

## LEOPARD<sup>TM</sup> 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 ⅓"	90–165 mm 3 ½"–6 ½"	90–165 mm 3 ½"–6 ½"
Drill pipe/tube diameter	76, 89 and 102 mm 3", 3 ½" and 4"	76, 89, 102 and 114 mm 3", 3 ½", 4" and 4 ½"	76, 89, 102 and 114 mm 3", 3 ½", 4" and 4 ½"
DTH hammer	3", 4"	4", 5" and 6"*	4", 4" HP, 5" and 6"*
Engine type	Caterpillar C9	Caterpillar C13	Caterpillar C13
Engine output power	261 kW / 1 800 rpm	328 kW / 1 800 rpm	328 kW / 1 800 rpm
Flushing air capacity	18 m³ / min at 24 bar (636 cfm at 348 psi)	24,4 m³ / min at 24 bar (862 cfm at 348 psi)	24,4 m³/min at 24 bar (862 cfm at 348 psi) 21,6 m³/min at 30 bar (763 cfm at 435 psi)
Operator cabin	HVC550	HVC550	HVC550
Certificate	ROPS and FOPS	ROPS and FOPS	ROPS and FOPS
Transport length	12.6 m (41 ft)	12.6 m (41 ft)	12.6 m (41 ft)
Transportation Tramming height	3.37 m (11 ft) / 3.29 m (11 ft)	3.37 m (11 ft) / 3.29 m (11 ft)	3.37 m (11 ft) / 3.29 m (11 ft)
Transportation Tramming width	2.49 m (8.2 ft)	2.49 m (8.2 ft)	2.49 m (8.2 ft)
Weight	23 150 kg Tier3 23 370 kg Tier4	23 700 kg Tier3 24 050 kg Tier4	24 050 kg Tier4

 $<sup>^{\</sup>star}$  Only in special conditions: 6" DTH-hammer limited max. 20 bar air pressure / DIN1343 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 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 COOPERATION BETWEEN MAN AND MACHINE

On top of high performance, the Leopard Series guarantees simple and comfortable machine operation. Featuring **a modern, accurate control system** with simple icon displays, the Leopard Series enables seamless cooperation of man and machine. The operator handles the drilling and the automation takes care of all machine controls.

The modern, overpressurized and ROPS- and FOPS-certified cabin, with first-rate ergonomics, efficient filtration for incoming and recirculating air, and excellent visibility – not to mention the modern LED lighting – further add to operator comfort. The large windshield comes with a strong safety grille that is easy to open for cleaning. The efficient dust collector with non-stop cleaning decreases the amount of dust emissions into the environment. It also improves filter lifetime and therefore reduces the need for maintenance.

Other features that translate into **easy maintenance** and reduced downtime include the engine compartment's open layout, easy cooler cleaning, the modular compressor control system, and the simplified, CAN bus-based electrical system. All daily maintenance points are located at ground level to simplify the process and improve the safety of service personnel. A fast fueling option and large fuel tank further reduce costly downtime.

#### **SAFETY**

Safety is a basic value for us and an intrinsic characteristic of all our drill rigs. On top of the proactive work to improve operational safety, we turn requirements into technical solutions – as a result the Leopard Series complies fully with the new drill rig safety standard EN16228.





## 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 hole 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

- New friction type jaws
- New, gentler and more 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.

