

Verrillon_® Handling Procedures for Acrylate Fibers

Stripping

Mechanical strippers, such as the "Miller Stripper," typically work fine. In the case of carbon-coated fiber, mechanical stripping can be more difficult because the fiber can be more brittle. A brandnew stripper is sometimes 'too sharp,' and it is very easy to break the fiber instead of stripping it (with or without carbon).

There is also a "Micro-Strip" tool kit; the tool can be set to a certain strip length, you put the fiber through the ferrule and squeeze, and it will strip the acrylate coating off. In addition, there is a "Soft-Strip" tool that is the same as the "Micro-Strip" tool except it contains a heating element to soften the coating first.

Dipping the fiber end in acetone for 30 seconds at room temperature can also help make mechanical stripping easier.

Whatever method is used—the carbon coating will not be removed from the fiber.

Cleaning/Cleaving

Clean the exposed glass by using a lint free tissue lightly moistened with 99% isopropyl alcohol. This will remove any excess coating, and will extend the life of your cleaver. There is no difference between cleaving a carbon versus a non-carbon coated fiber.

Fusion Splicing

Once a standard single-mode or multimode fiber splicing program has been chosen, ensure that the pre-fuse portion ("cleaning arc") of the program is performed at an early stage, before the fiber alignment step takes place. Generally, there is no need to change the detailed current settings of the pre-fuse step; however, the pre-fuse portion must remove the carbon from the fiber ends. If it does not, you will need to change the pre-fuse step time. The rest of the splicing process proceeds exactly as for non-carbon coated fibers. Because some of the vaporized carbon re-deposits on the surface of the electrodes, frequent cleaning of the electrodes is advised in order to have low-loss, high-strength, spliced fibers.