

Bridge Cable and Rope Acoustic Emission Inspection

TISEC specializes in the nondestructive inspection of suspender cables and ropes in cable-stay and suspension bridges, using acoustic emission (AE) or wire breaks. This technology is recommended for larger diameter ropes and cables that may not be suitable for inspection with long range ultrasound.

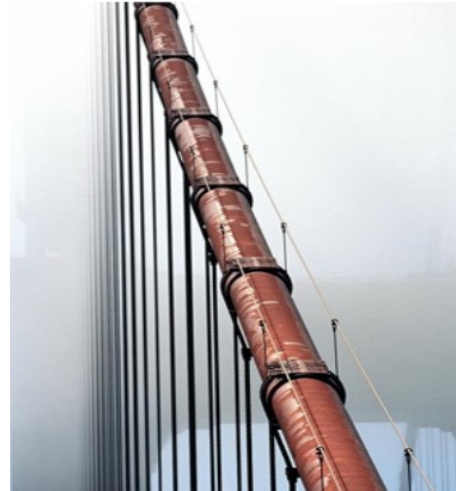
How it Works

- AE sensors are installed on accessible areas of the cables.
- Wire breaks generate acoustic wave that travels through the cable and are detected by the AE sensors.
- Based on the relative difference in acoustic wave arrival times at the AE sensors, the wire break location is identified.
- Follow-up visual inspections may be recommended based on inspection results.

Acoustic Emission (AE) Technology

Acoustic Emission technology has been utilized to provide risk-based inspection and maintenance for fracture critical members in infrastructure such as bridges and storage tanks. The technology provides real-time feedback on structural condition without the need for direct access to the area of interest.

Our American Society for Nondestructive Testing (ASNT) certified inspectors have complementary training in fall protection, rope access, highway safety, railway safety, first aid, and confined space safety.



Use CABLE^{AE} to monitor cables and ropes for wire breaks. Accurate identification of number of wire breaks and their locations are provided by this technology.

Data and reporting

Acoustic Emission data is straight forward to acquire and interpret. The obtained data could be used to schedule follow-up cable and rope inspections and maintenance procedures.

