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Short Cut Cutters Edge Black STAR diamond blade cuts better & lasts longer

By Homer Robertson

A high-quality, long-lasting rotary saw blade will greatly improve your forcible-entry and rescue operations. Many fire departments still use multiply abrasive blades on their rotary saws. Although these blades get the job done, they tend to chip or crack in apparatus compartments. They are also exposed to hydrocarbon fumes from fuel cans stored in the same compartment, which are known to damage abrasive blades.

As a result, my department tested and ultimately converted to a different type of blade, the Black STAR diamond blade by Cutters Edge, for use on our rescue-style rotary saws. The Black STAR is produced using a process called vacuum brazing, which exposes more of the diamonds while using less of the bonding material to hold the diamonds in place. Vacuum brazing provides superior bonding and allows the blade to last longer, cut faster and run cooler than other blades we tested.

We tested the Black STAR on all types of jobs, such as aluminum overhead doors and several heavy gauges of steel, including burglar bars. As far as metal goes, there wasn't much the Black STAR couldn't handle. It was also very effective on reinforced concrete, even without using water. (Water did improve the cutting operation by reducing dust and keeping the blade cooler.)

The one operation in which the Black STAR didn't perform as well: cutting wood. It *will* cut wood, just not as aggressively or quickly as regular blades.

At first glance, the cost for the Black STAR seems high—more than \$400 per blade—but when you compare its life expectancy to that of a standard multiply abrasive blade, the Black STAR wins hands down. Cutters Edge states the blades will last up to 100 times longer than a standard rotary-saw blade.

Although I can't confirm this number because we've used the blades for just over a year, I can tell you some of our blades have exceeded 50 times the life expectancy of a standard blade and are still going strong.

Compared to the cost of an abrasive blade (around \$10 per blade), a blade that lasts 50 to 100 times longer than a regular blade is worth \$500–\$1,000—

Cutters Edge Black STAR Diamond Saw Blade

Pros

- + Cuts all types of metal and reinforced concrete;
- + Lasts much longer than regular rotary blades;
- + Resists damage from hydrocarbon fuels; and
- + Very durable.

Cons

- High initial cost; and
- Not as effective when cutting wood.

Cutters Edge

P.O. Box 1179
Julian, CA 92036-1179
Tel: 800/433-3716
Fax: 760/765-0594
E-mail: info@cuttersedge.com
Web: www.cuttersedge.com



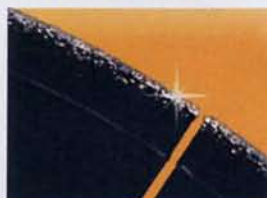
PHOTO: GLEN ELLMAN

The Fort Worth Fire Department has been using the Black STAR on its rescue-style rotary saws for more than a year. The blades have exceeded 50 times the life expectancy of regular blades.



PHOTOS COURTESY CUTTERS EDGE

Above: The Black STAR blade proved extremely effective on aluminum and steel.



Left: The blade is produced using vacuum brazing, which exposes more of the diamonds.

more than justifying the higher initial cost.

Another great advantage of the Black STAR: Your crews don't have to stop and constantly replace worn blades. Black STAR blades can also be stored in the same apparatus compartment as extra fuel without concerns about damage.

The Black STAR blades are available in three sizes—12", 14" and 16"—for different fire service needs.

Fire departments large and small are realizing the benefits of this blade. My own department placed Black STAR diamond blades in 25 of our rotary saws more than a year ago. Reports from the fire companies are nothing but positive. In the past year of service, we have not changed out a single blade from wear due to training or actual fireground use.

The Cutters Edge Black STAR diamond blade gets high marks for its durability with fire department rotary saws.

Captain Homer Robertson has been involved in the fire service since 1978, starting as a volunteer with the Granbury (Texas) Fire Department, of which he is a life member. He has served the Fort Worth Fire Department since 1985, currently in charge of the fire equipment division, which includes the apparatus fleet.