SANDVIK

Leopard™ DI series Built to perform

Surface down-the-hole drill rigs



Technical specification in brief

Technical data

	Leopard™ DI450	Leopard™ DI550	Leopard™ DI560
Recommended hole diameter	90–130 mm (3 ½”–5 ⅛”)	90–165 mm (3 ½”–6 ½”)	90–165 mm (3 ½”–6 ½”)
Drill pipe/tube diameters	76 mm, 89 mm, 102 mm (3”, 3 ½” and 4”)	76 mm, 89 mm, 102 mm, 114 mm (3”, 3 ½”, 4” and 4 ½”)	76 mm, 89 mm, 102 mm, 114 mm (3”, 3 ½”, 4” and 4 ½”)
DTH hammer	3”, 4”	4”, 5” and 6”*	4”, 4” HP, 5” and 6”*
Rotary head and rotation torque	HTRH6, 4300 Nm	HTRH6, 4300 Nm	HTRH6, 4300 Nm
Engine type	Caterpillar C9.3B, Stage V / Tier 4F	Caterpillar C13, Tier 3 Caterpillar C13B, Stage V / Tier 4F	Caterpillar C13, Tier 3 Caterpillar C13B, Stage V / Tier 4F
Engine output power	250 kW (340 hp) / 1800 rpm	328 kW (440 hp) /1800 rpm, Tier 3 340 kW (456 hp) /1800 rpm, Stage V / Tier 4F	328 kW (440 hp) /1800 rpm, Tier 3 340 kW (456 hp) /1800 rpm, Stage V / Tier 4F
Cabin type	HVC550	HVC550	HVC550
Cabin certificate	ROPS and FOPS	ROPS and FOPS	ROPS and FOPS
Control system type	PLC controlled electro-proportional hydraulics	PLC controlled electro-proportional hydraulics	PLC controlled electro-proportional hydraulics
Flushing air capacity	18 m^3 / min (636 cfm), at 24 bar (348 psi)	24,4 m^3 / min (862 cfm), at 24 bar (348 psi)	24,4 m^3 / min (862 cfm), at 24 bar (348 psi) 21,6 m^3 / min (763 cfm), at 30 bar (435 psi)
Transport length	12 m (38 ft)	12 m (38 ft)	12 m (38 ft)
Transport width	2.5 m (8.2 ft)	2.5 m (8.2 ft)	2.5 m (8.2 ft)
Transport height	12.0 m (38.0 ft)	3.3 m (11.0 ft)	3.3 m (11.0 ft)
Total weight	23 370 kg (51 522 lbs), Tier 4F / Stage V	23 700 kg (52 250 lbs), Tier 3 24 050 kg (53 021 lbs), Tier 4F / Stage V	23 700 kg (52 250 lbs), Tier 3 24 050 kg (53 021 lbs), Tier 4F / Stage V

* Only in special conditions: 6” DTH hammer limited max. 20 bar air pressure / DIN 1343.
DIN 1343: pressure = 1.01325 bars, air humidity = 0%, temperature = 0°C.

The best in productivity and user comfort

Businesses – large and medium-sized quarries and contractors in particular – constantly need to improve the productivity of their operations. This means that it is of the greatest importance to choose machines that do exactly the job they are supposed to – no more, no less.

This is why our Leopard™ DI series down-the-hole drill rigs are the perfect match for the job. Machines in the series are at their best in production drilling, quarry/mine development, presplitting and dewatering, and are suited to work at their maximum performance with Sandvik DTH hammers with a 3” to 6” hole size. The Leopard™ DI560 is also available with a 4” HP (high-pressure) 30 bar DTH hammer for even greater productivity.

Scrooge in fuel consumption, unsparing in drilled meters

The careful alignment of power and hammer size makes these rigs uniquely productive, keeping fuel consumption and operating costs as low as possible. Cost-effective machine performance is further enhanced by other advanced features such as load sensing compressor pressure control, active diesel RPM control, optimized diesel RPM level during drilling, and ambient oil cooler fan control.

Seamless co-operation

The modern, overpressurized and ROPS- and FOPS-certified cabin, with

Seamless operation between man and machine

Ergonomic cabin

— Ergonomic user interface
— Strong FOPS/ROPS-certified safety cabin
— Efficient filtration for incoming and recirculating air
— Pressurized
— Low noise level and vibration-free design
— Durable safety grille as standard
— Heating and optional air conditioner
— Two reversing cameras with monitor (optional)

User interface

— Excellent visibility
— Joystick for boom movements
— Pipe handling and magazine joystick
— Tramming and drilling joystick
— Foot pedal for thread greasing
— TIM hole inclination system (optional)
— TIM3D drill navigation system (optional)

Efficient led lighting and simple symbols

— Drilling and tramming

Easy maintenance

Daily and weekly maintenance points easily accessible from ground level.



Environmentally and economically friendly

Low fuel consumption
- Compressor pressure control with load sensing
- Ambient control of oil cooler fans
- Active engine control for optimized diesel engine RPM

Long lifetime for drilling tools
- Friction type jaws
- Gentle and accurate drill pipe handling system

Long lifetime for components
Ambient control for compressor running temperature – always the right running temperature. No condensate water in the system or unnecessarily high temperature to reduce component lifetime.

HTRH6 heavy duty rotary head with modular design for reliability and easy servicing.



Safe cabin with excellent visibility for efficient and productive operation.



Joysticks for easy drilling and tramming control.



The bigger 10.4” touch screen comes with TIM3D readiness which can be chosen as an option.

Leopard™ DI550 Sophisticated efficiency

Improved Leopard™ DI550 has the same drilling capabilities than its predecessors and in addition it comes with a more efficient motor and upgraded handling and maintenance capabilities.

What’s new

— New engine CAT C13B for fuel efficiency and better serviceability
— Updated compressor intake valve for more reliability
— Improved air-conditioning system for better operator environment
— Efficient hybrid fire suppression system (option)

Long lifetime

— Modular structure gives an easy ground level access to daily maintenance and service points
— Robust design is built to last and adds safety
— Long lasting drilling tools with friction type jaws and accurate drill pipe handling

Seamless operation

Fully electric operated interface and user-friendly layout. Operator gets simple and clear gauges for drilling parameters, compressed air pressure, feed pressure and rotation pressure. Operator screen for other vital information is included and possibility for an optional 10.4” touch screen for controlling machine functions. Excellent visibility and an ergonomic, low noise and vibration free cabin with cooling and heating for changing environments.

