



DU211-T ITH LONGHOLE DRILL

TECHNICAL SPECIFICATION

Sandvik DU211-T is a compact ITH longhole drill designed for underground mining in 3.5 x 3.5 m or larger production drifts. It is capable of drilling vertical and inclined fans and single or parallel Ø89 – 254 mm (3½" – 10") longholes up to 100 m in depth, using 3" to 8" in-the-hole hammers and Ø76 – 127 mm (3" – 5") pipes. The DU211-T can also be used for reaming up to Ø17½" (445 mm) holes in rapid raising using 12" hammers.

The DU211-T is track mounted and equipped with the RH6230 top drive, CF706-F feed with fixed centralizer, HS110 horizontal single slideover and ERIS drilling control panel. The 360° feed rotation, wide slide-over and feed tilt angles make the unit suitable for most mining methods and various service support applications. The CAN based drilling control system and drilling instrumentation ensure good control of the drilling operation.

The layout of the 6200N tracked carrier is designed for good stability, ensuring safe tramming in narrow mine drifts. All service points are accessible from ground level.

KEY FEATURES

Top drive	RH6230 with splined piston
Feed	CF706-F with fixed centralizer
Pipe diameter	Ø76 – 127 mm (3" – 5")
Pipe length	1 220 – 1 830 mm (4' – 6')
Horizontal (single) slideover	HS112 (305 mm movement)
Minimum drift size (H and W)	3 807 mm (6' feed)
Drift width in T-section	3 076 mm (minimum)
Pivot line height	1 588 mm
Hole distance from the (side) wall	456 mm (minimum)
Transport height	2 510 mm
Transport width	1 219 mm
Transport length	5 371 mm
Transport weight	8 165 kg

ROCK TOOLS

ITH hammer	Pipe Ø (mm)	Hole Ø (mm)	Hole Ø (in)
3"	79	89 – 102	3½ - 4
4"	79	115 – 127	4½ - 5
5"	89 / 102	140 – 152	5½ - 6
6"	102 / 115	165 – 203	6½ - 8
8"	127	216 – 254	8½ - 10
12"	127	up to 445*	up to 17½"

*) by reaming



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TOP DRIVE

Type of rotation head	RH6230 with splined piston
Working pressure	Up to 207 bar (rotation)
Rotation motors	2 x ME12
Maximum torque	5 730 Nm
Rotation speed	0 – 60 rpm
Weight	336 kg
Length with spline piston	760 mm (including saver sub)

FEED

Standard feed	CF706-F
Retaining centralizer	CF10 fixed centralizer
Pipe length (standard)	6' (1 830 mm)
Drill table pass through	222 mm (8¾")
Set-off from stope face	300 mm
Feed force	70 kN
Feed and return speed	Up to 0.3 m/s
Front and rear stingers	Standard
Stinger extension (rear)	910 mm (4'), 1 780 mm (5' and 6')
Stinger extension (front)	910 mm (4'), 560 mm (5' and 6')
Cuttings diverter	DV10
Laser distance from drill center	1 052 mm

FEED DIMENSIONS

Type of feed	CF706 (standard)	CF705 (option)	CF704 (option)
Pipe length	1 830 mm (6')	1 525 mm (5')	1 220 mm (4')
Total length	3 607 mm	3 302 mm	2 997 mm

LONGHOLE BOOM

Operating principle	Horizontal single slide-over
Type of boom	HS112 (305 mm movement)
Feed tilt (back/forward)	90° / 15°
Feed roll-over	360°
Feed travel	1 370 mm (6') 1 143 mm (5') 914 mm (4')
Pivot line height	1 588 mm

HYDRAULIC SYSTEM

Powerpack	HP45 (45 kW)
Hydraulic pumps	1 x 100 cm ³ and 1 x 74 cm ³ (60 Hz) 1 x 130 cm ³ and 1 x 90 cm ³ (50 Hz)
Type of pump	Variable displacement axial piston
Filtration (pressure/return)	5µ / 10µ
Oil tank volume	265 liters
Tank filling pump	Electric
Cooler for hydraulic oil	Shell and tube type oil-to-air cooler
Auxiliary hydraulics outlet	For pipe handler

DRILLING CONTROL SYSTEM

Type of control system	CAN (control area network)
Control panel	ERIS portable control panel
Control screen	12" (16:10) colour screen
Stand for control panel	Tripod stand with 15 m cable
Drilling controls	Rotation controlled feed (AccraFeed)
Diagnostics system	Comprehensive and interactive
Pipe handler control interface	Standard
Hole alignment system	Digital angle indicator
MySandvik remote monitoring	With configuration readiness

ELECTRIC SYSTEM

Standard voltages	380 – 690 V (50 and 60 Hz)
Total input power	45 kW
Main switch gear	MSE
Allowed voltage fluctuation	±10%
Starting method	Delta-Wye
Tramming lights	2 x 50 W (24 V) LED
Working lights	2 x 50 W (24 V) LED
Carrier positioning lights	2 x Laser type
Amber flashing light	LED (24 V)
Sealed AGM batteries	2 x 12 V
Safety shutdowns and alarms	Low water pressure Low hydraulic oil level High hydraulic oil temperature
Safety feature	Phase loss or reversal protection Motor overload protection Voltmeter and ammeter Zener diode

AIR AND WATER SYSTEM

Water booster pump	Triplex piston pump
Water pump capacity	27 l/min at 48 bar
Hammer lubrication system	HLU unit with oil level sensor
Lubrication metering capacity	0 – 4 liters/h
Lubrication tank capacity	32 liters
Water outlet (low pressure)	Rear of the carrier

CARRIER

Type of carrier	6200N (tracked)
Track type	Triple grouser
Track width	305 mm
Ground clearance	180 mm
Transmission	Hydrostatic
Brakes	SAHR fail safe wet disc brakes
Operator tramming platform	Forward facing
Power for tramming	From powerpack
Tramming speed (horizontal)	High gear: 2.2 km/h Low gear: 1.2 km/h
Gradeability	20° (35%)
Carrier hydraulic jacks	2 x CJ16 jacks (front) 2 x CJ16 jacks (rear)
Oil tank filling pump	Electric
Gradeability	35% (20°)
Centralized greasing points	Standard
Tramming alarm	Standard
Colour scheme	Sandvik standard
Documentation	2 x Operator's manual 2 x Maintenance manual 2 x Parts manual (in English only) 1 x Electronic manuals

OPTIONAL ITEMS**Drilling system**

*Front and rear stingers	With 50/50 extension
*CF706-S standard feed	With split centralizer
*CF1306-S heavy hoist feed	With split centralizer
*PA15 single axis pipe arm	For assisted pipe handling
Conversion kit	From one pipe size to another
Petol chain wrench on feed	To open hammers with hydraulic cylinder
RC slip plate	Without spline breakout
Thread lubrication system	For use with carousel

Instrumentation

Access protector	Laser gate
Camera and monitoring package	For drilling (Canada and USA only)
Hole depth/RPM monitoring	For RH6230 top drive
Hydraulic direct control system	CP2-S control panel on swing arm
Portable angle indicator	With laser alignment

Cleanin system

High pressure system with reel	Up to 48 bar
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Greasing system

*Automatic greasing system	For carrier and boom (Lincoln)
Manual greasing unit	Pump, reel and nozzle

Electric system

*Supply frequency	50 Hz
*Supply voltage	1000 V (50 or 60 Hz system)

Fire suppression system

Automatic system	Ansul, (10 nozzles)
Manual system	Ansul, (10 nozzles)

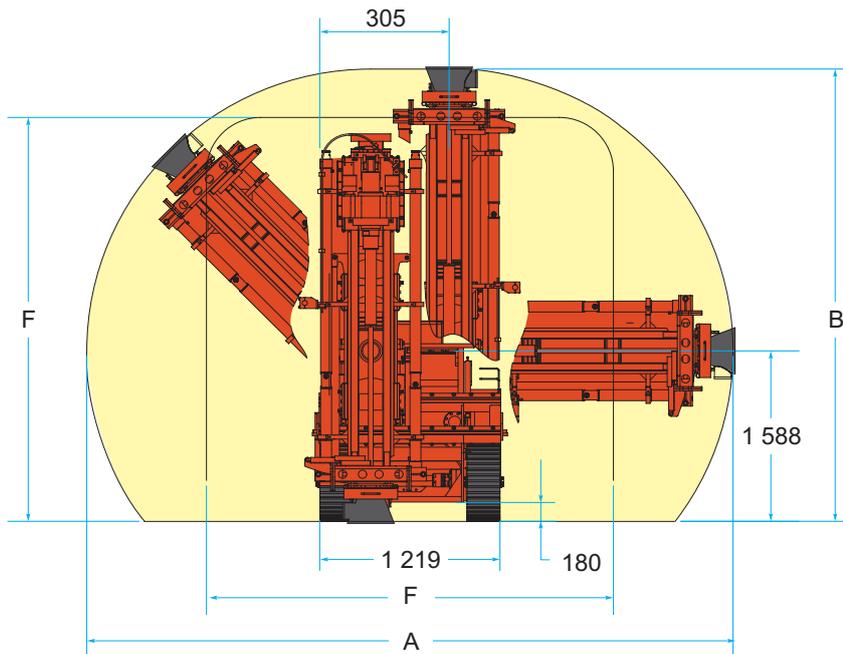
Carrier

Diesel engine for tramming	Deutz D914L4 (Tier4i) and 20 liters tank
Hitch on carrier	For towing booster (trailer)
Wheel chocks and holders	One on each side

Extra items

Drilling package: RC	Top drive upgrade (RC swivel) Hydraulic centralizers with RC slip plate Thread, forks and dual torque system Discharge diameter 76 mm Center tube ID 64 mm (maximum)
Drilling package: Wassara	Top drive upgrade (Wassara) Water swivel and stainless plumbing Water pulse dampening system
Spare ERIS control panel	With tripod stand and 15 m cable
Documentation	Extra manuals (printed and electronic)
Tools to specifications	For top drive and saver sub removal

**) Replaces standard feature*

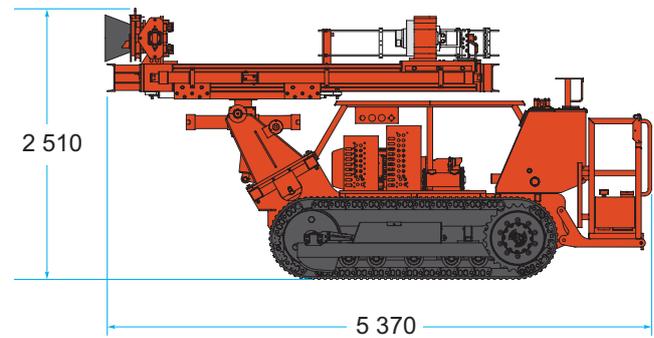
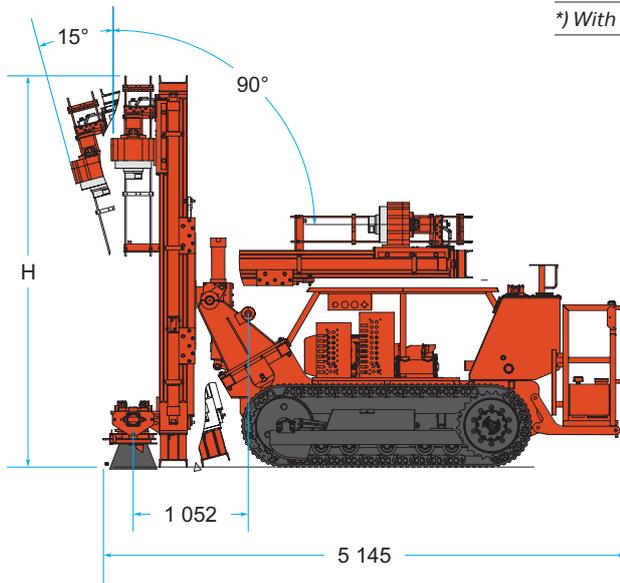


All dimensions in mm

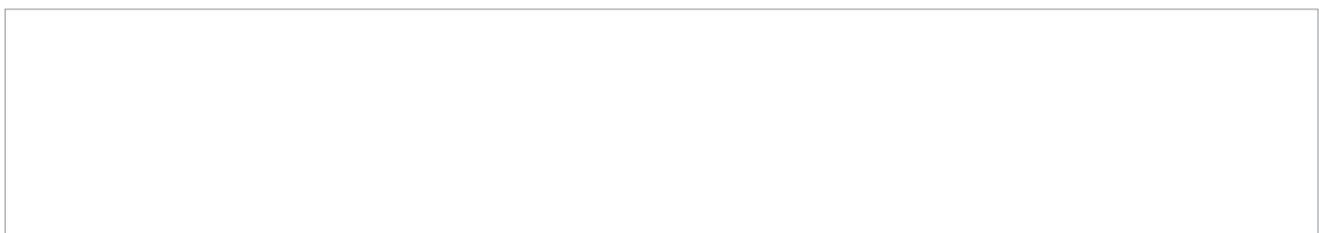
DIMENSIONS

	A	B	F	H
CF706-F feed	5 095	3 983	3 759*	3 607
CF705-F feed	5 095	3 983	3 759*	3 302
CF704-F feed	4 638	3 754	3 150*	2 997

**) With 100 mm clearance*



All dimensions in mm



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