In keeping with the tradition of continuous improvement and state of the art facilities, The Okonite Company has recently opened a new cable flame test laboratory.

The new facility is located in Orangeburg, South Carolina adjacent to the Okonite's Compound and Cable Manufacturing plants.

Okonite was instrumental in the vertical tray cable flame test development. The new laboratory replaces Okonite's Passaic, NJ facility where the vertical tray flame test procedure was developed in the early 1970's and where the IEEE ICC 12-32 working group fine-tuned the IEEE 383-1974 flame test procedure. After over 40 years and several modifications, the Passaic lab was closed earlier this year.

The Orangeburg laboratory was designed by a joint team of Okonite's Research & Engineering departments and Facilities Engineering to the current IEEE 1202 and UL 1685 standards for cable tray flame propagation testing. With UL cooperation, the test chamber and equipment was constructed to match their Northbrook, IL UL 1685 vertical cable tray test facility to help assure consistent laboratory to laboratory test results.

Tests can be conducted to the following vertical cable tray flame industry standards:

- UL1685 (utilizing the 1581 or 1202/FT4 procedure)
- IEEE 1202
- IEEE 383-1974
- CSA C22.2 FT4
- ICEAT-30-520
- ICEAT-29-520 (210,000 BTU/hr)

The lab can also be utilized to measure circuit integrity in fire tests, such as, IEC 60332.

The lab is equipped with state-of-the-art instrumentation and controls. All flame tests can be viewed in real time using remote computer terminals. The technician enters the required cable construction inputs and test parameters. He then initiates the test and inputs flame heights. All test parameters (gas & air flow into the burner, draft, temperature, etc) are electronically monitored, captured and saved in a database. A test report is then computer generated for documentation.

Inside the lab is the UL & IEEE 8' by 8' flame test enclosure and exhaust duct. For low smoke cable constructions, the exhaust duct is equipped with the required smoke measuring instrumentation to determine UL 1685 compliance, a popular requirement for mass transit cables. The lab was also designed to meet all local smoke abatement requirements.

The new test facility allows Okonite to provide quick, economical test results for cable development and for customer qualification testing.