

OFS Field Polishing Procedure Comparison

LC Polishing Comparison

New Universal Process (Requires Pre-radiused LC Connectors)			Old Process (Uses flat-tipped LC Connectors)		
Step	Polishing Material	Number of Figure-8 Strokes	Step	Polishing Material	Number of Figure-8 Strokes
1 (SM & MM) Air Polish	Type G (green) Paper	As Required	1 (SM & MM) Air Polish	Type J (purple) Paper	As Required
2 (SM & MM) Dry polish to remove adhesive/epoxy	Type G (green) Paper over four spacers (clear) over 5" dia. Universal Polishing Pad	EZ Adhesive: 30 strokes, then as required Epoxy: 45 strokes, then as required	2 (SM & MM) Dry polish to remove adhesive/epoxy	Type J (purple) Paper over one spacer (clear)	20 strokes, then as required
3 (SM) Wet polish with distilled water	Type M Paper over four spacers (clear) over 5" dia. Universal Polishing Pad	10 strokes	3 (SM & MM) Dry polish to dome ferrule	Type F (yellow) Paper over five spacers (clear) & foam	20 strokes
			4 (SM) Dry polish to improve dome surface finish	Type K (grey) Paper over five spacers (clear) & foam	20 strokes
			5 (SM) Wet polish with distilled water to improve return loss	Type L (purple) Felt	20 strokes
Repairs (If necessary)	Type F (yellow) Paper over four spacers (clear) over 5" dia. Universal Polishing Pad	5 strokes, then as required to remove flaw (10 strokes max). For SM, after flaw is removed, repeat Step 3.	Repairs (If necessary)	Type F (yellow) over one spacer (clear)	As required to remove flaw. After flaw is removed, repeat step 3 for MM or 3 thru 5 for SM.

- The Universal Polishing process reduces the number of polishing strokes for SM LC terminations by 31% for epoxy and 50% for EZ adhesive:

ex.	Current SM LC Epoxy & EZ	80 strokes
	Universal SM LC EZ	40 strokes
	Universal SM LC Epoxy	55 strokes
- The Universal Polishing process is less sensitive to installer's skill/experience. More consistent end-face geometries are achieved since LC connectors are pre-radiused and the process minimizes the amount of ceramic removed from the ferrule tip.
- More consistent optical performance is realized due to consistency of end-face geometries.
- The Universal Polishing process utilizes diamond-lapping film only during the repair step; therefore, the universal process is more cost effective than the current LC process.
- When performing an EZ termination using the Universal Procedure, the tip of the pre-radiused LC must be primed by wiping it through a drop of primer placed on a texwipe (see Doc #640-252-053-UNIV).
- The Universal Polishing process reduces the number of polishing papers required to terminate LC connectors from four (i.e. Types J, K, L, and F) to two (i.e. Types G and M).

OFS Field Polishing Procedure Comparison

SC/ST Polishing Comparison

New Universal Process (Uses pre-radiused SC/ST Connectors)			Old Processes (Uses pre-radiused SC/ST Connectors)		
Step	Polishing Material	Number of Figure-8 Strokes	Step	Polishing Material	Number of Figure-8 Strokes
1 (SM & MM) Air Polish	Type G (green) Paper	As Required	1 (SM & MM) Air Polish	Type A (brown) Paper	As required
2 (SM & MM) Dry polish to remove adhesive/epoxy	Type G (green) Paper over four spacers (clear) over 5" dia. Universal Polishing Pad	EZ Adhesive: 30 strokes, then as required Epoxy: 45 strokes, then as required	2 (SM & MM) Dry polish to remove adhesive/epoxy	EZ Adhesive: Type G (green) Paper over Paper Pad Epoxy: Type A (brown) Paper over Rubber Pad	As required Until "shiny halo" is observed on tip
3 (SM) Wet polish with distilled water	Type M Paper over four spacers (clear) over 5" dia. Universal Polishing Pad	10 strokes	3 Adhesive (SM) Wet polish with distilled water to improve return loss Epoxy (SM & MM) Dry polish to remove epoxy	EZ Adhesive: Type E (white) Paper over Paper Pad Epoxy: Type C (grey) or D (light green) Paper over Type A and Rubber Pad	10 to 15 strokes As Required
			4 Epoxy (SM) Wet polish with distilled water to improve return loss	Epoxy: Type E (white) Paper over Type A and Rubber Pad	10 to 15 strokes
Repairs (If necessary)	Type F (yellow) Paper over four spacers (clear) over 5" dia. Universal Polishing Pad	5 strokes, then as required to remove flaw (10 strokes max). For SM, after flaw is removed, repeat Step 3.	Repairs (If necessary)	EZ Adhesive: Type F (yellow) over Paper Pad and Rubber Pad Epoxy: Type F (yellow) over Type A and Rubber Pad	20 to 40 strokes, then as required to remove flaw. After flaw is removed, repeat step 3 for SM. 20 to 40 strokes, then as required to remove flaw. Repeat step 4 for SM.

1. The Universal Polishing process reduces the number of polishing papers, required to terminate epoxy and EZ, SC and ST connectors, from four (i.e. Types A, D, G, and E) to two (i.e Types G and M).
2. Using the Type M Paper during the final polishing step for SM will provide > 50 dB return loss. The current process, using Type E paper, produces > 40 dB return loss for SM terminations.