



OPTICAL FIBER CABLE FLEXIBILITY TESTING MACHINE

Torontech's TT-OFFT Series Optical Fiber Cable Flexibility Testing Machine determines the ability of an optical fiber cable to withstand repeated flexing for elevator cable and similar application. The test confirms to IEC 60794-1-2-E8 standard

Designed with pulleys having a semicircular shaped groove for circular cables and a flat groove for flat cables. Restraining clamps are fixed so that the pull is always applied by the weight from which the carriage is moving away.

According to IEC 60794-1-2-E8

APPLICATIONS

- **Elevator and Lift Cables** – Evaluates the durability of optical fiber cables subjected to continuous bending and flexing in vertical transportation systems.
- **Telecommunication and Data Transmission Cables** – Assesses long-term mechanical reliability of cables used in high-speed communication networks.
- **Industrial Automation and Robotics** – Ensures flexible cables used in robotic arms and automated machinery maintain integrity during repetitive motion.
- **Cable Assemblies in Buildings** – Tests the performance of fiber optic cables installed in shafts, conduits, and other areas requiring frequent movement.
- **Transport and Automotive Applications** – Validates the resilience of fiber cables exposed to vibration, movement, and tight installation spaces.
- **Aerospace and Defense Systems** – Confirms that specialized optical fiber cables maintain performance under repeated flexing in mission-critical environments.
- **Research and Quality Control Laboratories** – Provides manufacturers and testing labs with standardized methods to verify compliance with IEC 60794-1-2-E8.

THEORY & METHOD

The sample are stretched over the pulleys, each end being loaded with a weight. The mass of these weights and the diameters of pulleys is specified in the detailed specification The sample shall be flexed for the number of cycles specified in the detail specification.

A cycle is defined as the movement of the carriage away from its starting position to one end of the traverse, followed by movement in the opposite direction to the other end and then back to the starting position.

TECHNICAL SPECIFICATIONS

Model	TTOFCF
Carriage Stroke	1000 mm
Maximum Impact Cycles	1-9999 cycles
Speed setting Range	0-350 mm/min
Diameter of Pulley	Ø50mm/ Ø100mm/ Ø150mm/ Ø250mm/ Ø300mm
Mass of Weight	0.5, 1, 2, 3, 6
Power supply	Please specify voltage and frequency before placing the order. Power must be free of spikes and surges exceeding 10% of the nominal voltage)
Dimensions (L x W x H)	3100 x 800 x 1600mm
Weight	1000kg



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