

Electric Utility Transmission Line Reliability - EMAT

Mines researchers have developed a non-destructive monitoring and assessment technique and incorporated this concept into a device called an EMAT, or electro-magneto-acoustic transducer that enables monitoring of integrity and health assessment of conductors in ground mat risers and ACSR conductors in transmission lines. This device is in the form of a Hot Stick that can be attached to a live transmission line, by a lineman, to determine within a couple of minutes whether any mechanical damage exists in the lines (i.e. broken strands, corrosion, loss of connectivity, etc.)



Inventor: Dr. Rahmat A. Shoureshi, Dr. George Alers, Michael Chenoweth