POWER PROFILE: SANDVIK MINING AND ROCK TECHNOLOGY

# DRILLING DOWN THE DETAILS



**CUSTOMER:** Sandvik Mining and Rock Technology

LOCATION: Finland

#### **SCOPE OF ENGINE USE:**

Cat<sup>®</sup> C15 China Nonroad Stage III, U.S. EPA Tier 3 Equivalent, UN ECE R96 Stage IIIA Equivalent

**CAT® DEALER:** Witraktor, Finland

rocktechnology.sandvik

### THE RELIABLE ENGINES END USERS WANT

Down-The-Hole (DTH) drill rigs are widely used in open pit mines and quarries to drill bore holes to place explosives in hard rock. The highly efficient process places a percussion "hammer" above the drill bit to pulverize the rock, which is then blown out of the bore hole with high-pressure compressed air.

Sandvik Mining and Rock Technology is a leading supplier of DTH surface boom drills. Its newest product, the Leopard<sup>™</sup> DI650i<sup>™</sup>, is a self-contained crawler-mounted intelligent DTH drill rig that is designed for demanding high-capacity production drilling applications. The mobile drill incorporates a state-of-art design and layout with ergonomic iCAB cabin, intelligent drilling and compressor flow control systems and advanced serviceability features.

"The Leopard DI650i is a totally new platform for high-pressure DTH drilling primarily in open pit mines and large quarries," says Jari Läntinen, Product Manager, Surface Boom Drills at Sandvik Mining and Rock Technology. "A Cat engine was one of the first major components selected. The ease with which it was incorporated in the design really helped us meet our objectives for the new machine."

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The Leopard DI650i is powered by a Cat C15 diesel engine that meets China Nonroad Stage III, U.S. EPA Tier 3 Equivalent and UN ECE R96 Stage IIIA Equivalent emission standards. Its exceptional power density enables standardization across numerous applications, and multiple installation options minimize total package size. The C15 is ideal for equipment with narrow engine compartments.

Sandvik Mining and Rock Technology works with a number of engine suppliers, so the potential candidate engines for the Leopard DI650i were subjected to an extensive suitability test and auditing process. After that, the selected candidate underwent heat, air filtration and electrical system tests and an engineering evaluation of its compatibility with other selected components.

At the end of the process, the Cat C15 engine met the pre-selection criteria set for the Leopard DI650i as well as the reliability, fuel efficiency and global aftermarket support requirements.

"The Cat extended service cycle, extended warranty packages and availability of parts and service from a global network all give our customers extra assurance," Läntinen says. "The fact that Cat machines are already present in many of the mines our customers operate is another big advantage offered by the C15."

A long-term successful collaboration with Finnish Cat dealer Witraktor and the track record of previous Cat engines used in Sandvik equipment were also important factors in selecting the C15. Once the C15 was selected, Witraktor supported the Sandvik design team extensively throughout the development process.



"THE CAT EXTENDED SERVICE CYCLE, EXTENDED WARRANTY PACKAGES AND AVAILABILITY OF PARTS AND SERVICE FROM A GLOBAL NETWORK ALL GIVE OUR CUSTOMERS EXTRA ASSURANCE."



## LET'S DO THE WORK.

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