

# RIDE4EVER

## FOR MOTORCYCLISTS, BEING SEEN BY OTHER DRIVERS IS CRITICAL

### Be Seen: It May Just Save Your Life

by Keith W. Strandberg

Source: RoadBike Magazine

For motorcyclists, being seen by other drivers is critical. How many times have you heard the excuse "I didn't even see him"?



Unfortunately, most motorcycle gear -- jackets, pants, gloves, bags, and more -- is made in black and shades of gray, so bikes and their riders are hard to see, especially at night. Luckily, many clothing and accessory manufacturers are incorporating the latest in reflective technology into products.

In the past, being seen often meant looking like a traffic cone, wearing a combination of Day-Glo colors and reflective panels and tape. Safety-conscious riders can still go that route. For instance, check out the ANSI High Visibility Traffic Vests offered by Major Safety and the reflective products offered by Mutual Industries. But advances in reflective technology also mean you can be stylish and still be easily spotted.

### What Is Reflectivity?

Reflective material is really retro-reflective, where the light is reflected back to its source. There are two basic types of retro-reflective materials: glass bead and microprism.

In a glass bead system, light strikes the back surface of the bead and is returned to its source. In the microprism material, light enters through the surface of the material and bounces around inside the prism before returning to its source.

Because the prism has more reflective surface area than a glass bead, microprisms reflect much more light. Microprism technology also is more efficient than glass sphere, but it's about two to three times the cost.

Remember, though, light has to hit the surface of the reflective material for it to be bounced back. All the reflective material in the world won't make you more visible if no light hits it.

### High-Vis Colors

High-vis colors, like bright orange, Day-Glo yellow, or lime yellow, are effective in the daytime, although they don't do much in the dark. Lime yellow is increasingly the color of choice for people whose lives depend on being seen, such as policemen, firefighters, and roadside workers.

Blauer Manufacturing, a law enforcement clothing company, designs

all its products with some accommodation for visibility, according to President Stephen Blauer. "There is daytime visibility, and there is nighttime visibility," he says. "In order to get adequate daytime visibility, you need high-visibility fluorescent fabrics, and we choose fluorescent lime yellow. For nighttime, we use retro-reflective materials like Scotchlite."

Manufacturers also make riding clothing in high-visibility colors. For example, Aerostich offers riding gear in easily seen, screaming yellow. "For our clothing, we have been using Hi-Viz Lime Yellow for about three or four years," says Andy Goldfine, president and founder of Aerostich. "It's our newest color. Research determined lime yellow was the most easily perceived and optically recognizable."

Most rain gear companies also offer the one- or two-piece suits in a high-vis color, plus built-in reflectivity. One favorite is the bright-orange and black Gore-Tex rain jacket made by Harley-Davidson, which features ample reflectivity, including a reflective bar-and-shield logo in back. The matching pants also have reflective trim.

The unfortunate part of high-visibility colors is that they also are highly visible when you're off the bike. Who wants to walk into the local mall looking like you just came from your part-time job directing traffic? For many motorcyclists, a welcome compromise is the safety vest, a lightweight, high-visibility reflective vest that quickly slips over (and off) your riding jacket.

Several companies, like Vision Reflective Vests, make variations on the industrial vests designed specifically for motorcycling. The Super See Me vest from WomanBiker.com offers 225 square inches of Reflexite vinyl stripes. The advantage of these vests is that they're usually made with black mesh, which lets wind through. And the only part that stands out is the reflective material.

Another good product is the Reflective Harness sold by Whitehorse Press. Made of reflective yellow webbing with a 3M reflective center and quick-connect buckles, it packs up in a sandwich-size Ziploc, so it's easy to bring along.

## Reflective Clothing

Most dedicated motorcycle clothing manufacturers have been building reflectivity into gear for years. Most textile and many leather riding jackets have at least reflective piping and logos, if not full panels of reflectivity. The styling is such that these reflective elements usually look good and may not be noticeable.

"Over a decade ago, we were probably the innovator of reflectivity," says Tom Monroe, brand manager of FirstGear. "Ours was one of the first companies to put features on a motorcycle jacket designed for safety. We build in reflectivity, armor, and ventilation systems, and we do these things because we build for motorcyclists."

"There are more varieties of reflective materials available now, so we are able to use them in different ways," Monroe adds. "Years ago, we were limited to fairly large panels. Now we have thin stripes, reflective rubber badges, piping, and more. We even use black-colored reflective material, and you don't know it's there."

One particularly effective FirstGear product is a new Gericke jacket called "Crossbones." The entire design on the back of the jacket, in addition to the piping, reflective logos, and more, is reflective.

"I think reflectivity is very important in motorcycle clothing," says Kevin Rhea, Designer/CEO of Olympia Moto Sports. "Every good motorcycle jacket should have it built in. Reflectivity is so important for safety, and we're starting to see more of it used. Now, there are

fabric panels with reflective threads actually woven into the cloth, so it can be used over a larger area. You can have reflectivity in 20 to 30 percent of a garment.

"The new technology and new colors available make it easier to design reflectivity into sharp-looking garments," Rhea continues. "In the past, you were stuck with bright silver. But now there's a charcoal-gray color, which also reflects light back. A jacket can be designed for cruiser riders, who want to be conservative and elegant, but who don't want that high tech look. I've achieved this in my designs and still built in the reflectivity I want."

Many riding gloves also have reflectivity built in. Pants also include reflective piping and reflective panels. And motorcycle footwear, from companies such as IXS, Kochmann, Oxtar, and Sidi, also increasingly features a reflective insert.

## Accessories

It makes sense to buy products that incorporate at least some reflectivity. But if you already have your bike, jacket, gloves, and helmet, all without reflectivity, you're not out of luck. There are plenty of products that allow you to add it.

"Riders put reflective tape on their helmets, on motorcycles, and we do have some sew-on and iron-on varieties so they can put it on their clothing as well," says Karl Kriegh, owner of Identi-Tape. "The adhesive varieties have a peel-off backing, so it's easy to use and very durable. It also can be difficult to remove, so you have to be careful about placing it. The Engineering Grade material is even heat-shrinkable. You can take big pieces of it, put it on a helmet, and then heat it up so it conforms to the surface of the helmet."

One cool item is the Halo, a reflective circle that goes around a full-face helmet. "The Halo is strictly a safety item," says Michael Frost, owner of MFI. "The number-one rule of riding on the street is that motorcyclists are invisible. Anything that can help is important. Anything that's retro-reflective is more effective than a light. Retro-reflective goes right back to the thing that is going to hit you.

"All helmets have a round shape, and the Halo goes all the way around your head for 360-degree coverage. The yellow and orange Halos are neon colors which could give you some daylight conspicuity, but my motto is that if drivers are going to miss the big motorcycle in the daylight, they aren't going to see some strip of tape. At night, it's a different story.

"The lower leading edge of most helmets is usually black or gray, and the Halo reflective band is dull gray during the day. So you don't have to have a big orange triangle or a yield sign on your helmet, which looks silly."

You also can add reflective tape to your motorcycle, which demands the right kind of tape, or you'll do damage to the plastic and finish of your bike. JMH Motorsport makes reflective films for visibility marking. "I deal primarily with the sport touring market, specifically motorcycles with hard bags," says Morgan Holt, president. "The film is black during the day. But when light hits it at night, it turns bright white. This film is virtually invisible on a black hard case."

The advantages of this reflective tape are that it's not gaudy or obtrusive during the day. "If you took a picture at noon of a bike with the product applied to it, you would not see it," Holt explains.

"If you take the same picture with a flash, you would see the film. It's sensitive to light during the day, but the biggest contrast is at night. In many cases, the film makes a bike look visibly larger. We mark the rear, the front corners, and the sides. Wherever light is

coming from, the film will pick it up and, being retro-reflective, return the light to its source."

Many bags also have reflective material built in. Aerostich sells a High-Viz yellow messenger bag and reflective tape that will attach to most hard surfaces.

Whitehorse Press also offers several sizes of top-quality reflective sheets and Scotchlite tape. We also like their retro-reflective American flag decals, which come in three different sizes.

## **Just Do It!**

The moral of the reflective and high vis gear story? Being seen is safer than not being seen, and anything you can do to increase your visibility makes sense.

Wear conspicuous colors, wear clothing with reflective panels or striping, or add reflective tape to the panels of your bike. The more you add, the more visible you and your bike will be. RB

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