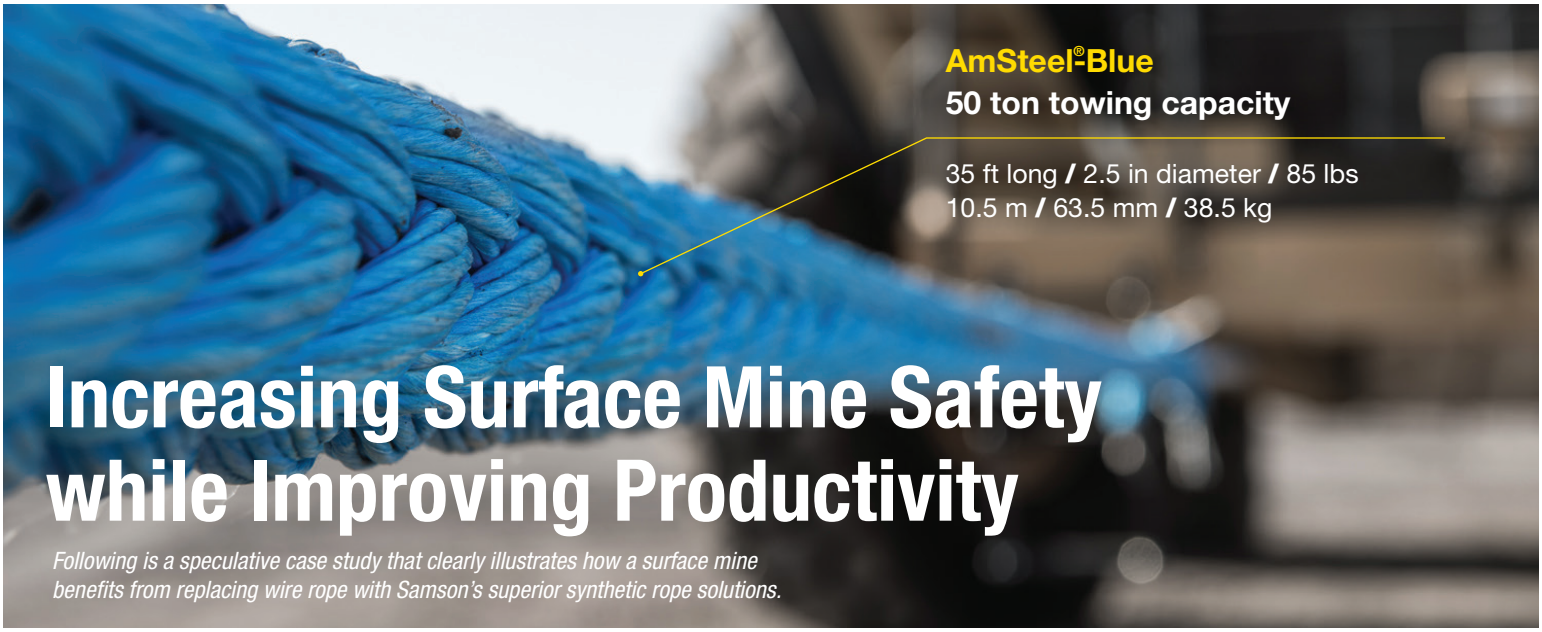

Increasing Surface Mine Safety while Improving Productivity

Following is a speculative case study that clearly illustrates how a surface mine benefits from replacing wire rope with Samson's superior synthetic rope solutions.

THE CHALLENGE

To improve safety in towing immobilized vehicles without reducing overall efficiency.

When steel-wire ropes are used to tow immobilized vehicles, they can snap, leading to serious injury and even fatalities. In light of this risk, more mines are considering safer, synthetic rope alternatives, which can satisfy efficiency objectives as well. As the leader in cordage innovation for over a century, Samson can provide the expertise and on-going support to streamline the transition to synthetic ropes.

AN INDIVIDUALIZED, FIRST HAND ASSESSMENT

A Samson representative visits a mine to review the conditions that ropes would be used in, personally evaluating the needs of the mine. The evaluation often includes consultations with additional mine personnel (such as the mine manager or safety and continuous improvement managers). The result is a customized Samson synthetic rope solution designed to maximize customer ROI and experience.

SELECTING THE RIGHT SOLUTION

To address the 100,000lbs + tow payloads typical in mines, it's clear that the strength and reliability of Samson's AmSteel®-Blue is required. AmSteel®-Blue replaces wire with an identical diameter, allowing them to use 2 inch AmSteel®-Blue where they were using 2 inch wire. The difference is in the weight, with AmSteel®-Blue weighing in at just 15% of what the steel wire had weighed. As a result, AmSteel®-Blue is far more maneuverable, making it easier to deploy as needed.

samson®
THE STRONGEST NAME IN ROPE

AmSteel® is a registered trademark of Samson Rope Technologies
Dyneema® is a registered trademark of Royal DSM N.V.
Dyneema® is DSM's high-performance polythylene product

The average time for a change-out is 30 minutes and can be accomplished by one man, dramatically increasing safety and productivity.

FABRICATION REQUIREMENTS

Samson works with the mine to determine the right finished length and fabrication requirements. Customers often purchase a rope for each active mining section, so it's on hand when needed. To protect from abrasion and extend the life of the rope, representatives often recommend ***chafe gear*** or a ***blue line thimble eye*** on the rope.

DELIVERY, MAINTENANCE AND SUPPORT

The Samson representative arranges logistics with the fabricating distributor who delivers the ropes on site ready to use. The representative also shows mine personnel precisely how the ropes should be used for optimum results and longevity, as well as how to properly inspect them.

THE OUTCOMES

Mines can expect to see meaningful reductions in injury by switching from wire to synthetic rope. The danger of recoil associated with wire is significantly reduced. In addition, back and hand injuries may also noticeably decrease.

The miners themselves generally far prefer Samson solutions. Not only are they less prone to injury, but the synthetic rope makes their job easier as well. Whereas previously they required heavy equipment like a lift or crane to move the steel wire rope, they can now carry the rope in the back of a truck. It takes just one man to hook it up, instead of five in the case of wire. This translates to dramatically faster change-out times, increased safety, and a more productive environment.

This increased safety and ease of use, combined with Samson's support and training adds up to overall savings, when the total cost of ownership is calculated. As a result, mines that deploy Samson solutions for recovery and towing often choose to deploy them for winches and conveyor belt changeovers as well.

Samson remains in close contact with all mining customers in order to continue to optimize their cordage performance.

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