

DL2710 Longhole drill

Technical Specification





LFRC700
Drilling module

VIC
remote control

FR10 / FR10-E (option)
Longhole boom

HL820ST
Rock drill

Compact Longhole drill

Key features

Hydraulic rock drill	HL820ST (21 kW)
Drilling module	LFRC700 (20 + 1 rods)
Minimum drift size (H x W)	3.4 x 3.2 m (4' drilling module)
T-section width in turning	3 400 mm
Pivot point height	1 390 - 2 230 mm
Vertical holes coverage	1 500 - 2 000 mm
Transport width	1 600 mm
Transport height	2 650 mm (LFRC704) 2 750 mm (LFRC705) 2 900 mm (LFRC706)
Transport length	9 020 mm
Total weight	17 000 kg depending on options

Sandvik DL2710 is a fully mechanized and compact electro-hydraulic top hammer longhole drill designed for underground mining in 3.4 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 DL2710 is mounted on a 4-wheel drive frame-steered and diesel powered carrier. It is equipped with HL820ST hydraulic rock drill, LFRC700 drilling module, FR10 longhole boom, VIC control system, remote drilling control panel, one-hole automation (option) and FOPS operator's safety canopy for high drilling capacity, good hole accuracy and maximum safety.

The 360° drilling module rotation, telescopic boom 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 DL2710 undercarrier 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.



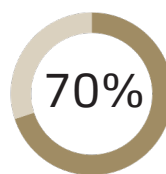
Main benefits

Optimized operations

The 2710 class is the ideal solution for underground mines and drilling contractors looking for a smarter control of ore dilution and increasing selective process in mining. The series consists of three types of drills using a common platform for different applications.

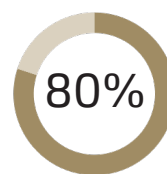
- DD2710 for development drilling
- DS2710 for rock support bolting
- DL2710 and DL2720 for longhole production drilling

These drills are simple and safe to operate with robust components and provide an excellent performance to ownership cost ratio.



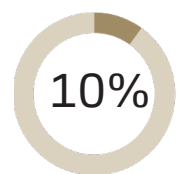
Optimized parts

Up to 70%* component modularity with 2710 series



High productivity

Above 80%* mechanical availability



Operating cost saving

Up to 10%* saving thanks to heavy duty rock drill



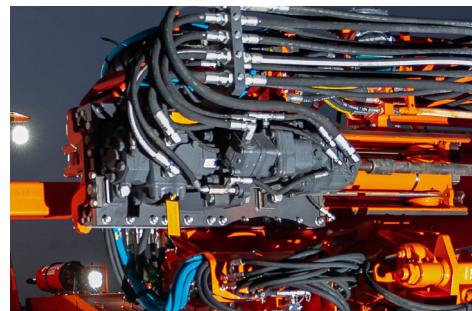
Portable control system

The VIC drilling control system with reaming hole selector increases drilling performance and reduces the wear on both rock drill and rock tools for an extended lifetime.



Compact and versatile LFRC700 drilling module

LFRC700 is compact in size and allows the units to be operated in production drifts 3.2 m or greater in height and width.



HL820ST heavy hydraulic percussive rock drill

Sandvik HL820T is equipped with a hydraulic stabilizer to control contact between drill bit and rock.



Improved coverage with FR10-E telescopic boom (option)

FR10-E telescopic allows to reach a large coverage thanks to a telescopic armature up to 480 mm



One-hole automation (option)

The one-hole automation option allows to drill the hole automatically. The drilling control system manage the drill rod adding during the drill hole process.



Knowledge box™ (TS2-535)

The Knowledge Box™ is our standard connectivity solution onboard Sandvik Underground drills. It allows to collect, process and transfer monitoring data into My Sandvik Digital Service dashboards for visualization of fleet health, productivity and utilization.



Sandvik 365 Parts and Services

Proudly keeping you on track!

Sandvik 365 Parts & Services offer a variety of possibilities to enhance your Sandvik DL2710 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	HL820ST (TS2-301)
Percussion power	21 kW
Percussion pressure	80 - 200 bar
Percussion rate	42 - 53 Hz
Rotation speed	0 - 180 rpm
Rotation torque	1 095 Nm (OMT200)
Weight	260 kg 305 kg with power extractor
Length with shank adapter	1 241 mm

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

Drilling module

Type of drilling module	LFRC700 (TS2-175)
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 2 000 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

Boom

Type of boom	FR10 (TS2-297)
Boom swing	Left 37° / Right 37°
Fan tilt (upholes)	Backward 35° / Forward 35°
Drilling module roll-over	360°
Drilling module travel	LFRC704: 920 mm LFRC705: 1 050 mm LFRC706: 1 050 mm
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
Front stabilizer	Horseshoe (short)
Laser distance from drill center	3 140 mm (vertical holes)

Hydraulic system

Powerpack	HPP875 (1 x 75 kW)
Percussion and feed pump	110 cc (variable)
Rotation pump	60 cc (variable)
Filtration size (pressure / return)	20 µ / 10 µ
Oil tank volume	200 liters
Filling pump for hydraulic oil	Electric
Cooler for hydraulic oil	OW30 oil-to-water (1 x 30 kW)
Low oil level indication	Level indicator and automatic switch-off

Drilling control system

Type of control system	Sandvik VIC
Control panel	Portable remote controls and stand
Power control (adjustable)	Full percussion Collaring Rotation / Threading Feed / Anti-jamming Flushing
Diagnostics system	Interactive

Electric system

Standard voltage	380 – 690 V (±10%)
Frequency	50 - 60 Hz
Total installed power	92 kW
IP classification	Specification TS2-132
Starting method	Star delta starter 380 - 575 V
Automatic cable reel	CR with tramming interlock
Cable reel control	At the operator station
Phase inverter detector	Automatic
Front lights	4 x 48 W LED (24V)
Rear lights	2 x 48 W LED (24V)
Pedestal light	2 x 48 W LED (24V)
Operator station light	1 x 5 W (24V)
Carrier positioning lights	2 x Laser type
Batteries	2 x 12 V, 80Ah
Battery charger	24 V, 10A

Air and water flushing

Flushing of holes	By Water
Water booster pump type	WBP2 (4 kW)
Water pump capacity	85 l/min at 16 bar (inlet 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	CTN9, 1 m³/min (7 bar)
Oil consumption	250 - 550 g/h
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: 100 dB(A) Emitted: 124 dB(A)
Operator's seat	For working / tramming Adjustable with seat belt

Technical Specification

Carrier

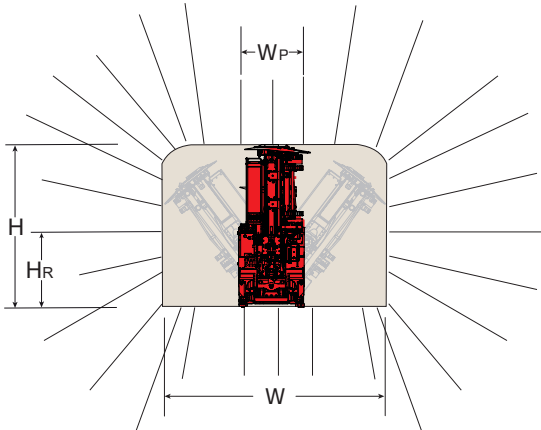
Type of carrier	MERCURY (frame steered)
Carrier articulation	± 35°
Rear axle oscillation	± 6°
Ground clearance	240 mm
Diesel engine	Deutz TCD3.6, 75 kW, China 4
Transmission	Hydrostatic, automotive
Axles	4 x radial piston
Tires	10.00 - 15
Service brakes	Hydrostatic and positive braking
Parking and emergency brakes	SAHR fail safe type wet disc brakes
Tramming speed	9 km/h (Horizontal) 4 km/h (14%=1:7=8°)
Gradeability / sideways tilt	Max. 15° / 5°
Fuel tank	60 liters
Hydraulic jacks	2 x Vertical (rear)
Brake release	Manual hand pump
Centralized greasing points	Carrier (TS2-463)
Hand held fire extinguisher	1 x 6 kg (type ABC)
Tramming alarm	Backward alarm
Knowledge Box™	Connectivity solution (TS2-535) My Sandvik insight readiness (TS2-390)
Colour scheme	Sandvik
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)

Optional features and packages

Hydraulic rock drill	
*HL710S rock drill Power extractor	With HPP755 (1 x 55kW) powerpack PE for HL820ST or HL710S
Drilling module	
*Drilling module Drilling module wear parts kit	LFRC1503 (3' rods), 27 + 1 rod For alternative tools
Boom	
Telescopic boom	FR10-E (TS2-297), Including front jacks
Drilling control system	
One-hole automation (incl. TIS) Boom movement prevention	For 4' to 6' feed 2 x switches and indicators lights
Instrumentation	
Drilling instrument Spirit level angle indicators Access detector	TIS with USB data collection On the side drilling module Mandatory in Europe
Air and water system	
*Air compressor *Air mist flushing	CT28 (2.8 m³/min at 7 bar, 18.5 kW) External air and water supply Internal air and external water supply (includes 2 x CT28)
2 x 60L air receiver Water hose Hooks for water / air hose	For end-of-hole flushing (requires CT28) 50 meters, Ø38 mm 2 hooks
Cleaning system	
LP system with reel HP system with reel	Up to 15 bar (TS2-343) Up to 180 bar (TS2-343)
Greasing systems	
Manual system	Greasing unit with pump, reel and nozzle (TS2-463)
Electric system	
*Powerpack *Optional voltage	IE4 Electric motor 1 000 V (50 Hz) with multivoltage transformer
*Electric cables Ground fault and overcurrent protection Battery jump start Dewatering pump outlet	Specification TS2-121 VYK200, VYK1000 Optional 8 kW (site voltage 380 - 1 000 V) 8 kW (380 V at 50 Hz)
Amber flashing light	LED (24V)
Operator's safety canopy	
Safety grill	Standard or all around
Fire suppression system	
Manual or automatic system Auto. fire suppression system	Ansul, 6 nozzles (TS2-460) Sandvik Eclipse™ (TS2-461)
Carrier	
*Diesel engine	TCD3.6 L4 (74 kW, Tier 4F, Stage V) TCD3.6 (74 kW Tier 3)
Engine pre-filter kit High altitude engine start	For Deutz engines Hydraulic unloading for high altitude engine start
*Foam filled tires Tramming camera Speedometer Wheel chocks and holders	4 pcs Front For 2700 serie 2 Sets
Extra items	
Berg plug / Berg socket Spare rock drill Spare wheel assembly Special tools for rock drill	HL820ST or HL710S Air or foam filled tires Complete set (TS2-452) Field kit (TS2-453)
Warranty extension Documentation *Package: Country specific options *Package: Harsh water	One year (excl. Kazakhstan) Extra manual (printed) CE package Advanced (TS2-049)
*) Replaces standard feature	

Technical drawings (FR10 boom standard)

All dimensions in mm



Minimum production drift size (mm)*

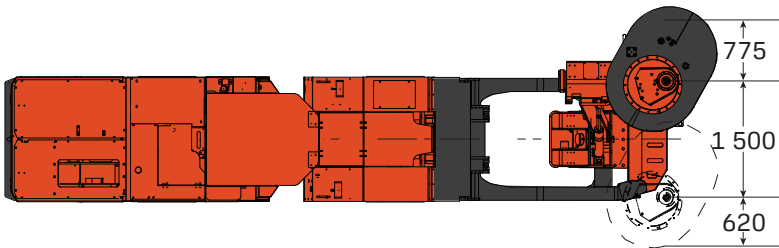
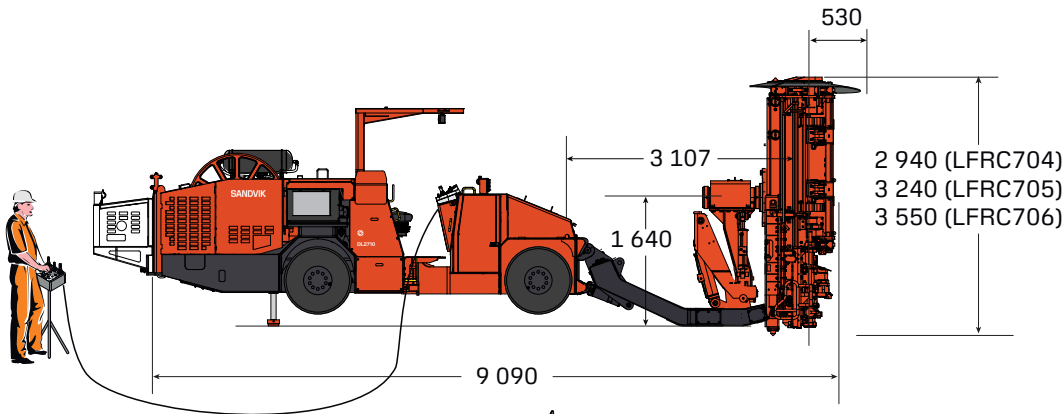
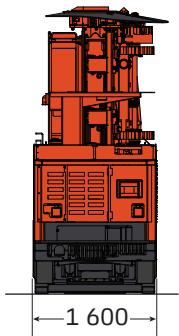
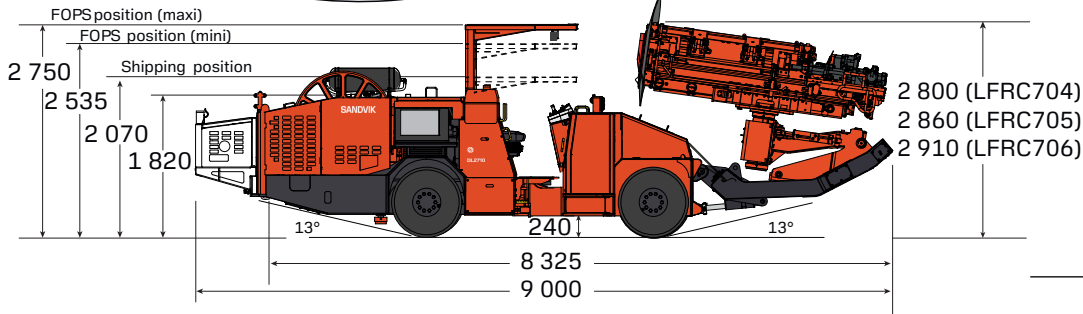
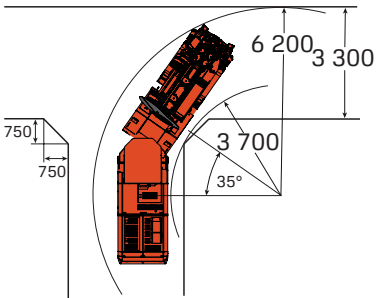
Model	H	HR	WP	W
LFRC704	3 380 mm	1 390 -1 640 mm	1 500 mm	3 150 mm
LFRC705	3 680 mm	1 390 -1 640 mm	1 500 mm	3 450 mm
LFRC706	3 980 mm	1 390 -1 640 mm	1 500 mm	3 750 mm

*Include 100mm clearance on each side

Maximum production drift size (mm)**

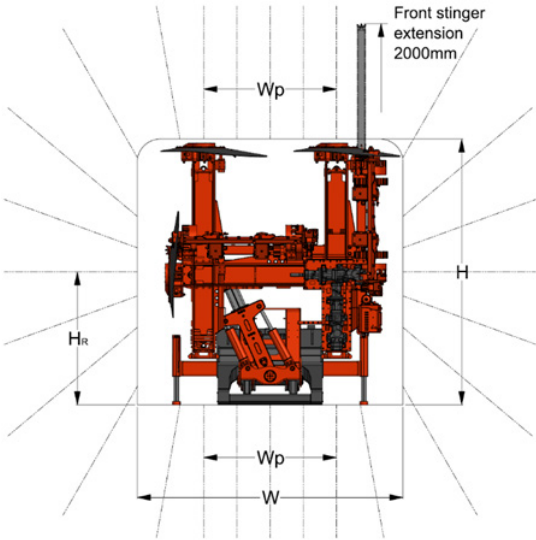
Model	H	HR	WP	W
LFRC704	3 500 mm	1 390 -1 640 mm	1 500 mm	4 180 mm
LFRC705	3 870 mm	1 390 -1 640 mm	1 500 mm	4 550 mm
LFRC706	4 170 mm	1 390 -1 640 mm	1 500 mm	4 850 mm

**Rear stinger extended, front stinger retracted; the use of drilling module mounted front stinger extends the coverage..



Technical drawings (FR10-E boom option)

All dimensions in mm



Minimum production drift size (mm)**

Model	H	W	WP	HR
LFRC704	3 380 mm	3 150 mm	1 460 mm	1 765 mm
LFRC705	3 680 mm	3 450 mm	1 760 mm	1 765 mm
LFRC706	3 980 mm	3 750 mm	2 000 mm	1 765 mm

Include 100mm clearance on each side

Maximum production drift size (mm)**

Model	H	W	WP	HR
LFRC704	3 860 mm	4 180 mm	2 000 mm	1 900 mm
LFRC705	4 150 mm	4 550 mm	2 000 mm	1 900 mm
LFRC706	4 450 mm	4 850 mm	2 000 mm	1 900 mm

**Rear stinger extended, front stinger retracted; the use of drilling module mounted front stinger extends the coverage..

