

# MAKING THE BLADES



### CMT introduces the best thing to happen to tooling since orange router bits.

Orange saw blades. Not just any colored blade, but CMT high quality circular saw blades with trademark orange Teflon<sup>®</sup> Industrial coating. Now you can immediately recognize a CMT blade by its orange color.

To create saw blades that are the best on the market, CMT goes to the same great lengths to produce a top quality blade as router bits, beginning with thoroughly researched design concepts. Hook and grind angles, carbide compositions and gullet designs are studied to give CMT blades the most efficient cutting performance. CMT also uses only the best raw materials available in the world - super 42-44 Rockwell hardened steel from Germany and Cèramètal micrograin carbide.

CMT saw blades are precisely worked on a series of CNC machines from start to finish.



The steel body of the blade is laser cut, not die cut, from superior strength steel. Laser cutting allows for use of a higher hardness level of steel than die-cutting. Softer steel tends to warp more easily. Laser-cut blades are not sub-jected to the stresses of the stamping process and remain flat and accurate for years of continuous service.

The next step is the smoothing and tensioning of the plate surfaces, which are evidenced by the superior finish and visible tension ring that runs around the circumference of the blade. This phase is done on computerized machinery and guarantees blade stability and uniformity. After tensioning, the bore and seats for the carbide teeth are ground. A smooth finish on the bore will make sure that the blade can be accurately mounted to the saw arbor and will have perfect concentricity during rotation.

 Teflon\* Industrial Coating
 Sharpening

Just as important is accurate grinding of the tooth seat for a sure fit of the carbide tip and maximum contact for brazing. Micrograin carbide teeth are applied with special silver-copper-silver brazing compound. This combination of metals is unique in that when the steel body and the carbide tipped teeth are heated during brazing, they expand and contracts with the blade. When the blade and tip are heated, the wire compound is injected into the joint. Thanks to the particular molecular properties of copper, the correct temperature can be attained. This layer acts as a buffer and keeps the carbide from cracking during cool-down shrinkage. The absence of this layer of copper requires brazing at a lower temperature, which dangerously results in failed welds.

The blades are then sanded, degreased and a coating of trademark orange Teflon<sup>®</sup> is baked on. Teflon<sup>®</sup> Industrial Coating is a stratified coating that forms layers when applied. The bottom layer bonds chemically and

mechanically to the blade surface while the top layer is a low friction non-stick layer of Teflon<sup>®</sup>. Between the two strata is a combination middle layer of bonding chemicals and Teflon<sup>®</sup>. So Teflon<sup>®</sup> coatings stick to your blade, but nothing else does. This low friction, non-stick Teflon<sup>®</sup> coating provides your blade with advantages that you can't get from a standard painted or chrome plated blade.

DuPont tested their industrial strength coating on saw blades and the results were clearly superior to uncoated blades:

#### Teflon<sup>®</sup> coated blades stay sharper longer

In woodworking tests, the Teflon® coated blade cut 55% more linear feet of wood than painted blades and 50% more than chrome-plated blades.

#### Teflon® coated blades are rust resistant.

In accelerated weathering tests on new and used blades, Teflon<sup>®</sup> coated blades effectively sealed out moisture that caused painted and chromeplated blades to rust. No oils, greases or rust-preventatives needed.

#### Teflon<sup>®</sup> coated blades clean up easier

The non-stick nature of Teflon® makes blade clean up easy. Even after extensive use, Teflon® coated blades wiped clean of gum and resin build up.

#### Teflon<sup>®</sup> coated blades use less energy

Ammeter readings taken from a 7-1/4" circular saw proved that Teflon® coated blades used 38% less amperage than painted blades and 35% less than chrome-plated blades. By using less amperage, Teflon® coated blades can help save wear and tear on saw motors and reduce energy costs.

#### Teflon<sup>®</sup> blades perform smoother, sharper cuts

In tests conducted in wood, Teflon<sup>®</sup> blades did not gum up or collect resin like normal blades do. The self-lubricating Teflon<sup>®</sup> finish sheds sappy wood residue before it builds up and leaves the blade clean to make sharper, more accurate cuts.

The final production step is the sharpening of the micrograin carbide teeth. Early on CMT carefully studied and researched the individual bevel tooth design and tooth combination for each blade according to its use. During the sharpening phase each angle, down to the milacron, is precise using multi-axis CNC machines for absolutely razor sharp tips.

An informative Teflon® silkscreen to the side of every blade provides immediate details about the blade type and its use.

Lastly, the CMT blade is packed in a US Patent design carry case for safe and convenient storage when not in use. Made of tough HDPE plastic for years of reuse.



**Ripping 201/202** 



Cut Off 208



Cut Off ATB 205-206 Compound Miter 207





**Compound Miter** 

& Radial 219



\*\*General\*\* 213/214



Combination 215-216



Cabinetshop Blade 221



Melamine & Fine Cut Off 210



Precision Dado 230



Non Ferrous Metal Saw Blades 225

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# Ripping

### 201-202 CARBIDE TIPPED -

Large flat top ground teeth with an aggressive 20° hook make the CMT rip blade ideal for glue line rips in hard and soft woods. These blades are equipped with a special anti-kickback shoulder behind each tooth to minimize the possibility of dangerous kickback that can occur as a result of overfeeding. Ideal for power or hand feeding.



20°



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- **NEW** fishhook expansion design CMT has redefined their fishhook slots, adding more slots so your blade runs smoother and works more efficiently.
- Exclusive CMT formula and design micrograin carbide tipped teeth.
- Laser cut blade body from 42-44 Rockwell hardness level high grade German steel.
- CNC tensioned and balanced.
- Specially formulated silver-copper-silver braze.

5				Pla	Kerf				
	lade meter mm	No. of Teeth	Type of Grind	Hook Angle	Bore Diameter	Kerf Thickness	Plate Thickness	Order No.	List Price \$
8"	203	20	FTG	20°	5/8"	0.126	0.087	201.020.08	51.90
10"	254	24	FTG	20°	5/8"	0.126	0.087	201.024.10	62.50
12"	300	30	FTG	20°	1"	0.126	0.087	201.030.12	87.90
Thin-K	erf								
10"	254	24	FTG	20°	5/8"	0.094	0.063	202.024.10	71.50

# **Cut Off**



### - 208 CARBIDE TIPPED

Get the speed and efficiency you need with its 15° hook, the CMT cut off blade gives you an excellent finish when cross cutting hardwoods softwoods and plywood. A perfect combination for your portable electric saw! Equipped with knock-out diamond for assembly on Skil-type arbors.





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+ equipped with knock-out diamond



## **Cut Off ATB**

#### 205-206 CARBIDE TIPPED -

<u>THE</u> all-around cut off blade for hardwood, softwood, plywood and chip board. The alternate top bevel teeth,  $5^{\circ}$  hook angle and high tooth count make this blade perfect for use on table and miter saws.

Alternatively the 10" x 60 tooth thin kerf blade gives superior results when cutting expensive stock in addition to everyday hard and soft woods and composites. The thin kerf with a 15° hook angle makes this blade a good choice for less powerful saws. Not recommended for use on radial arm saws.





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- CNC tensioned and balanced.
- Specially formulated silver-copper-silver braze.







Blac Diam inches		No. of Teeth	Type of Grind	Hook Angle	Bore Diameter	Kerf Thickness	Plate Thickness	Order No.	List Price \$
10"	254	60	ATB	5°	5/8"	0.102	0.079	205.060.10	88.50
Thin-Ker	ſ								
10"	254	60	ATB	15°	5/8"	0.094	0.063	206.060.10	88.50

# **Compound Miter**



### - 207 CARBIDE TIPPED

The CMT compound miter saw blade was developed with one purpose - to be an excellent all purpose blade on 8-1/2" compound miter saws. Try it on the Hitachi C8FB and judge the exceptional performance quality for yourself.

The negative hook keeps the work piece in place and in line with the fence while the combination of thin kerf and negative hook prevent the blade from climbing. For the ultimate finish on molding plywood and laminates, see our compound miter and radial blades.





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# **Compound Miter & Radial**

Miter and radial arm saws offer you a wide range of uses, so CMT gives you a compound blade designed to meet their specifications.

- the -5° hook angle, thin kerf and high tooth count allow you to make splinter-resistant top and bottom cuts in plywood, hardwoods, softwoods and laminates.
- the negative hook keeps the blade from climbing at aggressive feed rates.

With these features, CMT blades offer super performance on radial arm and miter saws and guarantee you a safer, more efficient working environment.





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- Laser cut blade body from 42-44 Rockwell hardness level high grade German steel.
- CNC tensioned and balanced.

30

Specially formulated silver-copper-silver braze.



Blac Diame inches		No. of Teeth	Type of Grind	Hook Angle	Bore Diameter	Kerf Thickness	Plate Thickness	Order No.	List Price \$
8-1/2"	216	60	4ATB+1TCG	- 5°	5/8"	0.118	0.098	219.060.08	77.90
10"	254	80	4ATB+1TCG	– 5°	5/8"	0.118	0.098	219.080.10	105.50
12"	300	90	4ATB+1TCG	– 5°	1"	0.118	0.098	219.090.12	141.50
14"	350	100	4ATB+1TCG	– 5°	1"	0.118	0.098	219.100.14	150.90
15"	380	100	4ATB+1TCG	– 5°	1"	0.118	0.098	219.100.15	155.90
16"	400	110	4ATB+1TCG	– 5°	1"	0.118	0.098	219.110.16	173.90

219 CARBIDE TIPPED -



### - 213-214 CARBIDE TIPPED

The NEW CMT **\*** General **\*** blade has taken the place of the 50 tooth combination blades for discerning woodworkers to become the best all-around blade. **\*** General **\*** provides excellent results, whether cross cutting or ripping, on the table saw. The consistent distance between each ATB tooth in conjunction with less teeth than a standard blade (40 versus 50) AND the 18° hook angle all add up to beautiful glue line rip cuts and smooth-as-glass crosscuts in both the top and bottom cut! Gives beautiful results in hardwoods, softwoods and plywood veneer.

NOTE: We recommend the CMT Combination Blades, items 215 and 216, with Radial Saw and Miter Boxes for general purpose work.





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- CNC tensioned and balanced.
- Specially formulated silver-copper-silver braze.









## Combination

### 215-216 CARBIDE TIPPED —

Versatility and capacity - our combination blade offers you the best of both worlds. Whether ripping or crosscutting you can work a wide range of materials with accuracy and efficiency. CMT employs an innovative tooth design which places a triple chip grind on every fifth tooth to clean out material and run a cleaner cut. This tooth design guarantees you a finish you can't get from ordinary combination blades. With the addition of antikickback shoulders and noise reduction slots, the CMT combination blade ranks first in its class. A must for professional woodworkers.







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- Laser cut blade body from 42-44 Rockwell hardness level high grade German steel.
- CNC tensioned and balanced.
- Specially formulated silver-copper-silver braze.

	Hade											
I inche	Blade Diameter es mm	No. of Teeth	Type of Grind	Hook Angle	Bore Diameter	Kerf Thickness	Plate Thickness	Order No.	List Price \$			
8"	203	40	4ATB+1TCG	12°	5/8"	0.126	0.087	215.040.08	66.90			
10'	' 254	50	4ATB+1TCG	12°	5/8"	0.126	0.087	215.050.10	81.50			
12'	' 300	60	4ATB+1TCG	12°	1"	0.126	0.087	215.060.12	113.90			
14'	' 350	70	4ATB+1TCG	12°	1"	0.138	0.098	215.070.14	141.50			
Thin	-Kerf											
10'	' 254	50	4ATB+1TCG	12°	5/8"	0.094	0.063	216.050.10	81.90			

# **Cabinetshop Blade**



Triple Chip



### - 221 CARBIDE TIPPED

The 10" x 60 Tooth CMT Cabinetshop Blade is sure to become a "standard" in the shop. The CMT Cabinetshop Blade, with alternating Triple Chip - Flat Top Grind and deeper gullet design, allows you to rip or crosscut with splinter free results in both hard and soft wood. Performs well also in laminates and plywood. The all-around performance of the CMT Cabinetshop Blade guarantees it will be an excellent value in a shop of any size.





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- CNC tensioned and balanced.
- Specially formulated silver-copper-silver braze.





Blac Diam inches		No. of Teeth	Type of Grind	Hook Angle	Bore Diameter	Kerf Thickness	Plate Thickness	Order No.	List Price \$
10"	254	60	1TCG+1FTG	10°	5/8"	0.126	0.087	221.060.10	70.90
12"	300	72	1TCG+1FTG	10°	1"	0.126	0.087	221.072.12	80.90



### **Melamine & Fine Cut Off**

**O** CARBIDE TIPPED

The ultimate in finish blades! CMT puts a 40° top tooth angle on its blades to provide flawless finishing on single and double laminates, melamine hard and soft woods this means absolutely minimal chipping on double face material! The melamine and fine cut off is excellent on large miter saws for complex angle cuts where accuracy is a must.





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- CNC tensioned and balanced.
- Specially formulated silver-copper-silver braze.







Blac Diame inches		No. of Teeth	Type of Grind	Hook Angle	Bore Diameter	Kerf Thickness	Plate Thickness	Order No.	List Price \$
8"	203	60	ATB	5°	5/8"	0.126	0.087	210.060.08	77.90
10"	254	80	ATB	5°	5/8"	0.126	0.087	210.080.10	104.90
12"	300	96	ATB	5°	1"	0.126	0.087	210.096.12	145.50

40°

### **Precision Dado**





### - 230 CARBIDE TIPPED

CMT thoroughly researched the shortcomings in "standard" dado sets and found out what cabinet makers required most from their ideal dado.

Result the superior CMT precision dado, designed with the following features:

- anti-kickback design to reduce the possibility of overfeeding that can occur when cutting mass material.
- splinter resistant cuts in veneer plywood, melamine and hard and soft woods; CMT also offers a 3/32" chipper made especially for under size plywood
- Four tooth chippers keep the cut flat and virtually free from tear out.
- shim sets included for cuts between 1/4" and 29/32".

#### Unlike other dadoes, CMT gives you:



Precise cuts for accurate fitting dado-groove joints



Carbide tipped four tooth chippers.



Splinter resistant cuts in all

Sturdy reusable Patented carrying case.



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- CNC tensioned and balanced.
- Specially formulated silver-copper-silver braze.







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CMT blade designers and technicians present the new Non-Ferrous Metal Saw Blade with the high quality performance you expect from CMT. Key features include high impact strength teeth made from special formulation carbide, a triple chip tooth configuration for longevity and a close tooth-to-body ratio - .112 tooth to .098 blade plate - gives better support to the tooth. The -7° hook angle provides controlled cutting for a smooth finish, without collapsing channel or storm window frames. Special gullet design allows for efficient chip evacuation. The CMT Non-Ferrous Metal blade is ideal for miter, radial and table saws and gives an optimum performance cutting aluminum, brass and other non-ferrous metals.

NOTE: We highly recommend using a liquid lubricant. Wax stick for lubrication NOT RECOMMENDED.





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Blad Diame inches		No. of Teeth	Type of Grind	Hook Angle	Bore Diameter	Kerf Thickness	Plate Thickness	Order No.	List Price \$
8-1/2"	216	60	1TCG+1FTG	-7°	5/8"	0.122	0.098	225.060.08	72.90
10"	254	80	1TCG+1FTG	-7°	5/8"	0.122	0.098	225.080.10	92.90
12"	300	96	1TCG+1FTG	-7°	1"	0.122	0.098	225.096.12	114.90

# Saw Blades & Accessories



### **Biscuit Joiner blades**

#### 240-241 CARBIDE TIPPED

The new 4" CMT Biscuit Joiner blades with trademark orange Teflon® Industrial coating make biscuit ioining auick and easy. High-grade German steel and 8 micrograin carbide tipped teeth guarantee years of use. Fits Lamello, DeWalt, Porter-Cable, Skil, Bosch, Freud and other popular biscuit joiners models (see spec chart below).

Blae Diam inches		Plate Thickness	No. of Teeth	Bore Diameter	Order No.	List Price \$			
Blade for Lamello, DeWalt, Skil, Bosch, Freud & similar biscuit joiners									
4"	100	0.110	8	22 mm	240.008.04	33.50			
Blade for Porter Cable biscuit joiner									
4"	100	0.122	8	22 mm	241.008.04	33.50			



#### Saw Blade Carry Case U.S. Patent No. Des. 397,934

Keeping your blades clean and stored properly is the key to longer blade life - so the CMT technical department designed this sturdy, HDPE plastic reusable blade case for you to keep all your CMT blades. Available in 3 sizes to fit most saw blade diameters.

Description	Blade Diameter	Order No.	List Price \$
Blade case - small	up to 7-1/4"	03.51.0206	10.90
Blade case - medium	from 8" to 10"	03.51.0207	10.90
Blade case - large	from 12" to 14"	03.51.0208	10.90
SPARE PARTS: Screw		990.012.00	0.40

### **Balance Blade & Sanding Disk** 299.111/112

Before starting a saw project, balance your CMT blade in your table saw first with the CMT Balance Blade & Sanding Disk. Mount the Balance Blade & Sanding Disk in your table saw and line it up with a square for accuracy. Remove the balance blade and mount your saw blade for true and precise cuts. Use the

Description	Disk Diameter	Bore Diameter	Order No.	List Price \$
Balance blade & Sanding disk	8"	5/8"	299.111.00	22.50
Balance blade & Sanding disk	10"	5/8"	299.112.00	33.50

#### Saw Blade Stabilizers 299.101/102

The CMT Blade Stabilizer virtually eliminates rim vibration to make cleaner, straighter cuts and extend the life of your CMT saw blade. It also helps to eliminate distracting noise caused by vibration during cutting. NOTE - for use on stationary saws only. Each order includes 2 Stabilizers.

Description	Disk Diameter	Bore Diameter	Order No.	List Price \$
Stabilizers for 8" blades	3"	5/8"	299.101.00	22.50
Stabilizers for 10" blades	5"	5/8"	299.102.00	25.90



Blade not included



