



DIGGING DEEP FOR INNOVATION

SANDVIK

CUSTOMER:

[Sandvik Mining and Rock Solutions](#)

PRODUCT:

Leopard DI650i Surface Drill Rig

LOCATION:

Tampere, Finland

SCOPE OF ENGINE USE:

CAT® C15, 403 kW / 1800 RPM

CAT® DEALER:

Avesco Finland

www.avesco-cat.fi/



FEATURED TOPIC:

Cat® C15

CAT® AND SANDVIK COME TOGETHER AGAIN TO ADVANCE THE MINING INDUSTRY

As a leading provider of commercial and industrial equipment for the mining, quarrying and construction industries, Sandvik Mining and Rock Solutions has worked together with Cat® dealers, including Avesco, for more than 40 years. Sandvik production facilities for surface and underground drill rigs are located in Tampere, Finland, and the long history with Avesco has led to Sandvik choosing over 10,000 Cat engines from across the power range for its equipment. Building on this relationship, Sandvik turned to Avesco for help in developing and configuring power for the Leopard DI650i surface drill rig. The high performance, dependability and versatility of Cat engines made the collaboration an easy decision.

BUILDING A BETTER DOWN-THE-HOLE RIG

Back in 2014, Sandvik began developing the Leopard DI650i surface drill rig to meet industry demand for a more flexible option. The DI650i is a down-the-hole drilling rig, diesel-powered and self-contained, designed for high-capacity drilling applications in surface mining. The rig was first offered to the market in 2018, and customer reviews have been excellent.

While it's not the first down-the-hole rig developed by Sandvik, the DI650i is more versatile and popular than its predecessors due to the hole sizes' capabilities of 6-6.5 inches. The rig is highly compatible, making it effective for drilling in many kinds of rock conditions. Its flexibility allows operators to use the DI650i for multiple mining applications with difficult ground conditions, making it a better investment for customers.

COLLABORATION FOR CUSTOMISATION

An intelligent, high-performance drill like the Leopard DI650i requires a special engine. Sandvik worked directly with Avesco engineers to determine the engine requirements and configure the Cat C15 to exact specifications.



Avesco engineers are located nearby in Kerava, Finland. Their proximity helps strengthen the relationship between Avesco and Sandvik, making collaboration possible.

"We started to ship C15 engines to Sandvik for this machine in 2017-2018, and then, eventually, the EU Stage V engines. We worked close by with Sandvik engineers and were involved from the very beginning to find the right engine ratings and options that were the most efficient and cost-effective."

- Juha Kaartinen, Cat dealer Avesco Sales Manager

DURABILITY IS A MUST

The Leopard DI650i is designed for large-scale quarry applications and demanding, high-capacity production. Depending on the job, one rig will excavate several million tons of rock. That level of production requires sturdy equipment, as well as a dependable power source.

"Our customers expect these machines to be running for a long time. They look at long life as something needed when they factor in the cost of their investment. The drill rig is crucial for construction business. If the drilling fails, the whole mine operation basically stops."

- Jarno Viitaniemi, Sandvik Product Manager



A PERFECT MATCH

Avesco and Sandvik have built a mutually beneficial relationship spanning four decades. When choosing an engine to power the Leopard DI650i, Sandvik factored in sustainability, but also production capabilities and product support. Caterpillar checks all three boxes.

"We start with technical specifications, what our power needs are and what the hole size is. And then the discussion turns to our expectation of support and how we rely on the manufacturer and dealer. It makes sense to use Cat engines in our machines because there are so many other Cat machines at a mining site, giving us access to the skilled and experienced Cat people available."

- Jarno Viitaniemi, Sandvik Product Manager

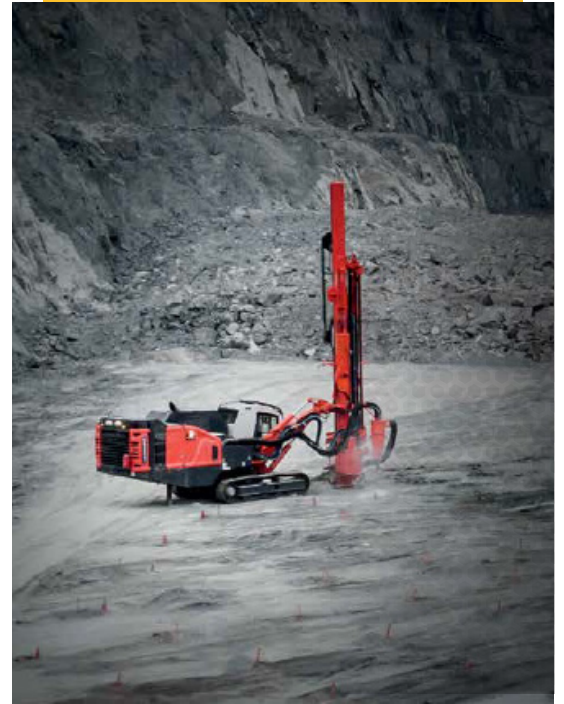
CRUSHING SUSTAINABILITY STANDARDS

The DI650i is available with the latest emissions compliance, EU Stage V, as part of a corporate commitment to meeting the highest sustainability standards. Sandvik strives to be as environmentally responsible as possible. The Cat C15 engine delivers high-efficiency results in a small package size, supporting sustainability and long-term cost of ownership goals.

Sandvik aims to improve upon its high standards of sustainability, looking to be carbon-neutral in the future. Sustainable practices in mining and rock excavation produce a brighter future, and they also increase productivity and efficiency. Sandvik sustainability goals of improving equipment lifecycles and lowering equipment CO2 emissions by 2030 will be reached, in part, by powering equipment with hydrotreated vegetable oil (HVO) and other renewable fuels. Sandvik is currently working with Caterpillar engineers on developing technology solutions to lower its carbon footprint.

"We continue to work with Avesco to find those sustainable solutions for the future. Caterpillar technology is helping us meet our targets for a lower carbon footprint and to eventually be carbon neutral. It's a very important part of our collaboration."

- Jarno Viitaniemi, Sandvik Product Manager



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- Jarno Viitaniemi, Sandvik Product Manager



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