

## Glossary

**LOGGING CABLE** — Usually FEP/Tefzel self-supporting instrumentation cable. Generally dropped through borings in subsurface mining or well applications.

**LONGITUDINAL SHIELD** — A tape shield, flat or corrugated, applied longitudinally with the axis of the cable.

**LONGITUDINAL SHRINKAGE** — A term generally applied to shrink products denoting the axial length lost through heating in order to obtain the recovered diameter.

**LONGITUDINAL WRAP** — Tape applied longitudinally with the axis of the core being covered.

**LONGWALL MACHINE** — A mining machine used to undercut coal.

**LOOP RESISTANCE** — The total resistance of two conductors measured round trip from one end. Commonly used term in the thermocouple industry.

**LOOP TEST** — A long line test where a good line is connected to a faulty line to form a loop in which measurements will locate the fault.

**LOSS** — The portion of energy applied to a system that is dissipated and performs no useful work.

**LOSS FACTOR** — The power factor times the dielectric constant.

**LOW BOND INSULATION** — An insulation that exhibits a small bond strength to the conductors.

**LOW FREQUENCY** — A band of frequencies extending from 30 to 300 kHz in the radio spectrum, designated by the Federal Communications Commission.

**LOW LOSS DIELECTRIC** — An insulating material that has a relatively low dielectric loss, such as polyethylene or Teflon.

**LOW NOISE CABLE** — A cable specially constructed to eliminate spurious electrical disturbances caused by capacitance changes or self-generated noise induced by either physical movement or adjacent circuitry.

**LOW TENSION** — Low voltage, as applied to ignition cable.

**LOW VOLTAGE** — (1) As defined in the National Electrical Code, a system rated nominal 24 volts or less, supplied from a transformer, converter, or battery, (2) A power system voltage rating of 1,000 Volts or less.

**LPF** — Low Pass Filter. A filter which greatly attenuates signals of higher than a specified frequency, but passes with minimal attenuation all signals lower in frequency.

**LUMEN** — A unit of measurement for light output.

**LV** — Low Voltage.

## M

**mA** — Milliampere (one-thousandth of an ampere).

**MAGNET WIRE** — Insulated wire used in the windings of motors, transformers, and other electromagnetic devices.

**MAGNETIC FIELD** — The field created when current flows through a conductor, especially a coiled conductor.

**MAP** — Manufacturing Automation Protocol. The OSI profile championed by General Motors Corporation to provide interconnectivity between plant hosts, area managers and cell controllers over a broadband token-passing bus network.

**MARKER TAPE** — A tape laid parallel to the conductors under the sheath in a cable, imprinted with the manufacturer's name and the specification to which the cable is made.

**MARKER THREAD** — A colored thread laid parallel and adjacent to the strand in an insulated conductor which identifies the manufacturer and sometimes the specification to which the wire is made.

**MASTIC** — A meltable coating used on the inside of some shrink products which when heated flows to help create a waterproof seal.

**MATV** — Master Antenna Television System. A combination of components providing multiple television receiver operations from one antenna or group of antennas.

**MAXIMUM CABLE DIAMETER** — The largest cable diameter that a high-voltage cable termination is designed to accommodate.

**MINIMUM CABLE DIAMETER** — The smallest cable diameter that a high-voltage cable termination is designed to accommodate.

**MAXIMUM DESIGN VOLTAGE** — The maximum voltage at which a high-voltage cable termination is designed to operate continuously under normal conditions.

**MC** — (1) Main cross-connect, (2) A UL cable type (metal clad).

**MECHANICAL WATER ABSORPTION** — A check of how much water will be absorbed by material in warm water for seven days (mg/sq. in. surface).

**MEDIUM FREQUENCY** — The band of frequencies between 300 and 3,000 kilohertz.

**MEDIUM-HARD DRAWN WIRE** — As applied to copper wire, having tensile strength less than the minimum for hard-drawn wire, but greater than the maximum for soft wire.

**MEDIUM VOLTAGE** — A class of nominal power system voltage ratings from 2 kV up to 69 kV.

**MEGA** — Prefix meaning million.

**MEGAHERTZ (MHz)** — One million cycles per second.

**MEGGER** — A special ohmmeter for measuring very high resistance. Primarily used for checking the insulation resistance of cables, however, it is also useful for equipment leakage tests.

**MELT INDEX** — The extrusion rate of a material through a specified orifice under specified conditions.

**MEMBER** — A group of wires stranded together which is in turn stranded into a multiple-membered conductor.

**MESSANGER WIRE** — A metallic supporting member either solid or stranded which may also perform the function of a conductor.

**MFD** — Microfarad (one-millionth of a farad). Obsolete abbreviation.

**MFT** — Abbreviation for 1,000 feet.

**MG** — Glass reinforced mica tape insulated cable with an overall sheath of woven glass yarn impregnated with a flame, heat and moisture resistant finish. 450°C, 600 V appliance wire.

**MHO** — The unit of conductivity. The reciprocal of an ohm.

**MHz** — Megahertz (one million cycles per second).

**MI** — A UL cable type. One or more conductors insulated with highly compressed refractory minerals and enclosed in a liquid-tight and gas-tight metallic tube sheathing.

**MICA** — A transparent silicate which separates into layers and has high insulation resistance, high dielectric strength, and high heat resistance.

