

Single Fiber Ferrule QC Process

- All ceramic single fiber ferrule connectors are polished utilizing one of our mass production polishing platforms. This includes 1.25mm ferrules (LC, LC APC, MU etc) and 2.5mm ferrules (SC, SC APC, FC etc).
- Following a complete polishing cycle the connectors are removed from the polishing fixture and cleaned and inspected for visual acceptance criteria. A 200x high contrast video inspection station situated at the polishing stations is utilized to make the inspection. If deemed acceptable, the connector is capped with a production dust cap and passed through to the testing station.
- All cleaning is performed with a lint free wipe (optical grade) and Reagent grade isopropyl alcohol (99%).
- Any inspection found to not meet the criteria results in routing the connector back through the polishing stage.
- Polished connectors are inspected, and cleaned if necessary, prior to installing them into the launch connector on one of our IL/RL test sets. Tests are performed at 1550nm.
- IL and RL values are obtained and recorded on the test sheet associated with the Work-order.
- Following an acceptable test for IL & RL the connector end-face is inspected utilizing our high contrast 200x video inspection system located at each test station. If visual inspection criteria are acceptable the connector is capped with a non production, clean, dust cap.
- Each assembly is serialized for traceability and all test results are saved and archived.
- Any visual inspection failure results in the connector being re-routed through polishing to repair the end-face quality. If re-polished, the assembly is subjected to a repeat test for IL & RL.
- Cable assemblies are routed to packaging area following complete testing. Dust caps are not removed again prior to shipping to the Customer.