

## Glossary

**BORDER LIGHT CABLE** — Same as stage cable but more than 2 conductors. Type SO cable is often used.

**BORE HOLE CABLE** — Power and/or communication cable suspended down a vertically drilled hole to equipment underground.

**BRAID** — Textile or metallic filaments interwoven to form a tubular structure which may be applied over one or more wires or flattened to form a strap.

**BRAID ANGLE** — The smaller of the angles formed by the shielding strand and the axis of the cable being shielded.

**BRAID CARRIER** — A spool or bobbin on a braiding machine which holds one group of strands or filaments consisting of a specific number of ends. The carrier revolves during braiding operations.

**BRAID ENDS** — The number of strands used to make up one carrier. The strands are wound side by side on the carrier bobbin and lie parallel in the finished braid.

**BRAIDING MACHINE** — Machine used to apply braids to wire and cable and to produce braided sleeving and braids for tying or lacing purposes. Braiding machines are identified by the number of carriers.

**BRANCH JOINT** — A cable joint used for connecting one or more cables to a main cable.

**BRAZING** — The joining of ends of two wires, rods, or groups of wires with nonferrous filler metal at temperatures above 800°F (427°C).

**BREAKDOWN (PUNCTURE)** — A disruptive discharge through the insulation.

**BREAKDOWN VOLTAGE** — The voltage at which the insulation between two conductors breaks down.

**BREAKING STRENGTH** — The maximum load that a conductor can withstand when tested in tension to rupture.

**BREAKOUT** — The point at which a conductor or group of conductors breaks out from a multiconductor cable to complete circuits at various points along the main cable.

**BRIDGE** — A circuit which measures by balancing four impedances through which the same current flows:

Wheatstone measures resistance  
Kelvin measures low resistance  
Schering measures capacitance, dissipation factor, dielectric constant  
Wien measures capacitance, dissipation factor

**BRIDGED TAP** — The multiple appearances of the same cable pair at several distribution points.

**BRITISH STANDARD WIRE GAUGE** — A modification of the Birmingham Wire Gauge and the legal standard of Great Britain for all wires. Also known as Standard Wire Gauge (SWG), New British Standard (NBS), English Legal Standard, and Imperial Wire Guide.

**BROADBAND LAN** — LAN which uses FDM (frequency division multiplexing) to divide a single physical channel into a number of smaller independent frequency channels. The different channels created by FDM can be used to transfer different forms of information — voice, data, and video.

**BROADCAST** — The act of sending a signal from one station on a LAN to all other stations.

**B and S** — Brown and Sharpe wire gauge — same as AWG.

**BSL (basic switching impulse insulation level)** — The crest value of a switching impulse voltage of a specified wave shape which a high-voltage cable termination is required to withstand under specified conditions.

**BUFFER** — A protective coating in intimate contact with an optical fiber.

**BUILDING WIRE** — Commercial wires used in the building trades such as: Types RHH, RHW, THW, and THHN wire.

**BUNA** — A synthetic rubber insulation of styrenebutadiene; was known as GR-S, now as SBR.

**BUNCH STRAND** — A conductor in which all individual wires are twisted in the same direction without regard for geometrical arrangement.

**BUNCHER** — A machine that twists wires together in a random arrangement.

**BUOYANT CABLE** — Originally military type MIL-C-2401 with built-in floatation ability. Many applications have been developed using buoyancy to advantage — numerous types and sizes for power, communications, telecommunications have resulted.

**BURIED CABLE** — A cable installed directly in the earth without use of underground conduit. Also called "direct burial cable."

**BUS** — A network topology which functions like a signal line which is shared by a number of nodes.

**BUS-BAR WIRE** — Uninsulated tinned copper wire used as a common lead.

**BUSHING** — A mechanical device used as a lining for an opening to prevent abrasion to wire and cable.

**BUTT SPLICE** — A splice wherein two wires from opposite ends butt against each other, or against a stop, in the center of a splice.

**BUTT WRAP** — Tape wrapped around an object or conductor in an edge-to-edge condition.

**BUTYL RUBBER** — Synthetic rubber formerly used for electrical insulating purposes.

**BX** — A common type of armored building wire rated at 600 volt.

**BYTE** — Generally, an 8-bit quantity of information, used mainly in referring to parallel data transfer, semiconductor capacity, and data storage; also generally referred to in data communications as an octet or character.

## C

**C** — Symbol for capacitance and centigrade.

**CABLE** — A cable may be a small number of large conductors or a large number of small conductors, cabled together, usually color coded and with a protective jacket overall.

**CABLE ASSEMBLY** — A cable assembly is a cable with plugs or connectors on each end for a specific purpose. It may be formed in various configurations.

**CABLE, BELTED** — A multiconductor cable having a layer of insulation over the assembled insulated conductors.

**CABLE, BORE-HOLE** — The term given vertical riser cables in mines.

**CABLE CLAMP** — A device used to give mechanical support to the wire bundle or cable at the rear of a plug or receptacle.

