Splitting 24-Fiber AccuRibbon® into 12-Fiber Subunits

Contents **Section**

1. Introduction

1.1 This document describes a procedure for splitting 24-fiber AccuRibbon® into 12-fiber subunits. It is intended for personnel with prior experience splicing optical fiber cables. A working familiarity with cable splicing tools and procedures is necessary as this guide does not cover all aspects of cable or fiber splicing.

1.2 This procedure is used when high fiber-count *AccuRibbon* cables are prepared for mass fusion splicing. By splitting the 24-fiber ribbons into 12-fiber subunits, standard 12-fiber mass fusion splicing equipment can be used to splice 24-fiber *AccuRibbon* cables. Cable examples include *AccuRibbon* LXE cables with 240 - 432 fibers, *AccuRibbon* DC cables with 288 - 432 fibers, and *AccuRibbon* DuctSaver® cables with 288 - 864 fibers.

1.3 This procedure may be used for mid-span splicing only if the entire 24-fiber *AccuRibbon* will be cut dead ahead. Otherwise, the 24-fiber *AccuRibbon* must be accessed using procedures described in OFS document IP-059, *Ribbon Access Kit, Glue – Tape Method*. Alternatively, the 24-fiber *AccuRibbons* can be split into 12-fiber subunits using a Fitel S233 Ribbon Splitter. Please contact OFS Customer Service at 1-888-FIBER-HELP (1-888-342-3743) for further information regarding the Fitel ribbon splitter.

1.4 An OFS 1050 core tube entry tool can be used to open the core tube and access the fiber ribbons. Core tube entry tools are available in several sizes to match the outside diameter of the core tube as described in IP-045, *1050 Core Tube Entry Tools*. The following instructions assume that the ribbons have been accessed and cleaned using the appropriate procedures.

1.5 The following procedure outlines a simple and fast method for dividing a 24-fiber ribbon into two 12-fiber subunits using a dental floss pick. The dental floss picks are available in OFS ribbon access kits or they may be obtained locally at most pharmacies.

2. Ribbon Splitting Procedure

2.1 Cut the end of the ribbon at a 45° angle.

2.2 Grasp the ribbon between your thumb and forefinger about 3/8-inch (10 mm) from its end. Flare the end of the ribbon by rubbing the pointed end of the dental floss pick back and forth across the cut end of the ribbon. The rubbing action causes the matrix material to flake off the end of the ribbon and leaves a short length of exposed fibers at the end of the ribbon.

2.3 Slightly open the flared end of the ribbon between the aqua (12) and blue (13) fibers and insert the dental floss between them (see Figure 1). Hold the floss perpendicular to the ribbon surface and slide it through the midline of the ribbon to the desired separation length.

2.4 After separating the ribbon into two 12-fiber subunits, cut off the loose fibers from flared end of each subunit. This will prevent individual fibers from separating from the subunits. Avoid sharp twisting and bending of the ribbon subunits during handling.

2.5 The 12-fiber subunits can now be spliced using standard 12-fiber mass fusion splice equipment and techniques.

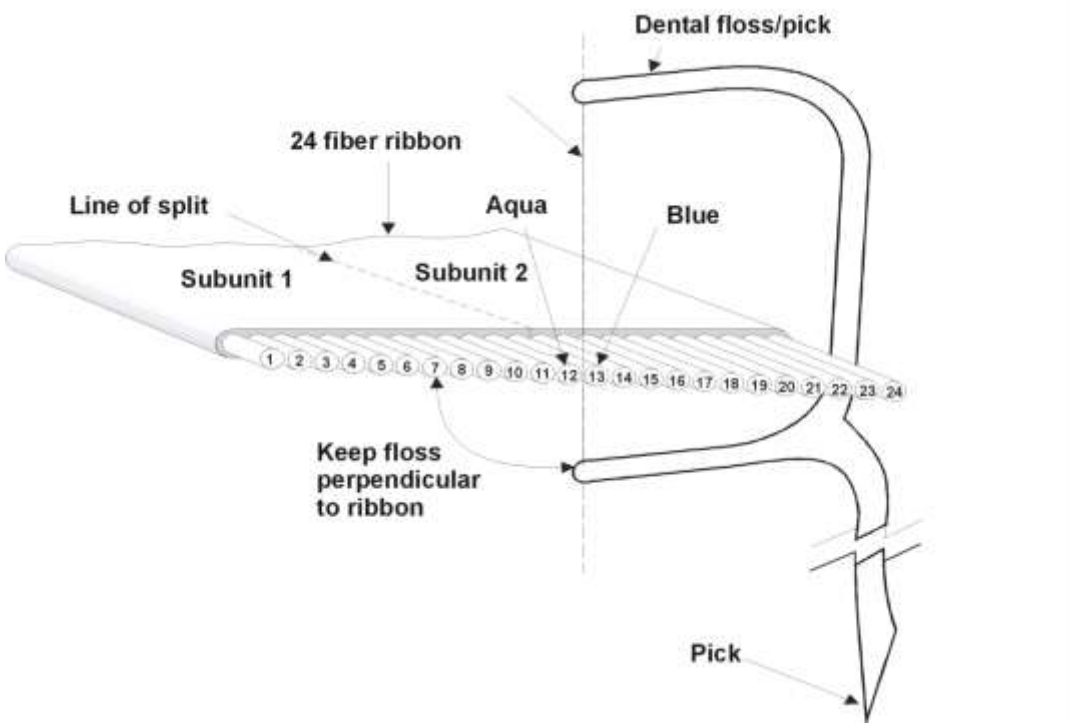

Figure 1. Splitting 24-fiber *AccuRibbon* using a dental floss pick.

For additional information please contact your sales representative. You can also visit our website at www.ofsoptics.com or call 1-888-FIBER-HELP (1-888-342-3743) from inside the USA or 1-770-798-5555 from outside the USA.

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