

## SP500 Polishing Machine Polishing Process for Pre-Radiused Ceramic Ferrule, Single-Mode, Nonpedestal, Angled PC <-65dB Return Loss

This process is designed to yield typical reflectance of  $\leq -65$  dB. SP500-NPAPC Single-Mode Angled PC Connector Polishing Kit contains all film consumables and slurry required for this process.\* Other necessary items include alcohol, a polishing pad, compressed air, and distilled water.

### Notes:

- a. A 70 durometer polishing pad is required for this process.\*\*
- b. Set pressure adjustment to "A" while raising or lowering the overarm. This step is very important to prevent crashing connector end-faces.
- c. Start timer cycle with the pressure adjustment set on "A". After the film is rotating, set pressure as indicated in the process.
- d. Prior to placing the connectors into the polishing fixture, remove the sharp glass cleave and flush the fiber to the bead using the green film in a circular motion by hand.
- e. Steps 2-4 require an even layer of slurry over the polishing films.
- f. All times and pressures are based on Corning Cable Systems connectors and fiber using F-123 epoxy.
- g. Bead removal step 2 cycle time is dependent on bead size and epoxy type.
- h. Secure film to rubber pad with a 0.5-in. piece of double-sided tape placed in the center of the pad.
- i. Clean polishing film with alcohol and blow dry prior to use.
- j. If rework is required, return to step 3. The puck must be full for optimum rework; use "dummy" connectors to fill incomplete pucks.

| Process for FC Connectors<br>(12-Port Puck) |                                  |                  |                   |                      |
|---|----------------------------------|------------------|-------------------|----------------------|
| STEP No.                                    | FILM Part #                      | PRESSURE Setting | TIME (in seconds) | PUCKS per film usage |
| 1   | 95-430-AO Green                  | see note "d"     | N/A               | 4                    |
| 2   | 95-406-DIA Brown w/slurry        | D                | 45                | 5                    |
| 3   | 95-401-DIA Lavender w/slurry     | D                | 45                | 5                    |
| 4   | 95-40005-AO Pale Yellow w/slurry | D                | 12                | 1                    |

| Process for SC Connectors<br>(12-Port Puck) |                                  |                  |                   |                      |
|---|----------------------------------|------------------|-------------------|----------------------|
| STEP No.                                    | FILM Part #                      | PRESSURE Setting | TIME (in seconds) | PUCKS per film usage |
| 1   | 95-430-AO Green                  | see note "d"     | N/A               | 4                    |
| 2   | 95-406-DIA Brown w/slurry        | D                | 45                | 5                    |
| 3   | 95-401-DIA Lavender w/slurry     | D                | 45                | 5                    |
| 4   | 95-40005-AO Pale Yellow w/slurry | D                | 12                | 1                    |

\*Film (packs of 50 sheets) and slurry may also be ordered separately using the "95-XXX-XX" number.

\*\*70 durometer pad may be ordered by using the Corning Cable Systems part number 95-501-78.

Customer Service—US or Canada: 1-800-743-2671  
 International: +1-828-901-5000  
 Fax: +1-828-325-5060

Corning Cable Systems LLC, PO Box 489, Hickory, NC 28603-0489 USA

<http://www.corning.com/cablesystems>



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