	12"	3/4"	0.050	305	20	1.3	RB125023T50	401616	50	Tube
5/8	6"	3/4"	0.050	152	20	1.3	RB65058T05	398510	5	Card
5/8	6"	3/4"	0.050	152	20	1.3	RB65058T50	398503	50	Tube
5/8	12"	3/4"	0.050	305	20	1.3	RB125058T50	398442	50	Tube

71

# **RECIPROCATING SAW BLADES**



#### MASTER COBALT

#### **MASTER COBALT® METAL RECIPROCATING SAW BLADES**

The Morse Master Cobalt Metal reciprocating blade is the best choice for cutting any machinable metal up to 1/4" (6.4mm) in thickness.

#### **FEATURES**

- ▼ Available in .035", .042, and .050" thickness
- Tapered blade body ▼
- Straight and variable tooth pitch ▼ ▼
- Reinforced tooth design with compound relief Positive rake on .050 x 6 TPI blades ▼
- ▼ Bi-metal construction

#### BENEFITS

- ▼ .035 blades for flexibility in tight spaces
- .050 blades for increased rigidity and ▼ heavier feed pressure
- Best for plunge cutting ▼
- ▼ Easier feed in wood
- ▼ High impact resistance
- ▼ More aggressive cutting
- ▼ Long cutting life
- ▼ Heat and wear resistant

ТРІ	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	quantity Per PKG.	PACKAGE TYPE
$\sim$	$\overline{\mathcal{M}}$	$\sim$	$\sim$	$\sim$	$\sim$	nn	n	m		$\sim$
14	4"	3/4"	0.035	102	20	0.9	RB414T05	400237	5	Card
14	4"	3/4"	0.035	102	20	0.9	RB414T50	400220	50	Tube
14	6"	3/4"	0.035	152	20	0.9	RB614C2	397308	2	Card
14	6"	3/4"	0.035	152	20	0.9	RB614T05	400411	5	Card
14	6"	3/4"	0.035	152	20	0.9	RB614T15	398381	15	Tube
14	6"	3/4"	0.035	152	20	0.9	RB614T25	398671	25	Tube
14	6"	3/4"	0.035	152	20	0.9	RB614T50	400404	50	Tube
14	6"	1"	0.042	152	25	1.1	RB64214T05	404181	5	Card
14	6"	1"	0.042	152	25	1.1	RB64214T25	404198	25	Tube
14	6"	3/4"	0.050	152	20	1.3	RB65014T05	399623	5	Card
14	6"	3/4"	0.050	152	20	1.3	RB65014T50	399616	50	Tube
14	8"	3/4"	0.035	203	20	0.9	RB814C2	397377	2	Card
14	8"	3/4"	0.035	203	20	0.9	RB814T05	400497	5	Card
14	8"	3/4"	0.035	203	20	0.9	RB814T25	398763	25	Tube
14	8"	3/4"	0.035	203	20	0.9	RB814T50	400480	50	Tube
14	9"	3/4"	0.035	229	20	0.9	RB914T05	400985	5	Card
14	9"	3/4"	0.035	229	20	0.9	RB914T50	400992	50	Tube
14	9"	1"	0.042	229	25	1.1	RB94214T05	403900	5	Card
14	9"	1"	0.042	229	25	1.1	RB94214T25	403917	25	Tube
14	9"	1"	0.050	229	25	1.3	RB95014T05	404327	5	Card
14	9"	1"	0.050	229	25	1.3	RB95014T25	404334	25	Tube
14	12"	3/4"	0.035	305	20	0.9	RB1214T05	400138	5	Card
14	12"	3/4"	0.035	305	20	0.9	RB1214T50	400121	50	Tube
14	12"	1"	0.042	305	25	1.1	RB124214T05	403962	5	Card
14	12"	1"	0.042	305	25	1.1	RB124214T25	403979	25	Tube
14	12"	1"	0.050	305	25	1.3	RB125014T05	404266	5	Card
14	12"	1"	0.050	305	25	1.3	RB125014T25	404273	25	Tube

ТРІ	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	quantity Per Pkg.	PACKAGE TYPE
m	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	m	$\sim$	m		$\sim$
18	3"	5/16"	0.035	76	6	0.9	RB318ST05	401999	5	Card
18	3"	5/16"	0.035	76	6	0.9	RB318ST50	401982	50	Tube
18	4"	3/4"	0.035	102	20	0.9	RB418C2	397247	2	Card
18	4"	3/4"	0.035	102	20	0.9	RB418T05	400275	5	Card
18	4"	3/4"	0.035	102	20	0.9	RB418T50	400268	50	Tube
18	6"	3/4"	0.035	152	20	0.9	RB618C2	397315	2	Card
18	6"	3/4"	0.035	152	20	0.9	RB618T05	400435	5	Card
18	6"	3/4"	0.035	152	20	0.9	RB618T15	398398	15	Tube
18	6"	3/4"	0.035	152	20	0.9	RB618T25	398688	25	Tube
18	6"	3/4"	0.035	152	20	0.9	RB618T50	400428	50	Tube
18	6"	1"	0.042	152	25	1.1	RB64218T05	404204	5	Card
18	6"	1"	0.042	152	25	1.1	RB64218T25	404211	25	Tube
18	6"	3/4"	0.050	152	20	1.3	RB65018T05	399647	5	Card
18	6"	3/4"	0.050	152	20	1.3	RB65018T50	399630	50	Tube
18	8"	3/4"	0.035	203	20	0.9	RB818T05	402590	5	Card
18	8"	3/4"	0.035	203	20	0.9	RB818T25	398770	25	Tube
18	8"	3/4"	0.035	203	20	0.9	RB818T50	402583	50	Tube
18	9"	3/4"	0.035	229	20	0.9	RB918T05	401005	5	Card
18	9"	3/4"	0.035	229	20	0.9	RB918T50	401012	50	Tube
18	9"	1"	0.042	229	25	1.1	RB94218T05	403924	5	Card
18	9"	1"	0.042	229	25	1.1	RB94218T25	403931	25	Tube
18	9"	1"	0.050	229	25	1.3	RB95018T05	404341	5	Card
18	9"	1"	0.050	229	25	1.3	RB95018T25	404358	25	Tube
18	10"	3/4"	0.035	254	20	0.9	RB1018T05	398497	5	Card
18	10"	3/4"	0.035	254	20	0.9	RB1018T50	398480	50	Tube
18	12"	3/4"	0.035	305	20	0.9	RB1218T05	400213	5	Card
18	12"	3/4"	0.035	305	20	0.9	RB1218T25	398619	25	Tube
18	12"	3/4"	0.035	305	20	0.9	RB1218T50	400206	50	Tube
18	12"	1"	0.042	305	25	1.1	RB124218T05	403986	5	Card
18	12"	1"	0.042	305	25	1.1	RB124218T25	403993	25	Tube
18	12"	1"	0.050	305	25	1.3	RB125018T05	404280	5	Card
18	12"	1"	0.050	305	25	1.3	RB125018T25	404297	25	Tube
24	4"	3/4"	0.035	102	20	0.9	RB424T05	400312	5	Card
24	4"	3/4"	0.035	102	20	0.9	RB424T50	400305	50	Tube
24	6"	3/4"	0.035	152	20	0.9	RB624C2	397322	2	Card
24	6"	3/4"	0.035	152	20	0.9	RB624T05	400459	5	Card
24	6"	3/4"	0.035	152	20	0.9	RB624T25	398701	25	Tube
24	6"	3/4"	0.035	152	20	0.9	RB624T50	400442	50	Tube
24	6"	1"	0.042	152	25	1.1	RB64224T05	404228	5	Card
24	6"	1"	0.042	152	25	1.1	RB64224T25	404235	25	Tube



### MASTER COBALT® METAL RECIPROCATING SAW BLADES

The Morse Master Cobalt HYBRID® reciprocating saw blade is the best choice for applications that need a blade that cuts through a variety of materials ranging from wood and plastic to ferrous and non-ferrous metals.

### **FEATURES**

- ▼ Available in .035" and .050" thickness
- ▼ Straight blade body
- ▼ Straight and variable tooth pitch
- ▼ Bi-metal construction

### BENEFITS

- ▼ .035 blades for flexibility in tight spaces
- ▼ .050 blades for rigidity and heavier feed pressure
- ▼ Greater beam strength
- Speed of cut
- ▼ Broader range of thickness applications
- ▼ Long cutting life
- ▼ Heat and wear resistant

TPI	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH (MM)	THICKNESS [MM]	MODEL #	PART #	QUANTITY PER PKG.	PACKAGE TYPE
$h_{\lambda}$	$\sim$	$\sim$	$\sim$	$\sim$	$\mathcal{N}$	vn	$\sim$	m		$\sim$
10	6"	3/4"	0.035	152	20	0.9	RB610C2	397285	2	Card
10	6"	3/4"	0.035	152	20	0.9	RB610T05	400398	5	Card
10	6"	3/4"	0.035	152	20	0.9	RB610T25	398664	25	Tube
10	6"	3/4"	0.035	152	20	0.9	RB610T50	400381	50	Tube
10	8"	3/4"	0.035	203	20	0.9	RB810T05	400473	5	Card
10	9"	1"	0.050	229	25	1.3	RB95010T05	404303	5	Card
10	9"	1"	0.050	229	25	1.3	RB95010T25	404310	25	Tube
10	10"	3/4"	0.035	254	20	0.9	RB1010T05	402576	5	Card
10	10"	3/4"	0.035	254	20	0.9	RB1010T50	402569	50	Tube
10	12"	3/4"	0.035	305	20	0.9	RB1210T05	400251	5	Card
10	12"	3/4"	0.035	305	20	0.9	RB1210T50	400244	50	Tube
10	12"	1"	0.050	305	25	1.3	RB125010T05	404242	5	Card
10	12"	1"	0.050	305	25	1.3	RB125010T25	404259	25	Tube
8/12	8"	3/4"	0.050	203	20	1.3	RB850812T05	400930	5	Card
8/12	8"	3/4"	0.050	203	20	1.3	RB850812T50	400947	50	Tube
8/12	12"	3/4"	0.050	305	20	1.3	RB1250812T05	400916	5	Card
8/12	12"	3/4"	0.050	305	20	1.3	RB1250812T50	400923	50	Tube
10/14	4"	3/4"	0.035	102	20	0.9	RB41014T05	402613	5	Card
10/14	4"	3/4"	0.035	102	20	0.9	RB41014T50	402606	50	Tube
10/14	6"	3/4"	0.035	152	20	0.9	RB61014T05	402002	5	Card
10/14	6"	3/4"	0.035	152	20	0.9	RB61014T50	402019	50	Tube
10/14	6"	3/4"	0.050	152	20	1.3	RB6501014C2	397360	2	Card
10/14	6"	3/4"	0.050	152	20	1.3	RB6501014T05	399234	5	Card
10/14	6"	3/4"	0.050	152	20	1.3	RB6501014T50	399227	50	Tube
10/14	6"	3/4"	0.050	152	20	1.3	RB6501014TT05	398541	5	Card
10/14	6"	3/4"	0.050	152	20	1.3	RB6501014TT50	398534	50	Tube
10/14	8"	3/4"	0.035	203	20	0.9	RB81014C2	397407	2	Card

6.

TPI	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	quantity Per PKG.	PACKAGE TYPE
hn	$\sim$	$\sim$	m	$\sim$	$\sim$	$\sim$	mm	m		$\sim$
10/14	8"	3/4"	0.035	203	20	0.9	RB81014T05	402118	5	Card
10/14	8"	3/4"	0.035	203	20	0.9	RB81014T15	398411	15	Tube
10/14	8"	3/4"	0.035	203	20	0.9	RB81014T25	398756	25	Tube
10/14	8"	3/4"	0.035	203	20	0.9	RB81014T50	402101	50	Tube
10/14	8"	3/4"	0.050	203	20	1.3	RB8501014C2	397384	2	Card
10/14	8"	3/4"	0.050	203	20	1.3	RB8501014T05	402071	5	Card
10/14	8"	3/4"	0.050	203	20	1.3	RB8501014T50	402064	50	Tube
10/14	12"	3/4"	0.035	305	20	0.9	RB121014T05	400114	5	Card
10/14	12"	3/4"	0.035	305	20	0.9	RB121014T50	400107	50	Tube
10/14	12"	3/4"	0.050	305	20	1.3	RB12501014C	402248	1	Card
10/14	12"	3/4"	0.050	305	20	1.3	RB12501014T05	402095	5	Card
10/14	12"	3/4"	0.050	305	20	1.3	RB12501014T25	398640	25	Tube
10/14	12"	3/4"	0.050	305	20	1.3	RB12501014T50	402088	50	Tube
10/14	12"	3/4"	0.050	305	20	1.3	RB12501014STT05	398435	5	Card
10/14	12"	3/4"	0.050	305	20	1.3	RB12501014STT50	398428	50	Tube



8" 10/1ATPI



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### ADVANCED EDGE BOLT® RECIPROCATING SAW BLADES

The Morse Advanced Edge BOLT reciprocating saw blade cuts lightning fast. The patent pending design excels in applications of small solids and structural shapes.

### FEATURES

- Available in 3/4" (20mm) width and .035" (0.90mm) and .050" (1.30mm) thickness
   Variable tooth pitches
- Reinforced, positive rake tooth design
- ▼ Bi-metal construction

### BENEFITS

- ▼ Use .035" (0.90mm) blades for flexibility in tight spaces
- ▼ Use .050" (1.30mm) blades accept heavier feed pressure
- ▼ Smooth cutting action
- ▼ Fast cutting
- ▼ Impact resistant teeth
- ▼ Long cutting life
- ▼ Heat and wear resistant

трі	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	quantity Per PKG.	PACKAGE TYPE
$\sim$	$\sim$	$\sim$	$\gamma\gamma\gamma$	$\sim$	$\sim$	$\sim$	m	M	$\sim$	$\sim$
8/11	6"	3/4"	0.035	152	20	0.9	RBAE6811T05	393003	5	Card
8/11	6"	3/4"	0.035	152	20	0.9	RBAE6811T50	393010	50	Tube
8/11	6"	3/4"	0.050	152	20	1.3	RBAE650811T05	393188	5	Card
8/11	6"	3/4"	0.050	152	20	1.3	RBAE650811T50	393195	50	Tube
8/11	9"	3/4"	0.035	229	20	0.9	RBAE9811T05	393065	5	Card
8/11	9"	3/4"	0.035	229	20	0.9	RBAE9811T50	393072	50	Tube
8/11	9"	3/4"	0.050	229	20	1.3	RBAE950811T05	393249	5	Card
8/11	9"	3/4"	0.050	229	20	1.3	RBAE950811T50	393256	50	Tube
8/11	12"	3/4"	0.035	305	20	0.9	RBAE12811T05	393126	5	Card
8/11	12"	3/4"	0.035	305	20	0.9	RBAE12811T50	393133	50	Tube
8/11	12"	3/4"	0.050	305	20	1.3	RBAE1250811T05	393300	5	Card
8/11	12"	3/4"	0.050	305	20	1.3	RBAE1250811T50	393317	50	Tube
11/15	6"	3/4"	0.035	152	20	0.9	RBAE61115T05	393027	5	Card
11/15	6"	3/4"	0.035	152	20	0.9	RBAE61115T50	393034	50	Tube
11/15	6"	3/4"	0.050	152	20	1.3	RBAE6501115T05	393201	5	Card
11/15	6"	3/4"	0.050	152	20	1.3	RBAE6501115T50	393218	50	Tube
11/15	9"	3/4"	0.035	229	20	0.9	RBAE91115T05	393089	5	Card
11/15	9"	3/4"	0.035	229	20	0.9	RBAE91115T50	393096	50	Tube
11/15	9"	3/4"	0.050	229	20	1.3	RBAE9501115T05	393263	5	Card
11/15	9"	3/4"	0.050	229	20	1.3	RBAE9501115T50	393270	50	Tube
11/15	12"	3/4"	0.035	305	20	0.9	RBAE121115T05	393140	5	Card
11/15	12"	3/4"	0.035	305	20	0.9	RBAE121115T50	393157	50	Tube
11/15	12"	3/4"	0.050	305	20	1.3	RBAE12501115T05	393324	5	Card
11/15	12"	3/4"	0.050	305	20	1.3	RBAE12501115T50	393331	50	Tube
15/21	6"	3/4"	0.035	152	20	0.9	RBAE61521T05	393041	5	Card
15/21	6"	3/4"	0.035	152	20	0.9	RBAE61521T50	393058	50	Tube

6.



TPI	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	quantity Per PKG.	PACKAGE TYPE
hn	N	$\sim$		$\overline{\mathcal{M}}$	$\mathcal{N}$	m	mm	n	m	$\sim$
15/21	6"	3/4"	0.050	152	20	1.3	RBAE6501521T05	393225	5	Card
15/21	6"	3/4"	0.050	152	20	1.3	RBAE6501521T50	393232	50	Tube
15/21	9"	3/4"	0.035	229	20	0.9	RBAE91521T05	393102	5	Card
15/21	9"	3/4"	0.035	229	20	0.9	RBAE91521T50	393119	50	Tube
15/21	9"	3/4"	0.050	229	20	1.3	RBAE9501521T05	393287	5	Card
15/21	9"	3/4"	0.050	229	20	1.3	RBAE9501521T50	393294	50	Tube
15/21	12"	3/4"	0.035	305	20	0.9	RBAE121521T05	393164	5	Card
15/21	12"	3/4"	0.035	305	20	0.9	RBAE121521T50	393171	50	Tube
15/21	12"	3/4"	0.050	305	20	1.3	RBAE12501521T05	393348	5	Card
15/21	12"	3/4"	0.050	305	20	1.3	RBAE12501521T50	393355	50	Tube





OWER/



### ADVANCED EDGE POWER® RECIPROCATING SAW BLADES

The Morse Advanced Edge Power reciprocating saw blade "powers" through the toughest applications. This heavy duty blade is perfect for cutting any machinable metal, as well as wood, wood composite, plastic, or rubber.

### **FEATURES**

WER P MILLE

- Available in 1" (25mm) width and .042" (1.00mm) thickness
- ▼ Straight tooth pitch
- ▼ Bi-metal construction

### BENEFITS

9" 14TPI BI-METAL

- ▼ 1" (25mm) width blades provide more rigidity and beam strength
- ▼ .042" 1.00mm) thick blades accept heavier feed pressure
- ▼ Smooth cutting action
- ▼ Long cutting life
- ▼ Heat and wear resistant

TPI	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	quantity Per PKG.	PACKAGE TYPE
m	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	mm	m	$\sim$	$\sim$
10	6"	1"	0.042	152	25	1.1	RBWP64210T05	392006	5	Card
10	6"	1"	0.042	152	25	1.1	RBWP64210T25	392013	25	Tube
10	9"	1"	0.042	229	25	1.1	RBWP94210T05	392068	5	Card
10	9"	1"	0.042	229	25	1.1	RBWP94210T25	392075	25	Tube
10	12"	1"	0.042	305	25	1.1	RBWP124210T05	392129	5	Card
10	12"	1"	0.042	305	25	1.1	RBWP124210T25	392136	25	Tube
14	6"	1"	0.042	152	25	1.1	RBWP64214T05	392020	5	Card
14	6"	1"	0.042	152	25	1.1	RBWP64214T25	392037	25	Tube
14	9"	1"	0.042	229	25	1.1	RBWP94214T05	392082	5	Card
14	9"	1"	0.042	229	25	1.1	RBWP94214T25	392099	25	Tube
14	12"	1"	0.042	305	25	1.1	RBWP124214T05	392143	5	Card
14	12"	1"	0.042	305	25	1.1	RBWP124214T25	392150	25	Tube
18	6"	1"	0.042	152	25	1.1	RBWP64218T05	392044	5	Card
18	6"	1"	0.042	152	25	1.1	RBWP64218T25	392051	25	Tube
18	9"	1"	0.042	229	25	1.1	RBWP94218T05	392105	5	Card
18	9"	1"	0.042	229	25	1.1	RBWP94218T25	392112	25	Tube
18	12"	1"	0.042	305	25	1.1	RBWP124218T05	392167	5	Card
18	12"	1"	0.042	305	25	1.1	RBWP124218T25	392174	25	Tube











### **HAVOC® RECIPROCATING SAW BLADES**

The Morse HAVOC Demolition reciprocating saw blade is specifically designed for "roughing in" applications on the construction site. This blade will cut through all types of wood, wood composites, metal, and nail embedded wood.

### **FEATURES**

New House Comments

- Available in .062" (1.60mm) thickness
   Available in 7/8" (22mm) blade width
- Tapered blade body
- Straight tooth pitch
- ▼ Reinforced, positive rake 6 TPI tooth design
- ▼ Bi-metal construction

### BENEFITS

▼ Provides minimum deflection for more stable cutting in wider cuts

- 7/8" (22mm) wide blades for increased rigidity and heavier feed pressure
- Best for plunge cutting ▼
- ▼ Fast cutting
- ▼ High impact resistance
- ▼ More aggressive cutting
- ▼ Long cutting life
- ▼ Heat and wear resistant

TPI	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	quantity Per PKG.	PACKAGE TYPE
hn	$\sim$	$\sim$	$\sim$	$\sim$	$\mathcal{N}$	$\sim$	m	m	$\sim$	$\sim$
6	6"	7/8"	0.062	152	22	1.6	RB66206T03	398350	З	
6	6"	7/8"	0.062	152	22	1.6	RB66206T20	398343	20	Tube
6	9"	7/8"	0.062	229	22	1.6	RB96206C	397186	1	Card
6	9"	7/8"	0.062	229	22	1.6	RB96206T03	402422	З	Card
6	9"	7/8"	0.062	229	22	1.6	RB96206T20	402415	20	Tube
6	12"	7/8"	0.062	305	22	1.6	RB126206C	397209	1	Card
6	12"	7/8"	0.062	305	22	1.6	RB126206T03	398312	3	Card
6	12"	7/8"	0.062	305	22	1.6	RB126206T20	398305	20	Tube
10	6"	7/8"	0.062	152	22	1.6	RB66210T03	398374	3	Card
10	6"	7/8"	0.062	152	22	1.6	RB66210T20	398367	20	Tube
10	9"	7/8"	0.062	229	22	1.6	RB96210T03	402446	3	Card
10	9"	7/8"	0.062	229	22	1.6	RB96210T20	402439	20	Tube
10	12"	7/8"	0.062	305	22	1.6	RB126210T03	398336	3	Card
10	12"	7/8"	0.062	305	22	1.6	RB126210T20	398329	20	Tube





### **RENOVATOR® RECIPROCATING SAW BLADES**

The Morse RENOVATOR reciprocating saw blade is the ultimate heavy duty, demolition/remodeling blade in the market. This blade cuts through wood and metals without leaving frayed or jagged cut edges, no need for additional finishing.

### **FEATURES**

- Available in .062" (1.60mm) thickness Available in 1" (25mm) blade width
- ▼
- Tapered blade body ▼
- Variable tooth pitch ▼
- Reinforced tooth design ▼
- **Bi-metal construction** ▼

### BENEFITS

- Provides increased rigidity for more stable cutting in wider cuts
- 1" (25mm) wide blades offer more beam strength
- ▼ Best for plunge cutting
- Fast cutting ▼
- Smooth cut finish ▼
- High impact resistant tooth
- ▼ Long cutting life
- Heat and wear resistant

ТРІ	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	quantity Per PKG.	PACKAGE TYPE
n	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	nn	$\sim$	m	$\sim$	$\sim$
8/11	6"	1"	0.062	152	25	1.6	RBR662811TO3	392518	3	Card
8/11	6"	1"	0.062	152	25	1.6	RBR662811T20	392525	20	Tube
8/11	9"	1"	0.062	229	25	1.6	RBR962811TO3	392532	3	Card
8/11	9"	1"	0.062	229	25	1.6	RBR962811T20	392549	20	Tube
8/11	12"	1"	0.062	305	25	1.6	RBR1262811TO3	392556	3	Card
8/11	12"	1"	0.062	305	25	1.6	RBR1262811T20	392563	20	Tube







### AUTO SALVAGE RECIPROCATING SAW BLADES

The Morse Auto SALVAGE reciprocating blade is targeted for any automotive reclamation/recycling, but can also be used for other automotive modifications requiring metal cutting.

### FEATURES

- ▼ Available in .035" (0.90mm) thickness
- ▼ Available in 3/4" (20mm) blade width
- ▼ Straight and variable tooth pitch
- ▼ Bi-metal construction

### BENEFITS

- ▼ .035" (0.90mm) thick blades for flexibility in tight spaces
- ▼ Cut between body panels, gets under stripped/rusted fasteners
- ▼ 3/4" (20mm) wide blades provide flexibility
- Allows for cutting in hard to reach places that a cutting torch would otherwise create more damage
- ▼ Smooth cutting action
- Long cutting life
- Heat and wear resistant

				LENGTH	WIDTH	THICKNESS			QUANTITY	PACKAGE
TPI	LENGTH	WIDTH	THICKNESS	[MM]	[MM]	[MM]	MODEL #	PART #	PER PKG.	TYPE
m	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	nn	$\sim$	m	$\sim$	$\sim$
14	6"	3/4"	0.035	152	20	0.9	RBSA614T05	395519	5	Card
14	6"	3/4"	0.035	152	20	0.9	RBSA614T50	395526	50	Tube
14	8"	3/4"	0.035	203	20	0.9	RBSA814T05	395557	5	Card
14	8"	3/4"	0.035	203	20	0.9	RBSA814T50	395564	50	Tube
14	12"	3/4"	0.035	305	20	0.9	RBSA1214T05	395595	5	Card
14	12"	3/4"	0.035	305	20	0.9	RBSA1214T50	395601	50	Tube
18	6"	3/4"	0.035	152	20	0.9	RBSA618T05	395533	5	Card
18	6"	3/4"	0.035	152	20	0.9	RBSA618T50	395540	50	Tube
18	8"	3/4"	0.035	203	20	0.9	RBSA818T05	395571	5	Card
18	8"	3/4"	0.035	203	20	0.9	RBSA818T50	395588	50	Tube
18	12"	3/4"	0.035	305	20	0.9	RBSA1218T05	395632	5	Card
18	12"	3/4"	0.035	305	20	0.9	RBSA1218T50	395649	50	Tube
10/14	12"	3/4"	0.035	305	20	0.9	RBSA121014T05	395618	5	Card
10/14	12"	3/4"	0.035	305	20	0.9	RBSA121014T50	395625	50	Tube



81



### **AIR SAW RECIPROCATING SAW BLADES**

The Morse AIR SAW reciprocating saw blade is specifically designed for use in pneumatic saws for thin sheet metal applications. Primarily used for automotive body modification and sheet metal fabrication.

### **FEATURES**

▼ Available in .025" and .035" thickness

**AIR SAW** 

- ▼ Blade widths of 1/2"
- ▼ Straight tooth pitch
- ▼ Bi-metal construction

### BENEFITS

- Cut between body panels and under stripped/rusted fasteners
- ▼ 1/2" wide blades provide flexibility for radius cuts
- ▼ Smooth cutting action
- ▼ Long cutting life
- ▼ Heat and wear resistant

TPI	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	quantity Per PKG.	PACKAGE Type
$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	m	$\sim$	m	$\sim$	$\sim$
10	3-5/8"	1/2"	0.025	92	12.7	0.6	RBA3610T25	399128	25	Tube
10	4"	1/2"	0.025	102	12.7	0.6	RBA410T25	396967	25	Tube
14	3"	1/2"	0.025	76	12.7	0.6	RBA314T05	398220	5	Card
14	3"	1/2"	0.025	76	12.7	0.6	RBA314T25	398572	25	Tube
14	3"	1/2"	0.035	76	12.7	0.9	RBA33514T05	396806	5	Card
14	3"	1/2"	0.035	76	12.7	0.9	RBA33514T25	396882	25	Tube
14	3-5/8"	1/2"	0.025	92	12.7	0.6	RBA3614T25	399135	25	Tube
14	4"	1/2"	0.025	102	12.7	0.6	RBA414T05	397506	5	Card
14	4"	1/2"	0.025	102	12.7	0.6	RBA414T25	397513	25	Tube
14	4"	1/2"	0.035	102	12.7	0.9	RBA43514T05	396844	5	Card
14	4"	1/2"	0.035	102	12.7	0.9	RBA43514T25	396929	25	Tube
18	3"	1/2"	0.025	76	12.7	0.6	RBA318T05	398244	5	Card
18	3"	1/2"	0.025	76	12.7	0.6	RBA318T25	398589	25	Tube
18	3"	1/2"	0.035	76	12.7	0.9	RBA33518T05	396813	5	Card
18	3"	1/2"	0.035	76	12.7	0.9	RBA33518T25	396899	25	Tube
18	3-5/8"	1/2"	0.025	92	12.7	0.6	RBA3618T25	399142	25	Tube
18	4"	1/2"	0.025	102	12.7	0.6	RBA418T05	397520	5	Card
18	4"	1/2"	0.025	102	12.7	0.6	RBA418T25	397537	25	Tube
18	4"	1/2"	0.035	102	12.7	0.9	RBA43518T05	396851	5	Card
18	4"	1/2"	0.035	102	12.7	0.9	RBA43518T25	396936	25	Tube
24	3"	1/2"	0.025	76	12.7	0.6	RBA324T05	398268	5	Card
24	3"	1/2"	0.025	76	12.7	0.6	RBA324T25	398596	25	Tube
24	3"	1/2"	0.035	76	12.7	0.9	RBA33524T05	396820	5	Card
24	3"	1/2"	0.035	76	12.7	0.9	RBA33524T25	396905	25	Tube
24	3-5/8"	1/2"	0.025	92	12.7	0.6	RBA3624T25	399159	25	Tube
24	4"	1/2"	0.025	102	12.7	0.6	RBA424T05	397544	5	Card

т	PI LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	quantity Per PKG.	PACKAGE TYPE
$\sim$	$\gamma \gamma \gamma$	$\sim$	$\sim$	$\sim$	$\sim$	m	$\sim$	m	$\sim$	$\sim$
2	4 4"	1/2"	0.025	102	12.7	0.6	RBA424T25	397551	25	Tube
2	4 4"	1/2"	0.035	102	12.7	0.9	RBA43524T05	396868	5	Card
2	4 4"	1/2"	0.035	102	12.7	0.9	RBA43524T25	396943	25	Tube
3	2 3"	1/2"	0.025	76	12.7	0.6	RBA332T05	398282	5	Card
3	2 3"	1/2"	0.025	76	12.7	0.6	RBA332T25	398602	25	Tube
З	2 3"	1/2"	0.035	76	12.7	0.9	RBA33532T05	396837	5	Card
3	2 3"	1/2"	0.035	76	12.7	0.9	RBA33532T25	396912	25	Tube
З	2 4"	1/2"	0.025	102	12.7	0.6	RBA432T05	397568	5	Card
3	2 4"	1/2"	0.025	102	12.7	0.6	RBA432T25	397575	25	Tube
З	2 4"	1/2"	0.035	102	12.7	0.9	RBA43532T05	396875	5	Card
3	2 4"	1/2"	0.035	102	12.7	0.9	RBA43532T25	396950	25	Tube
		1								





Available in .050" (1.30mm) thickness

Available in 1" (25mm) blade width

Straight tooth pitch

▼ Bi-metal construction

**FEATURES** 

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▼

▼

**PIPE BOSS® RECIPROCATING SAW BLADES** 

BENEFITS

▼

▼ ▼

The Morse PIPE BOSS reciprocating saw blade is specifically targeted for tailpipe and muffler removal, but can also be used for other automotive modifications where metal cutting is necessary.

heavier feed pressure

Smooth cutting action

Heat and wear resistant

▼ .050" (1.30mm) thick blades accept

1" (25mm) wide blades provide

more rigidity and beam strength

							▼ Long cutting I	ife		
TPI	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	QUANTITY PER PKG.	PACKAGE TYPE
hn	$\sim$	$\sim$	m	$\sim$	$\sim$	m	nnn	m	$\sim$	$\sim$
14	6"	1"	0.050	152	25	1.30	RBPB65014T05	395014	5	Card
14	6"	1"	0.050	152	25	1.30	RBPB65014T25	395021	25	Tube
14	9"	1"	0.050	229	25	1.30	RBPB95014T05	395038	5	Card
14	9"	1"	0.050	229	25	1.30	RBPB95014T25	395045	25	Tube
14	12"	1"	0.050	305	25	1.30	RBPB125014T05	395052	5	Card
14	12"	1"	0.050	305	25	1.30	RBPB125014T25	395069	25	Tube









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### FIRE + RESCUE RECIPROCATING SAW BLADES

The Morse FIRE + RESCUE reciprocating saw blade is preferred by professional firefighters who rely on quality and consistency. This blade is specifically designed for automotive extrication.

### FEATURES

- ▼ Available in .062" thickness
- ▼ Available in 7/8" blade width
- ▼ Straight tooth pitch
- ▼ Optimized set pattern
- ▼ Bi-metal construction

### BENEFITS

- Provides minimum deflection for more stable cutting in wider cuts
- 7/8" wide blades for increased rigidity and heavier feed pressures
- Quick and more efficient cutting in multiple wall applications
- ▼ Reduces vibration and operator fatigue
- ▼ Reduces chance for blade binding in cut
- Long cutting life
- ▼ Heat and wear resistant

ΤΡΙ	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	S MODEL # PART #		quantity Per PKG.	PACKAGE TYPE
$\sim$	$\sim$	$\sim$	m	$\sim$	$\sim$	m	mm	m	n	$\sim$
10	6"	7/8"	0.062	152	22	1.6	RBFR66210WT03	403665	3	Card
10	6"	7/8"	0.062	152	22	1.6	RBFR66210WT20	403511	20	Tube
10	9"	7/8"	0.062	229	22	1.6	RBFR96210WT03	403689	3	Card
10	9"	7/8"	0.062	229	22	1.6	RBFR96210WT20	403528	20	Tube
10	12"	7/8"	0.062	305	22	1.6	RBFR126210WT03	403702	3	Card
10	12"	7/8"	0.062	305	22	1.6	RBFR126210WT20	403504	20	Tube
14	6"	7/8"	0.062	152	22	1.6	RBFR66214WC	397117	1	Card
14	6"	7/8"	0.062	152	22	1.6	RBFR66214WT03	403672	3	Card
14	6"	7/8"	0.062	152	22	1.6	RBFR66214WT20	403542	20	Tube
14	9"	7/8"	0.062	229	22	1.6	RBFR96214WC	397131	1	Card
14	9"	7/8"	0.062	229	22	1.6	RBFR96214WTO3	403696	3	Card
14	9"	7/8"	0.062	229	22	1.6	RBFR96214WT20	403559	20	Tube
14	12"	7/8"	0.062	305	22	1.6	RBFR126214WC	397155	1	Card
14	12"	7/8"	0.062	305	22	1.6	RBFR126214WTO3	403719	3	Card
14	12"	7/8"	0.062	305	22	1.6	RBFR126214WT20	403535	20	Tube





				-PL	ASI	6		1				
	60 6171 Binkent El Manaux	Mo		LAS er / Lath & Di	<b>TE</b> RYWALL CUT	R is spec plaster With a	TER RECIPROC brse PLASTER re ifically designed f board, and plast "V" style tooth, ficantly reduced,	ciprocatin for cutting er with wo cut edge fi	g saw blad drywall, ood or met raying/chi	de tal lat ipping		
New PLASTER .		<ul> <li>FEATURES</li> <li>✓ Available in .050" thickness</li> <li>✓ Blade width of 3/4"</li> <li>✓ Special "V" tooth design</li> <li>✓ Bi-metal construction</li> </ul>					<ul> <li>BENEFITS</li> <li>▼ .050" blades for increased rigidity and heavier feed pressures</li> <li>▼ 3/4" wide blades provide flexibility</li> <li>▼ Cuts in both directions</li> <li>▼ Long cutting life</li> <li>▼ Heat and wear resistant</li> </ul>					
трі	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH (MM)	THICKNESS [MM]	MODEL #	PART #	QUANTITY PER PKG.	PACK		
	Ň	$\sim$		$\sim$	$\gamma\gamma$	m	$\sim$	m	$\sim$	$\sim$		
6	6"	3/4"	0.05	152	20	1.3	RB606PT05	400350	5	Car		
5	6"	3/4"	0.05	152	20	1.3	RB606PT50	400343	50	Tul		
		U	J-SH/	ANK	T d p	he Morse U eisgned for ipe clamp re	ECIPROCATIN SHANK reciproc cutting pipes and cip saws from m d, Pace and Flex	ating saw I metal seo nanufactur	blade is ctions. Fit			
A COMPACT OF A DAMAGE AND A DAM	the second	▼ Bla ▼ Coa		of 1" Ie tooth p		62" thickness	<ul> <li>BENEFITS</li> <li>▼ .035" blad</li> <li>▼ .050" blad</li> <li>▼ 1" wide bla beam stre</li> <li>▼ Coarse/PI</li> <li>▼ Long cuttin</li> </ul>	es for straig des provide ngth astic Fine/I	ghter cuts more rigio			

- Coarse/Plastic Fine/Metal
   Long cutting life
   Heat and wear resistant

TPI	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	quantity Per PKG.	PACKAGE TYPE
n	$\sim$	$\sim$	m	$\sim$	$\sim$	m	$\sim$	m	m	$\sim$
6	12"	1"	0.050	305	25	1.3	RBU1206T05	403641	5	Tube
8	5.5"	1"	0.062	140	25	1.6	RBU5508T05	400015	5	Tube
8	8"	1"	0.062	203	25	1.6	RBU808T05	400053	5	Tube
8	10.5"	1"	0.062	269	25	1.6	RBU10508T05	399975	5	Tube
8	12"	1"	0.062	305	25	1.6	RBU1208T05	403610	5	Tube
14	5.5"	1"	0.035	140	25	0.9	RBU5514T05	400039	5	Tube
14	8"	1"	0.035	203	25	0.9	RBU814T05	400077	5	Tube
14	12"	1"	0.035	305	25	0.9	RBU1214T05	403627	5	Tube



### DIAMONDGRIT

### DIAMOND GRIT® RECIPROCATING SAW BLADES

The Morse DIAMOND GRIT reciprocating saw blade is specifically designed for the commercial or residential cutting of ceramics, granites, and stone.

### FEATURES

- ▼ Available in 3/4" width
- ▼ Tempered steel blade body

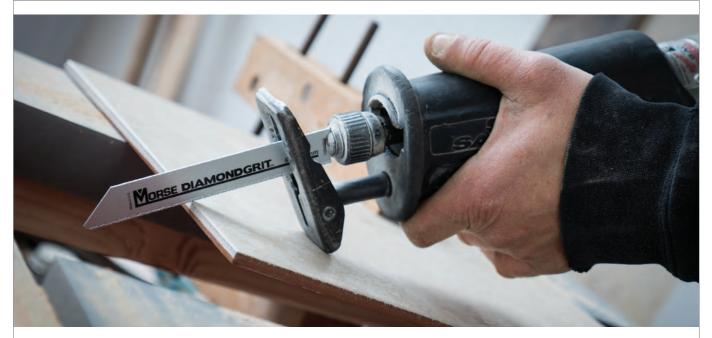
AMONDGRI

- ▼ Industrial diamond grit edge
- ▼ Narrow kerf

### BENEFITS

- ▼ Blades provide flexibility
- ▼ Durable, straighter cuts
- Smooth cutting action
- ▼ Longer life than carbide grit
- ▼ Fast cutting

ТРІ	LENGTH	WIDTH	GRIT	LENGTH [MM]	WIDTH [MM]	MODEL #	PART #	QUANTITY PER PKG.	PACKAGE TYPE
hn	$\sim$	$\mathcal{N}$	m	m	m	mm	nn	n	$\sim$
DG	6"	3/4"	Coarse	152	20	RBDG6C	129701	1	Card
DG	9"	3/4"	Coarse	229	20	RBDG9C	129718	1	Card







### **CARBIDE GRIT RECIPROCATING SAW BLADES**

The Morse CARBIDE GRIT reciprocating saw blade is the best design for cutting materials too thin, hard, or abrasive for conventional carbide tipped or bi-metal blades. Applications such as hardened steel, formed glass, fiberglass, laminates and composites.

### **FEATURES**

- ▼ Available in 3/4" (20mm) width
- Tempered steel body ▼
- Carbide grit edge ▼
- ▼ Narrow kerf

BALLET

▼ Round nose design

▼ Straight tooth pitch

**FEATURES** 

Narrow kerf

**ISMANTLER** 

▼ Available in 3/4" width by .035" thickness

- BENEFITS
- ▼ 3/4" wide blades for greater flexibility
- Durable, straighter cuts ▼
- Won't tear thin materials ▼
- Resistant to heat ▼
- ▼ Fast cutting

ТРІ	LENGTH	WIDTH	GRIT	LENGTH [MM]	WIDTH [MM]	MODEL #	PART #	quantity Per PKG.	PACKAGE TYPE
n	m		m	$\sim$	m	mm	n	n	$\sim$
Grit	4"	3/4"	Coarse	102	20	RCTCG4	402750	1	Card
Grit	4"	3/4"	Coarse	102	20	RTCG4TO3	403368	3	Card
Grit	4"	3/4"	Coarse	102	20	RTCG4T25	402910	25	Tube
Grit	6"	3/4"	Coarse	152	20	RCTCG6	402767	1	Card
Grit	6"	3/4"	Coarse	152	20	RTCG6TO3	403375	3	Card
Grit	6"	3/4"	Coarse	152	20	RTCG6T25	402927	25	Tube
Grit	8"	3/4"	Coarse	203	20	RCTCG8	402774	1	Card
Grit	8"	3/4"	Coarse	203	20	RTCG8TO3	403382	З	Card
Grit	8"	3/4"	Coarse	203	20	RTCG8T25	402934	25	Tube



### PALLET DISMANTLER **RECIPROCATING SAW BLADES**

The Morse PALLET DISMANTLER reciprocating saw blade is specifically designed for pallet recycling.

### BENEFITS

- ▼ .035" (0.90mm) blades for greater flexibility to get between boards
- ▼ Helps prevent blade from catching between boards
- ▼ Smooth cutting action
- ▼ Fast cutting
- ▼ Less damage to boards that can be re-used

TPI	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	QUANTITY PER PKG.	PACKAGE TYPE
n	$\sim$	$\sim$	$\gamma \gamma \gamma$	$\sim$	$\mathcal{N}$	nn	nnn	M	$\sim$	$\overline{\mathcal{N}}$
10	8"	3/4"	0.035	203	20	0.9	RB810RRPB500	401425	500	Box
10	9"	3/4"	0.035	229	20	0.9	RB910RRPB250	401661	250	Box
10	10"	3/4"	0.035	254	20	0.9	RB1010RRB250	401463	250	Box
	1			1		1		1	1	





### CARBIDE TIPPED RECIPROCATING SAW BLADES

The Morse CARBIDE TIPPED reciprocating saw blade is best for abrasive material applications that still require the cutting action and chip clearing capacity of gullets for speed of cut. Applications such as wood composites (particle board), nail free wood, plastics, non-ferrous metals (aluminum), and fiberglass.

### **FEATURES**

- ▼ Available in 3/4" width by .050" thickness
- ▼ Coarse, ground teeth
- ▼ Carbide tooth tips
- Narrow kerf

### BENEFITS

- ▼ Durable, straighter cuts
- ▼ Aggressive, fast cutting
- ▼ Ground for clean, accurate cuts
- ▼ Won't tear thin materials
- ▼ Resistant to heat
- ▼ Fast cutting

TPI	LENGTH	WIDTH	THICKNESS	LENGTH [MM]	WIDTH [MM]	THICKNESS [MM]	MODEL #	PART #	quantity Per PKG.	PACKAGE TYPE
m	N	$\sim$	m	$\sim$	$\sim$	m	nn	m	$\sim$	$\sim$
3	6"	3/4"	0.050	152	20	1.3	RTCT603C	403047	1	Card
3	6"	3/4"	0.050	152	20	1.3	RTCT603T03	403443	3	Card
3	6"	3/4"	0.050	152	20	1.3	RTCT603T25	403122	25	Tube
З	9"	3/4"	0.050	229	20	1.3	RTCT903C	403061	1	Card
3	9"	3/4"	0.050	229	20	1.3	RTCT903T03	403467	3	Card
З	9"	3/4"	0.050	229	20	1.3	RTCT903T25	403146	25	Tube
3	12"	3/4"	0.050	305	20	1.3	RTCT12O3C	403085	1	Card
З	12"	3/4"	0.050	305	20	1.3	RTCT1203T03	403481	3	Card
3	12"	3/4"	0.050	305	20	1.3	RTCT1203T25	403108	25	Tube
6	6"	3/4"	0.050	152	20	1.3	RTCT606SC	403054	1	Card
6	6"	3/4"	0.050	152	20	1.3	RTCT606ST03	403450	3	Card
6	6"	3/4"	0.050	152	20	1.3	RTCT606ST25	403139	25	Tube
6	9"	3/4"	0.050	229	20	1.3	RTCT906C	403078	1	Card
6	9"	3/4"	0.050	229	20	1.3	RTCT906T03	403474	3	Card
6	9"	3/4"	0.050	229	20	1.3	RTCT906T25	403153	25	Tube
6	12"	3/4"	0.050	305	20	1.3	RTCT1206C	403092	1	Card
6	12"	3/4"	0.050	305	20	1.3	RTCT1206T03	403498	3	Card
6	12"	3/4"	0.050	305	20	1.3	RTCT1206T25	403115	25	Tube



### **JAB SAWS**

Heavy duty, ergonomic handle to use with either a reciprocating or a hack saw blade. Allows for quick blade changes for various applications.





**JABSAW** 

### **RECIP KITS**

Multi-pack assortments of popular blade types and sizes for a variety of applications. Kits come with plastic storage boxes or tubes.



Description	Model#	Part#	Contents
nnn	$\sim$	$\sim$	mmmmm
General Purpose Kit	RBKITGPO1	397483	(5) ea: RB618, (6) ea: RB65006, (2) ea: RB814, RB8501014, RB95006 + Storage Tube
Heavy Duty Kit	RBKITHDO1	397490	(4) ea: RBWP64218, (2) ea: RB66210, RBFR66214W, RB96210, RBWP94214 + Storage Tube
Demolition Kit	RBKITDM01	397971	(3) ea: RBR662811, (2) ea. RB66206, RB66210, RB96206, RBR962811 + Storage Tube
Contractor General Use Kit	RBKITO1	405003	(14) ea: RB63506, (7) ea: RB610, RB61014, RB614, RB618,
Contractor Heavy Duty Kit	RBKITO2	405010	(10) ea: RB65006, (5) ea: RB65058, RB6501014, RB65014, RB65018
Demolition Kit	RBKITO3	405027	(5) ea: RB65006, RB65058, RB6501014, (4) ea: RB66206 / (8) ea: RB66210
Assortment Card	RBPO1	403030	(1) ea: RB414, RB418, RB614, RB618, RB65006



## CIRCULAR SAW BLADES

<b>BLADE TYPE</b> Metal Devil CL	<b>APPLICATION</b> Designed to be optimized for use on cordless metal cutting circular saws.
Metal Devil NXT Steel	Used to cut angle iron, steel plate, channel iron, I-beams, pipe and other ferrous metal shapes and parts.
Metal Devil NXT Thin Steel	Used to cut ferrous metals under 1/8" without bending the cut edge including corrugated roofing, sheet metal, conduit, and steel studs.
Metal Devil NXT Stainless Steel	Used to cut all stainless steel, including 1/4 <sup>°</sup> or thinner stainless plate, or 1/8 <sup>°</sup> or thinner wall stainless tube.
Metal Devil NXT Aluminum	Used to cut all 3/8" or thinner aluminum parts including extrusions, plate, angle and grating.
Metal Devil NXT Steel Studs (14" only)	Specially engineered to make quick, clean, accurate cuts on steel studs with square or miter cuts using 14" metal cutting saws.

### **METAL CUTTING CIRCULAR SAW BLADES**

### CUT THROUGH STEEL AND OTHER TOUGH METALS FASTER THAN EVER

Unique combinations of metallurgy and blade configurations are tailored for peak performance in specific applications.

### **FEATURES & BENEFITS**

### CUT COOL

▼ Touch the freshly cut metal edges. You will be amazed to find how cool it is to the touch.

### CUT FASTER

 Cut through 6" x 1/4" thick steel in approximately 12 seconds.

### CUT LONGER

 Exceptional wear resistance. Make more cuts than any other metal cutting blade on the market today.

MADE IN	U.S.A.

WARNING 🗐

Blade Type	Applications
Metal Devil CL™	Designed to be optimized for use on cordless metal cutting circular saws.
Metal Devil NXT <sup>®</sup> Steel	Used to cut angle iron $1/4$ " (6mm) max thickness, steel plate, channel iron, I-beams, pipe and other ferrous metal shapes and parts.
Metal Devil NXT <sup>®</sup> Stainless Steel	Used to cut all stainless steel, including $1/4$ " or thinner stainless plate, or $1/8$ " or thinner wall stainless tube.
Metal Devil NXT <sup>®</sup> Aluminum	Used to cut all $3/8$ " or thinner aluminum parts including extrusions, plate, angle and grating.
Metal Devil NXT <sup>®</sup> Thin Steel	Used to cut ferrous metals under 1/8" without bending the cut edge including corrugated roofing, sheet metal, conduit, and steel studs.
Metal Devil NXT <sup>®</sup> Steel Studs (14" only)	Specially engineered to make quick, clean, accurate cuts on steel studs with square or miter cuts using 14" metal cutting saws.

### **CIRCULAR SAW BLADES**



### METAL DEVIL METAL-CUTTING CIRCULAR SAW BLADES

Cut through steel and other tough metals faster than ever. Unique combinations of metallurgy and blade configurations are tailored for peak performance in specific applications.

### **APPLICATIONS**

- Steel, angle iron, steel plate, channel iron, I-beams, pipe ▼
- Thin Steel
- Stainless Steel (1/4 or less) ▼
- ▼ Aluminum
- Steel Studs (14" only) ▼

### BENEFITS

- Optimized for cordless metal cutting circular saws
   Cuts thin material without bending the edge
   Quick, clean, accurate cuting without secondary work
   Sut edges and excurate to be all in the same secondary.
- ▼ Cut edges cool enough to handle immediately

5-3/8" 137mm 137mm 6-1/4" 159mm 6-1/2" 6-1/2" 165mm CSI CSI 165mm	CSM5383258NSC CSM53832NSC CSM53848NAC CSM5385OCLTSC ▼ CSM62554NAC CSM62556CLTSC ▼	32 32 48 50 54	5/8 20mm 20-10mm-5/8 20mm	Steel Steel Aluminum	101332 101325 101578	4200 4200	Makita BCS550 / BSS501 Milwaukee M18	
5-3/8" 137mm 137mm 6-1/4" 159mm 6-1/2" 165mm 165mm 100 100 100 100 100 100 100 1	CSM53832NSC CSM53848NAC CSM5385OCLTSC ▼ CSM62554NAC CSM62548NSIC	32 48 50 54	20mm 20-10mm-5/8	Steel Aluminum	101325	4200		
137mm ( 137mm ( 6-1/4" ( 159mm ( 159mm ( CSI 6-1/2" ( 165mm ( CSI CSI CSI CSI	CSM53848NAC CSM5385OCLTSC ▼ CSM62554NAC CSM62548NSIC	48 50 54	20-10mm-5/8	Aluminum			Milwaukee M18	
6-1/4" 159mm 159mm 6-1/2" 165mm 175mm 165mm	CSM53850CLTSC <b>V</b> CSM62554NAC CSM62548NSIC	50 54	, -		101578			
6-1/4" 159mm CC CC CC CC CS CS CS CS CS CS	CSM62554NAC CSM62548NSIC	54	20mm		1010/0	4200	Makita BCS550 / BSS501 Panasonic EY3530NQMKW /	
6-1/4" 159mm ( 159mm ( CSI  6-1/2" 165mm ( CSI  CSI  CSI  CSI  CSI  CSI  CSI  CS	CSM62548NSIC			Thin Steel	101769	4200	EY452LN2M	
159mm CC CC 6-1/2" 165mm CSI CSI CSI			5/8	Aluminum	101585	4200	Makita 5046DWDE	
6-1/2" 165mm 6-1/2"	CSM62556CLTSC 🔻	48	20-16mm	Steel	101509	4200	Standard Circular Saws	
6-1/2" 165mm CSI CSI		56	20mm	Thin Steel	101776	4200	Cordless Circular Saws	
6-1/2" 165mm CSI	SM6504020NSC	40	20mm	Steel	101523	4200	Panasonic EY3552GQW	
6-1/2" CSM 165mm CSI CSI	CSM65040NSC	40	5/8	Steel	101516	4200	<b>Bosch</b> CCS180K / 1617K	
165mm CSI	M6504058CLSC 🔻	40	5/8	Steel	100984	4200	Makita BSS610 Dewalt DC310K / DC390K	
CSI	/16504858CLSSC 🔻	48	5/8	Stainless Steel	101714	4200	Ridgid R3203 Milwaukee 2630-20 /0730-20	
	M6505658CLAC 🔻	56	5/8	Aluminum	101738	4200	Hilti SCM22-A/DI04891A	
CSM	M6504020CLSC 🔻	40	20mm	Steel	101745	4200		
	CSM6504820CLSSC ▼ CSM6505620CLAC ▼		20mm	Stainless Steel	101707	4200	Panasonic EY3552GQW Hilti SCM18-A/03490197	
CSI			20mm	Aluminum	101721	4200	-	
<b>6-3/4"</b> 171mm	CSM67540NSC	40	20mm	Steel	101530	4200	Dewalt DW934K-2 Standard Circular Saws	
	CSM740NSC	40	20mm	Steel	101363	5800		
7"	CSM744NSSC	44	20mm	Stainless Steel	101677	5800	Morse CSM7MB / CSM7NXTB Evolution Steel Saw	
178mm	CSM754NAC	54	20mm	Aluminum	101608	5800	Jancy MCSL07-2 Milwaukee 0740-20	
	CSM768NTSC	68	20mm	ThinSteel	101783	5800		
(	CSM72540NSC	40	5/8 KO	Steel	101349	5800	Bosch CS5 / CS10 / CS20 / 1677M / 1677MD	
l	CSM72548NSC	48	5/8 KO	Steel	101356	5800	Dewalt DC300K / 364 / DW368 DW369CSK Makita 4131 /	
7-1/4"	CSM72560NAC	60	5/8 KO	Aluminum	101615	5800	5057KB / 5007FAK / 5007FK / 5740NB / 5377MG / 5277NB	
184mm C	CSM72568NTSC	68	5/8 KO	ThinSteel	101790	5800	Milwaukee 6390-20 / 6391-21 6394-21 / 6477-20	
C	SM7254020NSC	40	20mm	Steel	101547	5800	<b>Evolution</b> Fury / Outrage /	
(	CSM72548NSIC	48	20mm	Steel	101554	5800	Rage 1 / Rage 4	
<b>7-1/2"</b> 191mm								



1 ARBOR 3200 MAX RPM CARBIDE TIPPED MADE IN U.S.A. 

Blade Diameter	Part Number	#of Teeth	Arbor	Applications	Computer#	MAX RPM	Machine			
pm	$\sim$	m	$\sim$	$\sim$	$\sim$	$   \lambda $	$\sim$			
	CSM842NSC	42	5/8	Steel	101387	5800				
	CSM848NSC	48	5/8	Steel	101394	5800				
<b>8''</b> 203mm	CSM850NSSC	50	5/8	Stainless	101684	5800	<b>Milwaukee</b> 6370-20			
	CSM860NAC		5/8	Aluminum	101622	5800				
	CSM868NTSC	68	5/8	Thin Steel	101806	5800				
<b>8-1/4"</b> 210mm	CSM82548NSC	48	5/8 KO	Steel	101370	5800	Dewalt DW384, Makita 5008MGA			
	CSM948NSC	48	1	Steel	101400	3200				
9"	CSM956NSSC	56	1	Stainless	101691	3200	Morse CSM9MB / CSM9NXTB Evolution Steel Saw 5			
229mm	CSM968NTSC	68	1	Thin Steel	101813	3200	Jancy MCSL09 / MCSL09-2			
	CSM972NAC	72	1	Aluminum	101639	3200				
10"	CSM1052NTSC	52	5/8 KO	Thin Steel	101820	5200	Bosch 4410 / 4405 Dewalt DW713			
254mm	CSM1072NAC	72	5/8 KO	Aluminum	101646	5500	Ridgid MS1065LZA			
40"	CSM1260NSC	60	1	Steel	101561	1800				
<b>12''</b> 305mm	CSM1280NAC	80	1	Aluminum	101653	3800	Makita LC1230			
	CSM1280NTSC	80	1	Thin Steel	101837	2000				
	CSM1466NSC	66	1	Steel	101318	1800	Morse CSM14MB			
	CSM1480NAC	80	1	Aluminum	101660	3800	Dewalt DW872 Evolution Fury2 / Rage2			
<b>14</b> " 356mm	CSM1481NSTC	81	1	Steel Studs	100786	1800	Evolution Fully2 / Haye2 Evolution Steel Saw2 Jancy MCCS14 MCCS14-2			
	CSM1490NTSC	90	1	Thin Steel	101844	1800	Milwaukee 6190-20 Ridgid 614			
	CSM1490NSSC	90	1	Stainless	100793	1800				

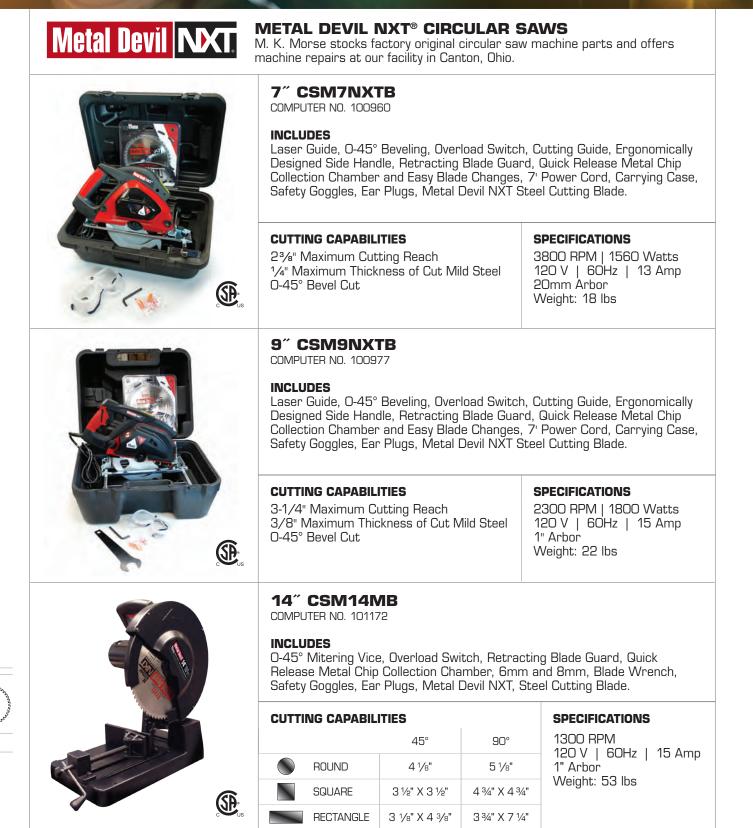
5%" blades include special bushings allowing them to fit 20mm, 10mm and %" arbor holes. \*% KO fits both diamond and circular arbors. Blades in red indicate international machine arbor sizes.





93

### **CIRCULAR SAW BLADES**



### **METAL CUTTING ACCESSORIES**





### **METAL DEVIL V-BLOCKS** CSP14A01 / 100724

Maximum Material Dimensions to be used with V-Blocks: ▼ Round 3" ▼ Square 3 7/8"

### **BENEFITS**

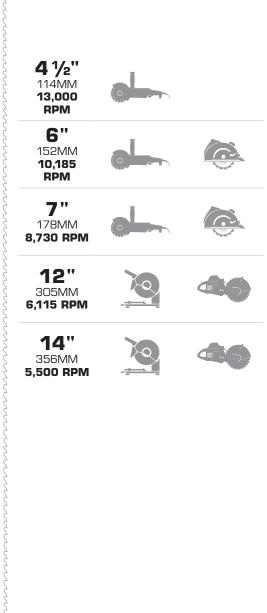
- Durable Steel Body Securely Holds Rounds, Squares ▼
- and Rectangular Materials Can Employ Several Vice Configurations to Accommodate a Variety of Structural Materials Strengthen The Clamping
- ▼ Performance of the Vice System
- Improves Cutting Performance on ▼ Structural Shapes

3200 MAX RPM CARBIDE TIPPED MADE IN U.S.A.

- Optimizes Blade Life
- Provides Precise Cutting Results ▼
- ▼ Reduces Opportunity for Machine Damage



### METAL DEVIL ABRASIVE CUT-OFF WHEELS DIAMOND EDGE



### **ABRASIVE CUT-OFF WHEELS**



### APPLICATIONS

- ▼ Metal studs
- Tubing and structural steel
- ▼ Stainless
- ▼ Non-ferrous
- ▼ Steel
- ▼ Rebar
- ▼ Cast iron and solids

### METAL DEVIL DIAMOND EDGE

Using an innovative new process, diamond crystal is permanently brazed to the blade and remains fixed for continuous cutting throughout the life of the wheel.

### BENEFITS

- Solid steel body maintains wheel diameter throughout its life and greatly reduces the danger of breakage.
- ▼ Vacuum brazed technology permanently bonds diamond crystals to the wheel, providing long blade life. Lasts up to 60 times longer than traditional abrasive wheels.
- ▼ Thin kerf design cuts faster and produces less dust and debris than traditional abrasive wheels.

BLADE DIAMETER	THICKNESS	PART NUMBER	COMPUTER NUMBER	ARBOR HOLE	MAX RPM
nn	$\sim$	mm	mm	mm	mm
<b>4.5</b> " (114mm)	.050	CSD4500C	102001	7/8" - 5/8"	13,000
<b>6"</b> (152mm)	.050	CSD6000C	102018	7/8" - 5/8"	10,185
<b>7"</b> (114mm)	.060	CSD7000C	102025	7/8" - 5/8" KO	8,730
<b>12</b> " (305mm)	.125	CSD12000C	102032	1" - 20mm	6,115
<b>14</b> " (356mm)	.125	CSD14000C	102049	1" - 20mm	5,500



Monse Metal Devil

DIAMONID









### **BLADE TYPE** Mors High Unive

### **APPLICATION**

Morse 811/1216 High Performance Universal Blade	A truly universal usage blade. Cuts machinable metals, stainless steel, plastics and nail embedded wood. The unique tooth geometry and bi-metal construction provide exceptional blade life with excellent speed-of-cut performance. This blade can easily cut materials you would cut with 8/12 through 18 teeth per inch blades.
Master Cobalt Bi-Metal	Use on machinable metals, including stainless steel, pipe, tubing and solids. Bi-Metal blades offer high heat, wear and shock resistance. Variable pitch allows a broader range of applications and reduced vibration when cutting. This combination results in the longest blade life among competitive blades.
Straight Pitch Bi-Metal	Use on machinable metals, including stainless steel, pipe, tubing and solids. Premium straight pitch blades offer high resistance to heat, wear and shock contributing to longer blade life.
Carbon Steel	Use on easy to machine metals. These economical blades are straight pitch.
Stationary Band Saw Blades	Use for cutting wood and easy to machine metals. Carbon hard edge/flex back blades offer reliable performance.



### APPLICATIONS

- ▼ Machinable metals
- Stainless steel
   Pipe
- ▼ Pipe▼ Tubing
- ▼ Solids

### **811 AND 1216 PORTABLE BAND SAW BLADES** These high performance bi-metal portable band saw blades

deliver exceptional performance and the most cuts per blade in the market.

MADE

### BENEFITS

MORSE 811

- Shock resistant teeth great for cutting machinable metals
   Variable pitch allows a broader range of applications and reduced vibration
- Available in a variety of lengths for any portable saw on the market

LENGTH X WIDTH	X THICKNESS			BOXED 3/B	OX	BOXED 25/B	DX	BULK 100/C/	RTON
INCHES	ММ	TPI	SET	MODEL #	COMP. #	MODEL #	COMP. #	MODEL #	COMP. #
nnn	inn	22	nn	$\sim$	$\sim$	nn	$\overline{\mathcal{A}}$	nn	2

HEAVY WALL BLAD	ES								
27-3/16 X ½ X .020	691 X 12.7 X .50	8/11	Modified Raker	ZWEP27811MC	002653				
28-13/16 X 1⁄2 X .020	732 X 12.7 X .50	8/11	Modified Raker	ZWEP28811MC	002660				
32-7/8 X ½ X .020	835 X 12.7 X .50	8/11	Modified Raker	ZWEP32811MC	002677				
35-3/8 X ½ X .020	899 X 12.7 X .50	8/11	Modified Raker	ZWEP35811MC	002684				
44-7/8 X ½ X .020	1140 X 12.7 X .50	8/11	Modified Raker	ZWEP44811MC	002486	ZWEP44811MCB25	002462	ZWEP44811MCB	002455
THIN WALL BLADE	S								
27-3/16 X ½ X .020	691 X 12.7 X .50	12/16	Modified Raker	ZWEP271216MC	002691				
28-13/16 X 1⁄2 X .020	732 X 12.7 X .50	12/16	Modified Raker	ZWEP281216MC	002707				
32-7/8 X ½ X .020	835 X 12.7 X .50	12/16	Modified Raker	ZWEP321216MC	002714				
35-3/8 X ½ X .020	899 X 12.7 X .50	12/16	Modified Raker	ZWEP351216MC	002721				
44-7/8 X ½ X .020	1140 X 12.7 X .50	12/16	Modified Raker	ZWEP441216MC	002738	ZWEP441216MCB25	002745	ZWEP441216MCB	002752





### **MASTER COBALT**

Variable pitch teeth on these premium bi-metal portable band saw blades reduces vibration when cutting. Features Matrix II cutting edges and the longest life compared to any competitive blades. Available in several lengths as well as standard (.020") and heavy duty (.025") thickness.

APPLICATIONS	BENEFITS
<ul> <li>Machinable metals</li> <li>Stainless steel</li> <li>Pipe</li> <li>Tubing</li> <li>Solids</li> </ul>	<ul> <li>Shock resistant teeth great for cutting machinable metals</li> <li>Variable pitch allows a broader range of applications and reduced vibration</li> <li>Special heavy duty skus available in .025" thickness</li> <li>Straight pitch teeth for better chip clearance and fast cutting</li> <li>Available in a variety of lengths for any portable saw on the market</li> </ul>

LENGTH X WIDTH	X THICKNESS			BOXED 3/B	OX	BOXED 25/B	OX	BULK 100/CA	RTON
	MM	TPI	SET	MODEL #	COMP. #	MODEL #	COMP. #	MODEL #	COMP. #
VARIABLE PITCH									
27-3/16 X ½ X .020	691 X 12.7 X .50	14/18	Wavy	ZWEP271418MC	001823			ZWEP271418MCB	001847
28-13/16 X ½ X .020	732 X 12.7 X .50	10/14	Modified Raker	ZWEP281014MC	001755			ZWEP281014MCB	001786
28-13/16 X ½ X .020	732 X 12.7 X .50	14/18	Wavy	ZWEP281418MC	001748			ZWEP281418MCB	001779
32-7/8 X ½ X .020	835 X 12.7 X .50	10/14	Modified Raker	ZWEP321014MC	001861			ZWEP321014MCB	003292
32-7/8 X ½ X .020	835 X 12.7 X .50	14/18	Wavy	ZWEP321418MC	001892			ZWEP321418MCB	003308
32-7∕8 X ½ X .020	835 X 12.7 X .50	20/24	Wavy	ZWEP322024MC	001878			ZWEP322024MCB	003315
35-3∕8 X ½ X .020	899 X 12.7 X .50	10/14	Modified Raker	ZWEP351014MC	003049			ZWEP351014MCB	003445
35-3∕8 X ½ X .020	899 X 12.7 X .50	14/18	Wavy	ZWEP351418MC	003056			ZWEP351418MCB	003452
35-3∕8 X ½ X .020	899 X 12.7 X .50	20/24	Wavy	ZWEP352024MC	003063			ZWEP352024MCB	003469
44-7∕8 X ½ X .020	1140 X 12.7 X .50	10/14	Modified Raker	ZWEP441014MC	001175	ZWEP441014MCB5	002370	ZWEP441014MCB	002233
44-7∕8 X ½ X .020	1140 X 12.7 X .50	14/18	Wavy	ZWEP441418MC	001182			ZWEP441418MCB	002240
44-7/8 X ½ X .020	1140 X 12.7 X .50	20/24	Wavy	ZWEP442024MC	001199	ZWEP442024MCB5	002363	ZWEP442024MCB	002257
44-7/8 X ½ X .025	1140 X 12.7 X .63	10/14	Modified Raker	ZWEP44251014	001953				
44-7/8 X ½ X .025	1140 X 12.7 X .63	14/18	Wavy	ZWEP44251418	001960				







STRAIGHT PITCH BI-METAL Straight pitch bi-metal blades with Matrix II cutting edges and straight pitch teeth, these blades cut fast and last a long time with reduced breakage and high resistance to heat, wear and shock. Available in several lengths as well as standard (.020") and heavy duty (.025") thickness.

### APPLICATIONS

- Machinable metals ▼

BENEFITS

- Stainless steel
- Pipe
- Tubing
- ▼ Solids

▼

▼

- ▼ Shock resistant teeth great for cutting machinable metals ▼ Variable pitch allows a broader range of applications and reduced vibration Special heavy duty skus available in .025" thickness
- ▼ Straight pitch teeth for better chip clearance and fast cutting
- ▼ Available in a variety of lengths for any portable saw on the market

4										
LENGTH X WIDTH	X THICKNESS			BOXED 3/B	OX	BOXED 100/C	ARTON	1/CARD - 5/STANDARD PACK		
	MM	TPI	SET	MODEL #	COMP. #	MODEL #	COMP. #	MODEL #	COMP. #	
STANDARD PITCH	1		1	1		1				
27-3/16 X ½ X .020	691 X 12.7 X .50	18	Wavy	ZWEP2718W	001830		001854			
8-13/16 X ½ X .020	732 X 12.7 X .50	24	Wavy	ZWEP2824W	001762	ZWEP2824WB	001793			
32-7/8 X ½ X .020	835 X 12.7 X .50	10	Raker	ZWEP3210R	001885	ZWEP3210RB	003254			
32-7/8 X ½ X .020	835 X 12.7 X .50	14	Wavy	ZWEP3214W	001908	ZWEP3214WB	003261			
32-7/8 X ½ X .020	835 X 12.7 X .50	18	Wavy	ZWEP3218W	001915	ZWEP3218WB	003278			
32-7/8 X ½ X .020	835 X 12.7 X .50	24	Wavy	ZWEP3224W	001922	ZWEP3224WB	003285			
35-3/8 X ½ X .020	899 X 12.7 X .50	10	Raker	ZWEP3510R	003001	ZWEP3510RB	003407			
35-3/8 X ½ X .020	899 X 12.7 X .50	14	Wavy	ZWEP3514W	003018	ZWEP3514WB	003414			
35-3∕8 X ½ X .020	899 X 12.7 X .50	18	Wavy	ZWEP3518W	003025	ZWEP3518WB	003421			
35-3∕8 X ½ X .020	899 X 12.7 X .50	24	Wavy	ZWEP3524W	003032	ZWEP3524WB	003438			
44-7/8 X ½ X .020	1140 X 12.7 X .50	10	Raker	ZWEP4410R	001205	ZWEP4410RB	002158	ZCWEAD10	000017	
44-7/8 X ½ X .020	1140 X 12.7 X .50	14	Wavy	ZWEP4414W	001212	ZWEP4414WB	002165	ZCWEAD14	000024	
44-7/8 X ½ X .020	1140 X 12.7 X .50	18	Wavy	ZWEP4418W	001229	ZWEP4418WB	002172	ZCWEAD18	000031	
44-7/8 X ½ X .020	1140 X 12.7 X .50	24	Wavy	ZWEP4424W	001236	ZWEP4424WB	002189	ZCWEAD24	000048	
44-7/8 X ½ X .025	1140 X 12.7 X .63	14	Wavy	ZWEP442514W	001939					
44-7/8 X ½ X .025	1140 X 12.7 X .63	18	Wavy	ZWEP442518W	001946					
53-3/4 X ½ X .020	1365 X 12.7 X .50	10	Raker	ZWEP5310R	001274	ZWEP5310RB	002196			
53-3/4 X ½ X .020	1365 X 12.7 X .50	14	Wavy	ZWEP5314W	001281	ZWEP5314WB	002202			
53-3∕4 X ½ X .020	1365 X 12.7 X .50	18	Wavy	ZWEP5318W	001298	ZWEP5318WB	002219			
53-3/4 X ½ X .020	1365 X 12.7 X .50	24	Wavy	ZWEP5324W	001304	ZWEP5324WB	002226			
53-3∕4 X ½ X .020	1365 X 12.7 X .50	10/14	Mod. Raker	ZWEP531014	001311	ZWEP531014B	002264			
53-3∕4 X ½ X .020	1365 X 12.7 X .50	14/18	Wavy	ZWEP531418	001328					
54 X ½ X .025	1372 X 12.7 X 6.4	10	Raker	ZWEP5410R	001342	ZWEP5410RB	001588			
54 X ½ X .025	1372 X 12.7 X 6.4	14	Wavy	ZWEP5414W	001359	ZWEP5414WB	001595			
54 X ½X .025	1372 X 12.7 X 6.4	18	Wavy	ZWEP5418W	001366	ZWEP5418WB	001601			
54 X 1/2 X .025	1372 X 12.7 X 6.4	24	Wavy	ZWEP5424W	001373	ZWEP5424WB	001618			



### **25 PACK PORTABLE BAND SAW BLADES**

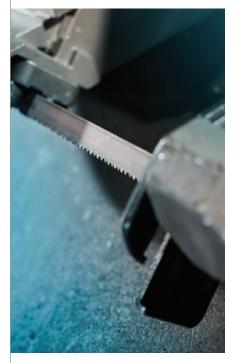
Our most popular sizes of bi-metal portable band saw blades in easy-to-store, 25 pack dispenser boxes.

LENGTH X WIDTH						
INCHES	MM	TPI	SET	PITCH	MODEL #	COMPUTER #
	$\sim$					
44-7/8 X 1/2 X .020	1140 X 12.7 X .50	14	Wavy	Standard	ZWEP4414WB25	002318
44-7/8 X 1/2 X .020	1140 X 12.7 X .50	18	Wavy	Standard	ZWEP4418WB25	002301
44-7/8 X 1/2 X .025	1140 X 12.7 X .63	14	Wavy	Standard	ZWEP442514WB25	001977
44-7/8 X 1/2 X .025	1140 X 12.7 X .63	18	Wavy	Standard	ZWEP442518WB25	001984
44-7/8 X 1/2 X .020	1140 X 12.7 X .50	10/14	Wavy	Variable	ZWEP441014MCB25	002356
44-7/8 X 1/2 X .020	1140 X 12.7 X .50	14/18	Wavy	Variable	ZWEP441418MCB25	002295
44-7/8 X 1/2 X .025	1140 X 12.7 X .63	10/14	Modified Raker	Variable	ZWEP44251014B25	001991
44-7/8 X 1/2 X .025	1140 X 12.7 X .63	14/18	Wavy	Variable	ZWEP44251418B25	002004

### **CARBON BLADES**

These economical blades are milled from solid carbon steel. Suitable for use on easier-to-machine metals, including pipe, tubing and solids.

LENGTH X WIDTH	X THICKNESS			BO	(ED	BU	LK
INCHES	MM	TPI	SET	MODEL #	COMPUTER #	MODEL #	COMPUTER #
nnn	m	$\sim$	$\gamma\gamma\gamma$	nn	nn	$\sim$	$\mathcal{N}\mathcal{N}$
STANDARD PITCH							
44-7/8 X 1/2 X .020	1140 X 12.7 X .50	14	Wavy			ZHEP4414WB	001670
44-7/8 X 1/2 X .020	1140 X 12.7 X .50	18	Wavy	ZHEP4418W	001434	ZHEP4418WB	001687
44-7/8 X 1/2 X .020	1140 X 12.7 X .50	24	Wavy	ZHEP4424W	001441	ZHEP4424WB	001694









**STATIONARY BAND SAW BLADES** Designed for use on stationary band saws, these carbon hard edge flexible back blades have teeth hardened to Rc 64-66. Reliable cutting action on wood and metals with guaranteed welds.

									TEETH I	PER INC	н						
LENGTH X WIDTH		0	-		4	-	6	0	-		4		8		4		2
		MOD#	COMP#	MOD#	COMP#	MOD#	COMP#	MOD#	COMP#	MOD#		MOD#		MOD#		MOD#	COMP#
52-3/4 X 1/4 X .014						ZCAB06	000178						000192	ZCAB24	000208	ZCAB32	000215
56-1/8 X 1/8 X .018	1426 X 3.2 X .5							ZCBA08A	002523								
56-1/8 X 1/4 X .014	1426 X 6.4 X .3					ZCBBO6	000246			ZCBB14	000253	ZCBB18	000260	ZCBB24	000277	ZCBB32	000284
56-1/8 X 3/8 X .014	1426 X 9.5 X .3					ZCBC06	000673										
57 X 1/8 X .018	1448 X 3.2 X .5							ZCCA08A	002547	ZCCA14A	002554						
57 X 1/4 X .014	1448 X 6.4 X .3					ZCCB06	000314			ZCCB14	000321	ZCCB18	000338	ZCCB24	000345		
57 X 3/8 X .014	1448 X 9.5 X .3					ZCCC06	000352			ZCCC14	000369			ZCCC24	000376		
59-1/4 X 1/8 X .018	1505 X 3.2 X .5									ZCZA14A	002561						
59-1/4 X 1/4 X .014	1505 X 6.4 X .3					ZCZB06	000819										
59-1/4 X 3/8 X .014	1505 X 9.5 X .3					ZCZCO6	000826										
59-1/2 X 1/8 X .018	1511 X 3.2 X .5							ZCDA08A	002578	ZCDA14A	002585						
59-1/2 X 1/4 X .014	1511 X 6.4 X .3					ZCDB06	000406			ZCDB14	000413	ZCDB18	000420	ZCDB24	000437	ZCDB32	000444
59-1/2 X 3/8 X .014	1511 X 9.5 X .3					ZCDC06	000451			ZCDC14	000468			ZCDC24	000482	ZCDC32	000499
62 X 1/8 X .018	1575 X 3.2 X .5							ZCEA08A	002592	ZCEA14A	002608						
62 X 1/4 X .014	1575 X 6.4 X .3					ZCEB06	000529			ZCEB14	000536	ZCEB18	000543	ZCEB24	000550	ZCEB32	00056
62 X 3/8 X .014	1575 X 9.5 X .3					ZCEC06	000574			ZCEC14	000581			ZCEC24	000604	ZCEC32	00061
64-1/2 X 1/2 X .025	1638 X 12.7 X .6					ZCFD06	000628			ZCFD14	000635	ZCFD18	000642	ZCFD24	000659	ZCFD32	000668
70 X 1/8 X .018	1778 X 3.2 X .5									ZCGA14A	002615						
70 X 1/4 X .014	1778 X 6.4 X .3					ZCGB06	000697										
70 X 3/8 X .014	1778 X 9.5 X .3					ZCGC06	000703										
71-3/4 X 1/8 X .018	1822 X 3.2 X .5									ZCHA144	002622						
71-3/4 X 1/4 X .014	1822 X 6.4 X .3					ZCHB06	000857										
72-7/16 X 1/8 X .025	1840 X 3.2 X .6									ZCIA14	000871						
72-7/16 X 1/4 X .025	1840 X 6.4 X .6					ZCIB06	000888										
72-7/16 X 3/8 X .025				ZCICO4	001076												
72-7/16 X 1/2 X .025	1840 X 12.7 X .6	ZCID03	001083														
80 X 1/8 X .018	2032 X 3.2 X .5									ZCJA14A	002639						
80 X 1/4 X .014	2032 X 6.4 X .3					ZCJB06	000901										
80 X 3/8 X .014	2032 X 9.5 X .3						000918										
82 X 1/8 X .018	2083 X 3.2 X .5									ZCKA144	002646						
82 X 1/4 X .014	2083 X 6.4 X .3					ZCKBOB	000949										
82 X 3/8 X .014	2083 X 9.5 X .3						000956										
93-1/2 X 1/8 X .025						201000				701 1 1 4	000970						
							000987										
93-1/2 X 1/4 X .025											001052		001007				
93-1/2 X 3/8 X .025							000994				001069						
93-1/2 X 1/2 X .025	2362 X 12.7 X .6					ZULDO6	001014			ZCLD14	001021	ZULD18	001038	ZCLD24	001045		



## JIG SAW BLADES

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BLADE TYPE	APPLICATION
Bi-Metal	Used primarily for cutting ferrous and non-ferrous metals. Milled and set teeth allow for better clearance while cutting metal. Using a larger tooth (6, 8 tpi) allows for more efficient cutting in hard board, wood and other wood composites.
Carbon Steel	Used for cutting all types of wood and non-metallic products. The conical ground/cross sharpened teeth offer very clean and fast cuts. Specs also available in milled and set style teeth.
Carbide Grit	Used for cutting fiberglass, ceramic tile, composites, laminates, marble floor tiles, etc. Super resistance to heat, wear and abrasion. Allows the cutting of materials that other blades are unable to cut.

### **JIG SAW BLADES**

### **BI-METAL BLADES**

For cutting ferrous and non-ferrous metals. Hard, durable high speed steel tooth points electron beam welded to a spring steel backer for toughness and stability during cutting.

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and the second s	▼ Wood	nable metal mbedded wood osites		<ul> <li>■ Milled and set teeth for better clearance while cutting metal</li> <li>■ Larger tooth (6, 8 tpi) are more efficient cutting in hard board, wood and other wood composites</li> <li>■ Available in a universal shank and T-shank</li> </ul>								
		LENGTH X WIDTH X	THICKNESS		25/TU	BE	5/CA 10/Standa		2/CA 5/STANDA		тоотн	
RECOMMEND	ED USE	INCHES	ММ	TPI	MODEL#	COMP#	MODEL#	COMP#	MODEL#	COMP#		
pm	$\sim$	nn	$\sim$	$\mathcal{A}$	$\sim$	$\sim$	m	$\sim$	$\sim$	$\mathcal{N}$	$\sim$	
UNIVERSAL SHA	NK: Used on	all popular jig saw m	achines acce	pting	j universal sh	nank.						
Wood, fiber board, asbestos, coarse-cut.4 X 3/8 X .035100 X 10 X .				6	SB3606T25	400855	SB3606C5	404549	SB3606C2	397636	М	
Wood, plywood, ha	rd-board.	4 X 3/8 X .035	100 X 10 X .9	10	SB3610T25	400879	SB3610C5	404556	SB3610C2	397643	М	

			-							
Wood, fiber board, asbestos, coarse-cut.	4 X 3/8 X .035	100 X 10 X .9	6	SB3606T25	400855	SB3606C5	404549	SB3606C2	397636	М
Wood, plywood, hard-board.	4 X 3/8 X .035	100 X 10 X .9	10	SB3610T25	400879	SB3610C5	404556	SB3610C2	397643	Μ
Non-ferrous metals, Fiberglass, hard rubber, nail-embedded wood.	4 X 3/8 X .035	100 X 10 X .9	14	SB3614T25	400893	SB3614C5	404563	SB3614C2	397650	Μ
Metal 18 gauge to 1/8".	3 X 3/8 X .035	75 X 10 X .9	18	SB2718T25	400794	SB2718C5	404518	SB2718C2	397612	Μ
Metal and non-ferrous metal up to 1/8".	3 X 3/8 X .035	75 X 10 X .9	24	SB2724T25	400831	SB2724C5	404525	SB2724C2	397629	Μ
Scroll - non-ferrous metals, fiberglass, plywood.	3-5/8 X 3/16 X .035	92 X 5 X .9	12	SB412ST25	399487	SB412SC5	404532	SB412SC2	397667	Μ
Scroll - metal 18 gauge to 1/8"	2-3/4 X 3/16 X .035	70 X 5 X .9	18	SB2718ST25	402972	SB2718SC5	404501	SB2718SC2	397605	М
T-SHANK: Used on all popular	jig saw machines ac	cepting Bosch	n or	T-shank.						
Wood, fiber board, asbestos, roughing work.	4 X 3/8 X .040	100 X 8 X 1.0	6	SB0406T25	400732	SB0406C5	404600	SB0406C2	397704	Μ
General purpose - wood cutting, compositions, plastic.	4 X 3/8 X .035	100 X 8 X .9	8	SB0408T25	400756	SB0408C5	404617	SB0408C2	397711	Μ
All woods, composition materi- al, plastics, plywood. Steel and non-ferrous	4 X 3/8 X .035	100 X 8 X .9	10	SB0410T25	400770	SB0410C5	404624	SB0410C2	397728	М
Steel and non-ferrous Metal 1/8" thick and up.	3 X 3/8 X .035	75 X 10 X .9	14	SB0314T25	400671	SB0314C5	404570	SB0314C2	397674	Μ
Metals over 18 gauge, tubing, conduit.	3 X 3/8 X .035	75 X 10 X .9	18	SB0318T25	400695	SB0318C5	404587	SB0318C2	397681	Μ
Thin metal, plastic fine cuts under 18 gauge	3 X 3/8 X .035	75 X 10 X .9	24	SB0324T25	400718	SB0324C5	404594	SB0324C2	397698	Μ
Softwood, aluminum, non-ferrous metal up to 3/8", sandwich material up to 3-3/4". Extra long blade.	5-1/4 X 3/8 X .042 5-1/4 X 3/8 X .042	132 X 8 X 1.1 132 X 8 X 1.1	12 21	SB0512LT25 SB0521LT25	_					M M
TOOTH STYLE: M (Milled)										

### **JIG SAW BLADES**



### **CARBON BLADES**

Used for cutting all types of wood and non-metallic products. The ground/cross sharpened teeth offer very clean and fast cuts. Specs also available in milled and set style teeth. Shank styles are available in either universal or T-shank.

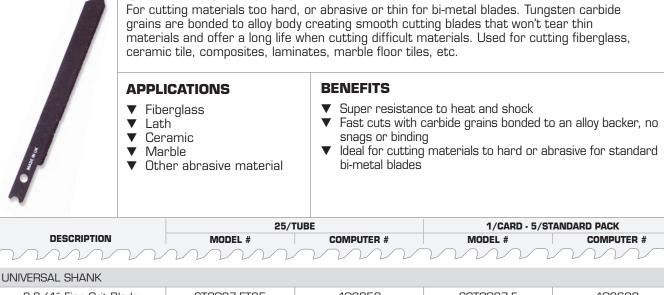
SEGON	▼ So ▼ Ha ▼ Ch ▼ Ply	LICATIONS Inftwood Ardwood Nipboards Jwood Aastic		▼ Hig wo ▼ Av	EFITS gh quality ca oods, chipbo ailable in bo oth styles a	oards, pl oth unive	ywoods, p rsal shank	lastic, ar < and T-sl	nd similar hank	materia	
LENGTH X WIDTH X THICKNES				S 25/TUBE		5/CARD		2/CARD		тоотн	
RECOMMENDED USE		INCHES	ММ	TPI	MODEL#	COMP#	MODEL#	COMP#	MODEL#	COMP#	

mm	$\sim$	m	nn	$\sim$	$\sim$	$\sim$
				a la la sul s		

UNIVERSAL SHANK: Used on all popular jig saw machines accepting universal shank.

Softwood, hardwood, plywood, chipboard, plastic up to 2" thick. Clean/fast cutting.	4 X 5/16 X .050	100 X 8 X 1.3	6	SC406T25	399722	SC406C5	404853	SC406C2	397865	CGR
Softwood, hardwood, plywood, chipboard, plastic up to 1" thick. Very clean cuts.	4 X 5/16 X .050	100 X 8 X 1.3	10	SC410T25	399746	SC410C5	404860	SC410C2	397889	CGR
Reverse tooth - non-splitting cuts of laminates, and chipboard. Very clean cutting.	4 X 5/16 X .060	100 X 8 X 1.5	10	SC410RT25	399739	SC410RC5	404877	SC410RC2	397872	CGR
Scroll cutting wood, plywoods, etc. Super fine finish. Ground, taper back.	2-3/4 X 3/16 X .050	70 X 5 X 1.3	20	SC2720T25	399692	SC2720C5	404815	SC2720C2	397834	CGR
T-SHANK: Used on all popular	jig saw machines ac	cepting Boscl	h or	T-shank.						
Softwood, hardwood, plywood, chipboard. Fast coarse cutting.	4 X 5/16 X .050	100 X 8 X 1.3	6	SC046T25	401401	SC046C5	404914	SC046C2	397964	М
Softwood, hardwood, plywood, chipboard, plastic up to 2" thick. Clean/fast cutting.	4 X 5/16 X .060	100 X 8 X 1.5	6	SC0406T25	400329	SC0406C5	404921	SC0406C2	397926	CGR
Softwood, hardwood, plywood, chipboard, plastic up to 1" thick. Very clean cuts.	4 X 5/16 X .060	100 X 8 X 1.5	10	SC0410T25	400510	SC0410C5	404938	SC0410C2	397940	CGR
Reverse tooth _ non-splitting cuts of laminates, and chip- board. Very clean cutting.	4 X 5/16 X .060	100 X 8 X 1.5	10	SCO410RT25	400503	SCO41ORC5	404945	SCO410RC2	397933	CGR
Curved cuts/scroll in softwood and hardwood up to 1" thick. Fast cutting.	3 X 5/32 X .040	75 X 4 X 1	12	SC0312ST25	401142	SCO312SC5	404884	SCO312SC2	397902	М
Curved cuts/scroll in softwood and hardwood up to 1" thick. Fast cutting.	3 X 3/16 X .050	75 X 5 X 1.3	20	SC0320ST25	401364	SC0320SC5	404891	SC0320SC2	397919	CGR
Curved cuts/scroll in softwood and hardwood up to 2" thick. Fast cutting.	4 X 1/4 X .050	100 X 6 X 1.3	6	SCO416ST25	400534	SCO416SC5	404907	SCO416SC2	397957	CGR
TOOTH STYLE: M (Milled) CG	R (Cross Sharpened,	, Conical Grou	ind)							





**CARBIDE GRIT JIG SAW BLADES** 

2-3/4" Fine Grit Blade	STCG27-FT25	402859	SCTCG27-F	402699
2-3/4″ Medium Grit Blade	STCG27-MT25	402866	SCTCG27-M	402705
2-3/4" Coarse Grit Blade	STCG27-CT25	402873	SCTCG27-C	402712
3-5/8" Fine Grit Blade	STCG36-FT25	402880	SCTCG36-F	402729
3-5/8″ Medium Grit Blade	STCG36-MT25	402897	SCTCG36-M	402736
3-5/8" Course Grit Blade	STCG36-CT25	402903	SCTCG36-C	402743
T-SHANK				
4" Fine Grit Blade	SOTCG4-FT25	402828	SCOTCG4-F	402668
4" Medium Grit Blade	SOTCG4-MT25	402835	SCOTCG4-M	402675
4" Course Grit Blade	SOTCG4-CT25	402842	SCOTCG4-C	402682

### **JIG SAW BLADE ASSORTMENTS**

6-piece assortments offer lots of versatility; packaged in a vinyl pouch.

Model #	Computer # Shank One Each (6 Pieces/Pouch)									
nnn										
UNIVERSAL SHANK: Used on all popular jig saw machines accepting Bosch or T-shank.										
SB1P	401173	1/4" Universal Shank	SB3606, SB3610, SB3614, SB2718, SB2724, SB412S	Vinyl						
SC1P	401418	1/4" Universal Shank	(2) SC406, (2) SC410, SC410R, SC2720	Vinyl						
SBC01	402163	1/4" Universal Shank	SB2718, SB2724, SB3606, SB3610, SB3614	Carded						
T-SHANK: Used on a	all popular jig s	saw machines acceptir	ng Bosch or T-shank.							
SB2P	401531	T-Shank	SB0406, SB0410, SB0314, (2) SB0318, SB0324	Vinyl						
SC2P	401432	T-Shank	nank SCO406, (2) SCO410, SCO410R, SCO416S, SCO320S							



## BI-METAL HACK SAW BLADES

BLADE TYPE	APPLICATION
Bi-Metal Blades	Used to cut pipe, tubing, solids, wood, plastic or any machinable metal. Increased heat and wear resistance for long life. Flexible to prevent shattering during use.
Morse Hack Saw Frames	We offer a wide range of hack saw frames from the "mini" for tight spaces to the Master McCoy <sup>®</sup> with features and beam strength that will stand up to the toughest professional uses.
Carbide Grit Blades	Used to cut glass, hardened steel, stranded cable and tile. Super resistance to heat wear and abrasion to allow the cutting of materials that other blades are unable to cut.
PVC/ABS Hand Saw	Designed to cut PVC and ABS pipe quickly and efficiently. Offered with replaceable blades.

### **BI-METAL HACK SAW SAW BLADES**

12" / 300mm

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					1000	and the second se	Statement of the second se		
00	Bi-m	etal hack b	lades w	SAW BLADI vill bend and fle cut pipe, tubing	x, resist			fer sawing an	d longer
Sauth Asin W	FEA	TURES			BENEF	ITS			
MORSE TRIPLE TOOTH THE	<ul> <li>✓ Vacuum heat treating</li> <li>✓ Straight blade body</li> <li>✓ Bi-metal construction</li> <li>✓ Harder edge for fast cutting</li> <li>✓ Greater beam strength</li> <li>✓ Long cutting life</li> <li>✓ Heat and wear resistant</li> <li>✓ Flexible to prevent shattering during use</li> </ul>								
DOTH Here Fred	Utiliz 24tp	e maximur	n cuttin aggres	-METAL HA g efficiency wir sive strokes ar section.	th three	teeth sizes. I	Lead off ke with '	with 32tpi, n I8tpi. Or isola	nove to te the
	▼ C ▼ F ▼ N	PLICATION Cut wood Plastic Aachinable Conduit		▼ Ang ▼ Cop	le iron per tubi	eel tubing ng naterials			
1.8									
LENGTH X WIDTH X THICKNES				/TUBE	MO	10/TUBE		2/CARD 5/STAN	
LENGTH X WIDTH X THICKNES INCHES MM			100 VIODEL #	/TUBE COMP#			MP#	2/CARD 5/STAN	DARD PACK Comp#
	T	$\sim$	NODEL #	COMP#	ННВ121	DEL # CO 82432T10 30	2333 H	MODEL#	<b>COMP#</b> 304092
INCHES MM	T (.6 18/2	24/32 HHB12 ball MORSE ball MORSE ball MORSE	Image: Second state           Image:	COMP# 1100 302340 STAN Cut woo conduit structu	HHB121 DARD od, plast , stainle ral mate a pitch te		HACK thinable g, angle re. Avail	MODEL# HCB12182432-2 SAW BLA metal, includi iron, copper	304092
INCHES MM 12 X 1/2 X .025 300 X 12.7 X 4 12'/300mm Bi 181 Bi	T (.6 18/2	24/32 HHB12 ball MORSE ball MORSE ball MORSE		COMP#	HHB121 DARD od, plast , stainle ral mate a pitch te	BEL # CO 82432T10 30 BI-METAL cic or any mad ss steel tubin erials and mo poth designs.	HACK thinable g, angle re. Avail	MODEL# HCB12182432-2 SAW BLA metal, includi iron, copper able in straigh	304092
INCHES MM 12 X 1/2 X .025 300 X 12.7 X 12 X 1/2 X .025 300 X 12.7 X 12"/300mm Bi 12"/300mm Bi 12"/300mm Bi 18T B	TPI	24/32 HHB12 ball MORSE MODEL #		COMP#	HHB121 DARD od, plast , stainle ral mate a pitch to	DEL # CO 82432T10 30 BI-METAL cic or any mac ss steel tubin erials and mo both designs. 10 TUBE CO MODEL#	HACK chinable g, angle re. Avail	MODEL# HCB12182432-2 X SAW BLA metal, includi iron, copper able in straig 2/CARD 5/STAN MODEL#	COMP# 304092 NDE ing tubing, nt and NDARD PACF COMP#
INCHES MM 12 X 1/2 X .025 300 X 12.7 X 12 / 300mm 12 / 300mm 12 / 300mm 12 / 300mm 13 / 18 / 18 / 18 / 18 / 18 / 18 / 18 /	T (.6 18/2 -Metal 8% Co TPI .6 18	24/32 HHB12 ball MORSE aur MORSE 100/B MODEL # HHB1018	MODEL #         21824321         1824321 <t< td=""><td>COMP#</td><td>HHB121 DARD od, plast , stainle ral mate a pitch to</td><td>DEL # CO 82432T10 30 BI-METAL cic or any mac ss steel tubin erials and more both designs. 10 TUBE CO MODEL# HHB1018T10</td><td>HACK chinable ig, angle re. Avail</td><td>MODEL# HCB12182432-2 SAW BLA metal, includi iron, copper able in straigh 2/CARD 5/STAN MODEL# HHCB1018-2</td><td>COMP# 304092 ADE ing tubing, nt and NDARD PACH COMP# 304009</td></t<>	COMP#	HHB121 DARD od, plast , stainle ral mate a pitch to	DEL # CO 82432T10 30 BI-METAL cic or any mac ss steel tubin erials and more both designs. 10 TUBE CO MODEL# HHB1018T10	HACK chinable ig, angle re. Avail	MODEL# HCB12182432-2 SAW BLA metal, includi iron, copper able in straigh 2/CARD 5/STAN MODEL# HHCB1018-2	COMP# 304092 ADE ing tubing, nt and NDARD PACH COMP# 304009
INCHES MM 12 X 1/2 X .025 300 X 12.7 X 12 X 1/2 X .025 300 X 12.7 X 12 X 1/2 X .025 300 X 12.7 X 10 X 1/2 X .025 250 X 12.7 X 10 X 1/2 X .025 250 X 12.7 X	TPI .6 18 .6 18 .6 24	A4/32 HHB12 A4/32 HHB12 MORSE MODEL # HHB1018 HHB1024	AMODEL #         21824321         21824321         55         55         55         0X         COMP#         360180         360241	COMP#	HHB121 DARD od, plast , stainle ral mate a pitch to	DEL # CO 82432T10 30 BI-METAL cic or any mac ss steel tubin erials and mon both designs. 10 TUBE CO MODEL# HHB1018T10 HHB1024T10	HACK chinable g, angle re. Avail COMP#	MODEL# HCB12182432-2 SAW BLA metal, includi iron, copper able in straig 2/CARD 5/STAN MODEL# HHCB1018-2 HHCB1024-2	COMP# 304092 ADE ing tubing, ht and VDARD PACH COMP# 304009 304009
INCHES MM 12 X 1/2 X .025 300 X 12.7 X 12 / 300mm 12 / 300mm 12 / 300mm 12 / 300mm 13 / 18 / 18 / 18 / 18 / 18 / 18 / 18 /	TPI .6 18 .6 18 .6 24 .6 32	24/32 HHB12 24/32 HHB12 24/32 HHB12 CORSE 100/B MODEL # HHB1018 HHB1024 HHB1032	ANDDEL # 21824321 21824321 21824321 2000 2000 2000 2000 2000 2000 2000 2	COMP#	HHB121 DARD od, plast , stainle ral mate a pitch to	DEL # CO 82432T10 30 BI-METAL cic or any mac ss steel tubin erials and more both designs. 10 TUBE CO MODEL# HHB1018T10	HACK chinable g, angle re. Avail COMP# 300186 300247 300322	MODEL# HCB12182432-2 SAW BLA metal, includi iron, copper able in straigh 2/CARD 5/STAN MODEL# HHCB1018-2	COMP# 304092 ADE ing tubing, nt and NDARD PACH COMP# 304009
INCHES MM 12 X 1/2 X .025 300 X 12.7 X 12 X 1/2 X .025 300 X 12.7 X 12 / 300mm Bi 12 / 300mm Bi 12 / 300mm Bi 12 / 300mm Bi 12 / 300mm Bi 10 X 1/2 X .025 250 X 12.7 X 10 X 1/2 X .025 250 X 12.7 X 10 X 1/2 X .025 250 X 12.7 X	TPI .6 18 .6 18 .6 18 .6 32 .6 14	24/32 HHB12 Additional HHB12 HHB1018 HHB1024 HHB1032 HHB1214	AMODEL #         21824321         21824321         55         55         55         0X         COMP#         360180         360241	COMP#	HHB121 DARD od, plast , stainle ral mate pitch to	DEL # CO 82432T10 30 BI-METAL cic or any mad ss steel tubin erials and mo both designs. 10 TUBE CO MODEL# HHB1018T10 HHB1024T10 HHB1032T10	HACK chinable g, angle re. Avail COMP#	MODEL# HCB12182432-2 C SAW BLA metal, includi iron, copper able in straig 2/CARD 5/STAN MODEL# HHCB1018-2 HHCB1018-2 HHCB1024-2 HHCB1032-2	COMP# 304092 ADE ing tubing, nt and NDARD PACF COMP# 304009 304016 304023
INCHES MM 12 X 1/2 X .025 300 X 12.7 X 12 X 1/2 X .025 300 X 12.7 X 12 X 1/2 X .025 250 X 12.7 X 10 X 1/2 X .025 300 X 12.7 X	TPI .6 18 .6 18 .6 24 .6 18 .6 14 .6 18	24/32 HHB12 Additional HHB12 HHB1018 HHB1024 HHB1032 HHB1214	ANDDEL # 21824321 21824321 21824321 2000 2000 2000 2000 2000 2000 2000 2	COMP#	HHB121 DARD od, plast ral mate pitch te COMP#	DEL # CO 82432T10 30 BI-METAL cic or any mac ss steel tubin erials and mo both designs. 10 TUBE CO MODEL# HHB1018T10 HHB1024T10 HHB1032T10 HHB1214T10	HACK chinable g, angle re. Avail	MODEL# HCB12182432-2 SAW BLA metal, includi iron, copper able in straigl 2/CARD 5/STAN MODEL# HHCB1018-2 HHCB1024-2 HHCB1024-2 HHCB1032-2 HHCB1214-2	COMP# 304092 ADE ing tubing, nt and VDARD PACH COMP# 304009 304009 304023 304023 304030
INCHES         MM           12 X 1/2 X .025         300 X 12.7 X           12 X 1/2 X .025         300 X 12.7 X           12 X 1/2 X .025         300 X 12.7 X           12 X 1/2 X .025         250 X 12.7 X           10 X 1/2 X .025         250 X 12.7 X           10 X 1/2 X .025         250 X 12.7 X           10 X 1/2 X .025         250 X 12.7 X           10 X 1/2 X .025         250 X 12.7 X           12 X 1/2 X .025         300 X 12.7 X	TPI .6 18 .6 18 .6 24 .6 18 .6 24 .6 18 .6 24	24/32 HHB12 A4/32 HHB12 A100/Bit MODEL # HHB1018 HHB1024 HHB1024 HHB1024 HHB1214 HHB1218 HHB1224	ANDDEL # 21824321 21844321 21844321 21844321 21844321 21844321 21844321 21844321 21844444444521 2184444444444444444444444444444444444	COMP#	HHB121 DARD od, plast ral mate pitch te COMP# 300100 300117	DEL # CO 82432T10 30 BI-METAL cic or any mad ss steel tubin erials and mo both designs. 10 TUBE CO MODEL# HHB1018T10 HHB1024T10 HHB1024T10 HHB1218T10	HACK chinable g, angle re. Avail COMP# 300186 300247 300322 302180	MODEL# HCB12182432-2 SAW BLA metal, includi iron, copper able in straig 2/CARD 5/STAN MODEL# HHCB1018-2 HHCB1024-2 HHCB1024-2 HHCB1024-2 HHCB1024-2 HHCB1024-2 HHCB1024-2 HHCB1024-2 HHCB1218-2	COMP# 304092 ADE ing tubing, nt and VDARD PACH COMP# 304009 304016 304023 304030 304037
INCHES MM 12 X 1/2 X .025 300 X 12.7 X 12 X 1/2 X .025 300 X 12.7 X 12 X 1/2 X .025 250 X 12.7 X 10 X 1/2 X .025 250 X 12.7 X 10 X 1/2 X .025 250 X 12.7 X 10 X 1/2 X .025 300 X 12.7 X 12 X 1/2 X .025 300 X 12.7 X 12 X 1/2 X .025 300 X 12.7 X	TPI .6 18 .6 18 .6 24 .6 18 .6 24 .6 18 .6 24	A4/32 HHB12 A4/32 HHB12 A4/32 HHB12 A00755 MODEL # HHB1018 HHB1024 HHB1024 HHB1218 HHB1224	ANDDEL # 21824321 21844321 21844321 21844321 21844321 21844321 21844321 2184444441 2184444441 218444444444444	COMP#	HHB121 DARD od, plast , stainle ral mate pitch to COMP# 300100 300117 300124	DEL # CO 82432T10 30 BI-METAL cic or any mac ss steel tubin erials and mo both designs. 10 TUBE CO MODEL# HHB1018T10 HHB1024T10 HHB1032T10 HHB1032T10 HHB1214T10 HHB1224T10	MP#           2333         H           HACk         Chinable           chinable         G           dg, angle         Compt           300186         300247           302180         302142           302180         302241	MODEL# HCB12182432-2 C SAW BLA metal, includi iron, copper able in straigl 2/CARD 5/STAN MODEL# HHCB1018-2 HHCB1018-2 HHCB1024-2 HHCB1032-2 HHCB1032-2 HHCB1214-2 HHCB1218-2 HHCB1224-2	COMP# 304092 ADE ing tubing, nt and NDARD PACF COMP# 304009 304016 304023 304023 304030 304047 304054
INCHES       MM         12 × 1/2 × .025       300 × 12.7 ×         12 × 1/2 × .025       300 × 12.7 ×         12 / 300mm       4         12 / 300mm       4         12 / 300mm       8         10 × 1/2 × .025       250 × 12.7 ×         10 × 1/2 × .025       250 × 12.7 ×         10 × 1/2 × .025       300 × 12.7 ×         12 × 1/2 × .025       300 × 12.7 ×         12 × 1/2 × .025       300 × 12.7 ×         12 × 1/2 × .025       300 × 12.7 ×	TPI .6 18 .6 18 .6 24 .6 18 .6 18 .6 24 .6 18 .6 24 .6 32	A4/32 HHB12 HHB1218 HHB1232	ANDDEL # 21824321 21844321 21844521 21844521 218	COMP#	HHB121 DARD od, plast ral mate pitch te COMP# 300100 300117 300124 300131	DEL # CO 82432T10 30 BI-METAL cic or any mac ss steel tubin erials and mon both designs. 10 TUBE COL MODEL# HHB1018T10 HHB1024T10 HHB1032T10 HHB1218T10 HHB1218T10 HHB1224T10 HHB1222T10	Imp#           2333         F           HACk         Chinable           chinable         g, angle           g, angle         Comp#           300186         300247           300322         302142           302180         302241           302241         302326	MODEL# HCB12182432-2 SAW BLA metal, includi iron, copper able in straig 2/CARD 5/STAN MODEL# HHCB1018-2 HHCB1024-2 HHCB1024-2 HHCB1024-2 HHCB1214-2 HHCB1214-2 HHCB1214-2 HHCB1224-2 HHCB1224-2 HHCB1222-2	COMP# 304092 ADE ing tubing, nt and NDARD PACF COMP# 304009 304016 304023 304023 304030 304047 304054
INCHES MM 12 X 1/2 X .025 300 X 12.7 X 12 X 1/2 X .025 300 X 12.7 X 12 X 1/2 X .025 250 X 12.7 X 10 X 1/2 X .025 250 X 12.7 X 10 X 1/2 X .025 250 X 12.7 X 10 X 1/2 X .025 250 X 12.7 X 12 X 1/2 X .025 300 X 12.7 X	TPI .6 18 .6 18 .6 24 .6 18 .6 24 .6 18 .6 24 .6 32 .6 14/18	24/32 HHB12 A4/32 HHB12 A4/32 HHB12 A007 A0	ANDDEL # 21824321 21824321 21824321 2000 2000 2000 2000 2000 2000 2000 2	COMP#	HHB121 DARD od, plast ral mate pitch to COMP# 300100 300117 300124 300131	DEL # CO 82432T10 30 BI-METAL cic or any mac ss steel tubin erials and mo both designs. 10 TUBE CO MODEL# HHB1018T10 HHB1024T10 HHB1032T10 HHB1214T10 HHB1214T10 HHB121418T10 HHB121418T10	MP#           2333         H           HACk         Chinable           chinable         g, angle           re. Avail         COMP#           300186         300247           302180         302142           302180         302241           302326         302159	MODEL# HCB12182432-2 C SAW BLA metal, includi iron, copper able in straigh 2/CARD 5/STAN MODEL# HHCB1018-2 HHCB1024-2 HHCB1032-2 HHCB1032-2 HHCB1214-2 HHCB1214-2 HHCB1224-2 HHCB1224-2 HHCB1224-2 HHCB121418-2	COMP# 304092 ADE ing tubing, nt and VDARD PACH COMP# 304009 304009 304016 304023 304030 304047 304054 304108

### HACK SAW FRAMES

MORSE

12" / 300mm 20/24T

Metal 8% Cobalt

### **MASTER MCCOY®** Another Morse original and the finest high performance hack saw frame you can find. It is stronger, cuts straighter, helps blades last longer and is more comfortable to use than other frames. It also offers more versatility and can make either standard or flush cuts. Model No. HHBF02 / 330022 Includes (1) 12" 20/24 TPI Blade BENEFITS Locking Screw Design allows for storage of extra blades and secures blade for "jab" sawing Multiple Pin Locations for mounting blade at 90° or 45° for standard or flush-cut applications ▼ Alloy Steel Support Beam makes frame stronger and allows over 30,000 PSI tensioning. Ergonomic grip protects fingers and grips comfortably ▼ Tensioning Handle provides extra torque to keep blades rigid for straighter cuts and longer blade life. LIGHTWEIGHT HIGH TENSION FRAME Made from lightweight aluminum, it cuts straight whether making standard or flush cuts. Model No. HHBF01 / 330015 Includes (1) 12" 24 TPI Blade BENEFITS Locking Screw Design allows for storage of extra blades and secures ▼ blade for "jab" sawing Multiple Pin Locations for mounting blade at 90° or 45° for standard V or flush-cut applications Tensioning Handle provides extra torgue for straighter cuts and ▼ longer blade life CONTRACTOR HIGH TENSION CONTRACTOR UTILITY Model No. HHBF04 / 300056 Model No. HHBF06 / 300063 BENEFITS BENEFITS Exceptionally light for handling ease Precise blade tension with wing nut ▼ Aluminum frame offers extra blade blade attachment Adjusts for either 10" or 12" storage space blade sizes

### **SPECIALTY HACK SAWS**

### **CARBIDE GRIT ROD SAWS**

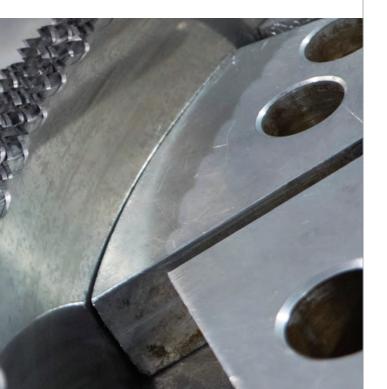
The thin cutting profile makes it easy to cut shapes and patterns even in limited access areas with these specialty blades on a standard hack saw frame.

APPLICATIONS       ■         Image: Second standard s									
DIMENS	SIONS	25/BOX MODEL #	COMP#	3/TUB MODEL #	E COMP#	1/CARD 5/ MODEL#	PACK COMP#		
nn	$\mathcal{N}$	m	$\sim$	m	nn	nn	m		
10	250	HRTCG10	362214	HRTCG10T03	362351	HRCTCG10	332217		
12	300	HRTCG12	362221	HRTCG12TO3	362368	HRCTCG12	332224		
1	Cut di	RBIDE GRIT H fficult materials inc s on a standard had	luding hydrau	ulic hose and strar	nded cables v	with these specia	ty		
	APPI	LICATIONS		BENEFITS					
	V St	ass ardened steel randed cable eramic tile		cutting and l	onger life ant to heat, v als other blad				
DIMENS	SIONS MM	25/BOX MODEL #	COMP#	3/TUB MODEL #	E COMP#	1/CARD 5/ MODEL#	PACK COMP#		
nni	n	nnn	$\sim$	m	$\sim$	inn	m		
10	250	HHTCG10	362191	HHTCG10T03	362337	HHCTCG10	332194		
12	300	HHTCG12	362207	HHTCG12TO3	362344	HHCTCG12	332200		
	A hand replac APPI ▼ P\ ▼ Pla	C/ABS SAW A dy carbon steel saw t eable spring-tempera LICATIONS /C astic lood	for plumbers, ed steel blades ■ BEN ▼ S ■ To ▼ P ▼ C	electricians and DIY	. These saws troke for quic rbon steel bla life & for cutting h for smooth uminum hanc	k, accurate cutting de for superior we PVC/ABS cutting lle	action.		
		MODEL #					. #   Comp#		
12″ (305mm) Ca	arbon Steel PVC/Al	35 Saw HPVC1201	330107	Mini hand hack saw fr	ame with 10″ hi	metal blade HHBF05	5-10 330077		
	arbon Steel PVC/Al		330114						
12" (305mm) Cart			330121		e	AND A UNA			
18" (450mm) Cart	oon Steel Replacem	nent Blade HPVCB18	330138	11 Monna 11 (718mm Bi-Metal 8% Cobalt					









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