

DL2711 TOP HAMMER LONGHOLE DRILL

TECHNICAL SPECIFICATION

Sandvik DL2711 is a fully mechanized and compact electro-hydraulic top hammer longhole drill designed for underground mining in 3.2 x 3.2 meter or larger production drifts. It is capable of drilling vertical and inclined fans and single or parallel diameter 64 – 89 mm longholes up to 38 meters in length, using T38, T45 and T51 MF-rods or Ø65 mm tube rods.

Sandvik DL2711 is mounted on a 4-wheel drive frame-steered and diesel powered carrier. It is equipped with HL710S hydraulic rock drill, LFRC700 drilling module, FR10 longhole boom, VIC control system, remote drilling control panel and FOPS operator's safety canopy for high drilling capacity, good hole accuracy and maximum safety. The 360° drilling module rotation and wide boom swing and tilt angles make the drill suitable for most mining methods and various service support applications.

The layout of the Sandvik DL2711 undercarriage is designed for good visibility, mobility and stability, ensuring fast and safe tramming in narrow mine drifts.

The operator's canopy and maintenance interface are designed for easy access, safe operation and all service points are accessible from the ground level.

KEY FEATURES

Hydraulic rock drill	HL710S (20 kW)
Drilling module	LFRC700 (20 + 1 rods)
Rod length	4' - 6' (1 220 - 1 830 mm)
Single section boom	FR10 (on front stabilizer)
Minimum drift size (H x W)	3 150 x 3 150 mm (4' drilling module)
T-section width in turning	3 400 mm
Pivot point height	1 390 - 1 640 mm
Vertical holes coverage	1 500 mm
Transport width	1 600 mm
Transport height	2 715 mm / 2 750 mm
Transport length	8 130 mm
Transport weight	14 800 kg

ROCK TOOLS AND HOLE LENGTH

Thread	Rod Ø (mm)	Hole Ø (mm)	Hole length (m)*
T38	39	64	25 - 38
T45	46	76	25 - 38
T45	65 (tube)	76 - 89	25 - 38
T51	52	89	25 - 38

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



1. SANDVIK DL2711 - LONGHOLE DRILL

HYDRAULIC ROCK DRILL

Type of rock drill	HL710S (TS2-302)
Percussion power	20 kW
Percussion pressure	Up to 190 bar
Percussion rate	52 Hz
Rotation speed	0 - 180 rpm
Rotation torque	1 095 Nm (OMT200)
Weight	245 kg
Length with shank adapter	1 340 mm
Filling device for accumulators	Specification TS2-430

DRILLING MODULE

Type of drilling module	LFRC700 (TS2-341)
Rod length	4' - 6' (1 220 - 1 830 mm)
Storing capacity	20 + 1 rods (all threads)
Fan distance from drift end	530 mm (minimum)
Feed force	31 kN
Feed and return speed	Up to 0.3 m/s
Retaining centralizer	Pito 7
Cuttings diverter	CC705
Front stinger	Extension 1 500 mm

DRILLING MODULE DIMENSIONS

Type	Rod length	Total length
LFRC704	1 220 mm	2 940 mm
LFRC705	1 525 mm	3 240 mm
LFRC706	1 830 mm	3 550 mm

LONGHOLE BOOM

Type of boom	FR10 (TS2-297)
Boom swing	Left 37° / Right 37°
Fan tilt (upholes)	Backward 50° / Forward 35°
Drilling module roll-over	360°
Drilling module travel	1 050 mm (all lengths)
Vertical hole drilling coverage	1 500 mm
Pivot point height	1 390 - 1 640 mm
Rear stinger	Mounted on feed cradle
Rear stinger extension	1 250 mm + 500 mm extend stud (option)
Front stabilizer	Horseshoe (short) with hydraulic jacks
Laser distance from drill center	3 090 mm (vertical holes)

HYDRAULIC SYSTEM

Type of hydraulic system	TPC LH
Operating principle	Electric pilot control
Powerpack	HPP 755 (55 kW)
Filtration (pressure / return)	10 µ / 10 µ
Oil tank volume	200 liters (drilling)
Filling pump for hydraulic oil	Electric
Cooler for hydraulic oil	OW30 oil-to-water (30 kW)
Low oil level indication	Level indicator and automatic switch-off
Set of tools	Specification TS2-429

DRILLING CONTROL SYSTEM

Type of control system	Sandvik VIC
Control panel	Cable remote panel
Power control (adjustable)	Full percussion Collaring Rotation / Threading Feed / Anti-jamming Flushing
Diagnostics system	Interactive
MySandvik insight	Remote monitoring system

ELECTRIC SYSTEM

Standard voltages	380 - 690 V (± 10%)
Frequency	50 - 60 Hz
Total installed power	72 kW
Main switch gear	NSX160N/38
IP classification	Specification TS2-132
Starting method	Star delta starter 380 - 575 V
Automatic cable reel	CR with tramming interlock
Cable reel remote control	At the operator station
Phase relay protection	Standard
Front working lights (combined working and driving)	4 x 50 W LED (4 200 lm, 6 000 K)
Rear tramming lights	2 x 50 W LED (4 200 lm, 6 000 K)
Pedestal lights	2 x 50 W LED (4 200 lm, 6 000 K)
Operator station light	1 x 5 W (24V)
Carrier positioning lights	2 x Laser type
Sealed AGM batteries	2 x 12 V, 80Ah

AIR AND WATER SYSTEM

Flushing of holes	By water
Water booster pump type	WBP2 (4 kW)
Water pump capacity	100 l/min at 12 bar (inlet pressure = 4 bar)
Water pump inlet pressure	2 - 5.4 bar
Flushing water pressure	10 - 12 bar
Shank lubrication device	SLU-1 (air / oil mist)
Air compressor	CTN10 (1.0 m³/min, 7 bar)
Rock drill oil consumption	250 - 550 g/h
Rock drill air consumption	200 - 300 l/min

OPERATOR'S SAFETY CANOPY

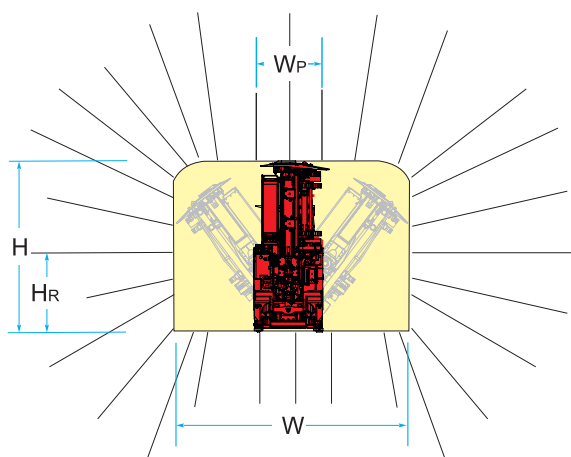
Canopy certification	FOPS (ISO 3449)
Unit height in tramming (FOPS)	High position : 2 750 mm Low position : 2 535 mm
Sound pressure level EN 16228	Operator station: 102 dB(A) Emitted: 124 dB(A)
Operator's seat	Ergonomic T-back seat

CARRIER

Type of carrier	MERCURY (frame steered)
Carrier articulation	± 35°
Rear axle oscillation	± 6°
Ground clearance	295 mm
Diesel engine	Deutz TCD3.6 L4EDG74 kW, Tier 4i, Stage IIIB
Exhaust catalyzer	Standard
Transmission	Hydrostatic, automotive
Wheel motors	4 x radial piston
Tires	315/85 x 15
Service brakes	Hydrostatic and positive braking
Parking and emergency brakes	SAHR fail safe type wet disc brakes
Tramming speed	8 km/h (Horizontal) 4 km/h (14%=1:7=8°)
Gradeability / sideways tilt	Max. 15° / 5° (according to EN 16228-2)
Fuel tank	60 liters
Carrier stabilization	Horseshoe (short) 2 x hydraulic jacks (rear)
Brake release	Manual hand pump
Centralized greasing points	Carrier
Hand held fire extinguisher	1 x 6 kg (type ABC)
Tramming alarm	Standard
Colour scheme	Sandvik
Documentation	2 x Operator's manual 2 x Maintenance manual 2 x Technical manual (in English only) 2 x Parts manual (in English only) 2 x CD of manuals (PDF files)

OPTIONAL FEATURES AND PACKAGES

Rock drill	
Power extractor	For HL710S
Drilling module	
Drilling module wear parts kit	for alternative tools
Instrumentation	
Drilling instrument	TIS with USB data collection
Spirit level angle indicators	2 pcs on feed
Cleaning system	
HP system with reel	Up to 180 bar (TS2-343)
Electric system	
Multi-voltage	1 000 V (50 Hz), with transformer
*Electric cables	Specification TS2-121
*Starting method	DOL for voltage above 575 V
Ground fault and overcurrent protection	VYK
Drilling and boom movement inhibition	2 x switches and 1 x chain guard
Amber flashing light	LED (24 V)
Battery jump start	Optional
Proximity interface	PDS / VDS system (TS2-381)
Air and water system	
Air mist flushing kit	For external air and water supply (IP5 air cleaner included)
*End-of-hole flushing	With 1 x 60L air receiver requires CT28 air compressor
Air mine connection	IP5 air cleaner
*Air compressor	CT28 instead of CTN10
Water hose with hooks	32 mm (1¼"), 80 meters
Greasing system	
Manual system	Greasing unit with pump, reel and nozzle
Operator's safety canopy	
Front protection	Safety grill
Fire suppression system	
Manual system	Ansul, 6 nozzles (Spec. 5-9800)
Auto. fire suppression system	Sandvik Eclipse™
Carrier	
*Foam filled tires	4 pcs
Wheel chocks and holders	2 Sets
Tramming cameras	Front
Speedometer	Control tramming speed
Extra Items	
Berg plug / Berg socket	HL710S
Spare rock drill	Air or foam filled tires
Spare wheel assembly	Complete set (TS2-449)
Special tools for rock drill	Field kit (TS2-450)
Warranty extension	One year (excl. Kazakhstan)
Documentation	Extra manual (printed)
*Package: Harsh water	Advanced (TS2-049)
*Package: Arctic	For extreme conditions
*Package: Dry drilling	(N/A with 1 000V) CT28 with 1 x 60L air receiver, air / oil cooler, dust hood on feed, readiness for hydraulic supply. Dust collector is not supplied.
*) Replaces standard feature	



MINIMUM PRODUCTION DRIFT SIZE (MM)*

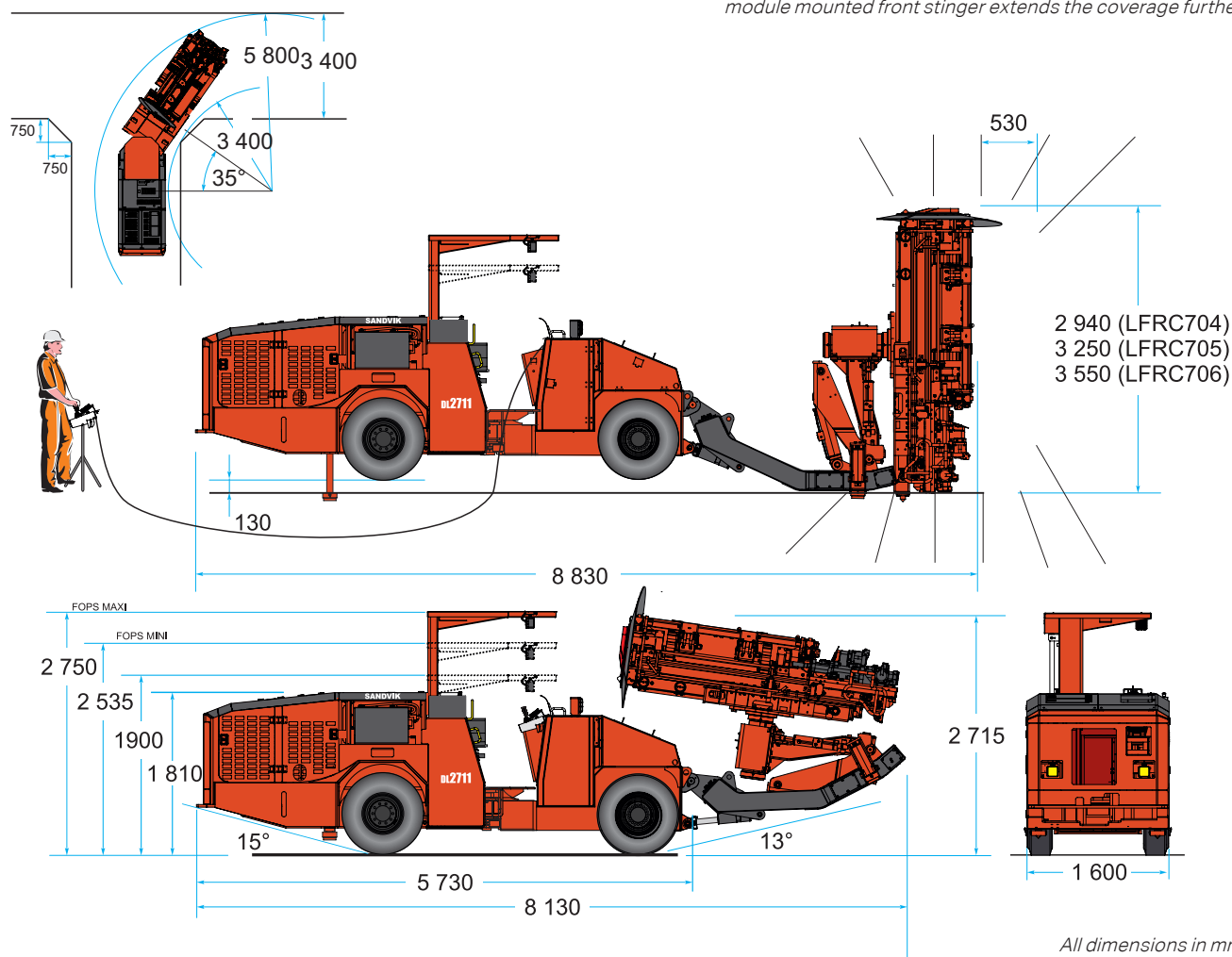
Model	H	Hr	Wp	W
LFRC704	3 150 mm	1 640 mm	1 500 mm	3 150 mm
LFRC705	3 450 mm	1 640 mm	1 500 mm	3 450 mm
LFRC706	3 750 mm	1 640 mm	1 500 mm	3 750 mm

*100 mm clearance

MAXIMUM PRODUCTION DRIFT SIZE (MM)**

Model	H	Hr	Wp	W
LFRC704	3 670 mm	1 640 mm	1 500 mm	4 350 mm
LFRC705	3 970 mm	1 640 mm	1 500 mm	4 650 mm
LFRC706	4 270 mm	1 640 mm	1 500 mm	4 950 mm

**Rear stinger extended the use of drilling module mounted front stinger extends the coverage further



All dimensions in mm

Sandvik Mining and Rock Technology reserves the right to make changes to the information on this data sheet without prior notification to users. Please contact a Sandvik representative for clarification on specifications and options.

ROCKTECHNOLOGY.SANDVIK

4. SANDVIK DL2711 - LONGHOLE DRILL