General Cable

Single-Source

SOLUTIONS

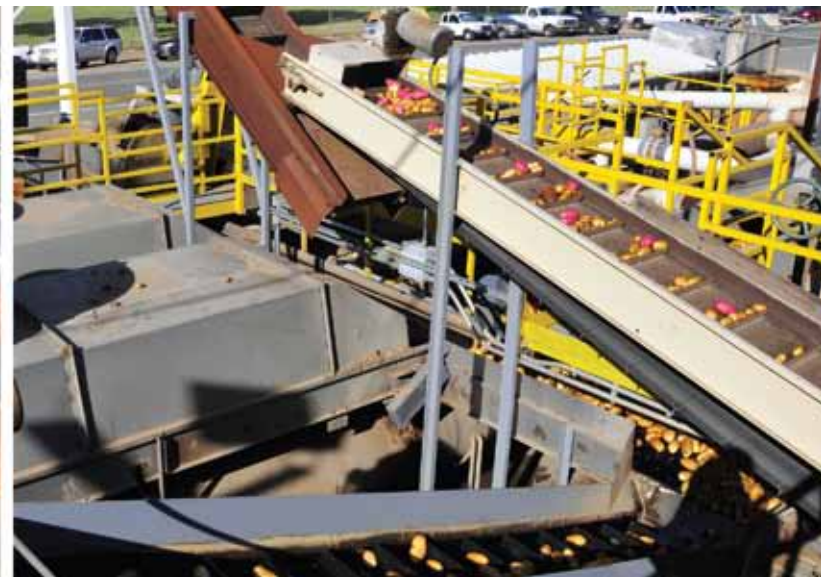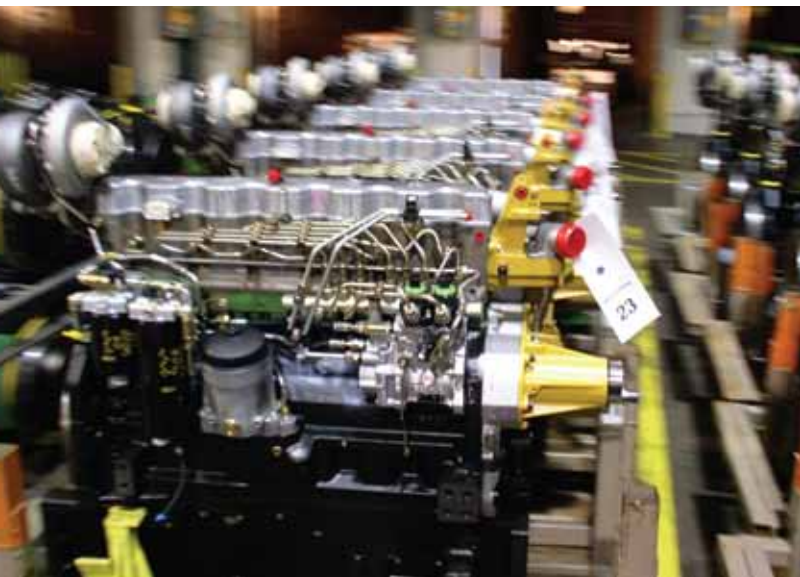### Serving the Needs of the Industrial Automation Market

**Cord Products • Industrial Cables • Datacom Cables
Fiber Optic Cables • Electronic Cables • Specialty Cables**

HERE TO SERVE

For more than 165 years, General Cable has provided the solutions that keep goods moving, products assembled and services delivered around the world. Through innovative design and engineering expertise, General Cable delivers the wire and cables that maintain ongoing productivity for an array of industrial automation and electrical distribution customers that represent a virtual "who's who" of the markets we serve.

Automotive & Consumer Products • Health Care & Medical Device Manufacturers • Pulp & Paper Industrial Equipment Manufacturers • Lifts & Cranes • Maintenance & Repair Operations Mining Equipment Manufacturers • Plants & Facilities Management • Pumps & Fountains Portable & Temporary Power Generation • Military • Refrigeration & Freezer Manufacturers

General Cable recognizes and values the importance of total customer satisfaction, and we have the experience and know-how to achieve it. Our people may come to work for us, but on the job, our Wire Wizards work for you. Put us to work and see what we can do for you.

WORLD-CLASS SERVICE & SUPPORT

Uniquely positioned to respond to the evolving needs of industrial applications, General Cable works side-by-side with customers to design innovative, cost-effective solutions that meet exact specifications while providing value-added services. Backed by an organization that is flexible and responsive with a commitment to maintaining lasting customer relationships, you can count on General Cable for superior service and support.

- Innovative cable designs for any industrial application
- Superior engineering expertise and production processes
- Advanced vertical integration capabilities
- Strong supply chain and inventory support
- Dedicated service, technical support and sales expertise

COMMITMENT TO QUALITY & THE ENVIRONMENT

General Cable is always searching for new and better ways to put quality in your product. The right mix of R&D experience, manufacturing expertise and stringent testing by the most qualified team of engineers ensures that every cable meets industry standards and offers the highest quality possible. Our Lean Six Sigma philosophy eliminates waste, non-value-added processes and sources of variation while reducing cycle-time and improving capacity, space utilization and productivity.

- ISO 9001 certified manufacturing facilities
- Ongoing process control and production management
- Quality assurance initiatives and rigorous performance standards
- R&D and innovative material development expertise
- Stringent in-house and third-party testing

General Cable is an environmentally conscious company committed to reducing and, where possible, eliminating hazardous substances. Through environmentally sound materials and production processes, our facilities have fully implemented an ISO 14001-equivalent environmental management system with strict oversight. All applicable products meet RoHS standards, and we consistently work to comply with evolving REACH requirements pertaining to wire and cable products and materials. Our revolutionary **17 FREE™** line of halogen-free datacom, fiber, cord and electronics cables feature substantiated green properties and may qualify for credits under environmental incentive programs.

General Cable

WORLDWIDE SINGLE-SOURCE SOLUTIONS

As a Fortune 500 company with more than 13,000 associates globally and 57 manufacturing facilities operating in 26 countries around the world, General Cable is positioned to meet the needs of today's industrial automation and electrical distribution customers with a diverse, industry-leading global product offering—whenever and wherever it's needed. Our products comply with major safety and performance standards and regulations around the world—from UL, IEEE and IEC to TÜV, RoHS and CSA.

Whether it's data, power, signal or control in the office, on the factory floor, inside the wind turbine or onboard an oil rig, General Cable has the electronic, industrial, data, fiber and specialty cable to keep power and information flowing and goods and services moving while ensuring maximum safety, value and long-term reliability. From special wire colors, print legends and TRU-Mark® sequential footage marking to unique materials and manufacturing requirements, General Cable has the people, equipment and experience to produce the custom cable you need.

Here is just a sampling of what is available to you:

CORD PRODUCTS

Carol® Brand leads the market. From portable cord to premium-grade **Super Vu-Tron® Supreme**, our extensive Carol line includes flexible and extra-flexible automation cable for tools, appliances, factory automation, marine, automotive, and instrumentation and controls.

INDUSTRIAL CABLES

General Cable's industrial instrumentation, power and control cables include **FREP®** and **VNTC®** Type TC cables, **Unicon®** and **DuraSheath®** low-voltage Type RHH/RHW-2/USE-2 cables, **Uniblend®** and **UniShield®** medium-voltage MV-105 cables, as well as a full line of **VFD** cables. These cables serve an extensive range of markets including solar, wind and traditional power generation; refining and petrochemical; natural gas production; steel, pulp and paper; and factory automation.

DATACOM CABLES

Data communications cables are on the job wherever enhanced networking performance is critical. We offer one of the most comprehensive lines of enhanced high-speed cable, including **Carol®** and **Gen*SPEED*® Brand** category cables.

FIBER OPTIC CABLES

Our **NextGen® Brand** fiber optic cables range from standard tight-buffer distribution and loose-tube fiber cables to the advanced **Biolite®** blown fiber system. All are designed, engineered and manufactured to specification for standard, specialized and custom applications, including marine, utility, transit, industrial and other diverse applications.

ELECTRONICS CABLES

General Cable's **Carol® Brand** products fulfill the complete wire and cable requirements of the fast-changing electronics, sound and security market-places. We offer **EXZEL™** high-endurance standard and LSZH control cables; hook-up wire; communications cable; computer, coaxial and microphone cables; lighting and automation control cables; and other special customized cable designs like **Gepco® Brand** solutions for professional broadcast and commercial audio/video applications, as well as security and life safety.

SPECIALTY CABLES

General Cable keeps pace with the ever-changing world and serves an extensive range of specialty markets and applications. With products like **CCW®**, our cables channel the power, control and signals that make equipment hum and engines run—from oil rigs, refineries, and cars and trains to commercial buildings, public venues, factory floors and military, nuclear, marine, transit and mining applications.

General Cable

CONDENSED PRODUCTION CAPABILITIES – COPPER PRODUCTS

Conductor:

Size Range (Multi-Conductor): 26 AWG thru 4/0 AWG

Size Range (Single Conductor): 28 AWG thru 1000 kcmil

Construction: Stranded and Solid

Material: Copper, Copper Covered Steel, Galvanized Steel, Copper Alloy, Silver

Coating: Tin, Silver, Nickel

Insulation:

Low Temp Ranges:

Ethylene Propylene Rubber: Flexible (-40°C to +105°C)

Tyrene Butadiene Rubber: Flexible (-55°C to +60°C)

PVC:
– Semi-Rigid, Conventional, Flexible, Clear, PVC/Nylon (-35°C to +105°C)

– For Plenum Cables, 75°C

Polyethylene: LD, HD, Solid, Chemical Foam, Gas Injection, Flame-Retardant (-76°C to +80°C)

Polypropylene: Solid, Chemical Foam (-25°C to +105°C)

Zero-Halogen Poly: For Plenum Cables (-20°C to +80°C)

High Temp Ranges:
FEP (-200°C), HALAR (150°C), SOLEF (150°C), TEFZEL (150°C), PVC (75°C), TPR (-100°C to +125°C), Hytrel (-90°C to +135°C), Nylon (-80°C to +125°C)

Identification:

Stripes or number printing, multiple color combinations using 1, 2 or 3 spiral stripes, number/legend printing (online), band marking (online or offline), up to 144 color combinations plus 1 or 2 spiral or parallel TRU-Mark® sequential footage marking

Twinning: 10 AWG thru 28 AWG

Cabling: 500 MCM – 26 AWG

Bunching: 36" & 48" outside-in single twist up to 37 conductors, high speed double twist, up to 200 elements / 1.250" max. cable diameter

Back Turners: Up to 9 elements

Planetary: Up to 7 conductors, up to 66 elements/1.250" max. cable core diameter

Shielding:

Braid or serve; 8, 16 and 24 carriers; 1.00" max. diameter

Materials: Nylon, Fiberglass, Tinned Copper, Bare, Tinned Silver, Aluminum, Bronze, Kevlar, Aluminum and Aluminum Mylar tape

Jacketing:

Up to 3.75" in cable diameter, 108" max. reel take-up

CPE: Flexible, oil resistance, flame-retardant (-50°C - 105°C)

Neoprene: Flexible, oil resistance, flame-retardant (-55°C - 90°C)

EVA: High temperature jacket (150°C)

Silicone: High temperature ignition wire jacket (200°C)

PVC: Conventional, flexible, oil resistance, zero-halogen

Polyethylene: LD, HD, solid, flame-retardant

Other: TPR, Polyurethane, FR-Polyurethane, FEP, HALAR, SOLEF, TEFZEL

Packaging:

– 36" & 48" Shaft Reelers

– Dual Shaft Spoolers

– Semi-Automatic Coiler

Testing:

– Complete mechanical and electrical/electronic testing

– Capabilities in accordance with UL, CSA, ETL and MSHA requirements

– General Cable's Willimantic, CT; Highland Heights, KY; and Indianapolis, IN laboratories have a wide range of mechanical test capabilities, including fire testing

Certifications:

– CSA Approvals   – MSHA
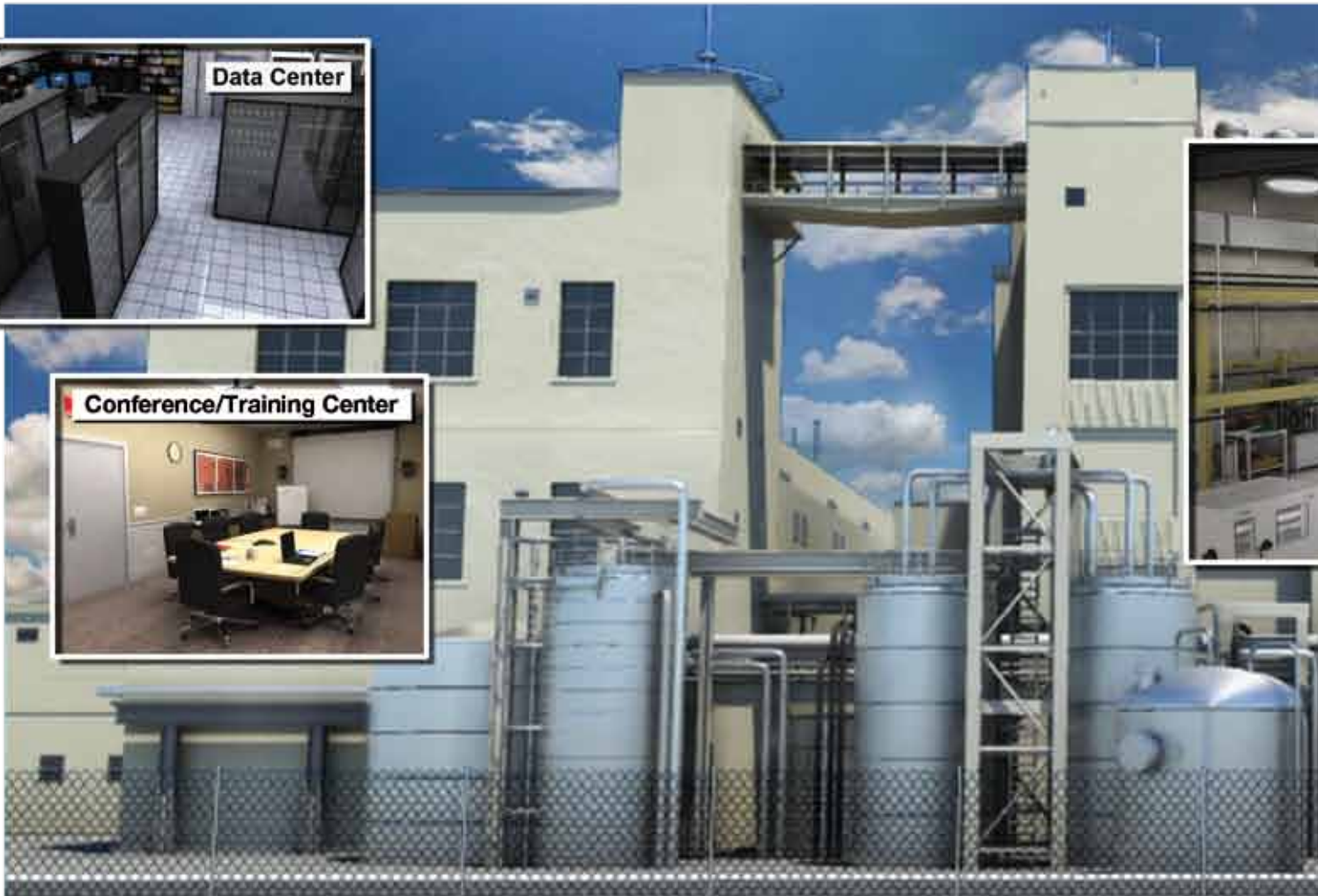
– ETL   – ROHS Compliant

– IEC   – TÜV

– IEEE   – UL Listed

Please consult your General Cable representative for additional information on product designs and constructions.

General Cable

Data Center

Conference/Training Center

APPLICATIONS & PRODUCTS

Manufacturing Floor

Carol® Brand Cord

- Type SOOW – 300 V and 600 V Rubber Portable Cord
- Type SEOOW – 600 V Plastic Portable Cord (junior available)
- Type STOW – 600 V Plastic Portable Cord (junior available)
- Welding Cable
- Bus Drop Cable
- MTW Hook-Up Wire
- Industrial Flex Cables – 2 kV
- Type SOOW – 300 V and 600 V Rubber Portable Cord with 17 FREE™

Industrial & Specialty

- Instrumentation Tray Cables – 300 V and 600 V
- Control & Power Tray Cables – 600V
- Variable Frequency Drive (VFD) Cables
- CCW® Armored Power and Instrumentation Cables
- Single Conductor Low-Voltage Cables
- Medium-Voltage Power Cables – 2.4 kV – 35 kV
- Industrial Armored Cables – 600 V – 35 kV

NextGen® Brand Fiber

- LSZH Tight Buffer Distribution
- LSZH Loose Tube
- LSZH Heavy-Duty Breakout
- LSZH Heavy-Duty Armored Breakout
- LSZH Extra-Heavy-Duty Breakout
- LSZH Extra-Heavy-Duty Armored Breakout

Carol® Brand Electronics

- EXZEL™ High-Endurance Multi-Conductor & Multi-Pair Cable – Foil, Braid Shield
- EXZEL™ High-Endurance LSZH Multi-Conductor & Multi-Pair Cable – Foil, Braid Shield
- Communication and Control Multi-Conductor & Multi-Pair Cable – Unshielded, Shielded
- Power Limited Tray Cable
- Coaxial Cable – Types RG-6, RG-11 and RG-59 Plenum Rated
- Twinaxial Cable
- DeviceNet Cable
- PVC Hook-Up Wire
- Computer Multi-Conductor & Multi-Pair Cable – Unshielded, Shielded
- Type RG-59 Standard & Siamese Coaxial Cables with 17 FREE™

Datacom

- Carol® Brand & GenSPEED® Category 6 Cable – UTP and F/UTP (ScTP)
- Carol® Brand & GenSPEED® Category 5e Cable – UTP and F/UTP (ScTP)
- GenSPEED® Category 6 and 5e Cable with 17 FREE™

Manufacturing Floor

Back Office

Security Office

Data Center

Datacom

- Gen*SPEED*® 10 MTP™ Category 6A 10 Gig Cable
- Carol® Brand & Gen*SPEED*® Category 6 Cable – UTP and F/UTP (ScTP)
- Central Office Cable
- Gen*SPEED*® 10,000 Category 6a and 6 with 17 FREE™

Carol® Brand Electronics

- Access Control Cable
- Type RG-59 Standard and Siamese Coaxial Cables with 17 FREE™

NextGen® Brand Fiber

- Tight Buffer Distribution
- Tight Buffer Distribution Interlock Armored
- Tight Buffer Breakout
- Tight Buffer Simplex
- Tight Buffer Duplex
- Loose Tube
- LSZH Tight Buffer Distribution with 17 FREE™

Industrial

- Single Conductor Low-Voltage for Battery Back-Up

Back Office

Datacom

- Carol® Brand & Gen*SPEED*® Category 6 Cable – UTP and F/UTP (ScTP)
- Carol® Brand & Gen*SPEED*® Category 5e Cable – UTP and F/UTP (ScTP)
- Central Office Cable
- Gen*SPEED*® Category 6 and 5e Cable with 17 FREE™

NextGen® Brand Fiber

- Tight Buffer Distribution
- Tight Buffer Distribution Interlock Armored
- Tight Buffer Breakout
- Tight Buffer Simplex
- Tight Buffer Duplex
- Loose Tube
- LSZH Tight Buffer Distribution with 17 FREE™

Carol® Brand Electronics

- Fire Alarm Cable
- Coaxial Cable – Types RG-6 and RG-59

Carol® Brand Cord

- Thermostat Wire – 105 V
- Lamp Cord
- Cordsets

Conference/Training Center

Gepco® Brand Commercial Cables

- Component Video RGB Coaxial Cable
- Composite Access Control Cable – Video + Audio or Data
- High-Definition Coaxial Cable – HDTV
- Speaker & Control Multi-Conductor Cable – Shielded, Unshielded
- Microphone Cable
- Automation Control Cable
- Lighting Control Cable

Security Office

Carol® Brand Electronics

- Access Control Cable
- Security Multi-Conductor Cable – Shielded
- Coaxial Cable – Types RG-6, RG-11 and RG-59
- Burglar Alarm Cable

Datacom

- Gen*SPEED*® 10 MTP™ Category 6A 10 Gig Cable
- Carol® Brand & Gen*SPEED*® Brand Category 6 Cable
- Central Office Cable
- Gen*SPEED*® 10,000 Category 6a and 6 with 17 FREE™

General Cable is ready to respond to your changing requirements and help you achieve continuous productivity savings. Call us today and put us to work for you.

General Cable