

DL331 top hammer Longhole drill

Technical Specification





SB60P
Hydraulic boom

LHF2005 / ERHC12
Drilling module

RDX5
Rock drill

Versatile and productive in medium section

Key features

Coverage	Up to 6.8 m (vertical) Up to 6.0 m (horizontal)
Distance of holes from the wall	160 mm
Hydraulic rock drill	1x RDX5 (20 kW)
Drilling module	1 x LHF2000 / ERHC12
Boom	1 x SB60P
Minimum drift size (H x W)	3 000 x 3 000 mm
T-section width in turning	4 300 mm
Transport width	2 020 mm
Transport height (canopy)	2 140 mm / 3 100 mm
Transport height (cabin)	2 920 mm or 2 670 mm
Transport length	11 285 - 11 580 mm
Total weight	15 500 kg

Sandvik DL331 is a fully-mechanized, highly versatile and compact electro-hydraulic top hammer longhole drill designed for underground mining in 3 x 3 m or larger production drifts. It is capable of drilling vertical and inclined fans and single or parallel Ø51 - 76 mm longholes up to 23 meters in depth, using R32, T38 and T45 rock tools.

The DL331 is mounted on a 4-wheel drive frame-steered and diesel-powered carrier. It is equipped with the RDX5 hydraulic rock drill, LHF2000 feed, ERCH12 rod handler, SB60P boom, THC561 hydraulic control system and operator's FOPS/ ROPS cabin or canopy for maximum safety, productivity and hole accuracy.

The smallest drilling distance to the wall reduces to a minimum dilution in Narrow Vein mining.

The LHF2005 is the most compact Long Hole feed on the market, using the longest rod in the most compact gallery, guaranteeing efficiency and less deviation (less rods for same hole length) or less dilution (smaller gallery for same rod length).

The unique SP60 boom auto-parallelism maintains hole direction without instrumentation for easier operation. Its 360° drilling module rotation and wide boom swing and tilt enable drilling in any direction, suiting most mining methods and service support applications.

The THC561 drilling control system is fitted with automatic features for maximum productivity in varying rock conditions, in up- and down hole drilling.

Optional TIS instrumentation provides drilling angles and depth, ensuring accurate drilling, for maximizing ore recovery and minimizing ore losses, dilution and oversizes in production.



FOPS / ROPS
Cabin, low cabin
or telescopic canopy

Same carrier
through the range

Main benefits

Speed and accuracy in rod handling

LHF2000 cylinder feed (feed force 20 kN):

- High torsion resistance beam for long service life
- Easily replaceable guiding rails for low operating cost
- Low height retaining centralizer

ERHC12 fully mechanized rod handler:

- Carousel indexing by hydraulic motor
- The carousel feeds rods in the gripping jaws for good reliability in rod handling
- Line feeding of rods into the drill center
- Storing capacity up to 23 m of drilling (6' rods)

Rear and front stingers (standard)

Rock tools and hole length

Type	Rod Ø (mm)	Hole Ø (mm)	Maximum hole length (m)*		
			4' rods	5' rods	6' rods
R32	32	51	15.5	19.5	23.5
T35	39	54	14.3	18	21.7
T38	39	64	14.3	18	21.7
T45	46	76	13.1	16.4	19.8

**) Feed in contact with rock and front stinger retracted*



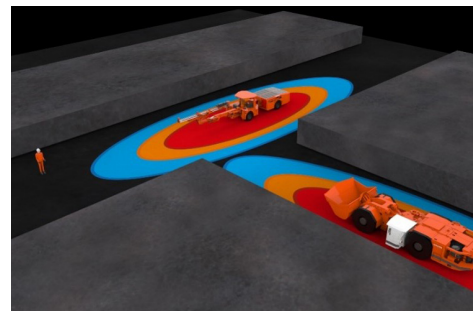
Optimized working environment

Modern and ergonomic cabin for maximum operator comfort with improved visibility and reduced noise level



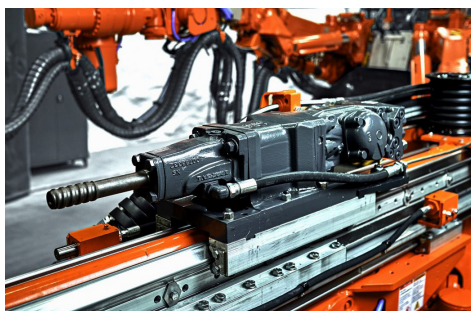
Instrumentation system

The TIS feature is integrated into the drilling control panel. It shows feed tilt, rotation angles, hole depth, penetration rate, and drilling pressures. Data is logged via USB and easily exported for reporting. Accurate hole alignment ensures effective process control.



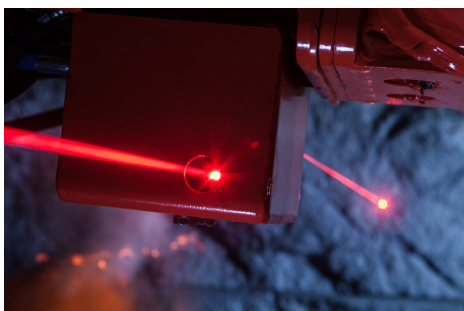
Proximity detection system (PDS level 9)

PDS system is generally designed to inform the operator and to slow down the machine and/or stop the equipment in case of a collision risk with a person or object carrying a tag.



Robust and performing rock drill

Sandvik RDX5 is a robust rock drill for heavy duty rock drilling. It is designed for face and long hole drilling, especially with its power extractor, to remove jammed rods. RDX5 is designed to perform even in the harshest conditions.



Lasers positioning

Equipped with positioning lasers mounted beneath the drilling boom, the machine can reach faster and more accurate setup in underground mining environment.



Sandvik DrillConnect

Readiness for Sandvik DrillConnect mobile application for improved data management and enhanced maintenance, and My Sandvik digital services.



Sandvik 365 Parts and Services

Proudly keeping you on track!

Sandvik 365 Parts & Services offer a variety of possibilities to enhance your Sandvik DL331 drill's performance.

As an OEM, we provide the best-suited choices to preserve your machine's high performance throughout its lifetime.

These consist of highly skilled service specialists supporting you 365 days a year, all using Sandvik Genuine parts and components complemented by a range of robust tools.

In addition, you get to enjoy the benefits of advanced digital services and a global infrastructure dedicated to keeping your Sandvik fleet on track.

Technical Specification

Hydraulic rock drill

Type of rock drill	RDX5 (TS2-433)
Percussion power	20 kW
Percussion pressure	210 bar (factory setting)
Percussion rate	67 Hz
Rotation speed	Max. 250 rpm (with OMS125)
Rotation torque	625 Nm (with OMS125)
Weight	210 kg
Length with shank adapter	1 245 mm (long shank)

Drilling module

Type of feed	LHF2000 (TS2-385)
Rod length	1 220 - 1 830 mm (4' - 6')
Retaining centralizer	FCC3
Cuttings diverter	Standard
Set-off from stope face	600 mm
Feed force	20 kN
Feed and return speed	0.1 m/s and 0.2 m/s (fast feed)
Front and rear stinger	Mounted on feed
Stinger extension	600 mm (front stinger) 1 200 mm (rear stinger)
Length with stingers extended	5 050 - 5 660 mm
Type of rod handling system	ERHC12 (TS2-168)
Storing capacity	12 + 1 rods (R32) 11 + 1 rods (T38) 10 + 1 rods (T45)

Drilling module extensions

Type	LHF2006 (Standard)	LHF2005 (Option)	LHF2004 (Option)
Rod length	6' (1 830 mm)	5' (1 525 mm)	4' (1 220 mm)
Total length	3 460 mm	3 155 mm	2 850 mm

Longhole boom

Telescopic boom	SB60P (TS2-316)
Boom swing	Left 29° / Right 31°
Boom head swing	Left 45° / Right 45
Drilling module roll-over	360°
Boom extension	1 200 mm
Drilling module travel	1 200 mm
Boom coverage (vertical holes)	6 800 mm
Feed parallelism	Automatic hydraulic
Boom head swing	± 45°

Hydraulic system

Powerpack	HPP555 (1 x 55 kW) IE3 electric motor
Filtration size (pressure / return)	20 µ / 10 µ Quick couplers for kidney filtration
Oil tank volume	180 liters (drilling)
Filling pump for hydraulic oil	Electric
Cooler for hydraulic oil	OW30 oil-to-water (1 x 30 kW)
Low oil level indication	Low level oil switch

Drilling control system

Type of control system	THC561 LH (TS2-361)
Operating principle	Hydraulic control
Manual boom control	Direct control Fully proportional Hydraulic parallelism
Drilling control	Semi-auto collaring Feed / percussion pressure control Feed compensation Coupling/uncoupling Flushing control Reaming control
Drilling safety	Boom movements inhibition switches

Electric system

Standard voltage	380 - 690 V (± 10%)
Total installed power	70 kW
Main switch gear	MSE 5
IP classification	Specification TS2-132
Starting method	Star Delta 380 V - 575 V DOL 600 -690 V
Automatic cable reel	TCR1
Cable reel control	At operator station and remote control at rear of the machine
Sealed AGM batteries	2 x 12 V, 95 Ah
Cable plug holder	On central rear hood
Front working lights (combined working and driving)	4 x 50 W LED (4 200 lm, 6 000 K)
Rear working lights (combined working and driving)	4 x 50 W LED (4 200 lm, 6 000 K)
Parking rear brake / park lights	2 x Red LED
Remote controlled search light	1 x 40 W (24 V) LED
Carrier positioning lights	2 x Laser type
Sealed AGM batteries	2 x 12 V (95 Ah)

Air and water flushing

Flushing of holes	By Water
Water booster pump type	WBP1 (4 kW)
Water pump capacity	33 l/min at 15 bar (input pressure = 4 bar)
Water pump inlet pressure	2 bar (min.)
Flushing water pressure	10 - 15 bar
Shank lubrication device	SLU1 (air / oil mist)
Air compressor	1 m³/min at 7 bar
Rock drill oil consumption	180 - 250 g/h
Rock drill air consumption	250 - 350 l/min
Air cleaner for external supply	IP5 including connection

Operator's safety cabin

Cabin certification	FOPS / ROPS (ISO 3449 / 3471) Cabin with safety grill, height 2 920 mm
Operation	Standing drilling, seated tramming
Sound pressure level according to EN 16228	Operator station: 80 dB(A)
Operator's seat	Ergonomic T-back seat
Air conditioning	Cooling only
Tramming cameras	1 x rear frame 2 x on each side of cabin or canopy
Audio system	Radio / USB MP3 / Bluetooth® and loudspeakers

Technical Specification

Carrier

Type of carrier	NC5-17
Steering system	Frame steering
Carrier articulation	Up to ± 38°
Rear axle oscillation	± 10°
Ground clearance	320 mm
Diesel engine	Deutz TCD2012, 74 kW, Tier 3, Stage IIIA, Canmet, China 2
Exhaust catalyzer	Standard
Transmission	Hydrostatic, automotive
Axles	Spicer 123 (front) and 112 (rear) with extended differential breathers
Tires	12.00-20
Service brakes	Hydrostatic and positive braking
Parking and emergency brakes	SAHR fail safe type wet disc brakes
Tramming speed	12 km/h (horizontal) 5 km/h (14%=1:7=8°)
Gradeability / sideways tilt	Max. 15° / 5° (according to ISO 18758)
Fuel recommended	Diesel EN590 / HVO EN15940
Fuel tank	90 liters
Tramming oil tank	55 liters
Carrier stabilization	2 x Telescopic (front) 2 x Vertical (rear)
Brake release	Manual hand pump
Tramming cameras	1 x rear, 2 x right and left side
Tramming alarm	Backward alarm
Knowledge Box™	Connectivity solution (TS2-535) My Sandvik insight readiness (TS2-390)
Documentation	1 x Operator's manual 1 x Maintenance manual 1 x Technical manual (in English only) 1 x Parts manual (in English only) 2 x USB key of manuals (PDF files) 1 x Online Parts manuals (MySandvik)
Underground standard working environment	0°C < Mine air T° < 40°C Humidity < 85% -1000 m < Altitude < 4000 m When applicable : 0° < Water flushing T° < 30°C 5 < Flushing or mine water pH < 10 Flushing water salt concentration < 2%

Optional features and packages

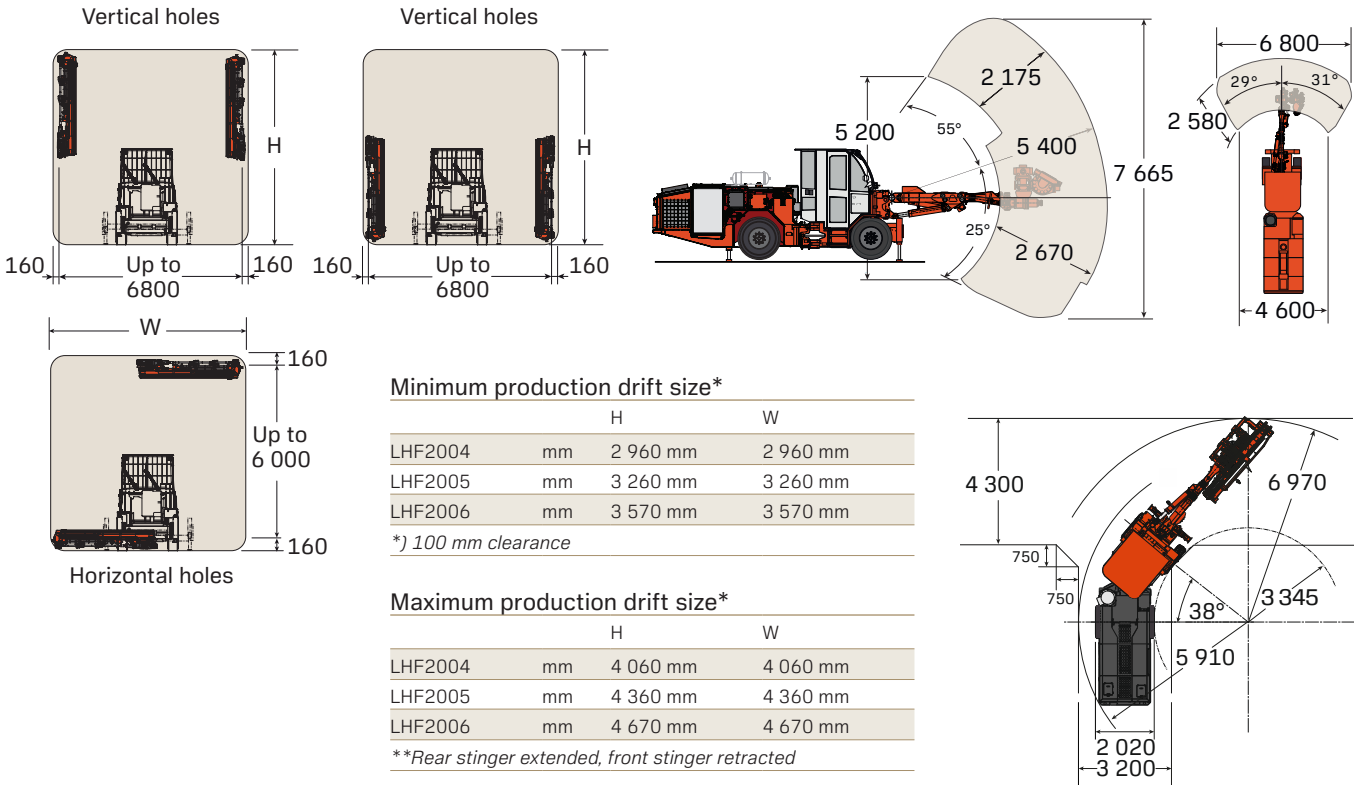
Rock drill	
Power extractor	For RDX5
Drilling module	
Conversion kit	From one rod size (thread) to another
Rear stinger extension kit	1 000 mm
Hydraulic system	
*Biodegradable oils	PLANTOHYD SE 68 or PLANTOHYD SE 46 (arctic)
Drilling control system	
Instrumentation	TIS with USB data collection
Spirit level angle indicators	2 pcs (on feed)
Indicator lights	For boom movement prevention switch
Access detector system	Mandatory in Europe (TS2-211)
Access protector system	Mandatory in Canada (TS2-211)

Optional features and packages

Electric system	
*Multi-voltage pro	380 - 1000 V, at 50 or 60Hz
*Starting method	Star Delta 600 - 690 V
*Electric cables	Specification TS2-121, delivered with cable safety kit - no plug
Ground fault and overcurrent protection	VYK (N/A USC package) with pilot cord (optional)
Auxiliary outlet	1 x 110 V or 1 x 230 V, 16 A
Battery jump start	Optional
De-watering pump outlet readiness	8 kW (site voltage 380 - 690 V)
Amber flashing light	N/A USC package LED (24 V)
Air and water system	
Flushing flow control	
Air mist flushing	For external air and water supply
*End of hole air flushing	2 x 60 liters air receivers with CT28
*Air compressor	2.8 m³/min at 7 bar
Water hose reel with water hose	THR with 32 mm (1 ¼"), 80 meters
Water hose with hooks	32 mm (1 ¼"), 80 meters
Cleaning system	
HP system with reel	Up to 180 bar (TS2-343)
LP system with reel	Up to 15 bar (TS2-343)
*Two-directional fan	Radiator and transmission oil cooler
Greasing systems	
Centralized greasing points	Specification TS2-463
Manual system	Greasing gun and cartridge with hose reel (TS2-463)
Automatic system	Carrier and boom (TS2-463)
Operator's safety cabin / canopy	
*Safety canopy with safety grill	FOPS (ISO 3449)
*Low cabin	FOPS / ROPS certification Height 2 670 mm, During drilling and tramming Brake applied or buzzer
Cabin heating	
Seat belt and door interlock	
Fire suppression system	
Hand held fire extinguisher	1 or 2 x 6 kg or 7.7 kg (Type ABC)
Manual or automatic system	Ansul, 6 nozzles (TS2-460)
Auto. fire suppression system	Sandvik Eclipse™ (TS2-461)
Carrier	
*Diesel engine	TCD3.6, 74 kW, Tier4F, Stage V, Canmet TCD3.6 DWG, 75 kW, China 4 with DPF
*Foam filled tires	4 pcs
Fast filling and evacuation system	Wiggins (complete)
*Knowledge Box™	My Sandvik productivity readiness (TS2-390)
Wheel chocks and holders	2 Sets
*Directional tramming alarm	Cri du Lynx®
Proximity detection system	CANbus Level 9
Speedometer	For NC5-17 carrier
Extra items	
Berg plug and socket	250 A
Spare rock drill	RDX5
Tools and pressure test box	Specification TS2-429
Spare wheel assembly	Air or foam filled tire
Special tools for rock drill	Field tool set (TS2-434) Complete tool set (TS2-435)
Warranty extension	One year (excl. Kazakhstan)
Documentation	Extra paper, PDF manuals
Video recorder and speedometer	For CIS
Package: Country specific options	LAM, USC, AUS, CE package
*Package: Harsh water	Basic or advanced (TS2-049)
*Package: Onboard air supply	For air mist drilling
*) Replaces standard feature	

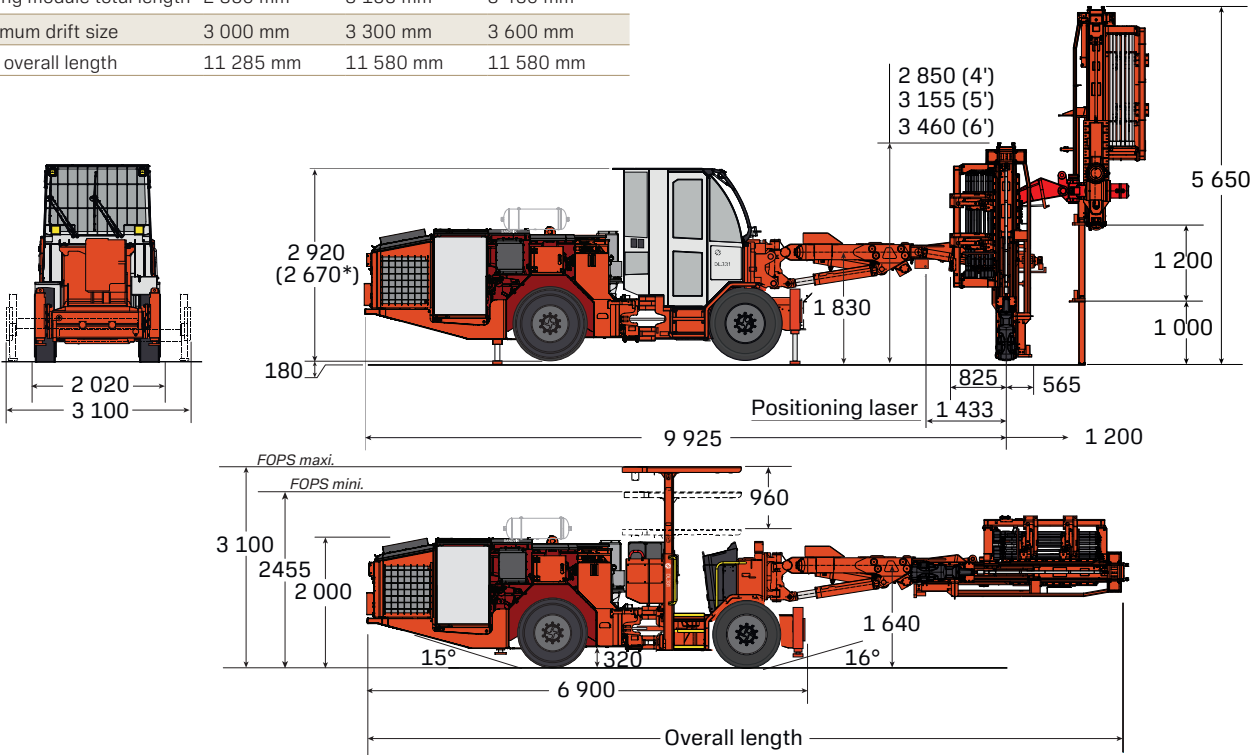
Technical drawings

All dimensions in mm



Drift and unit dimensions

	LHF2004	LHF2005	LHF2006
Drilling module total length	2 850 mm	3 155 mm	3 460 mm
Minimum drift size	3 000 mm	3 300 mm	3 600 mm
Unit overall length	11 285 mm	11 580 mm	11 580 mm



* With low cabin option

SANDVIK

TS2-045:17ENG@Sandvik Mining 2026
SANDVIK, iSURE® and DIGITAL DRILLER™ are trademarks owned by the Sandvik group of companies.

*Test results and calculations are to be considered as results reached under certain and controlled conditions. These test results and calculations should not be treated as specifications and Sandvik does not guarantee, warrant or represent the outcome of test results or calculations in any or all circumstances.

