





 Robit Bulletin is the customer magazine of Robit Plc.

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Product development through collaboration

When developing products for use under several conditions, it is vital to consider the experiences of people using the products. In modern times, it is possible to simulate all sorts of conditions in a lab environment or using computer models. But these can often only give an indication of the product's performance in the real world, whereas those working in the conditions set by said real world can tell you a lot more.

For the above reasons, Robit has a long tradition of working with its distributor partners and end-customers alike regarding product development. The end-users know their equipment and circumstances better than anyone, so they can often test new and existing products under true-to-life conditions. This way, one can ensure that the test results correspond to the products' actual performance and durability capabilities.

Collaborating towards better efficiency

One of Robit's long-term test partners is Stevin Rock, which operates a limestone quarry in the United Arab Emirates with a fleet of Down the Hole (DTH) machinery. They have been using Robit-manufactured DTH tools since 2016. Stevin Rock has been using the full suite of Robit's drilling consumables, with a 4" hammer as their workhorse of choice and adaptors, drill tubes, and 110 mm and 127 mm bits aiding the work.



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The initial contract was made after Robit succeeded in the trials at the Stevin Rock quarry. Robit's products triumphed with a longer life span and lower cost per meter than the competition at the time. While some alternatives provided a higher penetration rate, this benefit was trumped by the higher number of breakages it brought. They decided to go with Robit, which offered known products that provided conclusive and consistent high performance.

In the years since the initial contract, Robit has proven itself as the right choice with an excellent overall life span of products, a high level of service, and numerous supporting drill master visits. Indeed, these visits have been the core of the support and collaboration towards the customer. A Robit drill master has been visiting the site on support duties a couple of times a year to help Stevin Rock optimize their processes. In addition, Robit and their distributor partner DeltaCorp Global have conducted on-site practical and theoretical training sessions for the operators and mechanic teams on hammer assembly, preventative maintenance, bit wear, failure modes, and best drilling practices.

Robit always aims to find the best possible distributors for each region; the goal is to find those who understand the local market, culture, and general thinking. In DeltaCorp Global, Robit has one such winner. During the years, DeltaCorp has fostered a very close working relationship with Stevin Rock. This allows them to consistently offer timely and relevant support for the customer across their organization. DeltaCorp's representatives conduct at least one visit each week to one of Stevin Rock's three sites. The purpose of the visits ranges from stock deliveries to management meetings, where product quality and life span, as well as stock levels and forecasts, are assessed. While on-site, the representatives will also visit the drill rigs to receive direct feedback from the drill operators. On top of all that, the DeltaCorp representatives maintain constant communication with Stevin Rock's site management, working swiftly in the event any concerns should be raised, such as a sudden need for urgent deliveries, an unforeseen breakage, or some other operational problem.

Thanks to continuous support, Stevin Rock has improved the results they get with their equipment even further. When the initial contract started in 2016, the average life span of a drill bit was 2,000 meters, with hammers reaching approximately 8,000 meters. With all the training given to the personnel to help them make

"We have been using Robit's products for years and cannot fault their performance or service. We run an open tender every two years, and they always come out on top. Robit's commitment to collaboration and continuous improvement is their great strength. However, their local Distribution Partner is also strong; with their reliable supply chain management and quick reaction times, a solution is always available to us 24/7."

Brian Howard, Operations Director, Stevin Rock

the most out of their tools, the efforts to optimize the drilling processes, as well as the product improvements from Robit's Engineering and Production teams that based on the customer's feedback, the average bit life span has extended to 4,500 meters, with the hammers regularly exceeding 25,000 meters.

While the durability and solid performance of the drilling consumables first made Stevin Rock give Robit's drilling tools a chance, they have since gotten several more reasons to stick to their decision. And while they have been periodically testing multiple competing products, they have not had a reason to switch.

Collaboration as the basis for product development

During their years working with Stevin Rock, Robit has been conducting numerous tests on many hammers and bits. All these tests have aimed to increase the life span of the products, as well as their performance, with minimal downtime and breakages so that the customer can reduce their drilling costs to the minimum. Tests carried out with customers have been at the heart of Robit's product development process. Those trials have led to discoveries and breakthroughs that have guided the designs of their latest products, with the upcoming H-series hammers as a good reference point.

The new H-series hammers have been designed with performance and versatility as their guiding principles. The goal was to provide customers with a hammer range that they could utilize in different environments with minimal breakages and maximized utility for each operator's circumstances. Customer feedback led Robit to develop a new modular design, offering increased



Stevin Rock Operations Manager Brian Howard under the Arabian sun.

flexibility and adaptability to varying conditions. With a few simple changes in the assembly of the hammer, the user can customize it for their needs; whether one wants to run them with improved productivity in mind or needs to be able to use a lower capacity compressor, the H-series hammers can be modeled to suit these requirements.

In practice, the modular design allows Robit to offer four hammers in one base design. The assemblies vary between high power and low volume, as well as foot valved and tubeless. Thus the following variations are available: high power with a foot valve, high power tubeless, low volume with a foot valve, and low volume tubeless. The high-power assembly offers high blow energy and air volume, resulting in a fast penetration rate and is suitable for deep-hole drilling. On the other hand, the low-volume assembly provides lower blow energy and air consumption, which are ideal for soft ground while keeping the hammer energy efficient.

As an example, Stevin Rock was looking for a faster drilling hammer to improve the potential productivity. Robit provided them with two assemblies of the new H-series models with differing internal arrangements to control the airflow, one with low air volume and the other with high air volume. These new hammers were to be tested against the tried-and-true D45 hammer from Robit's older hammer range. The tests showed a considerable, consistent improvement across the board. The penetration rates went up in all tests, with the smallest increase at 14% and the most significant improvement at 30%. The highest penetration rate reached during the tests was 63.18 meters per hour. These results also correlated with those seen in earlier trials, ensuring the validity of the results.

With the new hammer range, Robit wants to bring more options to the market while still guaranteeing high performance. Because if one thing has become crystal clear during their collaboration with their customers, no two drill sites are the same. For this reason, they will make sure to let their customers' and distribution partners' voices be heard when developing new products and improving on the old ones.

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piloting a new way of making business

Imagine an offer where you, a mining company, are promised 5% cost savings on drilling consumables. If your supplier does not meet the promise, you only pay 20% of the going rate on said consumables. Would you be interested?

That is the core idea of the new RobitSave site audit program. Sales Director **Kimmo Kangas** explains the concept in more detail.

"Once we have identified and contacted a potential customer, our drillmaster visits their job site, surveys the relevant drilling tools they use, and documents their performance.

"The drillmaster does not make or recommend any changes in the setup; they merely observe and numerically records the performance: penetration rate in meters/minute, the lifetime of the tools, et cetera. Once they have collected enough data – in our pilot project, this took a week – they write a report. That concludes stage 1.

"In stage 2, we supply the customer with Robit tools for the same tasks. Up front, we charge 20% of the going rate of our products while promising 5% cost savings compared to their current supplier. And here's the beautiful part for the customer: if we don't reach those 5% savings – we will not charge a cent more", Kimmo explains.

The RobitSave program was first piloted at the Kemi chromium mine – the only one of its kind in the European Union – run by Outokumpu Chrome. Kemi quarries some 3 million tons of rock yearly (two-thirds ore, one-third waste rock), and the expected remaining lifetime of the mine is 30–50 years.

The RobitSave test at Kemi covered cable bolting and production drilling consumables. As per the RobitSave contract, Robit charged 20% of the price of the goods upfront. In total, the tests at the Kemi mine took some two months.

"It went extremely well. We had all the results in black and white; our calculation chart showed undeniably that the cost-per-meter savings were way above the 5% we had promised. Our customer was positively surprised, and we could charge the remaining 80%", Kimmo says.

The coming months and years will see the RobitSave site audit program gradually deployed across all of Robit's markets. Stay tuned for more news.





Building a new neighborhood in Stockholm

In the first half of the 20th century, the Norra Djurgårdsstaden district in Stockholm, Sweden, was a busy industrial center and port area with an oil port, a coal port, a free port, and even a seaplane base. Today, it is one of the largest urban development areas in Europe.

The Norra Djurgårdsstaden development project was kicked off in the early 2010s. The first 700 apartments were completed in 2012, and construction work is expected to continue well into the 2030s.

The overall plan includes construction work in five sub-areas in the district. One of them is Project Saltkajen in Södra Värtahamnen, where a new pier with an associated bridge will be constructed, and the existing quay will be rebuilt. The city of Stockholm signed the contract, worth SEK 610 million, with Skanska.

Foundation work for the project includes extensive pipe piling and sheet piling in demanding conditions: more than 500 SSAB RD pipe piles (711 mm and 508 mm) will be drilled and connected by welded interlocking sections, creating a continuous retaining wall against horizontal and vertical loads.

Skanska chose the Robit Steel Fist (SF) casing system to drill the RD piles. SF is a solid choice for all DTH applications where the casing is left in the ground. Skanska has successfully used it in previous projects, such as the Slussen reconstruction in Stockholm.

As construction continues, Norra Djurgårdsstaden is slowly transforming into a modern, environmentally friendly, sustainably built district with 12,000 homes and an estimated 35,000 new jobs. Värtahamnen will be home to some 5,000 people, and 20,000 will work there. With new walkways, shops, restaurants and nightlife, it will also be an inviting entry point for international visitors arriving in Stockholm by boat.



Cerro Corona: testing in the shadow of a pandemic

Thanks to its rich gold deposits, the Cajamarca region in northern Perú has been home to gold mines since the Inca times. One of the current mines is Cerro Corona, where Robit recently became the preferred supplier of DTH drill bits.

Cerro Corona mine, owned by Gold Fields Inc, is located on the eastern slope of the western Andes, some 80 km north of the regional capital of Cajamarca. The open pit mine is expected to produce some 2.1 Moz (about 60,000 kg) of gold and 407 kt of copper in concentrate over its 15-year mine life.

The rich gold deposit is hosted by diorite porphyry, an extremely hard rock embedded in limestone. MUR-WY, the drilling contractor at Cerro Corona, uses the so-called pre-splitting method, where closely spaced holes are drilled and lightly charged, causing fractures that isolate the gold-bearing rock from the surrounding rock mass. Successful pre-splitting requires very straight holes, and, as always, this should be achieved with optimal cost, penetration rate, and tool lifetime performance.

Robit believed their tools might improve productivity, so they contacted MUR-WY in 2021 to arrange test drillings for 5" DTH bits at Cerro Corona. Test drilling is typically a very hands-on type of work where you monitor and make adjustments on the spot

with the contractor. However, the COVID pandemic complicated things.

"In 2021, access to the mine was heavily restricted, so we had to get creative with MUR-WY to follow up on the tests. We ended up monitoring the performance remotely through WhatsApp videos and messages", says José Luis Cisneros, General Manager of Robit SAC.

Luckily the restrictions were eventually lifted, and Robit's Regional Sales Manager, **Martin Rodriguez**, was able to revisit Cerro Corona and conclude the tests, which proved highly successful.

"On average, compared to the tools they had used, we reached 20 to 25% better yields with our DHD340 Flat Face Premium bits and 40 to 50% better with our D45 HD hammers.

"We detected several ways to improve productivity. Not only did Robit's components perform better, but a key factor is also the service we can provide. We are now the preferred supplier for DTH consumables at Cerro Corona. There are still challenges to tackle, but we will work with our strategic partners from MRU-WY to articulate better ways to approach their needs and increase security regarding the project's required logistics", Martín says.



Founded in 2008, Fingeo Oy is now part of the E.M. Pekkinen Oy group.

"Our goal has been to develop our operating methods and provide a high-quality overall service. Fingeo has traditionally been strong in drilling and piling contracting. In recent years, we have expanded our service offering to include extraction by wedging and blasting and rock reinforcement by shotcrete, grouting and bolting.

"We now also offer comprehensive foundation work contracts, which makes it easier for the client as the same contractor takes responsibility for the work from start to finish. We have the flexibility to handle smaller projects as well as larger ones. Our extensive experience in soil and rock drilling, together with other civil engineering professionals, ensures an overall sustainable contract and smooth project management," says **Veli-Antti Pekkinen**, Project Manager at Fingeo Oy.

Construction continues to be strong in the Helsinki region

While Fingeo's operations mainly focus on the Helsinki metropolitan area, several projects, particularly demanding piling contracts for industrial and bridge projects, are carried out throughout the country.

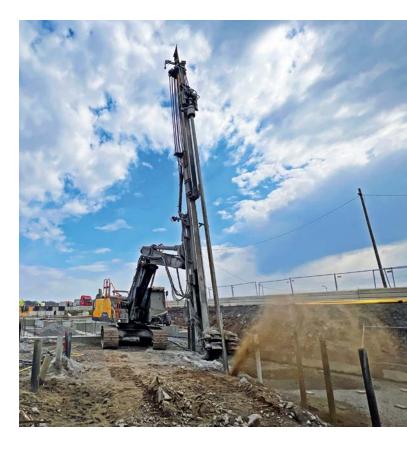
"In the future, we will increasingly offer our services in different parts of the country, especially in challenging projects and large turnkey contracts. We have plenty of work for the rest of the year as construction in the capital region continues to be strong on the ongoing sites. As for new projects, the future is not quite as clear," says supervisor Jukka Jääskeläinen.

Wide variety of work methods, skilled staff

For drilling and anchoring, Fingeo uses a large variety of methods and a wide range of special equipment.

"Our pipe piling projects range from a few piles to construction sites with several thousand piles. Tensile anchoring is used, for example, in trench shoring to absorb tensile forces. Our areas of expertise also include specialities like offshore drilling from a raft and combi walls for trench support.

"The backbone of our equipment consists of pipe piling and anchoring machines and drill rigs, of which we have about a dozen units. While the machinery is



state-of-the-art, our motivated and highly skilled staff is key to successful projects. Our team has an excellent working atmosphere. Our minimal turnover rate speaks for that," says **Kai Jaakkola**, supervisor.

Robit - the trusted partner for consumables

Drilling and piling is a consumable-intensive business. Fingeo's main supplier in these applications is Robit, with its products manufactured domestically in Lempäälä.

"At the moment, we get practically all our wear parts from Robit: for quarrying, that includes rods and bits; for piling, we use their reamers, pilot bits, and DTH hammers. We appreciate their domestic manufacture and great customer service that ranges from sales to delivery to problem-solving. Robit actively develops technically advanced products, and the manufacturing quality is high. Their consumables allow us to drill further, resulting in cost savings. And while Robit's products are definitely at the top of the market, they are also competitively priced. It's quite a rare equation," Jääskeläinen and Jaakkola say.

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Had a great skiing season. I exceeded myself and my expectations on many measures but left a lot to be desired too. My goals for the season were to compete in the U23 World Championships and finally debut in the World Cup. The season started fast at the beginning of November, and I was in really good shape compared to previous seasons. Right in the first race, I got my best placement to date in the Finnish Cup – a good start for the season.

After the observation competitions early in the season, I made it to the World Cup in Ruka, Finland, for the first time. In my first WC start, I finished in the top 30 in the classic-style sprint. On the second and third day, I also reached the top 40. Based on these results, I was selected to ski for the World Cup abroad. For the first time, I got to experience what it is like to tour overseas. In Lillehammer, I was 37th in the classic-style 20 km – an encouraging experience for a longer distance.

The main competitions in December were the Scandinavia Cup in Östersund, Sweden, which also served as a qualifying event for the U23 World Championships in Canada. I had an excellent sprint day and finished 11th in a tough race. December was a busy month of training.

In the autumn, I started studying Environmental Engineering at the University of Tampere, which allowed me to participate in the Winter Universiade, an equivalent of the World Student Championships. On 9 January, we travelled to Lake Placid in New York State – two weeks in the USA, five days of racing and many great experiences. The most memorable trip of my life; I would go again anytime! I skied two personal gold medals: 5 km classic and 5 km freestyle, and in the

relay, I anchored the Finnish team to gold. We had a great team spirit throughout the trip, and I'm sure it was largely because the team achieved top performances.

From Lake Placid, straight to Canada for the U23 World Championships. Despite the long travel days, I was in a good mood for the sprint day. I was really charged, which negatively affected qualifying, but it got better in the heat stage. However, the race day I had so anticipated ended prematurely with a crash, which was a big disappointment. In Canada, I skied one more classic 20 km with little success. I had to skip the last race due to health concerns.

Four weeks in North America left me really tired, and my race performances were hit-and-miss. I did have some successes: I won my first two personal Finnish Junior Championships, sprint and 10 km. I also qualified for the World Cups in Tallinn and Lahti, but I didn't have much to offer. The energy was ok, but the performance fell far below my level. However, I crowned the season with success in the Finnish championships relay, where our team won silver! I made my late-season top performance right where it mattered and ended the season with a smile.

A new training season is well underway, and my hunger for success has only grown stronger. Once you know what it feels like to throw your arms up in the sky in victory at the finish line, you're hooked forever!

Thanks to Robit for your invaluable support in my sporting career!

Hilla

Get to know RUMISHA MOTILAL CHALTHRAM

Rumisha Chaithram started as General Manager at Robit South Africa in June. She comes with broad management experience in the mining industry. Rumisha's family includes three teenage children and two Labradors, Max and Milo. In her spare time, Rumisha loves reading and working out.

You have already had an impressive career in managerial positions in mining and other industries. How did you end up at Robit?

I have had the privilege to lead in larger multinational organizations. I joined Robit because it has great quality products and a very flat, customercentric structure. This is excellent for faster decisionmaking and responding promptly to customers' requests. It allows me to apply my experience to grow Robit's market share in Southern Africa by optimizing mine productivity.

What are your key responsibilities as General Manager?

Executing the short- and long-term rock tools business strategies. I develop key growth sales strategies, tactics and action plans for market expansion. Geographic expansion of Robit's consumables in Southern Africa, building key customer relationships, and understanding customer and mining trends. Maintaining positive, trust-based relations with business partners, shareholders, and mining authorities. My goal is to double our market share, develop as many people as possible, and ensure my team accomplishes their career aspirations.

You are recognized as an inspiration for women leaders in South Africa. There are very few women in leadership positions in the industry. How do you see Robit's culture in that respect? Inclusivity is close to my heart, and I am grateful that the women that came before me allow me to be in



the role I am in today. This entails a responsibility to pay this forward to future generations. Robit's culture is highly customer-centric and results-oriented, meaning the role and culture is about creditability. A flat structure is ideal because there is no room for the politics of large bureaucratic organizations. This is refreshing, and I enjoy how well respected my viewpoints are received. I can push barriers and inspire my team. We have a strong leader with a lot of support and flexibility; Arto has acknowledged the involvement of ladies in our team who have been challenged in sales responsibilities. We all know that a diverse workforce increases return on equity, owner's equity, and sales. It's beautiful to watch the inclusivity and financial results unfold.

How do you see the industry evolving in the coming years?

Despite the post-pandemic supply disruptions, the mining industry has seen raised commodity prices, which is encouraging. Low productivity is a crucial issue for mines, and data analytics and digitalization, in general, have not been leveraged to their full potential. Deploying innovations such as remote drilling with Robit's polycrystalline diamond bit could lead to safer mining operations, higher productivity, and lower costs.

ESG is a big source of value whereby decarbonization governance has displayed both cost and margin benefits and social and global environmental impacts. Talent attraction, development and retention is a still an issue for the industry; in my opinion, if mines have a holistic approach to diversity, especially females represented, we will influence the change and yield the benefits.

Get to know

VILLE ILJANKO

Ville Iljanko joined Robit at the beginning of June as VP, Distributor Sales. He has extensive experience in management positions in the industry. Ville lives with his wife in Uusikaupunki; their three adult children have already left the nest. In his free time, Ville likes to chug along the archipelago on their wooden boat with his wife. He also plays golf and padel.

You have a long career in management positions in the metal and mining industries. How and why did you end up at Robit?

Robit had started a search for the job, and the head hunter contacted me. I've always found Robit an interesting company and have been following them since 2016. When the job description seemed to fit, I didn't need to think twice about applying or dig deep for motivation.

What are your key responsibilities as VP, Distributor Sales?

I am responsible for Robit's global distributor sales. I report to the CEO, am part of the Management Team, and work very closely with the business unit managers. I also lead the EMEA sales team and the marketing team.



Are you bringing some new ideas or approaches to Robit's sales processes?

I will undoubtedly draw something new from previous experiences, but first, I want to learn the ropes of the house. There is no point in changing things that work just for the sake of changing.

Based on your brief experience, how do you feel about Robit's corporate culture?

I got a positive impression of Robit's culture at the interviews, and it's only strengthened since I started working here. I have felt really welcome in the community.

What's the industry outlook for the coming years from your perspective?

The outlook is positive. The world continues to urbanise, which means underground construction will also continue, as will the mining industry. However, inflation and the interest rate market pose a challenge to capital-intensive industries. As recycling continues to evolve, the world has more and more materials at its disposal but still needs new raw materials. Often they are located in deeper and more hard-to-reach places than before, so there is a lot of excavating to be done. Another challenge is the intense competition in the industry, where the biggest players are also OEMs. But then, this is something Robit has been dealing with since day one.





From left: Arto Halonen, CEO, Robit Plc and Marcelo Orberg, CEO, Sotreq S.A.

Caterpillar, the U.S. company manufacturing construction machines, was an internationally known brand as early as the 1930s. Decidedly growth-oriented, the company was eager to find dealers across several countries and continents. Brazil was one of the markets with great promise for growth, and in 1941 Caterpillar signed a distribution contract in Rio de Janeiro with a local business called Sociedade de Tratores e Equipamentos Ltda.

The company name, although descriptive, didn't quite pack a punch, so it was soon abbreviated to Sotreq. After over 80 years, Caterpillar machines remain the pillar of Sotreq's business. The company is present in Brazil's southeast, midwest, north, and northeast regions, offering technological and specialized solutions for construction, mining, energy, and marine markets.

Always seeking new business opportunities, Sotreq identified underground mining as one of the sectors with good promise for expansion. On the other hand, at the same time, Robit had been on the lookout for a well-connected distributor in the Brazilian market. The two companies met, and since they soon discovered that joining forces would be a true winwin situation, a distribution deal was signed in June 2023 by Marcelo Orberg and Arto Halonen, CEOs of Sotreq and Robit, respectively.

"We believe in the power of collaboration and the strength of companies working together towards a common goal. Through the assumed cooperation with Robit, we are ready to conquer new challenges and continue our growth journey in the Brazilian market. We are very confident in the expansion of underground mining. For this, it is essential to add technology to the activity, with state-of-the-art accessories, which add productivity to our customers' business", says Mr Orberg.



