



Put The Power and Support of AmerCable in Your Mine

AmerCable Incorporated is a privately held company with its roots deep in the mining cable industry. Our outstanding reputation has been established on our ability to produce electrical cable products that are engineered to provide outstanding performance in very rugged, aggressive environments – including coal, copper, iron ore, phosphates, gold, silver, trona, uranium, and others. Our Tiger[®] Brand mining cables are delivered in 30 countries to service the world's leading mining companies, including:

Peabody Energy
Arch Minerals
BHP Billiton
Phelps Dodge
Anshen
Southern Peru Copper
CVRD
Newmont Gold
Placer Dome
Batu Hijau
SNIM

Massey Energy
Consol Energy
Rio Tinto
Pingshou
Codelco
Carbones del Guasare
Minera Brasileiras Reunidas
Anglo American
Barrick Gold
Freeport McMoran
Mezhdurechie

Innovative Products – Industry Leadership

For the past 10 years, AmerCable has been the undisputed leader in new product development for the global mining industry. We were the first to move away from Neoprene and Hypalon jacketing materials to the more environmentally friendly chlorinated polyethylene (CPE). In addition to being a superior material, both mechanically and physically, we developed a proprietary CPE formulation that is available in bright colors. Many of our mining customers utilize these colored jackets for circuit or voltage identification. In either case, these **highly visible cables enhance safety in the mine for personnel and equipment.** If a particular piece of equipment or

circuit needs to be shut down quickly, it makes cable and circuit identification a fast, simple task.



Thermoplastic Polyurethane (TPU)

For extremely abrasive mining environments, or where cables are more susceptible to rock falls, we developed an extremely tough jacketing material called Thermoplastic Polyurethane (TPU). **TPU’s physical properties in crush, cut-through, and abrasion resistance far exceed those of common thermoset rubber jackets.** AmerCable TPU has 5 times the abrasion resistance and twice the tear and tensile strength of normal rubber-based materials. It also passes MSHA flame tests for use in underground mining applications. TPU is also available in bright colors for easy circuit or voltage identification. When compared to standard rubber-based jacket materials, TPU is clearly superior.

	ICEA Minimums for EHD Jackets	Chlorinated Polyethylene (CPE)	Chlorosulfonated Polyethylene (Hypalon®)	Thermoplastic Polyethylene (TPU)
Tensile Strength (PSI)	2400	2900	3000	5000
Elongation @ Rapture %	300	500	500	500
Modulus PSI @ 200%	700	900	900	1100
Tear Strength lbs. per inch thickness	40	50	50	120
Abrasion Index	No	70	74	15

The greatly enhanced physical characteristics of TPU prevent it from being damaged as often as rubber-based materials. When damage does occur, it is typically much less severe. This durability reduces the number of times the cable requires repair – which creates a **reduction in downtime, increased machine productivity and a lower overall cost per ton.**

The superior physical, electrical, and mechanical properties of AmerCable's TPU jacketed trailing cables make it an **excellent choice for mines dealing with an aggressive, rugged environment that expect maximum efficiency.**

Tiger Stripes for Greater Safety

To enhance mine safety we developed Tiger Stripes, a process of vulcanizing a highly reflective tape directly into the outer jacket. This **highly reflective tape helps extend the life of the cable by making it more visible** to reduce damage from accidental "run-overs" and equipment snags.



Trailing Cable Innovation

AmerCable has also developed underground trailing cables with Fiber Optic cables in composite constructions with power, earth, and control cable groups. For special high power consumption applications, we developed high temperature cables with normal operating temperatures of 125° and 150° C. We developed **cables with Kevlar strength members, providing additional strength for pull, flex, and torsion resistance to "kinking" or "corkscrewing"**.

AmerCable's Tiger[®] Brand SHD-GC cables remain flexible in low temperatures and are not affected by ultraviolet rays. The internal components of the cable are comprised of highly flexible stranding, extruded strand shielding, Ethylene Propylene Rubber insulation, copper/nylon braid shield, two ground (earth) conductors, and one ground check conductor (pilot wire). The conductors are cabled together in a much shorter helix to withstand tighter bends and provide increased flexibility. The shielding system is designed to hold up to flexing, torsion, and shear, as are all of the other components. The jacket is extruded over the core to meet the standard diameter and wall thickness requirement of the Insulated Cable Engineers Association's specification.

The products AmerCable quotes are produced and tested in accordance with **ICEA, CSA, MSHA, AS/NZS, BS, VDE, and others.**

Operational Excellence

In addition to our reputation for product quality, we are also renowned for our operational excellence. Our **standard lead-times are 6 to 8 weeks; our emergency response time is 1 to 4 weeks.** For example, in late 2001, Freeport McMoran's Grasberg surface mine had an emergency requirement for 33,000 of 15kV trailing cable. AmerCable built and shipped 11,000 feet in 7 days and the balance of 22,000 feet 14 days later. This is typical of the high level of service we provide our customers. When you add in our **on-time delivery percentage of 99%+**, no one in the industry comes close to our delivery performance.

The Power of AmerCable

AmerCable has been servicing the mining industry for more than 50 years. When you work with us, you receive the highest quality cable products offered in the mining industry and the support of our highly experienced sales and engineering team. Our field engineers provide complete engineering and technical support at the mine, including the training and education of mine personnel on the industry's best practices of cable management, cable handling, and splicing techniques on low and high voltage trailing cables. AmerCable can also advise you on the best practices for cable deployment in your mine system for maximum efficiency and extended cable service life.

The outstanding physical, electrical, and mechanical properties of AmerCable's **jacketed trailing cables make them an excellent choice for mines who operate in aggressive, rugged environments.** Our goal at AmerCable is to help our customers reduce downtime, increase productivity, enhance safety, and achieve the lowest cost per ton. **Put the power of AmerCable to work in your mine!**



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