

Fiber Optic Lighting Technology Offers New Solutions for Mining and Mine Safety

RSL Fiber Systems is breaking new ground with fiber optic remote source lighting solutions targeted to the mining industry. The company's award-winning technology – presently utilized on U.S Navy warships for safe, rugged deployment in the most demanding environments – offers innovative solutions to a variety of mining industry challenges for improved safety, productivity, and mine rescue support.

Improved Safety Safety is paramount; with RSL's remote source lighting technology, there is no likelihood of hazardous ignition from the lighting transmission or display system. Because there is no electricity in the fiber optic cable, the danger of shock or electrocution is eliminated. Passive, non-electrical luminaires (light fixtures) virtually eliminate risk of explosion – and luminaires never need maintenance or replacement.

Productivity Efficient illumination of mine operations is key to productivity – and miner safety. RSL's durable, low-maintenance non-electrical lighting technology can be incorporated into mining equipment, such as continuous miners, to ensure reliable, high-output illumination of mine working sections with significantly reduced downtime.

Mine Rescue In the unfortunate event of a mine incident, support systems for Mine Rescue Teams are critical to miner survivability. RSL is working with Mine Rescue Teams and with mine rescue system manufacturers to identify ways that rugged, reliable and safe remote source lighting technology can enhance the capabilities of these systems with the goal of improving rates of survivability.

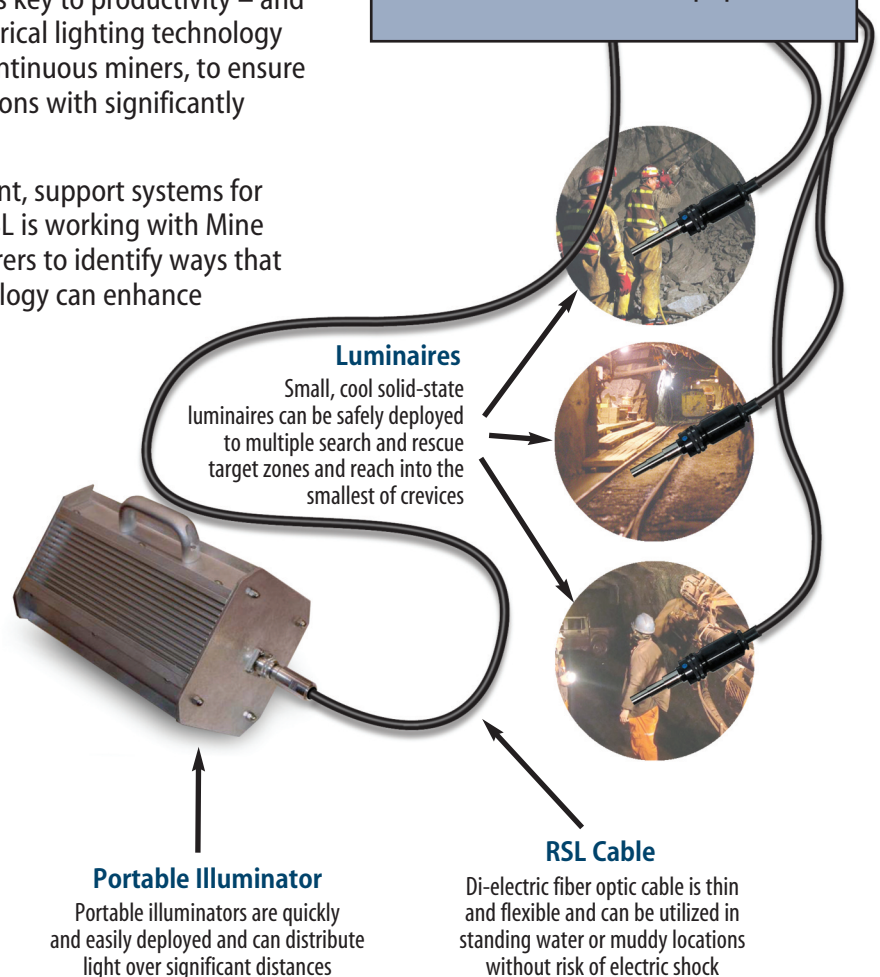


RSL Fiber Systems Remote Source Lighting Advantage

Small, cool luminaires and fiber optic cables can reach safely over long distances into the smallest of crevices

Rugged design that can meet tough shock and vibration requirements

Non-EMI/RFI emitting cables and luminaires won't interfere with radios or electronic equipment



LIGHT REIMAGINED™



Mining and Mine Safety Application Brief

Rugged Systems for the Most Demanding Environments

RSL systems are designed to meet the most complex, demanding specifications and applications.

- RSL systems have been shock and vibration tested to the highest military requirements, ensuring reduced maintenance time and cost – ideal for expensive mining equipment and extreme mining environments. Solid-state luminaires and cables can withstand high amounts of abuse for extended periods
- Compact, durable di-electric fiber optic cables and luminaires can be stored on reels and laid in rain, mud or standing water without degradation or risk of electric shock
- If portability is paramount, RSL systems can be located at strategic locations, packaged in small transit cases – or even designed as man-packs
- RSL lighting systems can also drive light to multiple, strategic points from a single, remote, controllable light source (illuminator)

RSL's team of design engineers – some of the most experienced, talented specialists in the business – will work with your team to develop and deliver the solution you need.

Prevention First

RSL systems are ideal for safe application on mining equipment, for permanent installation in mining environments and utilization for emergency and disaster response.

- Light fixtures (luminaires) can be designed to your specifications and, when required, safely contained within approved explosion-proof housings. The intrinsically safe nature of non-electrical fiber optic light delivery eliminates the risk of lighting systems contributing to potential disasters
- Side-emitting optical fiber can “point the way” to safety through the illumination of escape ways and cache points, with the goal of increasing rates of survivability in the event of a disaster

Use in Hazardous or Explosive Environments

RSL systems are ideally suited for application in mining environments where flammable or explosive fuel, fumes or materials may be present.

- High-intensity, directed light without a hot (and potentially spark-generating) light fixture
- Small, cool, solid-state luminaires connected to a lightweight length of unobtrusive fiber optic cable can reach safely through the smallest of crevices
- High-output illuminator (light source) can be safely located long distances away from where the light is delivered



Innovative solutions for the most complex, demanding mining and mine safety applications. That's RSL Fiber Systems.

Contact us today to discuss your specific requirements or application needs.

RSL Fiber Systems, LLC

255 Pitkin Street, East Hartford, CT 06108

Peter P. Gladis
Director of Marketing
(860) 518-5515 (cell)

(860) 282-4930, ext. 4957
ppgladis@rslfibersystems.com

Dennis Jarvis, II
Business Development Manager
(304) 542-3008 (cell)

(860) 282-4930, ext. 4955
djarvis@rslfibersystems.com

Visit us on the web at: www.rslfibersystems.com

RSL Fiber Systems is ISO-9001:2008 certified.

**RSL Fiber Systems is the proud recipient of
the 2010 Frost & Sullivan North American
Technology Innovation of the Year Award
in Remote Source Lighting.**

