

# BULLETIN

ROBIT PLC CUSTOMER MAGAZINE 2/2023

Westauz & Robit  
**in the  
Australian  
goldfields**

**Introducing US partners:  
NISS and OCI**

**Improving fuel efficiency  
in geothermal drilling**

**Robit**

# ENCOUNTERS AND INTERACTIONS

As we look back over the past year, it's the specific events and encounters that stand out in our memories. Often, those brief interactions build up to create the solid relationships we have with our customers and suppliers. This year at Robit, we've put a tremendous amount of effort into actively visiting and connecting with our business partners. I've personally enjoyed meeting with our customers and partners on all continents – except for Antarctica! So many memorable moments have sprung from these journeys.

The way we do business is a lot like dating. Initially, you're getting to know each other, checking to see if the other party "ticks the boxes" that matter to you in a relationship. As time goes on, you start to build mutual trust and understand the core values that you both hold dear. Some of these relationships then blossom into something that resembles marriage – a deep, long-lasting partnership. The beautiful thing about the business world is that you can have several of these "marriages" all at once.

As the holiday season approaches, I'd like to extend a big thank you to all our customers and partners. I am wishing you the very best for the new year!

**Arto Halonen**, *Group CEO*



# IN THIS ISSUE

Editorial .....	2
Westauz chose Robit for the Norseman gold project .....	4
Oulun Porakaivot thrives using Robit wear parts .....	6
NISS opened new doors for Robit in the US .....	8
Dwarsrivier chromium mine improving productivity with Robit's tools .....	10
OCI: a powerful partner in the US market .....	11
Hilla's training diary .....	12
Sharing drill & blast knowhow in San Juan .....	13

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Westauz jumbo  
at work.

Westauz chose Robit for the  
**NORSEMAN  
GOLD PROJECT**



*Norseman the horse has a statue in the town that was named after him.*

**In the late 19th century, gold fever was running high in certain southern parts of Western Australia. Among the prospectors were two brothers from the Shetland Isles, Lawrence and George Sinclair. They finally struck gold some 20 km north of Dundas, an already established find, and quickly realized the gold deposit was very prosperous. The Sinclair brothers founded a town on the site and named it Norseman – after their horse.**

Today, that corner of Western Australia is known as the Goldfields region. The Central Norseman Gold Mine was founded there in 1935 and ran until 2014, making it Australia's longest continuously-running gold mining operation. During that time, it produced over 5.5 million ounces, or more than 150 tonnes, of gold.

The gold reserves in the area were far from depleted, though. A few years later, Australian gold producer Pantoro Limited acquired 50% ownership of the Norseman Gold Project and, in 2022, brought back online three mines: the OK underground mine, the Scotia open pit and the Green Lantern open pit.

Underground operation at the Norseman OK mine is contracted by Westauz Mining, headquartered in Kalgoorlie, Western Australia. At the proposal of Robit's

Sales Manager **Steve Tedge**, Westauz agreed to run a development bit trial at Norseman OK in December 2022. Since Robit's bits outperformed the competition by far in terms of cost-per-meter, Westauz awarded the drilling consumables business to Robit in early 2023.

"Throughout 2023, volumes have only grown at the OK mine site as the decline has been rehabilitated and access gained to the gold ore. Westauz is now using our Top Hammer underground bits, rods, shanks, and couplings", says **Steve Landreth**, Robit's Vice President Australasia.

Westauz have expressed their satisfaction with Robit's can-do attitude and willingness to work with their customer. "In the early stages of the agreement, Westauz requested Robit make a design change to the development bits. Our engineering team was happy to oblige, and the bit now provides productivity gains in the drilling process. We are receiving very positive feedback, ranging from the Managing Director, General Manager, Project Manager, Mine foreman and operators", Steve Landreth says.

For Westauz, the Norseman project has marked a significant growth in business. Plenty of excavating remains to be done at the site for years to come: according to current estimates, the remaining mineral resource in the area is around 4.8 million ounces, or some 136 tonnes, of gold.

From left: Ville Alanko, Simo Manninen,  
CEO Sami Manninen, Panu Hauulos  
(Oulun Porakaivot); on the right  
Kimmo Kangas (Robit).



# Oulun Porakaivot thrives USING ROBIT'S WEAR PARTS

Kauno Määttä was a familiar name to Finnish wrestling fans in the 1960s and 70s: he won the Finnish Greco-Roman wrestling championship in his weight class several times. In his day job, however, Kauno did not make the headlines despite being a respected professional: he drilled wells.

Kauno's career as a driller continued into retirement and was passed on to the next generations. In the late 1980s, Kauno's primary school-age grandsons, **Sami** and **Simo Manninen**, got the spark when they got invited as helpers for a well-drilling job.

The spark ignited a lasting passion, and as a result, the brothers' own company, Oulun Porakaivot, was finally born in 2012. It operates throughout Finland, and its core business is drilling geothermal energy fields for large properties. Oulun Porakaivot also handles the design and permitting of the energy fields and has a wide range of customers from the public sector to commercial properties and housing cooperatives. They also drill individual geothermal and water wells for detached houses and other small properties.

Oulun Porakaivot operates six drilling rigs and has long been Robit's contract customer, using Robit products for all key consumables such as rods, ring bits, drill bits, and pilots. **Panu Haulos**, Design Engineer at Oulun Porakaivot, has noticed a welcome improvement in the quality of drilling tools.

"Reliability of consumables is critical in this sector. The wells are getting deeper – up to 450 meters – and the plots of land are often small: if the first hole falls short, there may not be enough room to drill a new one.

"In consumables, we have to look at the cost of a drill meter from an overall economic perspective: performance, drilling speed and fuel consumption. Robit's products have been consistently reliable and have performed excellently in deep wells. And today's hammers and bits are more durable than before," says Panu.

For about a year, Robit has been developing a new four-inch DTH hammer, branded Robit H4, for well drilling. Testing in cooperation with customers is an integral part of product development. The H4 hammer was optimized and finalized as per customer feedback. Robit's Sales Director **Kimmo Kangas** approached Oulun Porakaivot and offered them an opportunity to test the new hammer. A suitable test site was found in Helsinki, at a housing cooperative's future energy field, where 23 wells will be drilled to

a depth of 390 metres. Kimmo has followed the development of the H4 hammer from the beginning and has seen its potential.

"The functionality, reliability and penetration rate of the H4 are outstanding. However, the most significant improvement is fuel consumption, which is significantly lower than the competition. Typically, for example, in a 200-meter well, the compressor consumes about two litres of fuel per meter. On the H4 hammer, the consumption has been as low as one and a half litres. That's a crucial difference," says Kimmo.

Panu Haulos confirms that the H4 has achieved very low fuel consumption figures at the drilling test site. The two companies have been in close cooperation for years.

"Robit's domestic production is definitely a plus for us: we can get parts with a fast response time. They react quickly to our needs, around the clock if necessary. Robit has also been able to help in special cases where off-the-shelf products have not been available. For example, we had a project where the hole we were to drill had to be absolutely straight. Robit tailor-made us a special guiding rod that did the job," says Panu.

In many sectors of the economy, growth indicators have recently taken a downward turn. This is not the case in the thermal well market, at least not for Oulun Porakaivot.

"The trend is upward, and demand is constantly growing and diversifying. Of course, this is partly due to technological advances that allow us to drill deeper wells. In Finland, the city of Helsinki, in particular, is a strong driver of progress in this field. The city, striving to move away from fossil-based district heating, has streamlined the permitting process for geothermal heat", Panu says.



*Low fuel consumption is one of the key assets of the H4 hammer.*


**NISS opened**

# **NEW DOORS**

**for Robit in the US**

Platinum and palladium are precious metals with unique properties that make them indispensable in many technological applications, particularly autocatalysts. As minerals, both are quite rare and are mostly found in just a few regions around the world. One of them stretches across the northern flank of the Beartooth Mountains in Montana, USA.





*The Beartooth Mountains, just northeast of Yellowstone National Park, are part of the Greater Yellowstone Ecosystem.*

The area, geologically known as the Stillwater complex, hosts two underground mines, Stillwater and East Boulder – although "underground" may sound slightly misleading as the mining assets lie more than 2,700 meters above sea level in the mountains.

The mines are owned and run by the Sibanye-Stillwater Group, one of the world's largest producers of platinum and palladium. The Stillwater mine has been in operation for almost 40 years and produces some 250–300 koz, or about 7,000–8,500 kg, of platinum and palladium concentrate yearly.

Since July of 2022, Sibanye has been using Robit's consumables for jumbo and bolting drilling at the Stillwater Mine. That was the result of a fruitful cooperation between Robit and their distributor, NISS (Nasco Industrial Services & Supply), headquartered in Kellogg, Idaho. That cooperation turned out to be mutually beneficial.

"We had been looking for a reliable distributor who could help improve our market penetration for the mining sector in Southwest US. We hired a consultant for the job, and one of the largest US mining companies recommended NISS to Robit", says Robit Sales Engineer **Leif Olmstead**.

"NISS had great access to mines through selling ground support products. Previously, they hadn't dealt in drilling consumables, but this became a win-win situation: we gained a better foothold in a new market, and NISS could expand their product portfolio", Leif explains.

The first customer Robit won with NISS was the Stillwater Mine in Montana. Stillwater is a large-scale operation that uses the "ramp and fill" method, where the excavated spaces are filled again with waste rock and tailings once the ore has been extracted. For jumbo work, the mine uses 3,200 and 4,305mm Robit drifter rods and 45mm semi-ballistic S model bits; for bolting, R28-R28 M/M Hex Steel rods. Sibanye-Stillwater are happy with the supplied tools.

"We hear the rod lifetime has improved over the previous supplier, and the jumbo bits are faster and have fewer plugging issues," says Leif.

Work at the Stillwater Mine won't be ending anytime soon: the estimated life of the mine extends well into the 2050s. As for Robit and NISS, it has proved a promising start for their future endeavors together.

# Dwarsrivier chromium mine improving productivity with Robit's tools

**BIC is an acronym most geologists are familiar with. It stands for Bushveld Igneous Complex, situated in South Africa. It's one of the world's most significant geological features due to its size, age – and mineral wealth.**

BIC is the largest *layered igneous intrusion* within the Earth's crust. Put simply, a layered intrusion is an underground formation of rock formed from magma that cooled down and solidified in layers, much like a layered cake. Each layer can have different types and concentrations of minerals, making these formations especially interesting for geologists and mining companies.

The Bushveld Complex contains the world's largest known resources of platinum group metals, chromium, and vanadium. Most of the chromium resources are concentrated on the eastern limb of the Complex, which runs across Limpopo, the northernmost province of South Africa. One of the major producers of chromium ore in Limpopo is the Dwarsrivier mine, located some 130 km southeast of Polokwane, the provincial capital.

The Dwarsrivier mine has been in operation since 1999. Since 2015, it has been run by Assore South Africa. The mine produces more than a million tonnes of chromium ore yearly.

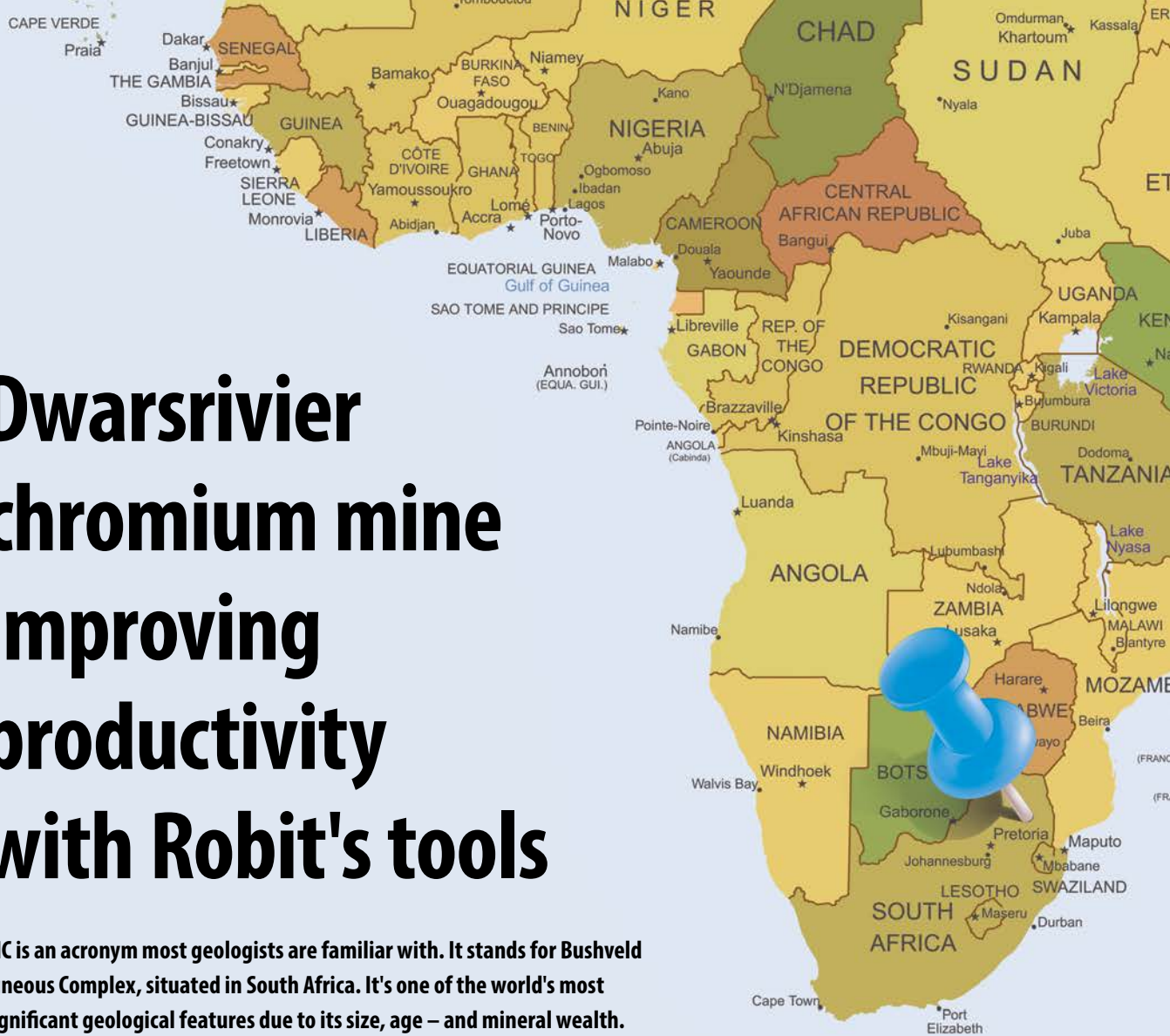
Mining is a competitive industry, and cost control plays an important part – and this applies to drilling tools as well. Recently, the Dwarsrivier mine began to use Robit's Top Hammer drilling consumables.

"Drilling requirements are essential to ensure that face holes for blasting are drilled fast, efficiently, and within budget. Quality and cost are the top priorities", says **Dewet Pretorius**, Mining Manager at Dwarsrivier.

In addition to cost and quality, Dwarsrivier were on the lookout for a supplier with effective after-sales service – something that had been lacking up until then.

"With Robit, our overall costs have decreased, production has improved, and the Robit team is providing us with good after-sales service as well", Mr Pretorius says.

South Africa holds about 70% of the world's chrome reserves and is the largest producer of ferrochrome in the world. Dwarsrivier will continue to contribute to this effort for a long time: the current plan extends the mine life well into the 2040s.



# OCI: A POWERFUL PARTNER in the US market

**OCI, LLC, headquartered in Brookville, Pennsylvania, has been servicing the US drilling industry since 1997. Their core businesses include designing and building drilling tools and systems, equipment sales, rental and service, and consulting clients on methods and materials in their drilling projects.**

OCI's sales offering includes Down the Hole hammers and shock absorbers. UK-based Bulroc rose to prominence in the 1970s as a leading manufacturer of DTH hammers and related accessories. **Jim Rupert**, one of the founders of OCI, had been working with Bulroc hammers since the early 1980s, and it was only natural that when OCI was founded in the 1990s, they would partner with Bulroc.

The same successful partnership continues to this day with OCI and Robit, which acquired Bulroc in 2016. DTH hammers, along with piling tools, remain a key part of the Robit product line in OCI's varied portfolio.

"We are a design and build manufacturing company that also mass produces micro piling casing and other industry products. We manufacture the micropile casing and the tooling used along with it.

Our offerings include sub adapters, head adapters, swivels of various models, drill pipes of various types, drill string components, augers, core barrels, kelly equipment, and auxiliary equipment. We are not limited to a product line; we offer unique opportunities to manufacture specialized drilling and construction equipment", says **Dave Franklin**, Technical Sales and Project Management at OCI.

The OCI-Robit partnership continues to serve the drilling industry across North America successfully.

"OCI feels we have a strong, healthy relationship with Robit, and we look forward to many opportunities in the near and distant future. Our clients have always been happy with Robit tools and the support we offer them as a team approach. Together, we provide a full scope of products and services," Dave Franklin sums up.

*The OCI headquarters  
in Brookville, PA.*

**FURTHER. FASTER.**

Winter 2023-2024

# HILLA'S TRAINING DIARY

The competition season has finally begun. Summer training was overall very successful. It's been enjoyable to compete in the early season races, knowing that I have improved.

The season kicked off with the Vuokatti Finnish Cup sprint, which went smoothly from the start despite having skied only a few dozen kilometers on snow. I competed in all four races and finished fourth in the final.

After Vuokatti, I traveled to Ylläs for a training camp. The conditions were excellent and I did some great sport-specific training with two friends. After two weeks, we moved to Ruka for another round of the Finnish Cup. A good sprint day and an OK distance day earned me a spot in the Ruka World Cup, held a week after the Finnish Cup.

The Ruka World Cup was my main goal of the early season, and I especially succeeded in the sprint. I was 16th in the qualifiers and finished 21st – my best performance to date at the World Cup level. It was truly rewarding to see that I had improved since last season.

I had hoped for a better performance in the next day's 10 km classic, but at least I got to wear the green U23 Cup leader's bib for ten kilometers.

A week later, I competed in the FIS races in Imatra, in the sprint and the 10 km classic. The sprint was a qualifier for the Trondheim World Cup stage, held a week before Christmas. Winning in Imatra sent me to Trondheim and my first international World Cup of the season.

My main goal for the season is the last U23 World Championships, to be held in Planica in February. I'm looking forward to competing in the youth races one last time, but before that, I need to prepare and find my peak form...

My regards to the Bulletin readers!  
*Hilla*

A corporate supporter of sports, Robit signed a sponsorship and cooperation agreement in 2021 with Hilla Niemelä, one of the most promising young skiers in Finland. Hilla has been keeping a training diary for our readers; here is episode four.



From left: Luis Carlos, Carlos Alarcón and CEO Daniel Cruz (Explotec); Juan Padilla (Robit); Emilio López-Jimeno, Pedro Chaves and Álvaro Rodríguez (Explotec).



# Sharing drill & blast knowhow in San Juan

**Explotec is a leading supplier of explosives and mining tools throughout Central America. Headquartered in Costa Rica, the company has created a solid network distributing its products to Nicaragua, Honduras, El Salvador, Guatemala, and beyond. It also organizes training events.**

A recent event took place in Costa Rica in November 2023. Focused on drill & blast, it drew 115 attendants from Central America to the Radisson San Jose hotel.

For expert insight, Explotec invited Robit's Drillmaster **Juan Padilla** to showcase examples and discuss best practices in the choice of drilling steels and proper equipment commissioning. The event also hosted **Emilio López-Jimeno**, a renowned lecturer and blasting expert, who discussed the importance of choosing the right parameters for effective blasting.

"Robit's role in these types of events is fundamental for developing our clients' knowhow and thus their ability to gain more market share in drilling steels", says **Carlos Alarcón Álvarez**, Technical Manager at Explotec.

Other speakers at the event included **Luis Carlos**, who spoke about blasting grid optimization, load factors, and improving fragmentation; **Pedro Chaves** discussed pre-cutting in blasting for mines and hydroelectric projects; **Álvaro Rodríguez** presented successful cases in blasting grid optimization and cost-cutting; and **Carlos Alarcón** examined the Royex rock breaking system as an alternative in fragmentation.

In 2024, the DTH  
hammer world  
will be witnessing

# A NEW STAR

In the meantime, have  
a fantastic new year 2024!



**Robit**

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