

MARKET SOLUTIONS



# MINING MARKET SOLUTIONS



TPC WIRE & CABLE CORP.  
*EXPECT HIGH PERFORMANCE®*

# Emergency Shut Off Case Study

## Customer Problem

As the third largest coal producer in Pennsylvania, this particular customer was looking for an abrasion resistant cable that could be used in an emergency shut off situation on their underground coal haulage system. Since safety is of utmost importance, they were looking for a long-term solution to keep their work environments functioning at the highest level. Not to mention, when the haulage system isn't working, it's costing the company valuable production hours.

## TPC Solution

The cable suggested for this application was a Super-Trex® 16/6 Multi-Conductor P&R Cable. The jacket on this cable is made up of a special compound that includes TSE (thermoset elastomer) which stands up to heat and flames. A nylon braid is embedded between the two-layer jacket to increase strength and resistance to impact, twisting and pulling. Live-Flex™ XLPE conductor insulation, No-Wick™ rayon reinforced synthetic filler and bunch stranded tinned soft drawn copper all aid in this cable's flexibility.

## Result

This coal mine customer replaced 35' of cable on three haulage systems. With the prior cable they were using, they replaced it every two months. Once the TPC Super-Trex P&R Cable was in place, it lasted 10 months. This ended up saving the company over \$5,000 in materials and labor costs and increased uptime by 60 hours proving that having the right cable in the right application can save valuable time and money.

Source: TPC Cost Value Analysis Report #1979.



## Mining Market Solutions

TPC Wire & Cable Corp. is a leading supplier of wire, cable and connectors used in harsh industrial environments. TPC's products are designed and engineered to withstand harsh conditions including abrasion, chemicals, constant flexing and extreme temperatures. TPC serves a variety of markets including the steel, utility, mining, automotive, food and beverage, government, oil and gas, transportation and wood, pulp and paper markets. The company's long-lasting, dependable wire and cable products solve the most difficult application problems in the harshest environments resulting in lower overall costs and increased production time. TPC products outperform and outlast ordinary cable 10:1.

## TPC Wire & Cable Corp. Customer Testimonials

### Travis Kirk, Prep Plant Supervisor Consol - McElroy Prep Plant

We have been using Super-Trex Welding Cables from TPC Wire and Cable. They are lasting much longer and with fewer repairs. Our MSHA citations have also been almost eliminated!



### Tyler McLaughlin TT Electronics-IMS

Just wanted to say your heavy-duty cable stripper has helped us maintain a safer work environment for our heavy cable assembly area. We were using a razor knife prior to getting this tool due to varying jacket thickness on one cable. Your tool gets most of the job done with less time taken and fewer hazards to the operator!



## TPC Products Solve Problems in Mining Applications

AREA	APPLICATION	TPC PRODUCTS
<b>Truck Shop/ Truck Electrical Maintenance</b>	1. Extension/Power Cords	<ul style="list-style-type: none"> <li>• Super-Trex® Ultra-Gard™ Portable Cord</li> <li>• Super-Trex® Type TC-ER Portable Cord</li> <li>• Super-Trex® Triple-Gard™ Portable Cord</li> </ul>
	2. Light Strands	<ul style="list-style-type: none"> <li>• Super-Trex® Ultra-Gard™ Portable Cord</li> <li>• Super-Trex® Type TC-ER Portable Cord</li> <li>• Super-Trex® Triple-Gard™ Portable Cord</li> <li>• Super-Trex® Portable Power &amp; Automation Cable</li> </ul>
	3. Welders	<ul style="list-style-type: none"> <li>• Super-Trex® Weld Cable</li> <li>• Weld Cable Assemblies</li> </ul>
	4. Water/Dust Resistant Connections	<ul style="list-style-type: none"> <li>• Quick-Connect™ Assemblies</li> </ul>
<b>Surface (Open-Pit) Mining</b>	1. Drills	<ul style="list-style-type: none"> <li>• Trex-Onics® Retractable Coil Cords/Coil Cord Quick-Connects™</li> </ul>
	2. Drop Lines	<ul style="list-style-type: none"> <li>• Super-Trex® Portable Power &amp; Automation Cable</li> </ul>
	3. Conveyor Pull Cord Cable	<ul style="list-style-type: none"> <li>• TPC Pull Cord Cable</li> </ul>
	4. Process Area	<ul style="list-style-type: none"> <li>• Super-Trex® Ultra-Gard™ Portable Cord</li> <li>• Super-Trex® Type TC-ER Portable Cord</li> <li>• Super-Trex® Triple-Gard™ Portable Cord</li> <li>• Super-Trex® Portable Power &amp; Automation Cable</li> </ul>
<b>Mine Processing Plant/Foundry</b>	1. Portable Power	<ul style="list-style-type: none"> <li>• Super-Trex® Ultra-Gard™ Portable Cord</li> <li>• Super-Trex® Type TC-ER Rated Portable Cord</li> <li>• Super-Trex® Triple-Gard™ Portable Cord</li> <li>• Super-Trex® Portable Power &amp; Automation Cable</li> </ul>
	2. Smelting Process	<ul style="list-style-type: none"> <li>• Chem-Gard™ 200 Cable</li> <li>• Chem-Gard™ 150 Cable</li> <li>• Thermo-Trex® 2800 Cable</li> <li>• Thermo-Trex® 2000 Cable</li> <li>• Thermo-Trex® 850 Cable</li> <li>• Thermo-Trex® 500-K Cable</li> </ul>
	3. Refining Process	<ul style="list-style-type: none"> <li>• Chem-Gard™ 200 Cable</li> <li>• Chem-Gard™ 150 Cable</li> </ul>

## The TPC Difference

Mining is one of the most abusive environments possible. Extensive abrasion, impact, vibration, tension and cut-through from various types of mining techniques are common causes for cable failure. Therefore, choosing a high quality, high performance mining cable, assembly or accessory is critical to withstand this demanding environment and extend your operation. TPC products are designed to last in applications where cables are exposed to chemicals, abrasion, heat, cold, flexing and constant motion and impact. TPC products are specifically designed to last longer than ordinary cables, reducing downtime and labor, anywhere cable failure is not an option.

## MSHA Approved Cord & Cable



**Super-Trex® Ultra-Gard™ Portable Cord** (All Sizes)



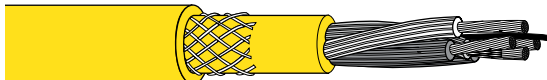
**Super-Trex® Black Triple-Gard™ Portable Cord** (All Sizes)



**Super-Trex® Type TC Portable Cord** (All Sizes)



**Super-Trex® Multi-Conductor P&R Cable**  
(16 AWG Only)



**Super-Trex® 2-6 Conductor Portable Power & Automation Cable** (8 to 2 AWG)



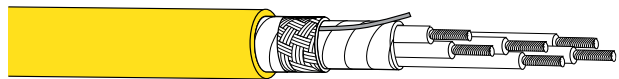
**Super-Trex® Type W Portable Power & Automation Cable** (8 to 1/0 AWG)



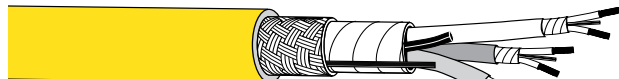
**Super-Trex® 4 Conductor Aramid Reinforced Orange Portable Power Reeling Cable** (All Sizes)



**Super-Trex® 600 Volt Welding Cable** (2 to 4/0 AWG)



**Trex-Onics® Overall Shielded Continuous Flex Multi-Conductor Cable** (All Sizes)



**Trex-Onics® Individually Shielded, Multi-Pair Control Cable** (All Sizes)

## Cables, Connectors and Cable Carriers

TPC Wire & Cable Corp. takes pride in providing quality products that withstand your abusive environments. Our sales representatives will take the time to discuss your specific application and work with our engineering and product teams to help solve your application problems.

In addition to our in-line cables, TPC Wire & Cable Corp. has the ability to:

- **Design and manufacture custom cables** to solve unusual application problems.
- **Connectorize your cables** using a broad range of military connectors, amphenol, cannon and molded connectors.
- **Provide a cable carrier system** with cables, hoses and connectors, all pre-loaded, tested and ready to install out of the box.

### Want to Learn More?

Available for download at [www.tpcwire.com](http://www.tpcwire.com):



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