

A Single-Use Blade That Cuts Like a Diamond

Becton, Dickinson and Company's first silicon ophthalmic blade is designed to combine diamond-like performance with single-use safety. BD's Atomic Edge blade meets all National Institute for Occupational Safety and Health guidelines for safe disposal and sharps-injury prevention. A new design feature, a non-autoclavable handle, discourages the blade's reuse. The knives also include an integrated retractable blade shield.

Audrey R. Rostov M.D., of Northwest Eye Surgeons, P.C., Seattle, has been using BD's Atomic Edge blades for about a year. "The advantages when compared to a steel blade are that the silicon blade makes a cleaner, more water-tight, accurate and smoother incision. The blade glides into the cornea nicely and is a huge improvement over steel blades," says Dr. Rostov.

While Dr. Rostov still prefers her diamond blades to those made of silicon, she says that for those surgeons who don't have access to or do not want the expense and upkeep of the diamond blades, the silicon blades are a good alternative. "I use diamond blades when I operate in my own ASC, but when I do cases at the local hospital or other surgery centers, I use the silicon blades," adds Dr. Rostov.

Safe and Disposable

The blade's total shape is designed for incision control. "The double-bevel design assists in ensuring straight penetration in single and two-plane clear cornea incisions. The blade's



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non-sharpened sides minimize the possibility of accidental side-cutting," says Yong Sun, marketing director for the ophthalmic division of BD.

The blade tip angle and blade assembly are designed to produce the correct penetration depth, preventing over-penetration. The blade protective shield's slider mechanism is designed to open and close with an intuitive single-hand operation.

The BD Atomic Edge features an edge radius of approximately 40 nm, vs. 20 nm for the typical diamond blade and approximately 600 nm for metal. Dr. Rostov says that the smaller edge radius gives a more water-tight incision.

BD's Atomic Edge knife with silicon blade and retractable blade shield.

Dr. Rostov says that the single-use blade is safer and allows for a guarantee of a fresh, sharp blade every time. She likes the design of the blade and finds the protective covering is easy to slide back, providing an added safety benefit.

Mark Iverson, M.D., in private practice in Morrisville, Vt., who has been using BD's Atomic Edge knives for approximately 3 months, concurs. "I find the blades to be very sharp," says Dr. Iverson. He does not use a diamond blade, but says the single-use blades are always guaranteed to be sharp and sterile. "The knife is ergonomically well designed," says Dr. Iverson. "I like the safety shield that protects the knife and also protects OR personnel from inadvertent injury." **OM**

For more information on the BD Atomic Edge Blade, visit www.bd.com/atomicedge.