

BULLETIN

ROBIT PLC CUSTOMER MAGAZINE 1/2026

Drilling into Tenerife's geothermal future

**Introducing full
ballistic FBX bits**

**Extending DTH hammer
life at Eagle Mine**

**Stronger service
in the Goldfields**

Robit

Building growth alongside our customers

Dear reader,

In the mining and drilling markets, success is built on local presence. Customers' operating environments, geological conditions, and requirements vary from one market to another. Success therefore requires both technical expertise and a deep understanding of local conditions. We build this understanding together with our people and our global distributor network. Daily dialogue with customers provides valuable insight into market needs and helps us develop solutions that create added value for them.

A good example is Kalgoorlie in Western Australia, one of the world's most significant mining hubs and a market that has long been important to us. Our new premises there provide stronger support for customer service, logistics, and collaboration. The goal is to be even closer to our customers and respond to their needs quickly and efficiently.

The courage to invest is also visible in our personnel choices. We appointed Jan Schroeder to lead the Canadian market, one of the world's most important mining regions. A key market deserves a dedicated person focusing on it full-time. Local presence is also an investment in market understanding and long-term customer relationships.

Behind all development are people. Whether supporting customers in Kalgoorlie, providing training in Michigan, taking part in geothermal projects in Tenerife, or introducing new products in Finland, success is built on the expertise of our people, cooperation, and a willingness to meet customer needs.

We have announced new supply agreements in Australia, North America, and South Africa. They strengthen our position in the international mining markets and show that long-term work with customers, products, and markets delivers results.

The growth in order intake and improved profitability in the first quarter support this development. More important than numbers, however, is what is happening behind them: we are strengthening our position in the market by investing in presence, expertise, and close cooperation with customers and distributors. This is how we lay the foundation for the next steps in growth across the world's most important drilling and mining markets.

Mikko Kuusilehto, CEO



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Drilling into TENERIFE'S GEOTHERMAL FUTURE

Tenerife is known worldwide for its volcanic landscape. Mount Teide, Spain's highest peak, rises from the centre of the island as a visible reminder of the geological forces that formed the Canary Islands.

Tenerife's volcanic geology makes it a natural candidate for geothermal exploration. However, volcanoes alone don't guarantee a viable geothermal resource. The heat must be close enough to the surface to be reached economically, and the underground rock must allow water or steam to circulate. Until now, the key question has been whether Tenerife's volcanic subsurface can meet these requirements in practice.

Tenerife's geothermal potential has long remained largely unexplored. Unlike Iceland, where geothermal energy plays a clear role in heating homes and buildings, the Canary Islands have had less need for space heating. Their energy challenge, however, is very real. Island grids require stable, local, and renewable electricity sources, and the Canaries have historically relied heavily on imported fossil fuels for power generation.

From volcanic promise to exploration

Now, Tenerife is taking a more concrete step towards understanding what lies beneath the island. In early 2026, geothermal exploration drilling began in Vilaflor, on the southern side of the Teide. The aim is to investigate whether the area can support future geothermal energy production.



The project is being developed by Reykjavik Geothermal and DISA, a Canary Islands-based energy company, with EU support for drilling activities. The first drilling work in Vilaflor was carried out by Marriott Drilling Group, a UK-based drilling specialist with a long track record of deep, technically demanding onshore projects.

Marriott's first phase in Tenerife began in early 2026. The task was to install the so-called upper conductor sections for two future boreholes: one for extraction and one for reinjection.

In geothermal drilling, these conductor sections serve as the large-diameter, steel-cased starting points for the wells. They stabilise the top of the borehole, protect the surrounding ground, and provide a foundation for continued deeper drilling.

The conditions were far from uniform. "We had some challenges," says **Marcin Kurmaniak**, Drilling Engineer at Marriott. "We encountered hard but weathered cracked rock, frequent driller's breaks, formation change to clay, and then from around 45 metres a sudden change to very hard rock."

Large-diameter Robit tools in action

For the conductor installation, Marriott used Robit's large-diameter Down the Hole drilling tools, including a Hyper 241 hammer and a Prime 762-mm XXXL casing

system. The conductor casing was installed to a depth of around 40–60 metres below ground level and cemented to the surface.

Marriott's confidence in the Robit system was based on earlier experience.

"We used Robit hammers and casing systems in 2022 for a deep exploration well project in Albania, drilling large-diameter conductor sections through challenging limestone karst", says Marcin. "Their performance convinced us of their suitability for demanding conductor installation work."

In Tenerife, the Robit system performed flawlessly on the first well. On the second, drilling was stopped at 60 metres after a component in the drilling assembly failed. The damaged part was returned to Robit UK for repair.

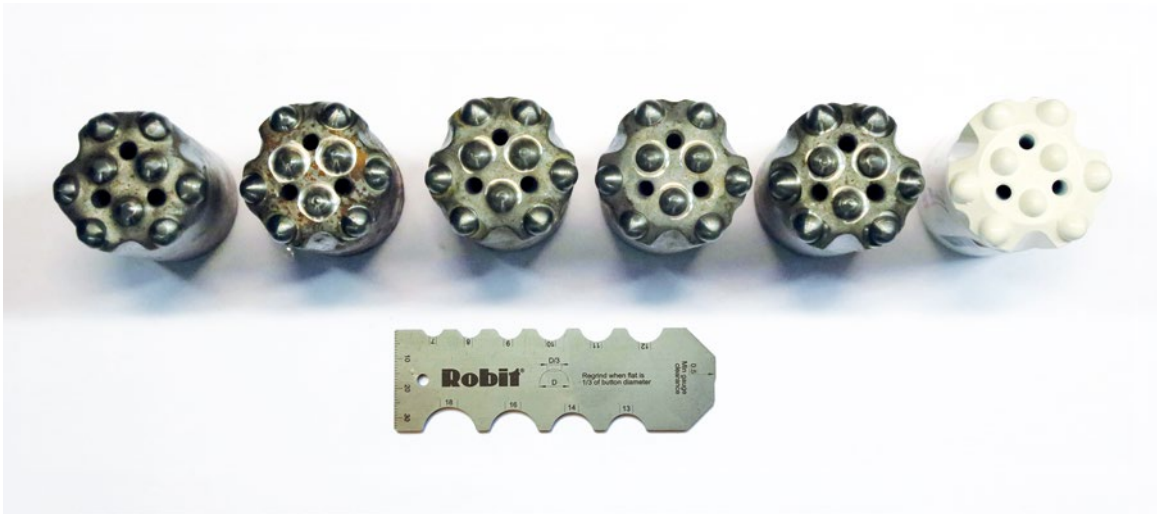
For Marriott, the geothermal project in Tenerife is continuing, using standard oilfield drilling techniques for the deeper sections. The plans include several wells with target depths of 2,500 and 3,000 meters.

If the explorations prove successful, geothermal energy could eventually provide Tenerife and the wider Canary Islands with a powerful, stable domestic renewable energy source, independent of imported fuel. The first wells in Vilaflor will help show whether Tenerife's geothermal promise can move from exploration to energy production.

Robit strengthens local drilling support in the Goldfields

Sometimes, a horse casting a shoe can lead to remarkable consequences. That, at least, is the most popular version of how the Kalgoorlie gold rush in Western Australia began.

In June 1893, Paddy Hannan and two other prospectors were traveling east from Coolgardie when they stopped near Mount Charlotte. Whether the delay was caused by a lost horseshoe, a straying horse, or simply a prospector's instinct, the result was beyond dispute: the discovery of gold that gave rise to the city of Kalgoorlie-Boulder and one of Australia's most famous gold rushes.



More than 130 years later, mining still defines the region. Kalgoorlie-Boulder sits at the center of Western Australia's Eastern Goldfields, roughly 600 kilometers east of Perth. The region hosts some of Australia's most significant gold and nickel operations, making the city a major service hub for mines, drilling contractors, and other businesses working across the Goldfields.

For drilling operations in this environment, local support matters. Remote sites cannot afford long supply delays, and the abrasive, variable geology of the Eastern Goldfields places high demands on drilling consumables. Reliable stock, fast service, and technical support close to the worksite can directly improve drilling performance and reduce downtime.

In the spring of 2026, Robit strengthened its presence in this key mining region by revamping its Kalgoorlie-Boulder branch into a permanent service base. The 2,000 m² facility combines warehousing for Robit's full product range with a dedicated bit grinding facility, giving local operators faster access to tools, service, and technical expertise.

The warehouse stocks Robit's full range of drilling consumables: Top Hammer tools such as button bits, shank adapters, drill rods, and couplings; DTH hammers, DTH bits, and drill pipes; RC equipment for exploration drilling; and casing systems and other geotechnical products.

"With a full range available locally, many orders that previously required longer lead times from Perth or overseas can now be fulfilled the same day or the next," says Sales Manager **Steve Tedge**, Robit Australia.

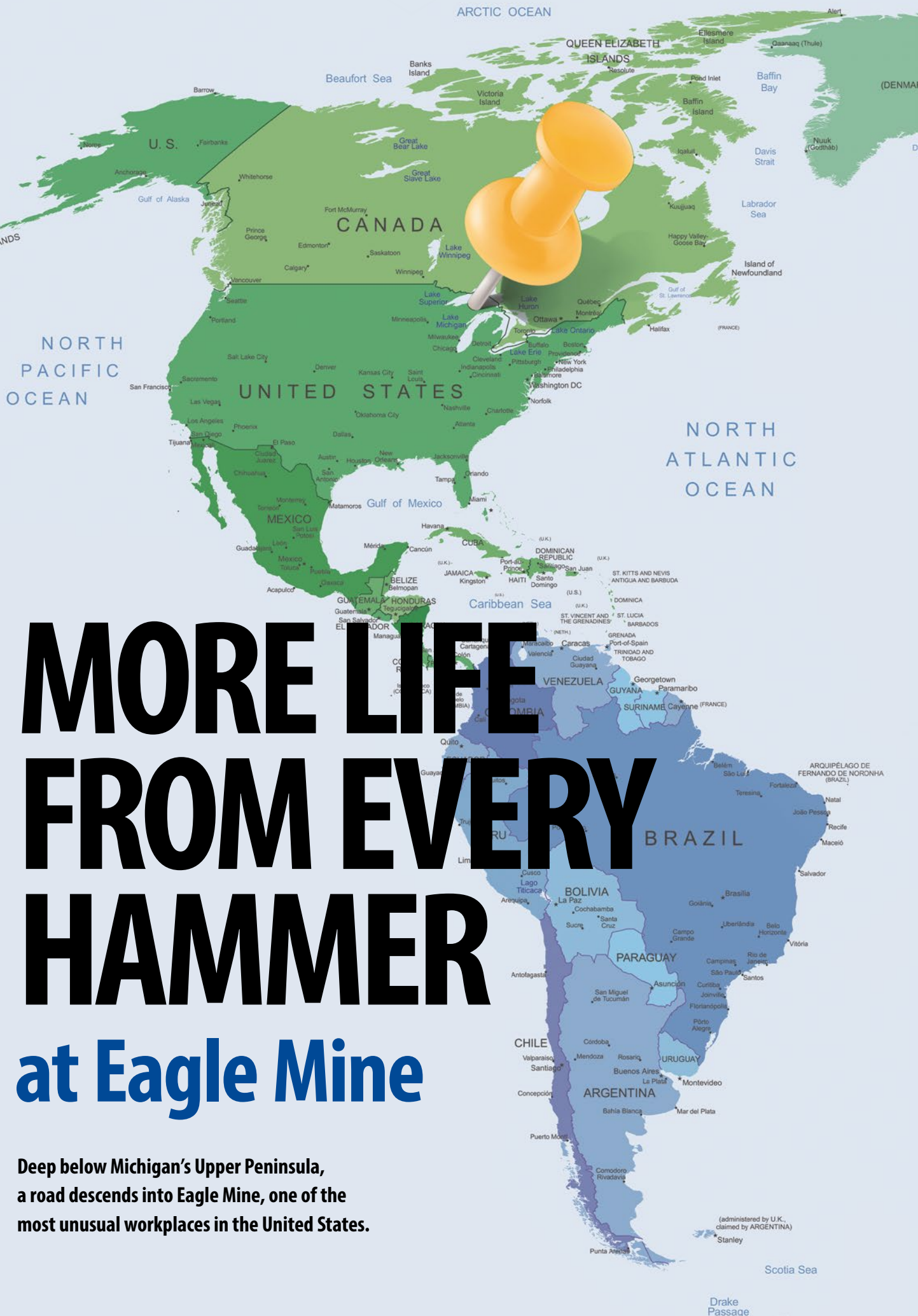
The branch also supports consignment stock and tailored supply arrangements for customers whose drilling schedules require site-specific planning. In a region where drilling operations may be located far from major logistics centers, this kind of local availability helps keep work moving.

A central part of the upgraded branch is the dedicated bit grinding facility. In hard-rock drilling, button bits wear gradually as the tungsten carbide buttons become flat, resulting in lower penetration rates and an increased risk of button cracking.

"Timely regrinding restores the button profile and can effectively double bit life, thereby reducing tooling costs," Steve Tedge explains. "With this service now available locally in Kalgoorlie-Boulder, our customers can have worn bits restored and returned to productive use without unnecessary delays."

"The Kalgoorlie-Boulder team is also available for technical support, including product selection, performance analysis, troubleshooting, and product trials," Steve adds. "By helping our customers choose the right bit, hammer, and rod configuration for local ground conditions, we can support better cost-per-meter performance in these demanding rock types."

Robit has served the Australian market since acquiring Drilling Tools Australia in 2016. The revamped Kalgoorlie-Boulder branch takes that presence further by putting stock, service, and drilling expertise directly in one of the country's most important mining regions.



MORE LIFE FROM EVERY HAMMER

at Eagle Mine

Deep below Michigan's Upper Peninsula,
a road descends into Eagle Mine, one of the
most unusual workplaces in the United States.



Eagle Mine is said to be the deepest point in the country accessible by car, reached via a ramp normally used by special mining vehicles. In 2022, the mine also set a Guinness World Record when an electric vehicle started from deep underground at Eagle and drove all the way to the top of Pikes Peak in Colorado, achieving the greatest altitude change ever driven by an electric car.

The setting is memorable, but Eagle Mine is significant for another reason: it's the only primary nickel mine currently operating in the United States. The underground mine produces nickel and copper, both essential materials for modern industry, used in everything from stainless steel and electrical systems to batteries and electric vehicles.

Since January 2026, Eagle Mine and the associated Humboldt Mill have been owned by Talon Metals. The acquisition turned Talon into a multi-asset US nickel-copper company, combining the producing Eagle operation in Michigan with the Tamarack Nickel-Copper-Cobalt Project in Minnesota. Domestic nickel production is an important part of building a more integrated US battery supply chain.

At Eagle Mine, the ore body is reached through a mile-long decline tunnel. Mining is carried out deep underground using long-hole stope and cut-and-fill methods. The process starts with drilling and blasting. The loosened ore is mucked, loaded into haul trucks, and brought to the surface. Once an area has been mined, it is backfilled with a mix of rock, aggregate, and concrete to support the ground for continued mining nearby.

In this kind of environment, drilling consumables are not a small detail. Their condition affects underground productivity, reliability, and cost efficiency. That is where Robit's cooperation with its US distributor NISS Global comes in. At Eagle Mine, Robit's drilling consumables are supplied and serviced through NISS.

Over the course of 2025, the mine observed that the consumption of Robit Dominator 30 Down the Hole hammers used for blast-hole drilling was faster than optimal. Robit's Sales Engineer looked into it and found that the hammer was often replaced sooner than was necessary. He decided to arrange training sessions on disassembling and rebuilding the hammers instead of discarding them for new ones.

As a result, hammer lifetime and drilled meters grew longer. "They already had the capabilities," explains **Michael Williams**, VP North America at Robit. "They just needed the training and shown the cost savings in getting more out of each hammer." Improved cost efficiency translates into higher productivity.

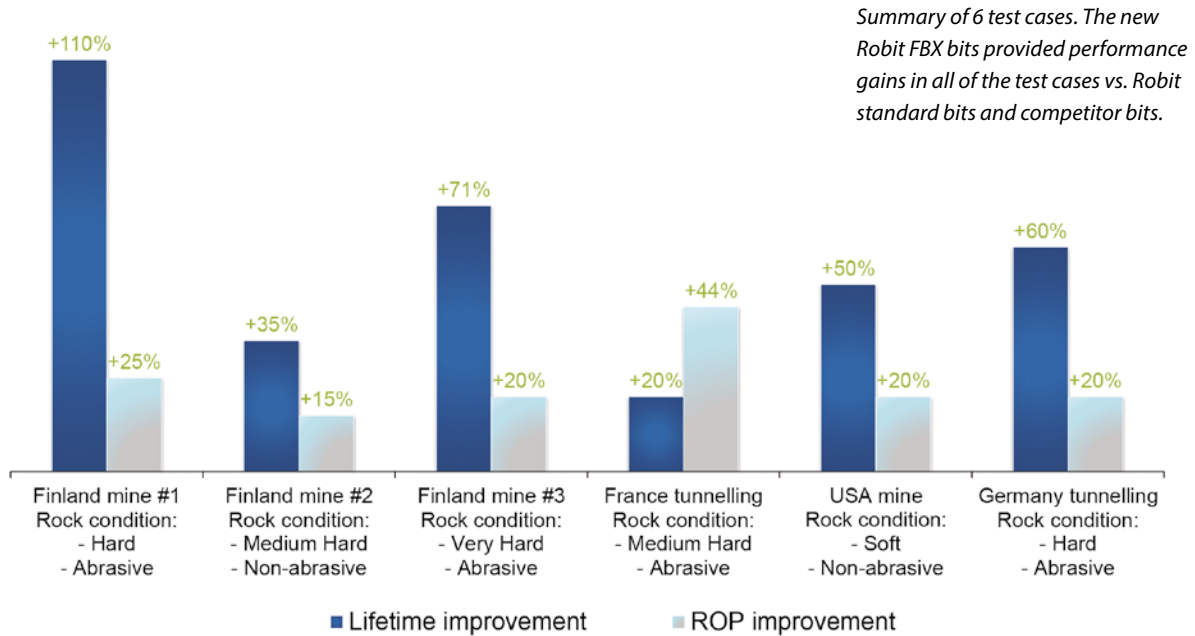
For Robit, the training was also a practical example of how distributor cooperation works at its best. NISS knows the local mining market and handles the day-to-day service relationship at Eagle Mine; Robit brings product knowledge, technical training, and support that help the distributor deliver more value to the end user.

In an industry where drilling is the first step in every production cycle, small improvements in service capability can make a meaningful difference. At Eagle Mine, Robit and NISS are helping ensure that the tools doing the work underground keep performing for longer.



New-generation Robit FBX bits

power Endomines' gold
mining operations



Underground mine development advances through a repeating cycle: drilling, charging, blasting, ventilation, mucking, scaling, support, and surveying. Together, these stages allow a drift, or development heading, to move forward round by round. Each stage must be completed safely and efficiently before the next round can begin.

The drilling stage directly influences productivity, equipment utilisation, and operating costs. While drill rigs and automation often receive much of the attention, the consumables at the rock face play an equally important role.

The drill bit determines how efficiently percussive energy is transferred into the rock, how well the rock is broken, how cuttings are removed, and how long drilling can continue before a bit change is required.

Robit's Full Ballistic Extreme Carbide, or FBX, drifting bit has been developed for this balance between penetration speed and service life. The FBX bits are also now part of Robit's new long-term agreements covering drilling consumables for Endomines' Pampalo and Hosko mines in Finland.

Built for speed and durability

Drifting puts heavy demands on drilling consumables. Holes must be drilled to the planned pattern and depth, at a speed that supports the development cycle and with sufficient accuracy to achieve the desired blast result. Rock conditions may also vary considerably, even within the same mining area.

At the bit face, carbide buttons must resist abrasive wear while also withstanding repeated impact loading without premature breakage. Button geometry must support efficient rock fracture, while the bit face and flushing design must remove cuttings effectively. If broken material remains at the face, penetration rate can decrease, and heat and wear may increase.

The FBX bit is based on a full ballistic button design. Ballistic buttons generally provide a more aggressive contact profile than spherical buttons, helping concentrate impact energy into the rock and supporting higher penetration rates in suitable conditions. In the FBX bit, this geometry combines with advanced carbide technology intended to provide both wear resistance and toughness.

The layout of the carbide buttons and flushing holes has also been refined to support rock fragmentation and cuttings removal. In drifting, where drilling time is closely linked to the overall cycle time, these details can make a significant difference.

Tested in varying rock conditions

Robit's reported test data for the FBX bits covers six test cases, including mining and tunnelling applications in Finland, France, the US, and Germany. The rock conditions ranged from soft, non-abrasive rock to very hard, abrasive rock.

In the test summary, the FBX bits showed performance gains in all six cases compared with Robit standard bits and competitor bits. The largest lifetime improvement was observed at a Finnish mine with hard, abrasive rock, where it reached 110%. Other reported lifetime improvements ranged from 20% to 71%, depending on the site and rock conditions.

The reported improvements in the rate of penetration (ROP) were more moderate but consistent. The highest ROP improvement in the test summary was 44% in medium-hard, abrasive tunnelling conditions in France. Other cases showed ROP gains between 15% and 25%. Robit has also reported up to a 45% faster rate of penetration compared with the company's previous generation of drifting bits, and more than 30% improvement in average lifetime without regrinding compared with drifting bits requiring regrinding.

As with all drilling results, the figures depend on the application. However, the spread of test conditions is notable: gains were reported in hard abrasive, medium-hard abrasive, medium-hard non-abrasive, and soft non-abrasive conditions.

Drilling support for the Karelian Gold Line

Endomines is a Finnish mining and exploration company focused primarily on gold. Its Pampalo and Hosko operations are located along the Karelian Gold Line in Ilomantsi, Eastern Finland – a gold-bearing greenstone belt extending for more than 40 km.

Both Pampalo and Hosko include underground operations, while Pampalo also has an open pit. Robit's agreement with Pampalo covers the direct supply of drilling consumables to Endomines. A second agreement has been signed with Veljekset Toivanen for the Hosko mine, where Toivanen is the main mining contractor.

The agreements bring Robit's new FBX drifting bits into daily use at Pampalo and Hosko. The bit has been developed to improve both penetration speed and service life – two factors that directly affect development drilling efficiency. Longer intervals between bit changes also mean fewer interruptions in the drilling cycle and less manual handling underground.

Along the Karelian Gold Line, Robit's drilling consumables help keep production and development work moving. With FBX, the focus is on a simple goal: faster drilling, longer bit life, and lower total drilling cost.



HILLA'S TRAINING DIARY

In 2021, Robit signed a sponsorship and cooperation agreement with Hilla Niemelä, a promising cross-country skier from Lempäälä, Finland. Hilla has been keeping a diary for Bulletin readers; this is the eighth entry.

Winter flew by once again, and my focus has now turned towards the summer ahead.

The past season was not quite what I had hoped for, but at the same time, it was much more than I had dared to expect. Although I was the first skier to miss out on Olympic selection, I still performed well throughout the season and gave my best without any injuries or illnesses.

The season included four individual Finnish Cup victories, two Finnish Championship titles, the overall Finnish Cup title, a personal best result in the World Cup, and appearances at almost every World Cup weekend.

Competing before the Olympic selections was mentally demanding, but after the disappointment, it was actually nice to return to racing without the constant pressure of having to prove myself.

Looking back, I am happy with the season as a whole. Most importantly, I completed another full season of racing and finished strongly in the winter's final competitions. My sights are now firmly set on the World Championships in Falun, Sweden.

Fortunately, there is still a long summer ahead, with time to recharge before the next training season begins. My plans are gradually taking shape, and I am feeling excited about what lies ahead. I am ready to give my very best once again and show what I am capable of next season.

Take care,

Hilla



FURTHER. FASTER.

HARD ROCK, SOFT LANDING

Wherever on Earth this issue finds you – in summer
sunshine, winter workdays, or anywhere in between –
we wish you a bright, colorful, and well-earned break!



Robit

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