



Draka



Material Handling and Metals Processing Cables,
Fire-Rated Power and Signal Cables

Draka harsh environment cables. Resistant to heat, stress and downtime.

Built for the harshest environments

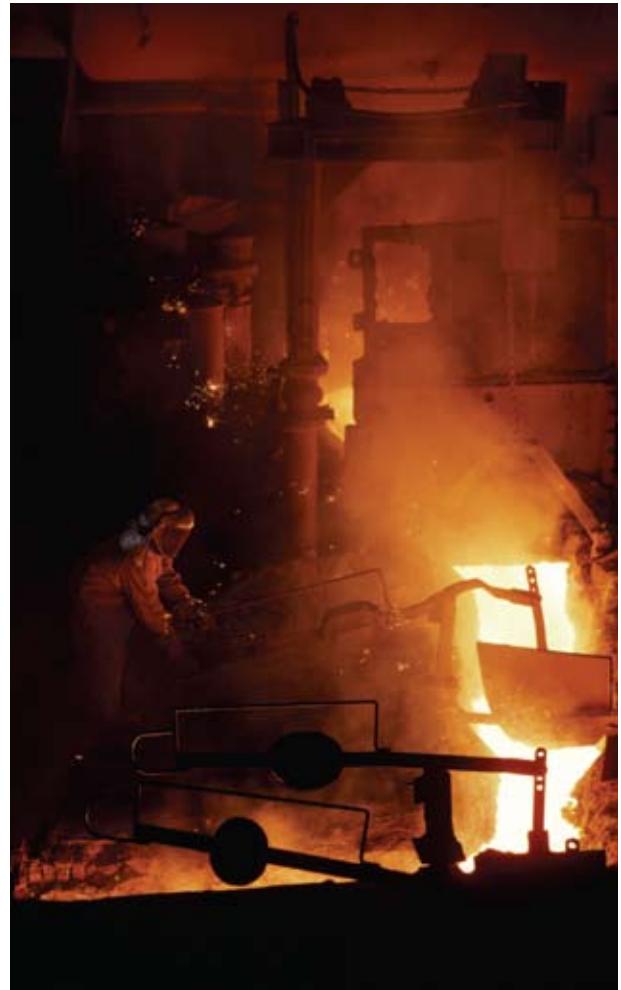
The temperature extremes of the materials handling world are no place for the inexperienced worker - or the untested cable. Experience is essential.

Experience is the reason Draka knows how to design and manufacture cables that thrive in extreme environments such as blast and basic oxygen furnaces. Draka cable solutions are crafted to work harder and last longer. A cable that doesn't need replacing results in both increased productivity and lower maintenance/replacement costs. Draka durability adds to your bottom line.

Start with materials: Draka's unique in-house custom compounding laboratory produces insulation and jacketing materials that thrive on the factory floor. Our material formulations exceed the most demanding requirements. This is how Draka's thermoset rubber insulation, used in our ALL-TEMP INDUSTRIRITE cables, excels at maintaining flexibility at both extremes of the thermometer.

Now add engineering: Tough materials are crafted into tough, flexible cables. Draka uses jacket reinforcement where needed to improve resistance to twisting. Aramid strength members help resist cuts and punctures.

Different constructions with a common goal: tough flexibility



Other construction processes add protection against torsion, impact, water, chemicals and abrasion while facilitating stripability and ease of soldering.

Look at the proof: Certifications and listings show that we meet minimum requirements. But Draka sets standards for our cables that are more rigorous than a minimum requirement. We strive to build cables that exceed normal limits because the real world tends to exceed them as well.

Tough cables for tough jobs are built by Draka.

Draka Lifeline® circuit integrity cables. Fighting fire with survivable power and signal.

Lifeline® Technology Cables - the new standard in survivability



Aluminum and steel processing is an extreme environment of molten metal, flame and sparks. Fires can ignite in an instant and quickly spread to destroy equipment, endanger human lives, and cause lost productivity and revenue.

Fire-rated Lifeline Technology cables are the best way for a mill to limit liability and downtime due to fire. Lifeline circuit integrity cables continue to provide power and signal to critical areas in the presence of a fire. By maintaining circuit continuity, Lifeline cables permit orderly shutdown of equipment, aid in the safe evacuation of personnel, and keep power flowing to fire-fighting systems.

Lifeline technology is based on a ceramifiable insulation that can withstand a fully-involved structural fire with temperatures of up to 1850° F for as long as two hours, thus meeting the tough UL 2196 standard.

Lifeline
undergoing
UL 2196
testing



Do not mistake flame-retardant cable for fire-rated cable: flame-retardant cable may not propagate a fire, but it is not required to continue to operate during an emergency. Only a fire-rated cable will do that.

Lifeline offers another clear advantage over other cable types. When fires occur, standard cables melt in conduit and completely block access to run replacement cables. Cleaning the melted insulation (or replacing the conduit entirely) is a slow and expensive process that can keep a

plant inoperative for days. However, Lifeline's ceramifiable insulation is easily removed from conduit. Pulling a rag through the conveyance will quickly and completely remove any ash residue. Cable can quickly be re-installed.



Lifeline Technology is already saving mill owners time and money. Lifeline is being used for RTD thermal sensors and controls in place of standard cables that required replacement every few days. Instead, Lifeline cables permit the machinery to operate uninterrupted for months at a time.

Field tests of Lifeline coaxial cable (video monitoring of blast furnaces) and Variable Frequency Drive (VFD) cables have proved so successful that the personnel at these locations have dubbed Lifeline their "miracle cable."

Other potential uses for Lifeline Technology are:

- Annealing furnaces
- AOD (Argon Oxygen Decarburization)
- Blast and Basic Oxygen furnaces
- Coke ovens
- Hot strip mills
- Hot dip aluminizing and galvanizing
- RH vacuum degasser
- Emergency communication coax cables
- Ventilation power with VFDs

Lifeline cables. Their use is limited only by imagination.

Draka cables. Flexible under the harshest conditions.

ALL-TEMP INDUSTRITE® Power and control cables



105°C All-Temp Industrite is Draka's premier flexible cable line, made to withstand the broadest range of conditions.

Recommended for festooning and reeling applications (spring and motor driven), cranes, power tracks, hoists, electric hand tools used in plant environments (i.e. hot strip mills), automatic storage & retrieval systems (AS/RS) and portable equipment.

ALL-TEMP INDUSTRITE® Magnet crane cable



ALL-TEMP INDUSTRITE® Magnet Crane Cable is designed and manufactured to withstand the abusive environment predominant in magnet crane areas of operation. ALL-TEMP INDUSTRITE resists cut through, puncture, tearing, abrasion and impact better than standard Type W because of the rugged design and material selection.

INDUSTRITE® Portable power for welding



Use Industrite welding cable for welding electrode leads, welding stingers, welding ground leads, battery cable, bus welding boxes, jumper cables, ground cables, lift trucks, and other portable power applications where extreme flexibility is required.

FLAT-FLEX® Power and control cable



FLAT-FLEX is designed for use when space is at a premium (since it can be stacked) or where extra flexibility is a requirement. Flat-Flex has a recommended bend radius of 3 - 5x cable thickness. Use FLAT-FLEX for cranes, hoists, or any other equipment which travels with a lateral traversing motion. Shielded versions are available.

For severe flexing applications below -10°C, specify FLAT-FLEX Neoprene cables.

FIBER-FLEX Optical fiber cable



A unique flexible fiber cable perfect for data communication within automation. It can be used in flexing applications such as festooning, reeling and energy chain.

VARIABLE FREQUENCY DRIVE (VFD) Power cable



VFD cables are used to power variable frequency drive motors of up to 2000 volts. They use a solid copper shield to deliver clean power unaffected by RF or other electronic noise. VFD cables are available in static or continuous flex constructions.

Lifeline. When power needs a little more time.

BOSTFLEX™ Control cable



BOSTFLEX is designed to easily handle the stresses of portable control, festoon systems, power tracks, cable tenders, cranes and hoists, pendant push button stations, power carriage systems, cable reels, retractable reels, automatic welders, transfer vehicles, and other abusive flexing applications.

NOTE: For severe flexing applications below -10°C, specify ALL-TEMP control cable.

BOSTGARD® Soaking pit power cable



BOSTGARD™ Soaking Pit Cable is designed and manufactured to provide long life under extreme heat and severe flexing conditions.

Applications include use on ingot transfer cars, scrap charging machines, soaking pit cranes, mud guns, ladle transfer cars, and in severe environmental conditions where extreme heat and abrasion are factors. Premium constructions are available for charging crane festoon systems.

BOSTCORD® Heavy duty power cable



Bostcord is perfect for use in limit switches, pendant push-button stations, extension cords, foot switches, proximity switches, conveyors, welding carts, retractable reels, and all types of portable tools and equipment.

LIFELINE® RHW Power cable



Lifeline® RHW is a composite insulation system that achieves the smallest diameter and highest temperature rating of any ceramified silicone fire rated cable. Without the need for additional fire barrier tapes, Lifeline RHW is UL Listed as type RHH/RHW-2 for 90°C and UL classified with a 2-hour fire rating per UL 2196 - "Standard for Tests for Fire Resistive Cables."

LIFELINE® CIC Circuit integrity cable



Lifeline® CIC is a cost effective means of providing "survivability" as required by the National Fire Alarm Code (NFPA 72). Additionally, it can dramatically increase the reliability of any fire alarm system when it needs it the most (i.e. when the system is under attack by fire and water).

Another benefit of the fire rated construction is extremely low capacitance improving system performance and eliminating the need for special mid-cap cables.

LIFELINE® CI Signal cable



All Lifeline® CI cables are qualified to UL 2196 - "Standard for Tests for Fire Resistive Cables" which includes a two hour fire exposure (accepted as representing an intense, fully developed fire within a building), water exposure and several electrical tests and monitoring to assure its circuit integrity performance.

Material Handling and Metals Processing Cables Specifications

Cable Name Recommended Usage	Resists Flame	Resists Abrasion	Resists Oil/ Chemicals	Resists Moisture	Resists Impact	Resists Tearing	Withstands High-Temp	Withstands Low-Temp	TC/ER Rated	More Flexible	Shielded	Ratings/ Listings
ALL-TEMP INDUSTRIRITE® POWER for festoon/reeling	●	●	●	●	●	●	●	●		●	option	UL, CSA, MSHA
ALL-TEMP INDUSTRIRITE® CONTROL for festoon/reeling	●	●	●	●	●	●	●	●		●	option	UL, CSA, MSHA
ALL TEMP INDUSTRIRITE® POWER for magnet cranes	●	●	●	●	●	●	●	●				
FLAT-FLEX® POWER/CONTROL for festoon	●	●	●	●			●			●	option	UL, CSA
FLAT-FLEX® thermoset POWER/CONTROL for festoon	●	●	●	●	●	●	●	●		●	option	UL, CSA
BOSTFLEX™ CONTROL for festoon/reeling	●	●	●	●	●	●	●	●		●		UL, CSA, MSHA
BOSTCORD™ extra heavy duty PORTABLE POWER	●	●	●	●	●	●	●	●				UL, CSA, MSHA
BOSTGARD™ POWER for soaking pits, etc.	●	●	●	●	●	●	●			●		
INDUSTRIRITE™ PORTABLE POWER for welding	●	●	●	●	●	●	●	●		●		UL, CSA, MSHA
VFD POWER POWER for VFD systems				●			●		●	option	●	UL, MSHA
FIBER-FLEX® optical fiber CONTROL for festoon/reeling		●	●	●	●	●	●	●		●		

LIFELINE® cables

Cable Name Recommended Usage	Description
LIFELINE® RHW POWER	Small diameter, high temperature rated cable, listed RHH/RHW-2 and UL 2196
LIFELINE® CIC CIRCUIT INTEGRITY	Qualified to UL 2196
LIFELINE® CI SIGNAL	Provides 'survivability' per NFPA 72
LIFELINE® TC POWER or CONTROL	Fire resistive UL listed tray cable

Any Draka cable can be customized to your specific application.



Draka Engineered Specialties

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 761 Joseph E. Warner Blvd. | Taunton, MA 02780 | Tel +1-508-822-5444
 One Tamaqua Blvd. | Schuylkill Haven, PA 17972 | Tel +1-570-385-4381

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