blade and bit cleaners

Which ones work best?

If cleaning your saw blades and router bits sits near the bottom of your "to-do" list, you may be shortening the life of your carbide cutters. We tested eight products and several home remedies to see which work fastest and safest.

he crud that inevitably builds up behind the carbide teeth and cutters on your saw blade and router bits is more than just an unwelcome nuisance. It affects the quality of your work by requiring more feed pressure to make the cut and burning the edges. In fact, cutters and blades with excessive buildup are sometimes mistaken for dull. A thorough cleaning often can rejuvenate a cutter's performance faster (and cheaper) than sending it to the sharpening shop.

Keeping your cutters clean has another less obvious benefit. Left unchecked, resins and pitch from wood and adhesives from man-made products (such as plywood and MDF) can corrode the blade or router-bit body and deteriorate the carbide. Such deterioration hastens dulling.

Job one: Making the mess

To ensure that all cleaners in our test had to deal with the same quality and quantity of gunk, we got ahold of new Freud LU74M 80-tooth crosscut blades, installed each one *backward* on a tablesaw (to speed the gunking-up process), and then ripped equal lengths of pressure treated pine. To see how a factory-applied nonstick coating might affect the performance of the cleaners, we repeated the filthing on Freud LU74R blades (the nonstick-coated version of the LU74M). Next, we marked each blade into 6-tooth sections that fit easily into shallow cups filled with a cleaner, as shown in the photo, *top*.



After soaking one set of teeth for five minutes (5M) in CMT 2050, most of the buildup wiped away easily. Note the dark deposits left in the soaking cup from the action of the cleaner alone. The "control" section shows the condition of the uncleaned teeth.

For each cleaner, we soaked one set of teeth for five minutes, and then gently wiped the teeth with a clean rag and noted how much buildup was left behind. If the cleaner removed all of the filth, we graded it with an "A" and stopped testing. If any residue remained, we soaked the next section for 30 minutes, wiped, and graded again. If needed, we then soaked the next group of teeth for 5 hours, wiped and graded. The grades for all three soaking times are shown in the chart on page 22.

Consider safety and speed

Take a look at the Safety column on the chart, and you'll see that these cleaners and

home remedies run the gamut from mild to dangerous. Pay special attention to those that are flammable and/or corrosive: Those products can cause bigger problems than a dirty blade if mishandled or misused. Even if a product label doesn't specifically instruct you to do so, protect your hands and eyes.

The fumes from some products, such as oven cleaner and Sprayway Saw Cleaner, are strong enough to catch in the back of your throat. With these products, wear a respirator and work in a well-ventilated area.

After cleaning your blades and bits, inspect the cutting edges for cracks or chipping, and discard any cutter showing such damage. When in doubt, toss it out.

Continued on page 22

Bear these tips in mind for piloted bits

Blade and bit cleaners can rob router-bit bearings of their lubrication, which leads to premature bearing failure. Before cleaning the bit, spin the bearing by hand to ensure it turns freely. If it spins easily, remove it and set it aside; otherwise discard it and get a replacement. When the bit is clean, reinstall the bearing and treat it with a high-speed router-bearing lubricant, as shown at *right*.



blades and bits

Finally, protect them with a coating of a rust-preventative product, such as those reviewed in *WOOD*® magazine, issue 154. Boeshield T-9 (boeshield.com, 800/962-1732) earned top honors in that test.

5 lessons learned

Lesson #1: Except for oven cleaner, none of the home remedies worked as well as the specialty products formulated specifically for cleaning blades and bits. (We've heard kerosene suggested as a blade cleaner, but in our tests, it had no effect at all, so we left it out of the chart.)

Lesson #2: If you're not in a big hurry, all of the specialty products cleaned very well with a five-hour soaking.

Lesson #3: On nonstick-coated blades, all of the specialty products cleaned well enough after five minutes to put the blades or bits back to work. For this luxury, you'll pay only \$5–\$10 more per blade than

uncoated blades. Money well spent, in our opinion.

Lesson #4: Two cleaners removed all of the gunk after only five minutes on uncoated blades—Sprayway Saw Cleaner and Empire BladeSaver. When you factor in product safety, we have to go with BladeSaver, which is virtually harmless and can be rinsed or dumped down

danger of polluting.

Lesson #5: In a pinch, oven cleaner will do the trick, but use it with caution and plenty of ventilation. Know, too, that blade makers caution that it may damage your blade.

the drain without

rell
Ster atted

These two blades demonstrate grades
A through D on the chart. An F grade

indicates that the cleaner had no

apparent effect on the blade grime.

CUTTING THROUGH THE CRUD: PERFORMANCE GRADES FOR BLADE AND BIT CLEANERS											
		CLEANING EFFECTIVENESS AFTER SOAKING (1)					5	/	L ®		
/			UNCOATED BLADE			NON-STICK COATED BLADE			/8	ENT	
/ /			30 MINUTES 5 HOURS		2 / E	5 MINUTES 30 MINUTES 5 HOURS			ATED	BEATMENT (2)	
	MANUFACTURER'S SUGGESTED	MIN	MIN	5 HOURS	MINU	MIN	5 HOURS	/	STIM	<u>e</u>	FOR MORE
CLEANER	APPLICATION METHOD	3	30	2	15	8	3	SAFETY	m g	PRICE (3)	/ INFORMATION:
SPECIALTY PRODUCTS											
BOESHIELD BLADE AND BIT	Spray and let soak for 30–60 seconds. Wipe dry.	В	A-	Α	Α	*	*	Nonflammable. Eye and skin irritant. Gloves recommended.	.18	\$9 for 8.5 oz.	800/962-1732 www.boeshield.com
CMT FORMULA 2050	Spray and allow to soak for a few minutes. Wipe with rag or sponge.	A-	A-	Α	Α	*	*	Biodegradable, non-toxic, and nonflammable. Mild eye irritant.	.48	\$12 for 18 oz.	888/268-2487 www.cmtusa.com
EMPIRE BLADE SAVER	Wet blade and work with soft bristle brush, if neccesary. Rinse with water and air dry.	Α		*	Α	*	*	Water-based. Eye and skin protection recommended.	.08	\$17 for 16 oz.	866/700-5823 www.empiremfg.com
LENOX WOOD PITCH CLEANER	Soak tools to remove pitch. Also can apply before cutting to prevent buildup.	В	В	Α	A-	А	*	Nonflammable. Eye protection recommended.	.25	\$3 for 8 oz.	800/642-0010 www.lenoxsaw.com
OXISOLV	Spray or soak for a few minutes, rinse with water, and wipe dry.	В	В	А	Α-	А	*	Eye and mild skin irritant. Nonflammable. Low flammability.	.91	\$10 for 20 oz.	800/594/9028 www.oxisolv.com
PITCH RX	Soak blade or bit in product for 2–3 minutes. Rinse with water and dry.	В	A-	Α	Α	*	*	Biodegradable, and nonflammable. Mild eye and skin irritant.	.27	\$13 for 16 oz.	770/680-0006 www.aroundtheshopinc.com
SPRAYWAY SAW CLEANER	Spray and allow to stand for 5 minutes. Wipe with damp cloth, sponge, or paper towel.	Α	٠	*	Α	*	*	Corrosive. Wear eye, skin, and lung protection.	.63	\$5 for 18 oz.	800/332-9000 www.spraywayinc.com
WOODCRAFT RESIN REMOVER	Dilute with 4 parts water. Wipe on, brush on, or soak blade or bit in cleaner.	B-	B-	Α	A-	А	*	Mild skin irritant. Wear eye protection when mixing.	.11	\$10 for 16 oz. (makes 5 pints)	800/225-1153 www.woodcraft.com
OTHER COMMON CLEANERS											
CARBURETOR CLEANER		D	С	C-	C-	С	В	Dangerous fumes. Eye and skin irritant.			or examples of grades.
CITRUS-BASED CLEANER		F	D	C-	D-	D	В	Organic and biodegradable. Slightly flammable.		* No further t	esting needed.
FORMULA 409		C-	С	B-	A-	Α	*	Nonflammable. Eye and skin irritant.		Based on cleaning a 10" saw blade. Cost per treatment is affected by application method and cleaning efficiency. Prices current at time of article's production and do not include shipping, where applicable.	
OVEN CLEANER		Α	٠	*	A-	A	*	Corrosive and flammable. Weye, skin, and lung protection	n. g		
SIMPLE GREEN		C-	В	В	A-	Α	**	Biodegradable, nontoxic, an nonflammable. Mild eye irrit	ant.		

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