

# E&MJ

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**Copper Processing**  
— Finding optimization opportunities

*Utility Equipment Advances*

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The A64 HD Water Cannon made short work of clearing drawpoints and previously backfilled ore passes at a block caving operation. (Photo: Getman Corp.)

tems, such as collision avoidance, help deliver optimal safety outcomes.

The big scaler also features the “absolutely unbeatable” hydrostatic drive, he said.

The drive “enables quick reversing as well as sensitive roof and side wall scaling,” the company reported. The shearing principle it supports substantially “increases scaling performance” in soft rock.

“All competitor scalers and scrapers are equipped with a shift gearbox,” Wolters said. “Our scaler has just two accelerators,” he said. “One for forward and one for reverse, without any shifting of gears.”

The LF-20HB has a Tier 4-Final engine. The LF-7.6HB has an EU Stage V engine.

The new scaler offers the reliability and robustness intrinsic to the line. “Availabilities of 90% and more are standard,” Wolters said.

The line also differs from the competition in that LF series scalers were specifically designed for soft rock applications.

“A typical scaler has a percussion hammer to hit the loose material from the roof and the walls,” he said. “Our scalers are, in fact, scraping and not scaling.”

The LF line is also more mobile than the competition, Wolters said.

“A typical scaler gets lifted on hydro props and works in an area of just a few m<sup>2</sup>,” he said. “Our scaler is much more mobile because it is scraping the loose material while driving slow.”

The LF-20HB is billed as a safety vehicle and is designed for room-and-pillar soft rock mines in North America. “It would be ok for rock hardness of up to 80 to 100 MPa, as long as it’s not a constant process of scaling solid rock of that strength,” Wolters said.

Without a Stage V engine, it is not available in Europe.

The smaller units are available in Europe, and have helped GHH jockey for market share there and in North America, Wolters said.

“GHH is a specialist in soft rock mining due to the long-standing relationship with our salt and potash customers here in Germany and Europe,” he said. “We are experts in soft rock scaling and have deep experience in this field.”

## Water Cannon Clears Drawpoints

Getman Corp. announced a global version of their successful A64 HD Water Cannon, developed to help a customer who was losing time clearing blocked drawpoints. “With thousands of drawpoints, blockages were causing expensive delays and losses in productivity,” said Janne Ojala, director, design and engineering, Getman.

Unlike similar products, the A64HD Water Cannon is “specifically and purposely designed to clear drawpoints, working directly to aid mine efficiency,” Ojala said. “And in this instance, the customer’s method of clearing was time-consuming and unpredictable.”

The A64 HD Water Cannon proved to “make short work of a challenging situation and tackled their drawpoint blockage issue,” he said.

The customer also used the cannon to reopen previously backfilled ore passes. “They were able to reopen the ore pass without using explosives, clearing over 20 m of wet muck in two days,” Ojala said.

“Our water cannon is optimized to focus on the critical role of clearing rather than compromising the design by serving secondary functions such as dust suppression or washdown,” he said.

Using a 6-m boom, the unit clears muck by shooting water to 2,800 liters/min. With it, drawpoint clearance time can be reduced from days to hours. “First attempt success rates can be as high as 85%,” he said.

The topmost benefit offered is the safety of the teleremote operation. “Distanting the operator from the blockage area and providing them with an efficient, effective solution to clear the blockage keeps the operation moving smoothly without compromising safety,” Ojala said.

“Our radio remote control allows the operator to be underground with options

for either line-of-sight or at a further distance using teleremote operations," he said. "The remote-control system is intuitive, and operators can refine their feel for the controls as they use them."

The cannon's design led to several unit orders in recent years.

The A64 HD Water Cannon is ideal for block-caving operations. "This product is dedicated specifically to this application and is uniquely suited in the market to be a safe and efficient alternative to other clearing techniques," Ojala said.

The water cannon exemplifies Getman's mission: helping miners work safe, Ojala said. "While we offer a broad range of standard production and production support products, we are adept at developing novel solutions for the challenges our customers face in this dynamic industry."

## Scout Speeds Techs to Worksites

J.H. Fletcher & Co. announced the U.S. debut of the Mine Scout Supervision Vehicle. The company said the unit is a rapid-deployment supervision vehicle for transporting two people between underground and surface operations.

"It is equipped with ample storage space for tools, spare parts and testing equipment," Francois Meintjes, associate



The Small Boss Buggy features a Tier 4-Final engine with streamlined electronics. To facilitate maintenance and cut costs, it has neither a diesel particulate filter nor diesel exhaust fluid. (Photo: Genco)

director, international sales, J.H. Fletcher, said. "It was designed with maintenance in mind, with easy-to-access service points."

The unit offers speed and peace of mind. With industry-leading safety features, "the vehicle is a comfortable ride, and conserves operator energy when compared to walking or carrying tools by hand," Meintjes said. "This enables the

service technician to do a top-quality repair job in a shorter amount of time."

The Mine Scout features a robust chassis and world class components, the company reported. It can run for "up to 10,000 hours before an overhaul is required," Meintjes said.

"When overhauled by J.H. Fletcher, the vehicle can achieve an additional 6,000 engine hours," he said. "The longevity of the Mine Scout and ability to have a second service life sets it apart from its competitors and promises the customer the lowest running cost."

The unit was co-developed with manufacturer UV Botswana to help African miners do more with fewer technicians and tools. "It was developed after observing, at a customer site in Zimbabwe, that a service technician wastes up to 26% of a 10-hour shift on walking," Meintjes said.

"To make matters worse, the only rapid-deployment vehicles commercially available are ATVs, side-by-sides and light-duty trucks," he said. "These commercial vehicles are not purpose-built for mining and lack the required durability and operator protection one might expect from a mine compliant vehicle."

The Mine Scout "gets you to the workplace faster and safer than ever before," he said.

J.H. Fletcher reported seeing interest in the vehicle from customers in Africa. UV Botswana "has successfully secured



Genco Mine Service co-develops a Cummins Tier 4-Final engine that uses exhaust gas recirculation and diesel oxidation catalyst technologies. The engine is simple and easy to maintain. (Photo: Genco Mine Service)