



RFD1X-4010

FACE DRILL





Maximum control for precise and consistent drilling

This Rhino RFD1X-4010 face drill is loaded with enhancements that not only increase productivity and uptime, but lower daily operating costs too. A high-efficiency hydraulic system, advanced digital control interface, and specific drilling modes to allow you to choose your penetration profile headline the long list of advances.



1. Level climate-control system with automotive-style adjustable louvers helps keep the glass clear and the cab comfortable.

2. Advanced LCD monitor provides intuitive access to a wealth of operational and drilling data and functions.

3. Ergonomically correct short-throw pilot levers provide smooth, predictable fingertip control with less movement or effort.

ENGINE AND POWERTRAIN

Diesel Engine Brand – Model	RHINO RFD97T / Deutz BF4M1013
Engine Power kW (HP) @ rpm	97 (130) @ 2300 / 85 (114) @ 2300
Emissions Certification (Tier / Stage)	Tier 3 / Stage IIIA
Transmission (Type / Model)	Dana Spicer Hydrodynamic
Chassis Type	Robust articulated tunneling
Steering & Articulation Angle (°)	± 40
Axles / Brakes	Dana / Multi-disc SAHR brakes
Maximum Speed km/h (mph)	13.5 (8.4)
Maximum Gradeability (%)	≥ 25 (14°)
Tyre Dimensions & Type	11.00 x R20 Special mining
Fuel Tank Capacity L (gal)	100 (26.4)
Exhaust Purification System	Catalytic gas purifier

HYDRAULIC SYSTEM

Hydraulic Pump Type	Variable displacement (Percussion / Rotation)
Maximum System Pressure bar (psi)	240 (3,480)
Hydraulic Tank Capacity L (gal)	220 (58.1)
Filtration µm	10 return / 3 pressure
Oil Cooling System	Large area water cooler

HYDRAULIC ROCK DRILL (DRIFTER)

Impact Power kW (HP)	18 / Opt. 22 (Woserld)
Percussion Pressure bar (psi)	230 (3,335)
Percussion Frequency Hz (bpm)	60 (3,600)
Rotation Speed rpm	0 - 300
Rotation Torque Nm (lb-ft)	1,070 (789)
Drilling Diameter mm (in)	43 - 76 (1.7" - 3.0")
Shank Adapter	T38 / T45
Air Consumption for Lubrication L/s (cfm)	6 (12.7)
Anti-jamming System	Integrated fast-acting RPCF
Total Operating Weight kg (lb)	15,600 (34,392)

POSITIONING BOOM

Number of Booms	1 heavy reinforced tunnel boom
Boom Extension mm (ft)	1400 (4.6)
Lift Angle (°)	-10 / +60
Lateral Swing (°)	± 45
Roll-over Rotation (°)	360 continuous
Automatic Parallelism	Yes, double tripod suspension
Anti-collision System	Electronic stop monitoring
Boom Weight kg (lb)	1,950 (4,299)

FEED (GUIDE SHELL)

Feed Beam Type	Steel beam / High-torsion structural aluminum
Feed Type	Hydraulic motor + heavy chain
Feed Beam Extension mm (ft)	1,800 (5.9)
Feed Force kN (lbf)	18 (4,046)
Maximum Rod Length mm (ft)	4,900 (16.0)
Effective Drilling Depth mm (ft)	4,600 (15.1)
Reverse Extraction System	Yes, via control software



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DRILLING COVERAGE

Maximum Coverage Area m ² (ft ²)	70 (753)
Maximum Coverage (W × H) mm (ft)	10,000 × 7,500 (32.81 × 24.61)
Minimum Tunnel Section m (ft)	4.5 × 4.5 (14.76 x 14.76)
Max. tunnel section m (ft)	10.0 × 13.0 (32.81 x 42.65)
Inner Turning Radius mm (ft)	3,945 (12.9)
Outer Turning Radius mm (ft)	6,245 (20.5)

ELECTRICAL SYSTEM (OPERATION)

Main Electric Motor kW (HP)	75 (100.5)
Total Installed Power kW (HP)	83 (111.3)
Voltage / Frequency V (Hz)	380/660/1140 (50/60)
Starting Method	Soft-start
Cable Length (Reel) m (ft)	100 (328.08)
IP Protection Rating	IP65 integral
Battery Electric Propulsion	Optional on DWE version
Battery System	2 x 12 (120 Ah)

WATER & AIR SYSTEM

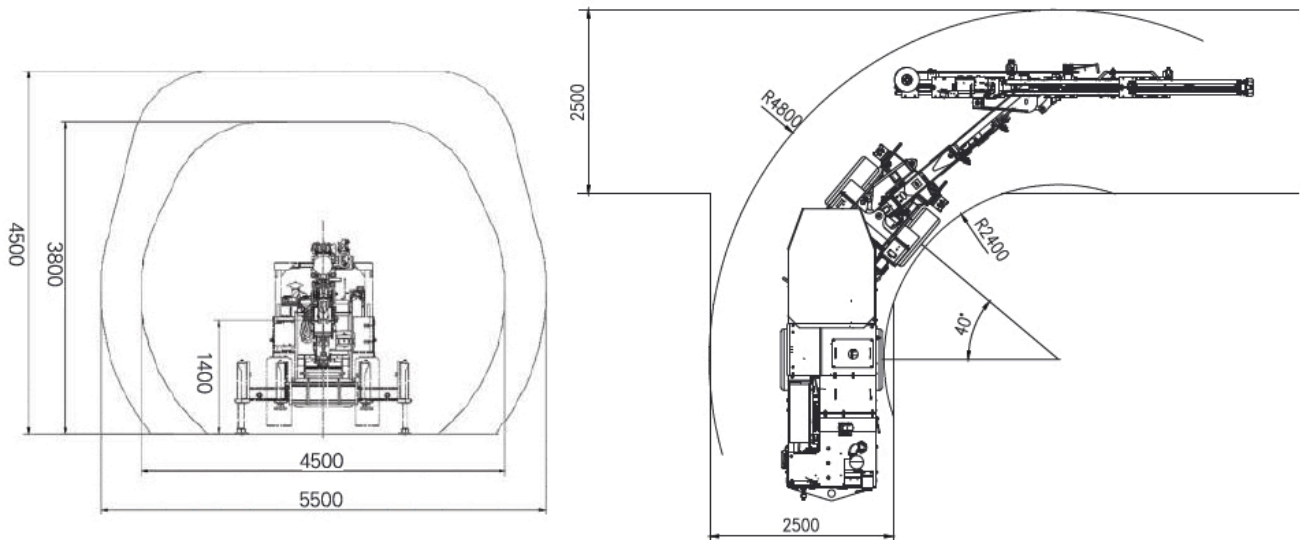
Compressor Type	High-eff. rotary screw
Compressor Brand	Sullair / Ingersoll Rand
Compressor Capacity m ³ /min (cfm)	1.40 (49.44)
Air Working Pressure bar (psi)	8.5 (123)
Air Pressure for Lubrication bar (psi)	3.0 (43.5)
Water Pump Type	High-pressure multistage pump
Water Pump Brand	Grundfos
Water Flow L/min (gpm)	83 (21.9)
Maximum Water Pressure bar (psi)	14 (203)
Pump Motor Power kW (HP)	4.0 (5.4)

AUTOMATION, CONTROL & CONNECTIVITY

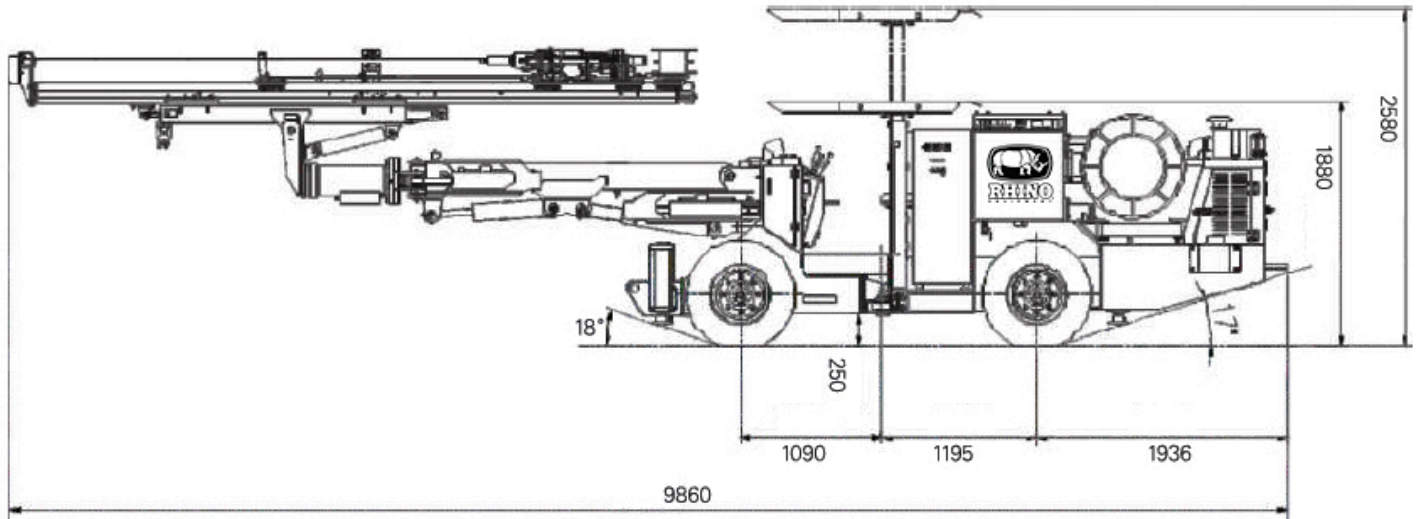
Control System	Hydraulic Pilot / Electro-hydr.
Automation Level	Basic semi-automatic
Anti-jamming System	Active Hydraulic RPCF
Positioning Control	Electronic angle sensors
Remote Operation	Cable ready (optional)
Remote Monitoring	GPRS basic telemetry
Navigation / Drilling Plan	Analog profile reading
MWD (Measure While Drilling)	Not available

CAB, ERGONOMICS & SAFETY

Structure Certification (FOPS / ROPS)	FOPS / ROPS Factory standard
Cab Type	Optional: Enclosed climate-controlled cabin
In-cab Noise Level dB(A)	< 80 (Enclosed cabin)
A/C & HEPA Filtration System	Yes (Only with enclosed cabin option)
Fire Suppression System (Manual / Auto / Brand)	6-nozzle Ansul manual/ auto.
Centralized Lubrication System (Auto Grease)	Lincoln progressive automatic (Opt)
Blind-spot Cameras & LED Lighting (Lumens)	High-power LED / Rear camera



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DIMENSIONS & WEIGHT (TRANSPORT POSITION)

Total length mm (ft)	13,169 (43.2)
Transport width mm (ft)	2,135 (7.0)
Transport height mm (ft)	2,353 (7.72) / Canopy up: 3,053 (10.02)
Internal turning radius mm (ft)	3,945 (12.9)
External turning radius mm (ft)	6,245 (20.5)
Ground clearance mm (in)	365 (14.4)
Wheelbase mm (in)	3,145 (123.8)



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